

**Laws of the Face:
Restaging Forensic Art as a counter-forensic
device**

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Abstract

Laws of the Face is a multi-modal, participant-observer study of forensic cultures of human identification which pursues practical and theoretical objectives as complementary, focusing on methods of post-mortem facial depiction as forensic objects whose socio-cultural affordances have been overlooked. Recognising Forensic Art's epistemological precarity within forensic science and ontological ambiguity as art, the cultural in/visibilities of the dead are considered through theories of faciality, photography and necropolitics, and the operational work of post-mortem forensic depictions is resituated with reference to the counter-forensic (Keenan, 2014a; Sekula, 2014), *forensis* (Weizman, 2014) and Humanitarian Forensic Action (Cordner and Tidball-Binz, 2017), with the work of citizen/netizen allies suggesting new ways to extend the forum of relational citizenship and forensic care (M'Charek and Casartelli, 2019).

An operational study undertaken in a medico-legal facility in Cape Town (South Africa) results in an evidence-based framework which supports the routine uptake of standardised post-mortem facial imaging/depiction in complex operational contexts, informed by ways in which the so-called 'migrant body' is forcing change and innovation in forensic methods internationally. Fieldwork and semi-structured interviews (n=70) with forensic deathwork practitioners internationally provide a grounded analysis of the state of the field, culminating in a new critical framework for post-mortem Forensic Art as a form of 'extra-ordinary deathwork' (Moon, 2020), characterised by its re-mediating actions located both in the process of the work itself, and in the work these images are expected to perform, forensically and well as socially. Conventional frameworks of expert/amateur knowledge are challenged, and pracademic exchange promoted. The main tenets of the thesis are performed by an online artwork called *Speaking Likeness*, comprising eighteen audio-visual portraits of forensic artists in which aspects of the hidden curriculum of this work is revealed through embodied knowledge and arts-based research.

Statement of Objectives

- To consider reasons for the general omission of Forensic Art from critical and visual culture studies, as well as Science, Technology and Society (STS) studies focusing on forensic cultures, alongside Forensic Art's apparent epistemological crisis as a tool of forensic analysis, amplified by the establishment of Facial Identification as a separate and scientifically supported discipline. Two papers by Wilkinson (2014, 2015b) act as prompts to answer two related questions: *What is at stake in producing, working with, and circulating images of the post-mortem face for the purposes of forensic identification?* And, *If we think of Forensic Art as art at all, what kind of art is it?*
- Apply artistic and curatorial research skills to find ways around the dead-end, binary arguments of art vs. science/evidence vs. intelligence that have characterised discourses related to Forensic Art thus far, and instead directly engage practitioners and operational contexts to build a grounded picture of the state of the practice, and matters of care and concern currently impacting the field
- Engage the crisis of Unidentified decedents within the South African medico-legal system (essentially a twinned public health and safety and security issue, due to shared responsibility for forensic services in that country) by looking at approaches developed by other complex forensic identification contexts, in which secondary and visual methods are becoming critical areas of focus.
- Use forensic facial imaging skills to analyse operational challenges and demonstrate alternative practices that take the emotional impact of visual identification of the dead into consideration

- Extend this enquiry to the work citizen/netizen victim advocacy groups

These objectives can be directly linked to the original contributions of this study, which include:

- A detailed multifactorial analysis of n = 1010 Unclaimed cases at a single South African medico-legal facility, focusing on visual documentation. Demographic trends within the cohort are described, and poor photographic documentation is evidenced, leading to recommendations for improved operational efficacy informed by in-depth contextual analysis throughout and across the system
- Proof-of-concept digital post-mortem depictions produced for ten unresolved cases, presented in a low-cost format directed at a public appeal for information
- Ground truths concerning the state of Forensic Art are developed from a close analysis of an international sample of respondents (n = 70), informing a new theoretical positioning for post-mortem Forensic Art methods in line with the objectives of forensic humanitarianism
- An original artwork and accompanying e-book records previously undocumented accounts from within the field, presenting them in a public-facing way (online audio-visual 'archive') where form is deployed to closely reflect and challenge content

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Acronyms

2D; 3D	Two-dimensional; three-dimensional
AAFS	American Association of Forensic Sciences
ABFA	American Board of Forensic Anthropology; Diplomate (D-ABFA)
AFIS	Automated Fingerprint Identification System
AM	Antemortem
ASFM	African Society of Forensic Medicine
ASSA	Anatomical Society of Southern Africa
BAFA	British Association of Forensic Anthropology
BAHID	British Association for Human Identification
CFS	Craniofacial Superimposition
CFR	Craniofacial Reconstruction
CPD	Continuing Professional Development
CPS	Crown Prosecution Services
CRC	Criminal Records Centre, SAPS
CMS	Crime Scene Management and Criminal Records Centre (SAPS)
CT	Computed Tomography
DNA	Deoxyribose Nucleic Acid
(N)DOH	(National) Department of Health
dPMD	Digital Post-Mortem Depiction
DVI	Disaster Victim Identification (sometimes MDM-DVI)
EAAF	<i>Equipo Argentino de Antropología</i>
FASE	Forensic Anthropology Society of Europe
FACT	Forensic Anthropology Cape Town, University of Cape Town (UCT)
FACTS	Forensic Anthropology Centre at Texas State University
FAIG	Forensic Anthropology Interest Group (cf. ASSA)
FARC	Forensic Anthropology Research Centre, University of Pretoria (UP)
FBI	Federal Bureau of Investigation
FISWG	Facial Identification Scientific Working Group
FIO	Facial Identification Officer
FIU	Facial Identification Unit
FPS	Forensic Pathology Services

FMP	Forensic Medical Practitioner
FPO	Forensic Pathology Officer
GAN	Generative Adversarial Network
HFA	Humanitarian Forensic Action
HVIRU	Human Variation and Identification Research Unit, University of the Witwatersrand
IAI	International Association for Identification
IACI	International Association for Craniofacial Identification
IALM	International Academy of Legal Medicine
ICMP	International Commission on Missing Persons
ICRC	International Committee of the Red Cross
ICTY	International Criminal Tribunal for the Former Yugoslavia
IHL	International Humanitarian Law
IO	Investigating Officer
LABANOF	<i>Laboratorio di Antropologia e Odontologia Forense</i> , University of Milan)
LCRC	Local Criminal Records Centre (cf. SAPS)
LE(A)	Law Enforcement (Agency)
LEO	Law Enforcement Officer (sworn)
LSU FACES	Louisiana State University Forensic Anthropology and Computer Enhancement Services
MDM	Mass Disaster Management (sometimes MDM-DVI)
MDI	Medicolegal Death Investigator (US)
MOU	Memorandum of Understanding
MPTT	Missing Persons Task Team (South Africa)
NAMUS	National Missing and Unidentified Persons System
NCIC	National Crime Information Centre
NCMEC	National Centre for Missing and Exploited Children
NIJ	National Institute of Justice
NYAA	New York Academy of Art
OFPI	Observatory Forensic Pathology Institute, Cape Town (cf. SRML)
OpID	Operation Identification (cf. FACTS)
OSAC	Organisation of Scientific Area Committees
PM	Post-mortem
PMD	Post-Mortem Depiction

RCMP	Royal Canadian Mounted Police
RAI	Royal Anthropological Institute
SAAFS	South African Academy of Forensic Sciences
SAPS	South African Police Service
SOP	Standard Operating Procedure
SRML	Salt River Medico-Legal Laboratory
SRS	Salt River Study
STS	Science, Technology and Society Studies/Science and Technology Studies
STT	Soft Tissue Thickness
SUN	Stellenbosch University (also SU)
SWG	Scientific Working Group
TRC	Truth and Reconciliation Commission
TWG	Technical Working Group
TDTF	Trans Doe Task Force
UBC	Unidentified Border Crosser
UID	Unidentified Decedent
UNTHSC	University of North Texas Health Science Centre
UP	University of Pretoria
USF	University of South Florida
VIB	Victim Identification Board
VIC	Victim Identification Centre
VISUN	Victim Identification, Stellenbosch University (SUN)
ZA	South Africa

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In the same way that my anatomy and forensic training is indebted to the ‘silent teachers’ populating dissection labs and anatomy repositories and museums around the world, my growth as a researcher is also indebted to ‘silent supervisors’ Inger Mewburn (<https://thesiswhisperer.com/>) and Pat Thomson ([patter](#)) via their research skills blogs. The relevance of patter’s Monday morning posts to an immediate problem or concern I was facing was nothing short of uncanny, and thesiswhisperer’s critiques of the PhD (and academic culture in general) are beacons. As an educator, I aspire to the clarity and generosity of this kind of democratisation and demystification of knowledge and research methods, and these resources have become essential to my own teaching. Thank you.

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This research developed against the backdrop of a number of major global political events, including the Brexit referendum, the election of the 45th President of the USA and a new South African president tasked with reversing ‘state capture’ and rebuilding key organs of justice and accountability dismantled by his predecessor. The bulk of the writing process coincided exactly with the lockdown period related to the Covid-19 pandemic in the UK and began to conclude as lockdown began to lift. This has been a strange and memorable time, and the world looks considerable different now compared to when I started this project, but also in many ways, exactly the same. Some of this currency and urgency is reflected in the resources on which this study draws, as well as in the claims and appeals it makes, because it is hoped, more than anything, that it is useful.

My time in the UK has been intellectually and creatively rich beyond hope, however it has also made me deeply attuned to the undeniable necropolitics of the contemporary political climate, rife with intolerance and a conspicuous lack of humanity. As a privileged White person I have managed to visually ‘pass’ in these streets, yet I too am a migrant, and the longer I was resident in my adopted country, the less welcome I came to feel. My solidarity lies with those who undertake dangerous journeys with significantly less resources and far greater risk, towards hope, security and preservation of life, whatever your origins or destinations. *Mortui vivos docent*, perhaps now more so than ever.

Nobody learns how to be a connoisseur or a diagnostician simply by applying the rules. With this kind of knowledge there are factors in play which cannot be measured: a whiff, a glance, an intuition.

Carlo Ginzburg, 1980

Illustration is a hinge between the linguistic and the visual, and it can turn many ways.

Colin Richards, 2004

Preface

Field vignette 1: Durban, South Africa. Sometime in December 1998

It's sometime in December, 1998. Summer in Durban, the sub-tropical humidity already thickening the early morning air. I'm in my hometown for an undetermined period, assisting with my grandfather's move into an assisted-living community while preparing my MAFA submission. A parent drops me off at the medico-legal mortuary on Gale Street. I have never been here before, but the generic governmental-clinical aesthetic is all too familiar. But for the climate, I could be back in Johannesburg.

I manoeuvre myself inside inelegantly and sweaty with my camera bag and copy stand and introduce myself to the desk constable who asks if I'm the new photographer. *No, unfortunately not.* He calls his supervisor, who is expecting 'Sidney's granddaughter.' *Yes, that's me.* My grandfather's years of service in the Chevra Kadisha made his face a familiar one along these corridors, his deathwork credibility now my premature inheritance.

I am shown to a room and asked which scrapbooks I want.

All of them.

—Really? How much time do you have?

I will work until I run out of film, or when you close for the day, whichever comes first, if that's OK?

—Sure. *Maar hulle* – scoffing at the archival gloves I pull out my bag – *is nie nodig nie.*¹

An officer is sent for the books, which arrive quickly in several batches, casually thumped down on a desk. They might come get them if anyone comes looking for someone. *Of course.* The phrase 'care-worn' pops into my head but 'distracted neglect' seems more apt. These volumes are abject in every way, their covers abraded and bruised from careless handling, but more so the artlessly hand-inked identifiers on their spines shouting BLACK, WHITE, INDIAN, COLOURED. Where a group has multiple books assigned to it, they are differentiated by year, a material amplification of the structural violence of colonial and apartheid-era legacies that persists in language.

I set up against a wall below a high window. The natural light is diffuse and ample. The walls are painted in the style I have come to call Foucauldian minimalism, that two-tone, gloss/matt enamel divide so beloved of state institutions. I notice tiny irregularities along the boundary line where the paint bled beneath the masking tape. The rush-hour traffic on the main road bleats and wails on the other side of the wall. I place a film canister in the body of my hand-me-down 35mm Minolta, gently coaxing its dark tongue over the sprockets until it finds purchase (it's temperamental). I secure the loose back with tape and affix the camera to the stand mount, set the focus to manual and check the light meter. Like Johannesburg, this is an academic mortuary, aligned with a university. But unlike Johannesburg the forensic pathologists here – not the police management – seem to be the primary gatekeepers, which is why I am working with books and not bodies today. Somewhat disorientated by being forced to shift attention from one kind of corpus to another at first, I am now grateful. Autopsies in mid-summer are not gentle experiences. But I am also curious: how, in almost two years on-site in Johannesburg, had no one mentioned the identification scrapbooks to me before? Did the cops consider them less interesting than the real thing? Probably,

¹ *Trans.* Afrikaans 'But those are not necessary/you don't need those'

considering the relish with which they would introduce me to Monday's cases, drawer by drawer. *Mortuaries are always busiest on Mondays, after public holidays or pay day.* I figured they had a system for unknown bodies, but I never imagined it would be the base archival equivalent of a banker's ledger filled with jumbo colour prints stuck six to a page with glue stick, like a school craft project.

I consider the books. Which to document first didn't matter. I had resolved to approach this as a purely mechanical exercise in visual re-mediation, re-photographing as many of the photographs as I could, completely out of focus, in a single session. These were not my images to look at. I tried to imagine the trauma of arriving at this facility to search for a long-missing loved one and having to page through this grotesque library for traces of a familiar face; I could not. The condition of my work in Joburg was 'no faces, no case numbers', which was hardly a demand in an environment where much else testifies to the work of the dead. Besides which I had no interest in further contributing to visual cultures of gratuitous body-horror. Yet now, faces and case numbers were all I had, so how to work with the problem? What I wanted to make required the faceness of faces but needed also to mask individual identity. The obfuscation of visual blur was thus double-edged; in protecting identity it would contribute to the ongoing effacement of these anonymous dead. This was a known risk. But eye-bars always struck me as an absurd attempt at anonymisation, a cheap and inadequate form of ethics-signalling that rendered subjects cartoonishly criminalised. The blurring (I vainly hoped too) might connect the work (in spirit if not sophistication) with Christian Boltanski's *Dead Swiss*, pushing his re-mediation of strangers' faces snipped from newspaper obituaries even further towards facial formlessness. It was the only way I could conceive to create an unidentifiable but relatable mirror-archive that spoke to these unknown and invisibilised deaths that could not be tallied alongside the more heroic ones accounted for by the Truth Commission hearings which had dominated public consciousness for the past two years. It was a self-examination, a reckoning of some kind, with complicity and personhood.

I opt for non-discrimination. Adopting an automaton-like attitude, I open a book, line up the first image below my camera, un-focus, click the shutter and repeat the process six times per page, image by image, left to right, row by row, hardly looking at what I am photographing except to frame each image as tightly as possible. Some faces had been so poorly photographed, they did much of my work for me. Hundreds of frames later, I come to it, where pages have become stuck together. I gently ease the leaves apart to reveal a space where an image once was. In its place, a note scrawled in ballpoint pen over the slick-dried residue of glue, tiny bubbles dotting the 'i's, the whole thing encircled, autographed and dated – four days before Christmas – by the attending officer: PHOTO GIVEN TO FAMILY.

I stop, feeling the distance between these unknown people collected within these pages, and those who search for them (over months, years, forever?) suddenly collapse. From the hundreds of ostensibly similar images that had passed in front of my lens that morning, I have a good idea of what this one might have looked like. How desperate did one need to be to request such an image as a family keepsake? How long had it been until they found their family member archived here? Was it perhaps the only photograph of this individual that existed, a nineteenth-century moment in the late twentieth? Or perhaps, once located and the facts known, the thought that *this* image of a loved one would remain between these pages forever, available to the gaze of strangers, was too much to contemplate? I position the page below my lens, pulling sharp focus for the first time that morning, and press the shutter. There had to be a better way to do all this.

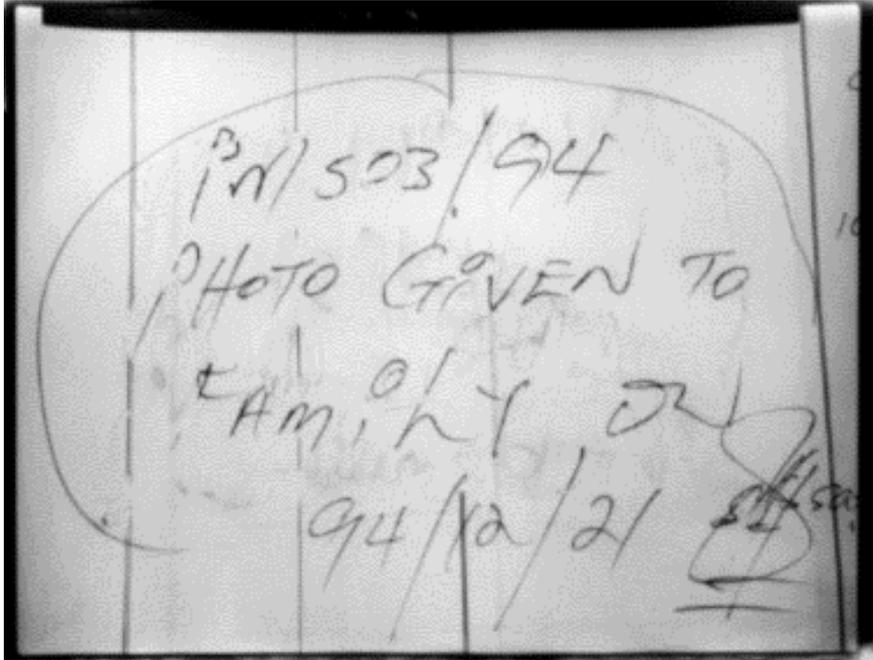


Figure 1: Kathryn Smith, Detail from *ID/Inventory*, multimedia installation (dimensions variable), 1998-1999. Silver gelatin print on 8" x 10" gloss resin-coated paper

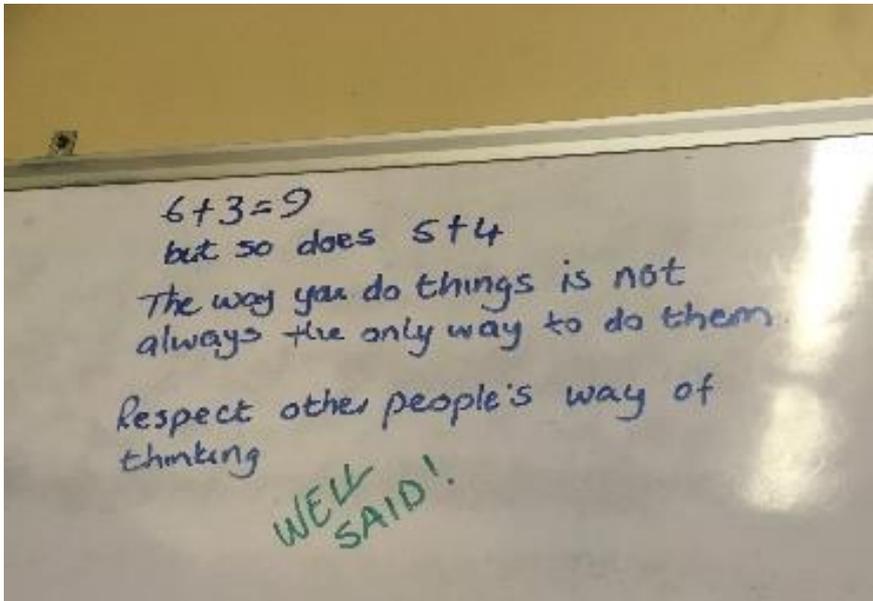


Figure 2: Kathryn Smith, *Whiteboard wisdom*, Salt River medico-legal mortuary, 2018. iPhone photograph

Field vignette 2: Salt River Medico-Legal Laboratory, 1 November 2018, 16h30

It's ninety minutes to shift-change, and I'll soon be starting an experimental session with forensic pathology officers, some ending their twelve-hour shift, some arriving to work through the night. The mortuary's seminar room is in the facility's heart, part of a series of administrative offices opening out to a small outside space that is a combination of backyard and courtyard, and I must be escorted there. With the busy morning work of autopsies long concluded, and other administration wrapping up for the day, it's much quieter than I am accustomed to. Built in the mid-late 1950s, the spatial design of this facility embodies apartheid-era racial segregation, a Rorschach-blot of a building designed with the separate entrances and reception areas for 'European' and 'Non-European' South Africans then mandatory in government structures. Since the takeover of forensic services by the Department of Health from the South Africa Police Service in the mid-2000s, valiant attempts have been made to disrupt this perverse duplication, repurposing each wing towards different operational requirements. But the structure itself is a persistent reminder of past injustices, and the storage overflow assigned to refrigerated containers in the grounds shielded from passing traffic its continuing contemporary expression.

The seminar room is a nodal space between other spaces, opening out onto covered walkway, but also opening into two other offices from opposite walls. Seating is arranged around the perimeter of the room, with a circular table in the centre, stacked with several neat but well-populated folder bundles. To the left of the door in the corner, a fridge is topped with a microwave. The only wall without a door is dominated by an enormous shallow display case, the contents of which are impossible to ignore. It resembles a large, glazed window with a frame of dark, varnished wood. Decades of dust coat the inside of the glass. On its pegboard backing, homemade weapons associated with some of the violent deaths that moved through this facility over the decades have been arranged. Some are missing, and others have slipped from their rusting anchors. A typed yellowed label has fallen to the very bottom of the case. An artefact of the previous administration, its message is largely obscured but I learn half the name of the person who held the keys to this cabinet in the 1980s.

I have entered this room many times, and never fail to be arrested by these things. I make a point of checking on them when I do visit. Part of me welcomes the neglect of these hideous trophies, their physical impotence. But another part wants to dust them off, place them under lights and photograph them as examples of misdirected but undeniably effective (and deeply affective) creative labour. They were unusual enough to warrant retention in case similar impressions were ever seen on another unfortunate body, and so constitute an object-archive of forensic record.

Under their malevolent gaze, one can't help but be on high alert, which is a good tactic for a seminar room. But staff have started to enact small interventions on the display case, redeploying it as a display area for social photographs, perhaps blind to its content from habit, or wanting to distract from it. In one set of pictures, I see many of the support officers – several of whom are likely to walk through the door any moment – gathered around a plentiful *braai* under pop-up canvas awnings in the shaded car park. In another, one of the offices has been repurposed for karaoke, with everyone clearly having a great time.

An intense day at UCT has depleted my energy reserves and I'm anticipating a tough session, but these pictures make me smile. I move to deposit my work bag on the table next to the folder stacks and get set up. I look around to see if there is any free wall space to put up the images we'll be talking about. There isn't, but right up against the very top edge of a

wall-mounted whiteboard, a message neatly inscribed by an anonymous hand in blue marker makes me laugh out loud:

*6 + 3 = 9
but so does 5 + 4.
The way you do things is not always the only way to do them.
Respect other people's way of thinking.*

To which someone else has responded with a jauntily angled reply in green:

WELL SAID!

The rest of the whiteboard is a spectral palimpsest of many other meetings and planning sessions recorded and erased, but this note has been preserved, a little island of positive intention, an appeal for tolerance, to do and be better. Affirmative, forthright, frustrated and fed-up. In these five lines of colloquial poetry, two unknown voices have summed up my past three weeks of interviewing members of the South African Police Service and this facility about the crisis of unidentified decedents in the South African medico-legal system. I take my iPhone out of my pocket, framing the exchange so the reflected fluorescent light does not disrupt the text, and capture it. Things are looking up.

Considering two images taken twenty years apart

What is the link between forensic identification, principally a legal domain, and humanitarianism, the work of which exceeds the primary objectives of medico-legal investigation by engaging the living in its work? And how might socially-engaged artistic practices enhance the work of Forensic Art in advancing the practice of post-mortem identification?

These two photographs, one analogue black and white, the other digital colour, are from my personal archive. Taken twenty years apart, they serve as a critical entry point to this project positioned at the interface of art, science, justice, and human rights. What these images represent – which are also the conditions that made them possible – is the plainest introduction to the conceptual concerns, methodological orientations, and objectives explored in this project that it is possible to offer.

Fig. 1, essentially a representation of the space where another image used to be; a signifying absence. It is where this project really began back in 1998, although of course it was impossible to know that at the time. The

social segregation embodied in those mortuary scrapbooks encountered in 1998 persists within forensic and investigative cultures in South Africa², and versions of the resigned response of, ‘We don’t like it but it’s practical,’ is echoed by counterparts in the forensic deathwork field internationally. Manual records remain the way that Unknown, Unidentified and Unclaimed bodies are archived within most medico-legal facilities in South Africa, making access to this data, and consolidation across contexts, extremely challenging (Evert, 2011). The Western Cape is the only province to have adopted a digitised records system since 2007. The ‘scrapbook’ at Salt River, one of the leading facilities in the province and a primary site in this study, is now an Excel spreadsheet, with facial images placed and adjusted without careful attention to the actual proportions of the face, creating new problems out of the old.

These two images are ethical bookends, speaking to time and transformation – personal, political – in material ways. Neither depicts a human face, yet both embody human traces through the indexicality of handwriting which may be considered a proxy for the human voice; inscriptions representing performative potential through touch and action. Choosing to stage them as entry points to this study accompanied by brief contextualising vignettes (i.e. textual images) is to set narrative and analysis side-by-side, a self-conscious technique directed at confronting the inevitable entanglements of scholarship and subjectivity, and to introduce the politics and poetics of the artist-voice alongside that of a researcher-voice. Pointing to the simultaneous consonance and dissonance of the ‘law’ of the forensic and the ‘lore’ of the social and cultural, these images speak to the operational and emotional barriers that exist between medico-legal services and the communities they serve, and how it might be possible to more effectively mediate between them. As such, they also tacitly signal the privileged access of a transdisciplinary practitioner, permitted to move through restricted spaces and collect evidence of the desire for connectivity

² Cemeteries were the first places to be racially segregated in South Africa, a legacy of colonial administration long before the Afrikaner Nationalists came to power in 1948 and apartheid became law (Dennie, 2009), an extraordinary expression of necropolitics (Mbembe, 2003).

and recognition; between the living and the dead on the one hand, the professional world of medico-legal post-mortem investigation on the other, and the public realm beyond. As a visual partnership that holds deep personal significance, these faceless images make a mutual appeal across time for an intersectional and emotionally intelligent approach to the work of post-mortem human identification.

Chapter 1: Forensic Cultures and the Facial Image

But what about people of whom we possess murder-relics only, lacking knowledge even of their names? Still, I think, the impulse of observers with any modicum of empathy is to “bring them alive.”

(Vollman in Svenson, 2016; n.p.)

Introduction

In the preface to his book *Who Are You? Identification, Deception and Surveillance in Early Modern Europe* (2007), Valentin Groebner recalls a response to a lecture given at the start of his work on said book. He describes an increasingly restless audience as he “lectured cheerfully about the first descriptions of persons, rattling on about the emergence of wanted posters, passports, the doppelganger or double, spies, and imposters.” The departmental chairperson then commented “in a friendly but strict voice”: “If this is the kind of book you have in mind [...] you will have to write the history of the portrait, and that of legal procedures, political theories, registration systems, tax systems, public assistance for the poor, and of military administration – over a couple of hundred years, moreover. [...] Are you up to this task?” (Groebner 2007:10) As Groebner goes on to acknowledge, a truly comprehensive version of such a project is clearly an impossible endeavour for a single book (and likewise any single thesis), and any such history will inevitably leave out a great deal while ‘bearing witness’ to areas in which an author is ignorant. Facing the challenge, he devised a solution he describes as “an attempt at capturing the topic in a net of narratives.”

Nothing more aptly conveys the spirit in which this study has been undertaken and ways in which its design, methodology and findings are reflected in its form (modes of presentation). *Laws of the Face* is a

multimodal study on the role of Forensic Art¹ in contemporary forensic identification procedures, paying particular attention to the unidentified deceased. It stages an encounter between the operational efficacy of forensic post-mortem depictions and the affective power of the post-mortem face (which post-mortem forensic art techniques are directed at rendering recognisable and fit for public circulation) guided by two inter-related questions: *What is at stake in producing, working with, and circulating images of the post-mortem face for the purposes of forensic identification? And If we think of Forensic Art as art at all, what kind of art is it?*

Theoretically part of, but also operating at the edges of what Burney et al. (2012) have described as ‘forensic cultures’, this study seeks to rethink the critical (epistemological) location of practices broadly referred to as Forensic Art in relation to professional practitioner experience, informed by the primary areas that shape this interdisciplinary work, namely its associated scientific subject areas, visual discourses, and knowledge claims.

Many of the subjects that Groebner and his cautionary host list above are relevant to this project but replacing ‘deception’ and surveillance’ with ‘unidentified decedents’ and ‘humanitarianism’ introduce a host more besides. Groebner’s visual and conceptual metaphor of a ‘net of narratives’ echoes what N. Katherine Hayles has referred to as ‘cognitive assemblages’ (Hayles, 2016) in which certain concerns or ideas function like tropes or coordinates by which a particular research terrain can be mapped out, but which also refer outside themselves by virtue of their interdisciplinary relevance, thus demonstrating flows and connections across diverse disciplinary interests.

Forensic Art is a complex interdisciplinary field that blends art and science (Wilkinson, 2015b) and yet is not well understood by either field. The primary focus of this enquiry concerns post-mortem methods of Forensic Art, specifically post-mortem depiction as a less utilised and visible technique compared to facial reconstruction (Lee et al., 2010;

¹ In this study, Forensic Art is capitalised as a proper noun to denote a recognised professional practice, but forensic artists are referred to the lower case. Likewise, a distinction is made between Facial Identification as a proper noun for the same reasons, in relation to the process of carrying out a facial identification analysis by a facial identification examiner, for example. These terms are further disambiguated in Chapter 2.

Wilkinson and Tillotson, 2012; Wilkinson, 2014). Post-mortem methods often present the last chance of identifying someone who bears no scientific trace and may provide renewed impetus to an investigation that has stalled if primary methods of identification (fingerprints, dental, DNA) fail to produce a comparative match. These methods are understood in relation to the full suite of facial depiction methods, as forensic artists are seldom able to focus exclusively on a single method, and indeed, frequently perform this work alongside other duties. Practitioners may be sworn officers within law enforcement organisations, civilian support officers or within adjacent consulting capacities such as academia, private sector and freelance practice. The context or 'site' in which this work is produced is considered a primary signifying feature.

An overarching objective of the study is to make a positive contribution to policy and practice in forensic human identification through a re-imagining of the role of Forensic Art in post-mortem identification, with reference to its professional practices, public perceptions and future relevance by advocating for a healthy exchange between the practitioner and academic communities and thus greater transparency in science for justice and improved accountability (Houck, 2019a; b). Thinking through justice as both an ideal and an objective, related concepts of personhood and citizenship may be considered part of the broader objectives of forensic identification. Notions of citizenship are intimately connected to concepts of personhood in the first instance: how are you recognised as a subject, holding agency and an identity that is your right in death as well as life? 'Person' as John Locke famously said, 'is a forensic term.' (Nimbalkar, 2011; Boeker, 2015).

Unidentified deceased persons represent a fundamental challenge to our concepts of personhood. Without a name, how can we begin to (re)construct an identity, and enable the actions – bereavement, memorialisation, repatriation, justice – that contribute to the continuing bonds among surviving individuals and communities, and by extension, a healthy society? This study suggests that forensic artists play a critical yet under-exploited role in these processes, and that considering this perspective might also contribute to a more nuanced public understanding of the

satisfactions and challenges associated with this vocation. (Re)locating Forensic Art both professionally and critically thus requires attending to ‘context’ in particular ways, which is achieved through an international, cross-cultural analysis of post-mortem identification and forensic imaging practices based in primary data generated through direct, participant-observer engagement with/in operational contexts and adjacent specialists. In demonstrating the relationship between policies and practices, and reflecting on dominant professional and social attitudes towards images of the dead and conditions that might cause such attitudes to shift, the influence of cultural or political contexts and representational styles on how we relate to images of the post-mortem human face begins to emerge.

Unfolding over three stages, this introduction broadly echoes the structure of the thesis as a whole, positioning this study as embodied, practice-led research (Barrett and Bolt, 2007; Smith, 2009; Michel, 2018), principally informed by the author’s own established research-based visual arts/curatorial and forensic practice, whilst recognising parallels with relevant anthropological and sociological studies animated by material-semiotic interests and situated knowledge (Haraway, 1988). The narrative arc begins with an account of the background, problems and objectives of the study which are described in relation to its orientation to the visual, which also informs its scope. It then introduces several grounding concepts and orientations in respect of the ‘forensic,’ understood to operate between scientific and criminal law and the lore of localised and informal knowledge, which produce forms of citizenship and agency differently.

The study’s multi-modal methodology (theoretical, empirical and practice-based) and related critical concepts are described as a function and expression of a sited approach directed at analysing the flows and transfers of knowledge within and between sites of operation and practice. Rationale, objectives and methods are thus triangulated towards an ethics of the intersectional (my phrase) as a general principle for interdisciplinary research located at the boundaries of applied art and science. Following the design principle that an interrelationship between form and function is a significant vector of intention, the thesis structure is framed with reference to the distinctive modes of writing encountered throughout; as an expression

of voice (or more accurately *voices*) that points to the significance of dialogue as the source of the majority of the primary data which grounds this enquiry.

Background, Problems and Objectives

The universal right to be identified after death was recognised in 1996 by Interpol's General Assembly (Cordner and Tidball-Binz, 2017, p.65). Identification of the dead is also a social requirement, enabling post-mortem practices (memorial, administrative) to be duly attended to by next-of-kin; accurate mortality rates and their contributing factors to be measured relative to populations; and appropriate legal enquiries to be conducted in the case of non-natural death to determine criminal responsibility or other liabilities. This is enshrined in International Humanitarian Law (ICRC, 2020). As Keenan and Weizman (2012a, pp.62–63) write,

The success or failure of the search for a missing person determines the legal status of the person in question, and thus his or her legal agency – either in helping to convict the accused, in the case of success, or in keeping the proceedings open, in the case of a failure to identify. Non-identification, or the inability to find a body, places the missing person in the ambiguous state of probably-dead-but-legally alive, allowing prosecutors and investigators to keep legal processes open. In this sense, the missing person possesses a sort of ghostly agency, an immateriality that is not simply present but which nonetheless has effects, and even demands responses. Of course, when trials take place and verdicts are demanded, other forensic evidence must be presented by which the dead are identified. The agency of the missing person and the practices of forensics – in its successes and limitations – are thus intimately connected.

According to the National Missing and Unidentified Persons System (NamUs, 2020, online) a collaboration between the National Institute of Justice (NIJ) and the University of North Texas Health Science Centre (UNTHSC) in the United States, the 600,000 people reported missing and 4,400 unidentified bodies recovered annually in that country is a 'silent

mass disaster' (Ritter, 2007; Adams, 2015).² Other parts of the world are also evidencing a crisis of unidentified decedents along with missing persons, paralleling patterns of undocumented migration from one country to another.³ The global crisis of unidentified people appears to reflect significant global challenges of inequality, poverty and oppression. Deaths of migrants from Africa and the Middle East attempting to reach Europe, and countless unknown persons who attempt the journey to the United States across the border with Mexico have attracted international media attention and are receiving the attention of forensic specialists who, in working under extreme conditions with minimal resources, are making advancements in both scientific method and humanitarian interests (Anderson, 2008; Cattaneo et al., 2010, 2020; Anderson and Spradley, 2016; Olivieri et al., 2017, 2018). In a less visible way, the medico-legal system in South Africa is buckling under similar numbers of unidentified and unclaimed decedents in its mortuaries (Wild, 2017b; Baliso et al., 2019; Brits et al., 2020), and no official national statistics are kept regarding these cases. Without fully understanding the extent of the problem on a national as well as provincial and local level, it is difficult to motivate for increased investigative capacity or where (and what) operational interventions would be most effective, because these are unlikely to be one-size-fits-all.

The visual identification of the dead can present certain challenges, particularly in mass fatality (MDM-DVI) situations (Chung and Yoon, 2009; Tillotson, 2011; Wilkinson and Tillotson, 2012; Wilkinson, 2014; Chung and Seo, 2015; Gibelli et al., 2016; Caplova et al., 2017). These challenges are amplified by the emotional work associated with viewing the dead; cross-cultural experience and even fraud (identity theft). Could the visual, the mode which communicated the plight of these people via the press (particularly the Lampedusa disaster of 2013), play an equally potent

² The history of NamUs parallels the large-scale investment in DNA technology as a tool of forensic identification by the US's NIJ. The organisation traces its history back to 2005, with the first *Identifying the Missing* summit hosted by the NIJ, and the establishment of MP and UP databases in 2007 and 2008 respectively, which became connected to enable case comparison in 2009. The current NamUs 2.0 software was launched in 2018 (NamUs, 2020, accessed 18 July 2020).

³ See for example the [Missing Migrants project](#) (International Organization for Migration, 2020, online)

role in the attempts to scientifically identify them? This seed of an idea was planted at the University of Dundee (MSc Forensic Art, 2013) and furthered at the International Conference on Craniofacial Superimposition 2014 (MEPROCS, 2015; Damas et al., 2020), where the forensic pathologist, Cristina Cattaneo promoted the need to invest in secondary methods for identification, and encouraged the focus on the facial and the importance of photographic images, saying, ‘We do not understand African faces well... and all we have to work with are photographs in their pockets’ (pers. comm., 2014).

Thus, the first problem to be addressed is that post-mortem methods of Forensic Art are unevenly/inadequately exploited in global contexts that would theoretically stand to benefit from them, such as those experiencing high volumes of unidentified decedents, which constitute non-routine cases. The impact and efficacy of post-mortem visual identification procedures involving next-of-kin, and the technical support workers who facilitate such identifications as part of their duties, have not yet been studied in any meaningful way. Available resources and expertise are a significant factor in how or whether non-routine cases receive attention, and thus it was decided to actively test the viability and operational impact of introducing post-mortem depiction into a visual identification workflow in one of the busiest medico-legal facilities in South Africa.

Post-mortem depiction (PMD; also variously referred to in the field as image ‘clarification’, ‘sanitization’ or simply a ‘clean-up’) attends only to the soft tissues and textures of the post-mortem face (Wilkinson and Tillotson, 2012). Working from a suitable post-mortem photograph of the deceased (ASTM, 2018), in which the face should not be obscured, and where sufficient soft-tissue should be present to reasonably suggest the individual in-life appearance, the objective is to produce a plausible image of a living face that is fit for public circulation, either via re-sketching the photograph (Taylor, 2000) as in figs. 3 and 5, or using image editing software and an appropriate visual database to repair trauma and reverse signs of decomposition as in figs. 4 and 6, supported by knowledge of how trauma and taphonomic change affect facial appearance post-mortem.

The image originally presented here cannot be made freely available via LJMU E-Theses Collection for reasons of copyright



Figure 4: Amy Tillotson, demonstration of digital post-mortem depiction as described in Wilkinson and Tillotson (2012).
Courtesy Face Lab

Figure 3: Post-mortem photograph showing facial injuries from crab predation in a case of drowning (left), with 2D post-mortem sketch by Karen T. Taylor (2000, loc.3737)

Provided adequate data is available, PMD is considerably less resource-heavy than facial reconstruction and can produce positive results if investigators know to make use of this method early enough in an investigation and ensure appropriate public exposure of the depiction. Figs. 5 and 6 show a case from Scotland where the original sketch did not produce any leads and a new depiction was requested a year later, which lead to a positive identification.⁴



Figure 5: Post-mortem drawing by an unnamed artist of an unidentified body recovered from Kyleakin, Skye, as reproduced in *The Edinburgh Reporter* (Hislop, 2013).
Courtesy Police Scotland



Figure 6: Revised post-mortem depiction of Kyleakin case (digital, colour), including depiction of clothing, tattoos, jewellery, University of Dundee, reproduced in *The Edinburgh Reporter* one year later (Hislop, 2014).
Courtesy Police Scotland

⁴ Study participant P50, who produced the updated depiction, discusses this case in *Speaking Likeness* (Smith, 2020a, pp.332–333).

Post-mortem depictions may be circulated by law enforcement agencies (fig. 7) or victim advocacy groups (fig. 8). Fig. 7 is a historical example of a public appeal poster in which a putatively unaltered post-mortem image is used, but where the face shows no visible trauma and the eyes are open. Given the community demographics in which the appeal was circulated (London’s East End, early twentieth century), it was also translated into Russian. Fig. 8 shows an example of a contemporary public appeal poster produced by a victim advocacy group, including altered versions of an original facial reconstruction to show possible variations of appearance of the individual. Citizen action is discussed in detail in Chapter 6.



Figure 7: City of London public appeal for information about members of the Houndsditch gang, 22 December 1910 (Keily and Hoffbrand, 2015, p.67) Courtesy Crime Museum, Metropolitan Police Service, London



Figure 8: [LostNMissing Inc](#) public appeal poster of NamUs #1616, date unknown (post-2006). Featuring modifications of the original reconstruction by Donna Fontana as published on The Doe Network [online](#), accessed 17 September 2020

In summary, the objectives of this study are to provide a context-driven analysis of global attitudes to depicting the dead for identification purposes, and of the culture of forensic facial imaging more broadly; and via empirical, sited observation and practice, present a grounded analysis of visual identification methods towards improved operational service provision in high-caseload contexts.

Locating *forensis* between ‘law’ and ‘lore’

What constitutes the ‘laws of the face’? We could just as well ask, ‘What constitutes the lore of the face?’ Spoken aloud, ‘law’ may be understood as ‘lore’ and vice versa. Lore denotes a body of popular or anecdotal knowledge that may have mythological overtones. ‘Law’ is conventionally understood as scientific-legislative, but of course we *enact* laws socially and culturally. In other words, while the law is highly formalised, it is interpretable, and we experience its expression in various informal ways. The definition of a scientific law is that it always continues to fit the evidence. In a court of law, the role of evidence is to be persuasive. Increasingly, visual or other forms of demonstrative evidence are used to support scientific forms of evidence in the courts, but the ways in which these events are narrated and (re)mediated tends more towards lore, creating a referential loop.

This double reference embedded the study’s title intentionally reflects the particular (peculiar) conditions of Forensic Art as an epistemologically insecure practice operating at the interface of art, science and law but not adequately recognised by any one field, whilst being arguably the most public-facing aspect of forensic cultures, given that its images fundamentally rely on public exposure to solicit information about unknown suspects, unidentified decedents and the missing or fugitive. Forensic facial images cannot succeed if they do not reach the appropriate community or person who might recognise the individual represented. The face is a “valuable forensic object” (Burney et al., 2012, p.3) but the specific role of artists and other image-makers who produce these images within forensic cultures, has received inadequate scholarly attention. Set against the glamorisation of forensic cultures generated via procedural dramas, genre fiction and ‘true crime’, the operational logics of Forensic Art are thus produced as a paradoxical source of public fascination on the one hand and professional frustration on the other, driven by a lack of agreed standards of training and practice, and obfuscation about professional entryways into the field. This observation places this study in the line of sight of two central

ideas. Firstly, an appeal for the reclamation of the ethics of ‘forensis’ (Weizman, 2018, 2014) within forensic praxis; and secondly, ‘mediator deathwork’ (Walter, 2005) which describes the triadic flow of information between the decedent, a specialist mediator and a public or official event in which the decedent’s story is performatively interpreted to the living. These concepts, if not completely entangled, closely parallel each other here, activated through the various meanings of the verb ‘to stage’ i.e. orientated primarily around the public realm but also incorporating associations with ‘performance,’ ‘event organization’ and ‘a series of phased activities that form part of a whole.’ All these are present in the scope of work described herein, representing both the *sites* of primary data collection, and the *forms* by which findings are shared.

Thinking through the forensic

Laws of the Face appeals to an integrated understanding of the term ‘forensic’, recognising its original meaning from the Latin *forensis* – “pertaining to the forum” (Weizman, 2014, 2018, p.65) – as a space for public debate. The direct trace of this etymology still persists in the tradition of ‘Forensics’ in schools and colleges in the United States, referring to competitive public speaking events and not the comparatively better-known reference to criminalistics (Allen, 2017). Over time, ‘forensics’ has become verbal shorthand – what Weizman refers to as “linguistic telescoping” (Weizman, 2018, p.65) – for the more specific application of a range of scientific methods to criminal investigation and their presentation in courts of law, sacrificing the critical (public, political) power associated with the original space of the forum. This has been propelled, most obviously in the public imaginary, by the influential presence of crime and procedural dramas that have dominated television since the first broadcast of *CSI: Crime Scene Investigation* (CBS) on October 6, 2000, a series which is widely regarded as transforming this particular genre of procedural drama. As unrealistic as they are, these glossy imaginative fictions of forensic work have created an increased awareness and interest in the field, but also

produced the ‘CSI Effect’, impacting jury expectations and perceptions of the processing and presentation of forensic science evidence in court rooms (Foltyn, 2008; Byers and Johnson, 2009; Pierson, 2010; Kirby, 2013; Penfold-Mounce, 2016). When an acceleration of scholarly attention begins to accrue around a particular concept or concern, it is announced as a ‘turn’, and so it is with the intersecting interests constituting the ‘forensic turn.’ ‘Forensic’ has also come to signify “a more purely *technical* rendition of depth, much like the previously fashionable intensifier ‘hyper’”, risking as James Frieze argues, becoming “the new, glittering generality.” (Frieze, 2019, p.6). This study is less interested in the “glittering generality” of what the forensic denotes but is instead committed to the ‘gritty specific’ work of reclaiming *forensis* as both a physical space (where processes of justice may be staged and performed in the public interest), but also as a concept, an ideal of research-based art as social action which uses research skills, digital tools and crowd-sourced data to call attention to oversights and absences by responsible authorities in attending to unidentified decedents and unresolved missing persons cases internationally.

The research group Forensic Architecture has come to embody such ideals in their spatially (as opposed to facially) focused interrogations of where state power has acted in violation of human rights and international humanitarian law (Forensic Architecture, 2018a, online; Weizman, 2018).⁵ Forensic Architecture do their work through a critical engagement with two key concepts, the ‘forensic aesthetic’ (Keenan and Weizman, 2012a) and the ‘counter-forensic’ (Keenan, 2014a; Sekula, 2014; Forensic Architecture, 2018b, online), which simply put, directs forensic methods at authorities who are seen to be in violation of the very laws by which they seek to organise and control certain citizenries.

Forensic aesthetics, as Keenan and Weizman suggest, found cultural expression within what has become known as ‘the era of the witness’ (Guerin and Hallas, 2007; Joyce and Stover, 1992), with reference to post-

⁵ During the period of this research, the Goldsmiths-based research centre Forensic Architecture have risen to international prominence for their development of spatial representations to challenge official narratives of contemporary conflict. They were nominated for the Turner Prize 2018, and have successfully challenged the ethics of private patronage of the arts (Cogley, 2019; Greenberger, 2019; n.a, 2019; Small, 2019).

World War II tribunals and investigative commissions into war-time atrocities and human rights violations.⁶ In presenting their theory, they lend particular credence to the images of the alleged skull of Josef Mengele translucently overlaid with known images of Mengele as a younger and then older man, produced by Richard Helmer as part of the multi-disciplinary team of international experts tasked with determining the identity of remains thought to be those of the Nazi doctor and post-war fugitive.⁷

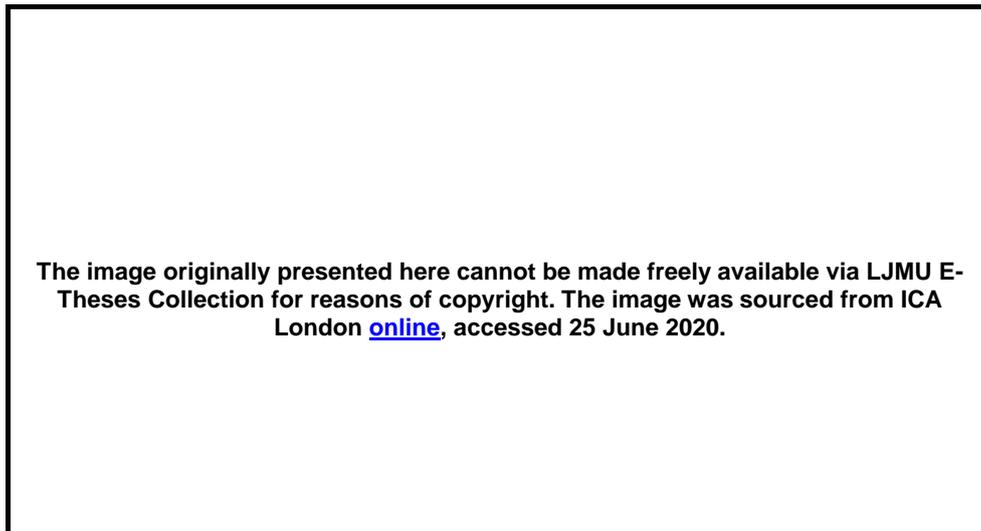


Figure 9: Images produced by Richard Helmer superimposing a portrait of Josef Mengele with images of his skull, Medico Legal Institute Labs, São Paulo, Brazil, June 1985. Reproduced on 'Forensic Aesthetics: Short Course in Forensic Architecture', courtesy of Maja Helmer.

Not only do these images achieve “a spectral presence – present and represented at one and the same time,” (Keenan and Weizman, 2012a, p.37); “subject over object, an image of life over an image of death,” (p.38); “capturing some of the meaning of the figure of the missing person, a figure whose legal definition also bridges life and death” (p.65), they did more than “[push] the probability calculation further in the direction of a definitive identification... *It was the appearance of a previously unseen*

⁶ This focus here is on Keenan and Weizman’s framework, but my creative practice has been engaged with the original articulation of this concept in Rugoff (1997) and its extension in Bray (2014).

⁷ This team included Dr Clyde Snow helped found the [Equipo Argentino de Antropología Forense](#) (EAAF) in Argentina, a pioneering and influential non-profit organisation dedicated to humanitarian forensic action internationally.

image that produced the potential for conviction” (p.38, my emphasis). Here ‘conviction’ reflects both scientific confidence and a judiciary decision.

As noted by Keenan and Weizman, the case of Mengele is a tipping point in the recognition of forensic anthropology globally: it was credited with establishing methodologies and procedural standards that would become part of the basic toolkit of humanitarian forensic work (Doretti and Burrell, 2007; Cordner and Tidball-Binz, 2017), a “crystallization of identificatory forensics” (Keenan and Weizman, 2012a, p.55) performed by a method that now forms part of a broad suite of craniofacial identification and depiction methods popularly referred to as Forensic Art. Further, the public exposure catapulted forensic anthropologists from obscurity to celebrity in an unprecedented way, producing “an expanded public domain [for their work] that was soon to include – and had to find ways to deal with – many more skeletons and human remains: a domain that is not limited to courts and press conferences but today has made its mark in popular culture at large, with complex results.” (Keenan and Weizman, 2012a, p.56)

Much less visibly – largely because photography was not yet invented and the media did not operate with a fraction of the international scope that it would a century later – the ‘body in the pub’ is an historical example of *forensis* in action in early Victorian Britain. The bodies of those who suffered ‘unaccounted for’ deaths would be removed to the local inn, where the coroner would hold an inquest and the jury would have to view the body in person (Burney, 2000, pp.6–7), with little consideration for more contemporary sensitivities that bearing physical witness to potentially violent death that (some) modern forensic and judicial contexts now recognise, and attempt to mitigate through the presentation of remediated visual evidence such as simulations and diagrams. Later that century, such tasks were professionally separated and removed to purpose-built facilities, with the death investigation process enacting a translation or transposition from private-professional (autopsy/pathology, lab) to public-professional (inquest/trial, courtroom). This has significance in Walter’s mediator deathwork theory, described in more detail further on.

Counter-forensics

Counter-forensics first appeared as a term in Allan Sekula's brief essay, 'Photography and the Limits of National Identity,' first published in 1993, about the role of photography in the Kurdistan genocide by the Iraqis (Sekula, 2014, p.30), and which is further expanded in the work of Thomas Keenan (2014a). Sekula defined counter-forensics as "the exhumation and identification of the anonymized ('disappeared') bodies of the oppressor state's victims [which] becomes the key to a process of political resistance and mourning" and credits Clyde Snow's prior work in El Salvador as "providing the technical basis for this project." (2014, p.31) "These are dismal sciences," Sekula writes, "but fundamental in their basic humanism, a humanism of mournful reindividuation, laying the groundwork for a collective memory of suffering" where "photography's incapacity for abstraction is invaluable."

Counter-forensics apply scientific and research – and as will be suggested here, *artistic* skills – to the work of humanitarian activism. This is not apolitical work, however it is important to note that counter-forensics are not 'anti'-forensic. Rather, counter-forensic initiatives show how traditional conceptions of authority and expertise have been challenged from *within* the field of forensics itself, as well as from outside of it, which opens up the prefix 'counter' (already a relational qualifier) to include 'adjacent' or 'corresponding' as well as the more obvious 'against' or 'in opposition to'. The work of the EAAF or Forensic Architecture has come to exemplify the counter-forensic as their findings, although coming from a space of activism, are also accepted by formal investigative authorities.⁸

This work shares the anti-authoritarian spirit of creative technologies developed to disrupt the collection of personal data by state or corporate interests, or draw attention to violations of privacy embedded within

⁸ The exhibition project *Poisoned Past: Legacies of the South African Chemical and Biological Warfare Programme* (Smith et al., 2016) which ran parallel to the very early part of this study, is an example of a counter-forensic investigation insofar as it revisits the lack of accountability for apartheid-era human rights abuses perpetuated by a secret state programme. Findings from various investigations, hearings and trials (TRC, criminal and professional disciplinary) were re-presented along with newer findings and poetic interpretations of evidence towards drawing out alternative narratives in unresolved matters of historical state-sanctioned violence and their significance in the present. See Rappert *et al.* (2018), included in Appendix 1.

everyday technologies (facial recognition systems are popular targets, such as in the work of Adam Harvey or Zach Blas⁹) and like those artistic responses, are committed to exercising basic human freedoms against the function-creep of techno-political expressions of state and corporate security in which certain identities are more heavily policed than others.¹⁰



Figure 10: Adam Harvey, Look N° 1 from *CV Dazzle*, 2010. [Online](#), accessed 2 August 2020. Courtesy of the artist.

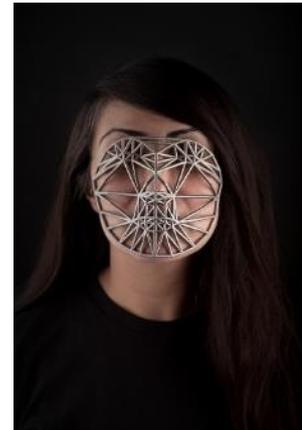
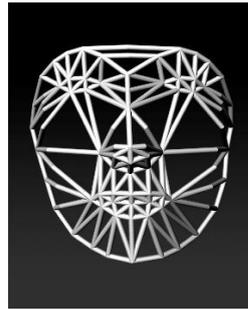


Figure 11: Zach Blas, from the *Face Cages* series, 2013-2016. Left: *Face Cage 2*, 2014. 3D rendering, 5 x 3 x 5 inches. Photo by Scott Kepford. Right: *Face Cage 2*, endurance performance with Elle Mehrmand, 2014. Courtesy of the artist

Further, it is interesting to consider ways in which counter-forensics has found additional expression in the work of ‘citizen forensics’ (Ferrero, 2014; Halber, 2014; Cruz-Santiago, 2017; Schwartz Marin and Cruz-Santiago, 2018), where both simple and sophisticated technologies enable a form of participatory science that in its ‘unauthorized’ work activates the body politic towards a truly public reclamation of *forensis*. Of course, one’s own orientations, to use Sara Ahmed’s term (Ahmed, 2010), will determine how one considers work like this as either negatively or positively transgressive. Can the challenges to structures of authority and power that

⁹ Both artists approach subjects of computation, privacy, surveillance, and performance where the face is a prominent feature. Harvey’s *CV Dazzle* (since 2010) and Blas’s *Face Cages* (2013-2016) and *Facial Weaponization Suite* (2011-2014) were case studies in a paper delivered at the 2017 IACI conference, Brisbane, Australia. See Appendix 1.

¹⁰ This finds expression in racial profiling in policing; the post-9/11 United States ‘War on Terror’ which constructed Muslim identity as an object of fear and violence; and the UK Home Office’s creation of a ‘hostile environment’ for migrants under then-secretary Theresa May (Yeo, 2018).

such work represents be tolerated, or even better, *recognised* as offering potential solutions to operational problems?

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Figure 12: Citizens protesting missing Mexican students, Acapulco, Mexico, 2014.



Figure 13: Zach Blas, *Procession of Biometric Sorrows*, public action, Mexico City, Mexico, 2014. Part of the *Facial Weaponization Suite* series, 2011-2014. Photo: Oliver Santana. Courtesy of the artist.

These two expressions of the counter-forensic and their respective ethics and interdisciplinary approaches thus offer important ways to rethink the primary work and secondary affordances of post-mortem Forensic Art practices. Frieze has observed, “The rampant spread of the term ‘forensic’ is symptomatic of what forensic aesthetics responds to: a large-scale breakdown of certainty about the basis of truth... Forensic aesthetics casts itself not as constructive but as *responsive*, presenting its work as *reparatory* to breaches or potential breaches of trust and order.” (2019, p. 7; my emphasis) This reparatory ethos motivates the critical (re)location of post-mortem Forensic Art proposed here, as a principal feature of the methods and techniques used to carry out post-mortem depictions based on mortuary photographs, where signs of trauma and decomposition are reversed or repaired through drawing or photographic compositing, and facial reconstructions from the skull, which recreate facial appearance completely. Noting that while ‘repairs’ to a facial image are principally a technical operation, this work also has social and cultural (i.e. humanitarian) affordances that exceed this technical mode, which are not yet adequately understood or leveraged within, and by application of, the practice.

Thinking through deathwork

Walter (2005, p.383) defines deathwork as “specialised work following a death,” which traditionally takes the form of a dyadic therapist-client relationship.¹¹ Mediator deathwork however entails a “triadic flow of information: the dead > mediator > public rite” involving two key tasks, enacted across different sites, and meeting two conditions. Firstly, information is gleaned from the dead, in *private*; and then this information is translated/re-enacted/performed in *public*. The primary focus must be on the deceased (not the bereaved) and the story told about them must be public/official.

Storytelling and performance are central to mediator deathwork, along with the requisite authority to produce the necessary information in a plausible way (Walter, 2005, pp.386, 401). Pathologists, coroners, American funeral directors (distinguished from British ones), funeral celebrants, obituary writers, spiritualist mediums, and museum curators are suggested by Walter as key mediator deathworkers (Walter, 2005, p.384), of which three are of particular relevance in relation to Forensic Art: the pathologist, the spirit medium, and the museum curator. Where the second two are concerned, Chapter 5 elaborates further, but pathologists span the boundary into what is referred to here as ‘forensic deathwork’, which enables the incorporation of other relevant specialisms such as forensic anthropology and imaging practices.

The three core skills required by mediator deathworkers are showing **respect** to the dead; demonstrating **multiple competencies in cognitive and emotional labour in communicating plausible stories** to diverse audiences; and being able to **perform these stories in an engaging way** while keeping their own personality out of the performance (Walter, 2005, p.406). As Walter suggests, a certain level of invisibility or sublimation of personality confers authority in mediator deathworkers: even as they all

¹¹ In Walter, other models of deathwork include the dyadic “barrier deathwork” where the professional “insulates the living from the dead” (British funeral directing is his example) and the triadic “intercessionary deathwork” where “priests send prayers the other way, from the living to, or on behalf of, the dead” (Walter 2005: 383)

actively ask questions of the deceased, they are all taught to be “passive receptors.” Mediator deathwork thus involves “a seemingly contradictory mix of qualities,” as those performing these duties must be “a mere channel, yet also to be able to orchestrate a ritual drama and to hold an audience.” (Walter, 2005, pp.402–403) This ability to be a medium for a particular message chimes with how the authority of evidence (truth) is produced within forensic contexts, an extension of conventions of scientific objectivity that must also bear legal scrutiny.

Forensic cultures and visibility

This research is situated within a specific community that is in many ways hidden from casual sight as well as from theoretical consideration, which is in part an occupational feature of deathwork generally, but which is amplified in forensic deathwork: medico-legal investigations produce privileged and sensitive information which may have criminal significance. Access to relevant sites of investigation and related data is necessarily restricted to essential stakeholders, so conducting research within this field as an external/adjacent practitioner requires significant levels of negotiation, including validating one’s cognitive authority, and establishing trust amongst key practitioners who may serve as initial points of contact/entry.

Burney *et al.* (2012, p.1) suggest that the public visibility of forensic cultures is “unprecedented” for an applied science, but in respect of forensic imaging particularly, this visibility is also relative and paradoxical (and thus compelling) and sited in particular ways. The crime scene (‘field’) and medico-legal mortuary (‘lab’) are two particularly potent emblems of forensic cultures, sites where professional and lay knowledge contentiously intersect via the CSI Effect which has rendered the work of forensic science imaginatively visible, extending the third site – the public forum – to the realm of the fictional. Here the dual power of the abject (attraction~repulsion) finds powerful expression, which is perhaps exactly why forensic procedurals like *CSI* are so popular: they draw back a veil on this particular type of edge work, fictionally reorganizing the messy, slow, largely analogue and frequently chaotic character of the real investigative

milieu, and recasting its numerous, often fractious stakeholders as glamorous, close-knit and multi-skilled teams. Investigations which in reality take days, weeks or even years to complete, find rapid, satisfyingly clean and seductively hi-tech resolutions within forty-five to sixty minutes.

Forensic Art represents a facet of forensic cultures whose work products are arguably the most reliant on public exposure, and the feedback of publicly sourced intelligence back into operational workflows, yet it does not (yet) form part of the scholarly literature on forensic cultures.¹² As Burney *et al.* observe (2012, p.3) forensic science as a field of study has established itself as “a lively interdisciplinary exercise” which involved “recognising, and accounting for the ways in which representations of forensic knowledge and practice circulate amongst and impact other cultural realms.” The ways in which they describe the production of forensic knowledge (which is also true of knowledge *about* forensic matters) as offering “new insight into the power of, and meanings embedded in, forensic locations, networks and formations,” precisely describes the rationale for the focus on primary data produced through extensive fieldwork which characterises this study. Their appeal to understand forensic science as “a historically-shifting material and social entity but also as mediated through a cultural grid of forms, languages and resources through which credibility is built up, negotiated and contested” as “both situated and normative,” in which Science and Law are not “irremediably estranged cultures with incompatible epistemological assumptions, methodological protocols and normative political and ethical commitments” (Burney et al., 2012, p.2), aptly nutshells the perspective taken here.

¹² The 2010 conference ‘Forensic Cultures’, hosted by Manchester University’s Centre for the History of Science, Technology and Medicine was the UK’s first conference dedicated to the interdisciplinary study of forensic science and medicine, which was documented as a series of papers collected into a special section of the journal *Studies in History and Philosophy of Biological and Biomedical Sciences* (Burney et al, 2013) and provides the foundational literature on the subject. The face is not wholly absent from consideration, but only considered in relation to CCTV surveillance (Edmond, 2013).

Critical methods as a function and expression of sited praxis

This study positions itself as an anthropology of beliefs and practices within, and in relation to Forensic Art, specifically, post-mortem facial representation. Mapping its potential theoretical terrain constituted a rather complex form of ‘boundary work’ (Gieryn, 1983, 1999). Cartographic metaphors are plentiful and appropriate for a study orientated around how practices are both sited and situated.

Experience suggests that interdisciplinary, research-based practice is characterised by an enfolding of method, theory and practical application/experimentation, producing a particularly rich form of heuristic knowledge that almost requires a form of reverse engineering to be able to articulate in an expository way. A methodology takes shape around which a number of ‘e’ words accrete: encounter, embodiment, embeddedness, enactment, entanglement. The frequency with which variations of the phrase ‘in relation to’ is used throughout flags a ‘situated knowledge’ perspective (Haraway, 1988), which is also post-colonial, feminist and committed to advocating for the intersectional within scientific practice (see for example, Zuckerman and Crandall, 2019). As such, it is more productive to speak to the spirit of the enquiry and demonstrate this through practice.¹³ Attending to the entanglements (Nuttall, 2009) of method and theory, orientated around a methodological-ethical nexus, is a productive space which resonates with Edward W. Soja’s concept of ‘thirdspaces’ in which the spatialities we inhabit have “the same scope and critical significance as the historical and social dimensions of our lives.” (Soja in Borch, 2002, p.113). The spirit of ‘thirdspace’ knowledge finds precedent in Carlo Ginzburg’s history of scientific methods, which are invested in delineating boundaries and disciplinary territories, largely premised on the distinction between the

¹³ Artistic research methods have methodological parallels in other disciplines that go by other names, make slightly different claims, and are theoretically described. For example, boundary work is recognised as consonant with artistic research methods (Borgdorff, 2012, pp.132–133), and assembling methods and techniques around identified problems or questions, which may then gain or lose traction and validity as the research (practice) proceeds, or be abandoned and revisited as necessary, essentially describes the character of any research process, but is particularly characteristic of a studio practice (practice-based or practice-led) which is reflected in sociological action-reflection methods.

‘mathematical rigour’ of quantitative methods which create generalised abstractions, and qualitative, “conjectural” ones, which attend to specifics by way of their ‘elastic rigour’ (Ginzburg, 1980, p.28). Certain practices require skills that cannot be learned “simply by applying the rules” and require other forms of sensory knowledge (his examples are connoisseurship or diagnosing illness). Ginzburg therefore advocates for maintaining focus on conjectural knowledge because it is “closely bound up with everyday experience – or to be more precise, with every *context* in which the unique and irreplaceable character of its components seems *critical to those involved*” (1980, p.28, my emphasis).¹⁴ Through a combination of theoretical review and participatory empirical observation, Forensic Art is understood as a frontier territory populated with colourful characters who are a rich source of tacit, community-based knowledge that has not yet been adequately anthologised or analysed for what it can reveal about the relationship between academic and practitioner cultures.

Orientations

A rich and sensitive understanding of context is of course essential to understanding the significance of data gathered during fieldwork, but also how to go about collecting that data in the first instance, particularly when the researcher is both observer and participant in the field being studied.¹⁵ The affordances (access) and challenges (implicit bias) of the participant-observer position is a persistent leitmotif and principle ‘focalising lens’, to

¹⁴ Tim Ingold’s (2018, p.10) position that ‘method’ is nothing but an affective armour designed to protecting the notional ‘objectivity’ of inquiry, shielding the researcher “from direct sensory contact with materials” is indebted to Ginzburg. Appealing to the spirit of what Ingold refers to as ‘Goethean science’, which he describes as an immersive and multi-sensory approach which should “endeavour to reach a level of mutual involvement or coupling, in perception and action, such that observer and observed become all but indistinguishable,” Ingold is trying to reclaim the values of wonder, respect, commitment to curiosity and gratitude (in a word, love) that he avers has been stripped from the contemporary scientific project by the “technocrats of innovation,” and which art, or artistic methods, have the potential to reclaim. As such, the (re)searcher’s own presence is “an essential prerequisite for learning from what the world has to offer us”, not “a source of observer bias to be reduced at all cost.”

¹⁵ Participant-observation is a concept innate to anthropology and ethnography, a position that acknowledges the researcher as central to an ethnographic process, in other words, where the researcher’s own subjectivity, experience and background will inevitably function as an interpretive lens, and is as available to critical analysis as what it being studied.

use Mieke Bal's phrase (Bal, 2001), onto the ways in which work products and knowledge circulates within such spaces, and the conditions under which these products and knowledges might transfer out of them. These contextual translations across "grey areas and endless negotiations" (Doretti and Burrell, 2007) provide a useful means to analyse how Forensic Art, as an expression of forensic cultures in general, advance or obstruct their own interests.

Sara Ahmed explains the concept of 'orientations' as "the direction we take that puts some things and not others in our reach." (Ahmed, 2010, p.245) These things may be apprehended only by exceeding our gaze – in other words, their absence or presence must be otherwise sensed – and then "only insofar as it has come to be available," in other words, not as a fact of their physical location but how our orientations shape the way we "face some ways more than others."¹⁶ This is a question of what our individual subjectivity and attachments (disciplinary and otherwise) make us alert. "If orientations affect what bodies do," she continues, "then they also affect how spaces take shape around certain bodies." (2010, p.250) Ahmed is of course pointing out the ways in which certain bodies are assumed to be normative and expected within certain environments, whilst others are framed as being somehow 'out of place', not meeting certain criteria by which they might become "naturalized" in relation to certain spaces (2010, p.251). Gender and race are obvious co-ordinates here, and have come to figure significantly in discussions around implicit and cognitive bias relative to post-mortem facial depictions (Trans Doe Task Force, 2020; Wilkinson, 2020). Far from assuming that the experiences of the missing or migrant body, the unidentified decedent, or even the forensic artist working at the boundaries/edges of art/science/law as well as the living and the dead, are in any way equal or comparative (that would be absurd), these diverse bodies (living and dead) do all transgress designated social and epistemological terrains and thus themselves represent boundaries which *become* interfaces.

¹⁶ As the Preface demonstrates, my personal history is a formative foundational orientation which cannot be extricated from my professional identity and is the primary lens through which I am compelled to perceive how ideologies of power, violence and dehumanisation continue to be enacted on bodies perceived as less equal to others.

Sites speak of spatial delineations, but they are also epistemic – they become domains of knowledge with conceptual, material, political and virtual expressions and signifying potential. Maintaining boundaries, literally and figuratively, is an expression of power. As Achille Mbembe has cogently shown, spatial control is the clearest expression (the “raw material”) of sovereignty and its associated violence. Historically, colonial powers established new social relations through spatial control, and contemporary occupations act similarly: “Sovereignty meant occupation, and occupation meant relegating the colonized into a third zone between subjecthood and objecthood” (Mbembe, 2003, p.26).¹⁷ Around this concept a number of formative ideas and sources all to do with relationality, boundaries and orientations accrete – ‘heterotopia’ for example (Foucault and Miskowiec, 1986) and Pierre Bourdieu’s ‘field’ (Swartz, 2016, online) – along with considerations of flows and networks, and who the significant actants (people or objects) operating in these spaces might be.

Testing or crossing boundaries, or working at the edges is by definition risky, transgressive. As a field of applied expertise that is “uniquely compelling, and often contentious,” forensic cultures operate across a range of sites and domains; it is inherently about “locations, networks and formations.” (Burney et al., 2012, p.1) This is reflective of a material semiotic approach which echoes aspects of Actor Network Theory (ANT) (Latour, 2017). A multimodal and multi-sited approach enables critical links to be made across such locations, networks and formations, as well as between theory, policy, practice and public understanding in a field where isolation/silo-ing of information is common via the legacies and practices of forensic culture as a particular expression of a multi-stakeholder institutional culture. The intersections between investigatory and judicial worlds, the public sector and academia are short on connectivity and joined-

¹⁷ Mbembe illustrates the differences in late-modern occupation compared to early-modern forms (colonialism) via Palestine, “in its combining of the disciplinary, the biopolitical, and the necropolitical” (Mbembe, 2003, pp.27–29). Its spatial metaphors embody the implicit proliferation of violence made possible by new technologies of surveillance and aggression including logics of “dispersal and segmentation” such as “splintering” and “seclusion”, “the overlapping of two separate geographies that inhabit the same landscape”; “surveillance and control vested in higher-ground structures and aerial technologies, what Eyal Weizman has called a ‘politics of verticality’” with “no continuity between the ground and the sky.”

up thinking, yet if these values and practices can be suitably fostered, positive results are shown to follow.

Further interdisciplinary links can be made to four-field anthropology, an inherently sited concept incorporating archaeology, biology, language and culture, and recognised as a foundational impetus for the cross-cultural approach of this study, as well as reflecting the interdisciplinary nature of post-mortem facial depiction methods, particularly facial reconstruction, as applied in forensic or historical casework.¹⁸ Following Adovasio in Dirkmaat (2015), ‘sitedness’ extends to how bio-anthropology might be distinguished from bio-archaeology: the former is situated in the ‘lab’ whereas the latter is associated with the ‘field’. Thinking back to the forum as a site which hosts the public presentation of evidence and thus produces or denies justice, the arrival of said evidence at this site is preceded by its collection at the site of investigation, and subsequent processing at the site of analysis, whether lab or studio (Weizman, 2018, p.66). By extension, the transfer of knowledge – by whom, how and when – are factors which contribute to whether disciplinary status can be conferred to an activity or not. Forensic Art faces similar challenges to its professional status and recognition, albeit for somewhat different reasons, so the ways in which work products and knowledge circulates within such spaces, and the conditions under which they might transfer out of them, provides the primary means to analyse how such cultures support or hobble their own interests.

‘Site’ has various expressions and reflections, almost superseding that of the image as object in this study, or more accurately, pointing to the entanglement of sites, objects and subjects. George E. Marcus’s ‘multi-sited ethnography’ (1995) as both concept and practice, offers ways to produce and critically reflect on, forensic cultures as particular producers, and performers, of emic and etic knowledge as expression of the social

¹⁸ Some include a fifth field, Applied Anthropology, where anthropological methods or theory are applied to solving human problems within a specific context or population, for example in Medical Anthropology, Anthropological Economics, and Contract Archaeology *inter alia* (Wikibooks, 2020) The echoing of Rose’s four sites (Rose, 2016) is acknowledged in how ‘field’ and ‘site’ imply practices that are specifically located and locational.

anthropology concept of in-group/out-group,¹⁹ which participant-observation amplifies.²⁰ It creates the space to attend to the flows and networks of situated knowledge, produced through dialogical engagement with study participants, and a characteristic feature of grounded theory approaches (Holton, 2018). Given Forensic Art's particular conditions and practitioner sites, the field represents a unique enfolding or entanglement of emics and etics in a way that suggests any attempt to produce a nuanced account of this world from a completely external position would be severely constrained, while a view 'from within' needs to remain vigilant to bias.

Jane Rendell's methodology of 'site-writing' as a form of embodied writing that enables the exploration of (and reflection on) the writer's own subject position "in relation to their particular objects and fields of study, and on how their writing can engage materially with their sites of inquiry and audiences" (Rendell, 2020, online)²¹ extends what Rose's 'four sites' of visual analysis offers (Rose, 2016). Related to this, site-specific/site-responsive artistic practices (Kwon, 2004) are particularly relevant examples in which dialogue and other relationships with a 'host' community are essential to establish trust between artist, site and stakeholders, and in which meaning is produced dialogically or relationally, rather than externally imposed (Kester, 2004, 2011; Bishop, 2012).

Orientating around 'site' and its manifest signifying qualities is thus proposed as a sufficiently flexible framework that resonates across disciplines of art and anthropology without losing specificity, enabling the researcher to attend both to the specifics of an observational context and its broader significance.

¹⁹ Broadly speaking, emic refers to knowledge developed from within the social group (from the perspective of members) whilst etic refers to external perspective on a particular group (i.e. from the perspective of an observer).

²⁰ As a general practice Forensic Art is itself multi-sited, simultaneously engaging craniofacial anatomy, cognitive psychology, clinical imaging and art/illustration, but Forensic Art focused on post-mortem identification is more specifically a sub-set of biological anthropology and a suite of allied skills (oste archaeology, odontology, genetic phenotyping, isotope analysis etc.), particularly when the practice is applied to archaeological research and heritage practices.

²¹ See also Rendell (2010) for an extended exposition of the method and its products.

Identifying matters of care and concern in forensic identification

In this study, the practice of Forensic Art is located within forensic cultures, which have previously been framed within Science and Technology Studies (STS). Following Ginzburg (1980) and Rappert (Rappert, 2014, 2015), the methodology described here enables the sensing of absence within Forensic Art towards identifying ‘matters of concern’ (Latour, 2005) and matters of care (Puig de la Bellacasa, 2011), the latter more closely approaching an ethics of praxis, which is the primary interest.²²

As Rappert (2015, p.4) suggests, attending to absences is to ask, “How can those examining the ethical, legal, and social implications of science become more mindful about the implications they are *not* addressing?” In other words, what gets amplified and what becomes a blind spot, and at what cost? Identifying what is latent in participant interviews, for example, requires “being able to recognize about others what they might well not recognize about themselves.” (Rappert, 2015, p.17) Doing this work requires ‘heightened sensitivities’ to address complicity and the self-referential and demands experimental forms of enquiry that are attentive to tensions and this potentially disruptive (Rappert, 2015, p.19).

In Puig de la Bellacasa’s propositional model, concern and care are related; both are understood as ‘affective states’ but care is more easily translated as a verb; a form of action. Engaging matters of care requires attending to neglected or overlooked labour, “a speculative commitment to think about how things would be different if they generated care.” (Puig de la Bellacasa, 2011, p.96) It is thus propositional, a transformative ethos that suggests “how those who study things can participate in their possible becomings.” (2011, p.100). It is also gendered (feminist), signalling an interest in intersectionality, “counting in participants and issues who have not managed or are not likely to succeed in articulating their concerns, or whose modes of articulation indicate a politics that is ‘imperceptible’ within

²² Latour’s ‘matters of concern’ is interested in turning our energy away from the work of social theorization that Rappert (2015, pp.17–18) describes as “the deconstruction of other people’s facts” (“unearthing, exposing, revealing, and so on, the social basis for notionally objectified factual claims”) towards “attempts to understand the materially heterogeneous assemblages that enable the liveliness of things to emerge, be maintained, and move individuals.”

prevalent ways of understanding. Intervening in the count of whom and what is ratified as concerned affects the representation of things.” (2011, pp.94–95)²³

Forensic care as ‘relational citizenship’

M’Charek and Casartelli’s work in relation to Italian initiatives at Mellili to identify migrants who perished in the Lampedusa wrecks (2013) represents a significant study both in methodological approach (attending to absences) and how they recognise an expanded definition of citizenship as explicitly relational through “forensic care work” which deserves more attention from relevant authorities as it is “politically neglected” (2019, p.16). This work is informed by Puig de la Bellacasa’s matters of care, but instead of care resorting within an affective relation, here it is about the “practical work of achieving something good through tinkering with unexpected encounters [...] and the ability to experiment within the situation at hand.” (2019, p.2)

Their study suggests that caring for bodies also means caring for the infrastructure which is designed to produce them *as subjects*. Protocols are identified as an ethnographic device and an expression of relationality, designed to ensure bodies “move” in the right direction, “to make humans, things, and information flow together” in an unbroken chain of evidence (M’Charek and Casartelli, 2019, p.4), a point which is vital in the operational study described in Chapter 3.²⁴ However the actual, practical work of care, both for bodies and for infrastructure, is what protocols take for granted. Attending to absences here is thus driven by similar incentives to Walter’s mediator deathwork.

M’Charek and Casartelli (2019, p.16) further suggest that forensic care work helps us see how practices of citizenship unfold outside of formal

²³ Pointing to orientations, Puig de la Bellacassa (2011, p.95) evokes ‘standpoint theory’, noting that “thinking from marginalized experiences as political (that is, as problematic) has a potential to transform knowledge. However, in technoscience it is not only knowledge but also practices and sociomaterial configurations that are affected by this gesture.”

²⁴ The foundational criminalistics maxim of ‘every contact bears a trace,’ known as Locard’s Exchange Principle, appears to extend into Humanitarian Forensic Action (Cordner and Tidball-Binz, 2017) via M’Charek and Casartelli’s remark that “As bodies move, they change things and people around them” (2019, p.13).

responsibilities.²⁵ Post-mortem forensic care work produces relational citizenships because here, bodies of the unidentified become part of a collective, “bounded by ideas about humanity and acknowledges people as part of a human community and the world in which we live.” Following Rygiel, M’Charek and Casartelli (2019, p.16) suggest that this is a ‘transgressive citizenship’ or ‘citizenship from the margin’ as it “goes beyond the logics of the nation state, since the state takes into account and cares for dead people who are not formally its citizens” and as such, the unidentified dead become world citizens. Such a view opens the way to considering forensic deathwork’s role in producing post-mortem personhood in new ways.

Sensing absences through empirical observation

From personal experience, post-mortem forensic identification involves a significant amount of emotional labour which is not reflected in the professional literature. Emotional labour is a form of hidden work that if made visible, enables other things to come into view. The labour of practice – for example developing facility in artistic techniques like drawing, sculpting, digital compositing, or even just absorbing a systematic protocol such that it becomes second nature – is developed through repetition, and might also be seen as a form of hidden labour. And paradoxically, once mastered, the hard work of repetition is perceived as ‘effortless’ (Ahmed, 2010, p.246).

The value of forensic imaging is vested in its material outcomes. The role that emotional labour plays in this work (and its costs) is hidden, and

²⁵ Citizenship conventionally describes the relationship between an individual citizen and a nation-state, under which the individual has certain rights or obligations recognized under the custom or law of a particular territory. Citizenship is thus a state of belonging (agency), with ‘good citizenship’ involving an adherence to obligations (for example paying taxes, or not breaking the law) as well as other contributions to the ‘greater good’ of a particular community. This study was undertaken against the backdrop of significant political events, including Brexit (by which a narrow majority of citizens of the United Kingdom voted to withdraw from the European Union) and the election of Donald J. Trump as the forty-fifth President of the United States, both of which amplified the critical citizenship conversation globally through tacit and explicit political messaging signal-boosted through the tentacular networks of social media.

thus poorly understood. Might it be a source of reflexive knowledge in the way that, for example, the hidden curriculum of emotional and behavioural conditioning has been explored in anatomy education contexts? (Prentice, 2013; Kramer et al., 2019) It was not assumed that engaging this subject within professional and institutional cultures that are deeply invested in clinical/investigative objectivity would be easy, but given the innate ‘sociability’ of bodies (Lambert and McDonald, 2009), it was an essential component of identifying expressions of humanity within a culture not conventionally associated with the concept.

Data collection included a combination of textual and visual research and analysis, desktop research (case records review), and fieldwork, including participant-observation in operational contexts in the United Kingdom, the United States, South Africa and South Korea, recorded in visual, audio and written fieldnotes (notebooks and digital devices/files). A total of seventy participants were engaged in ten countries across five continents internationally, representing every major global context with the exception of South and Central America, of which forty-eight were formal respondents to a semi-structured interview conducted in-person or via online video call.²⁶ Of these, seventeen agreed to participate in an experimental re-presentation (re-mediation) of this research material, represented by the accompanying artwork *Speaking Likeness*.

In addition, professional conferences and training workshops were significant sites of empirical observation, data collection and participant recruitment, as well as social interaction and the formation of new friendships that extend beyond shared professional interests. The entanglements of professional and personal investments, especially in niche fields such as this, is thus embraced as both an asset (facilitating access) and a potential liability (limiting or shaping critical analysis in particular ways).

²⁶ Within healthcare research, this type of approach is referred to as a KAP study (SPRING, 2014), surveying the Knowledge, Attitude and Practice of a specific cohort or community to produce an ‘educational diagnosis’ of that community towards betterment. KAP studies provide quantitative and qualitative information about the gaps between knowledge and action (what is known, believed and done), and are therefore appropriate for collecting context-relevant data towards future planning and policy development. A study by Edirisinghe, Kitulwatte, and Nadeera (2020) surveying the use of digital photography in the medico-legal context in Sri Lanka is a particularly relevant example here.

Table 1 summarises key research activities in terms of their duration, location and respective objectives. Woven throughout this thesis (but finding particular focus in Chapters 3, 4, and 5) are indications of how each contributed to the overall data collection and research experience over time i.e. how they implicitly or explicitly fostered knowledge transfer relative to the activity (including professional and social interactions); and the ways in which expectations in advance of each activity were either met, challenged or exceeded. This table excludes the majority of conferences, symposia and invited seminars attended or given during the period of research, which are detailed in Appendix 1.

Table 1: Summary of main fieldwork activities 2016-2018

Activity	Year	Duration	Objective/s
1	2016	27 – 28 September	Exploratory fieldwork in Cape Town (South Africa) and establishing terms for operational sub-study (see Chapter 3)
2	2018	5 – 10 February	‘Drawing to Depict the Deceased’ 40-hr CPD certified workshop with Karen T. Taylor, Texas State University, San Marcos
3	2018	28 July – 9 August	IAI annual educational conference, San Antonio, TX with extended fieldwork stay in Austin TX
4	2018	21 October – 2 November	Fieldwork in South Africa (Johannesburg, Pretoria, Cape Town) conducting formal and contextual interviews with SAPS members, academics and FPS
5	2018	19 – 24 November	Operational observation at National Forensic Service, South Korea
6	2019	July cancelled due to hurricane	Follow up interviews and portrait making with participants of the IACI conference, Baton Rouge, Louisiana

Voice and Structure

Alongside site as a concept but also a physical/virtual location, ‘voice’ as polyvocality is taken up throughout the study to give shape to the numerous voices and perspectives that have contributed to and shaped this enquiry. The site-writing of the Preface introduces the voice of the artist-storyteller as discrete from the voice of the researcher-analyst, although they are aspects of a single scholarly persona. Here the phenomenon of situated knowledge is reflected through direct experience of encountering forensic spaces first as non-expert/outsider (artist), and then as expert/insider (trained

forensic artist), and how this translates into greater agency and cognitive authority within forensic cultures.

The experience of conducting numerous semi-structured interviews under various conditions – conversational versus written; face-to-face versus virtual/telematic; familiar and unfamiliar locations – brought to the fore the contingencies and fluidities of the conversational form and the potential to engage a range of disciplinary and professional concerns in ways not reflected in the literatures. Given that interpersonal communication was essential to organising and agreeing these interviews, the most striking takeaway from the fieldwork experience as a whole was witnessing the consistent failure of effective communication within single institutions or services, as well as between them, and how certain participants (under anonymity) appeared to use the researcher’s in-group/out-group status (a particular agency and voice) to communicate frustrations that had no satisfactory platform within their respective work contexts or networks. The diverse composition of practitioners in the international forensic facial imaging community, and the sites in which its images must circulate and hopefully effectively communicate with the public, amplifies breakdowns, blind spots and missed connections in identifiable ways, but when such breakdowns are rerouted through counter-forensic initiatives, the positive results are equally striking. The research design and presentation thus actively sought out a device which could describe this process, but also embody it (the artwork).

Within the thesis, polyvocality is translated into deliberate modes of writing, namely theoretically-informed discursive analysis set alongside prose-style narrative (field vignettes) to suggest the compatibility of empirics and poetics (the ‘law’ of the forensic and the ‘lore’ of the social and cultural) as complementary ways to approach an understanding of a problem in which critical subjectivity becomes an asset rather than a limit of scholarly enquiry, and illuminate specific problems or encounters within certain spaces or between particular stakeholders. During the data analysis process, interviews (written and verbatim transcribed audio) became akin to a sculptural material through an awareness of the shapes that conversations take over time, and whether or not they begin with an existing familiarity or

as an encounter between complete strangers. The particular structural conditions of Forensic Art demanded that individual voices be heard without excessive mediation, and although there was no possibility of representing the nearly half a million words of interview data in any significant detail, verbatim quotes from interviews have been used to give nuance and thick description to demographic data, particularly in Chapters 4 and 6 (and their associated Appendices), and is the fundamental substance of *Speaking Likeness*, described in Chapter 5.²⁷

The following chapter, *From Forensic Art to Forensic Action*, is divided into three parts. Part 1 summarises an international history of Forensic Art praxis in relation to its parent disciplines, key figures, important knowledge-producing sites and current professional challenges in the field, including the disambiguation of Forensic Art from its partner discipline of Facial Identification. Part 2 offers an illustrated review of the literatures that also attends to the theoretical scope and limits of the project. The lack of a foundational theory for Forensic Art within visual culture or thanatology made it necessary to cast nets into adjacent fields and pick through the catch to find relevant pockets of scholarly work that may be assembled, however unconventionally, towards an expanded understanding of Forensic Art in terms of its socio-cultural affordances.²⁸ These find common ground where the post-mortem body, photography and the ethics of spectatorship intersect, framed two key concepts: necropolitics (Mbembe, 2003) and the civil contract of photography (Azoulay and Institute for Public Knowledge, 2011; Azoulay, 2012). Part 3 shifts theoretical focus to concepts of faciality and builds on the concept of ‘edge objects’ which sit at the boundaries of representational registers. In Part 4, forensic identification and humanitarian action come together, framed by Walter’s theory of mediator deathwork and the ideals and ethics of the counter-forensic,

²⁷ Where possible, these are cited from the *Speaking Likeness* manuscript (vol.2 of this thesis) Additional material is included in the relevant chapter appendices.

²⁸ Taken together, this particular approach to reviewing the literatures is imagined as an assembly of ‘critical friends’, as Lorraine Daston might say (2008, pp.228–229), acting to keep each other “interpretable and articulate visible”; or as a ‘meshwork’ to use Tim Ingold’s phrase (2015) where theory, visual methods and an ethics of action intersect, advancing the work of identifying an appropriate location for Forensic Art by expanding the theoretical basis for Forensic Art in relation to forensic and visual cultures and demonstrating its relevance to other fields of study.

described with reference to ‘mirror sites’ in Europe and the United States doing critical work with unidentified refugee/migrant bodies, which provide the impetus and ethos for the sub-study described in the next chapter.

Post-Mortem Visual Identification in South Africa: An Operational Study addresses the crisis of unidentified decedents in South Africa via a sub-study combining a records review and empirical observation conducted in a medico-legal mortuary in Cape Town, South Africa with additional observation of the Wits ID Unit in Johannesburg (Brits et al., 2020) and the co-operation of specialised units within the South African Police Service (SAPS). The viability of post-mortem depiction as a routine modality of visual identification is explored, with post-mortem facial photography hypothesised as a space for primary intervention towards improved service delivery.

Forensic Cultures: In the Field reports on fieldwork conducted internationally with forensic deathwork practitioners and is divided into two parts, the first presenting a selective synthesis of results from semi-structured interviews with forensic artists and allied specialists highlighting key features of continuity and contrast in professional and cultural practices within post-mortem human identification, suggesting new ways that this work could be theoretically repositioned and thus better professionally supported and capacitated, as well as promoted, in the interests of greater public understanding and co-operation. The second part reports on the findings of a focus group with forensic pathology officers exploring processes of visual identification of the dead, and how various post-mortem depiction styles may be received in a context where such images are largely absent from visual and media cultures, and where cultural and religious diversity demands particular sensitivities to questions of post-mortem representation. Forensic officers are shown to be holders of invaluable but often overlooked knowledge in their role as mediators of the intersectional interests of law enforcement and medico-legal investigations, and next-of-kin.

Chapter 5 presents a critical exposition of an [online artwork](#)/e-book *Speaking Likeness* (see thesis volume 2), conceived in response to the limits of writing in which selected practitioner data is re-mediated into a

conceptually dense but open artistic form representing an experimental translation of the research process and core tenets of the thesis, drawing on concepts of staging, performance, interface, prosopopoeia and the voice of the ‘expert’ with reference to the theatrical operations of *forensis*. The original contribution of the study – its methodological and theoretical contributions, generation of primary data and the production of an original artwork – is vested in these three chapters, in which the complexities of in-group/out-group dynamics, emic/etic knowledge relative to the diversity of stakeholders in forensic deathwork, and the socio-cultural affordances of post-mortem Forensic Art come to the fore.

The penultimate chapter, *Restaging Forensic Art in Three Acts*, advances the central thesis of this study in three moves that draws theoretical, empirical and creative findings together in a critical discussion. The first part considers how the forum of post-mortem identification is being expanded through public engagement, framed by Claire Moon’s concept of forensic humanitarianism as ‘extraordinary deathwork’ (Moon, 2020) and the concept of the ‘pracademic’ (Caldwell and Dorling, 1995; Posner, 2009), suggesting ways in which the current epistemological and professional challenges of Forensic Art may be reimagined and repositioned. Part 2 returns to the face through the work of M’Charek and Schramm (2020) and Judith Butler’s notion of ‘radical effacement’ (Butler, 2006a), illustrated with examples from contemporary art and online citizen forensics – a significant site of counter-forensic action itself – which challenge biological assumptions about identity presentation and enable a reclamation of critical citizenship in the context of the original public ethos and praxis of *forensis*. It concludes with a description of three ways in which post-mortem facial imaging may be repositioned as a form of deathwork via the practice of visual re-mediation.

In conclusion, key findings are summarised into six areas which suggest ways in which the future of the field may be strengthened, grounded in the repositioning of post-mortem Forensic Art as a tool of forensic humanitarian praxis that supports operational efficacy and social engagement.

Chapter 2: From Forensic Art to Forensic Action

There is no doubt a politics behind looking at the dead: we are inclined to look away.

(Edkins, 2015: 49, note 51)

Introduction

The reasons why attention should be given to the social and cultural affordances of forensic facial images has not yet been articulated from within the field, or from scholars studying forensic cultures. As facial images, they are preceded by expectations of conventional portraiture, which cannot be met. This causes an epistemological frustration which results in their dismissal as aesthetic objects as well as objects motivated by other conceptual or formal concerns. They are perceived as failed art, variously dismissed as aesthetically unsophisticated, uninteresting, instrumental, mechanistic, while also being overlooked as objects of cultural interest. Yet any claim to 'being art' is externally projected; from within the field, the limits of these images are understood. Any reference to art points to its practical techniques, and the necessary perceptual and interpretative skills that enables the complex forms and shapes of the face to be translated and rendered multi-dimensionally.

Attending closely to the central research questions, *What is at stake in producing, working with & circulating images of post-mortem faces?* and *What kind of art is 'Forensic Art'?* this chapter has four main moves. Firstly, it tracks international histories of post-mortem Forensic Art and key knowledge-producing sites and representative bodies in relation to its current professional issues, including professional standards and accreditation/certification and the disambiguation of Forensic Art from Facial Identification.¹ Secondly, it tracks the in/visibilities of post-mortem

¹ The objective is to situate forensic facial imaging practices in relation to how their respective cognitive authority is produced and translated across world contexts, shaped by their recognition (or lack thereof) by 'parent'/adjacent/contributing disciplines (anatomy,

visual representations in thanatology and visual/media studies via the idea that images (and our response to them) are conditioned by literal and metaphorical limits of tolerance, to which modes of circulation (exposure) are essential considerations. Three tropes emerge as most relevant for future work on this subject – visual thanatology, faciality, and the ethics of spectatorship – which are illustrated with recent examples that embody the necropolitics of the visual and photography’s civil contract.

Attention then shifts to foundational theories of faciality and the effects/affects of facelessness, and considers the role of material and visual transformation – here referred to re-mediation – in generating ambivalence in post-mortem representation, by which forensic facial depictions may be considered ‘edge objects.’

The final section focuses on the current global humanitarian crisis produced by contemporary migratory trends, framed by the legal and socio-cultural principles underpinning the developing discourse of Humanitarian Forensic Action (Cordner and Tidball-Binz, 2017) and particular forensic responses in in Mellili (Italy) and San Marcos (USA) which appear to be advancing traditional forensic practices by embracing a counter-forensic ethos. These initiatives function as mirror sites for the South African context, which is the focus of the following chapter.

Limits of tolerance

This study is invested in the material-semiotic power of forensic facial images, particularly those depicting the unidentified dead – how they matter *as* matter and to whom – within as well as outwith the specific ‘site’ of investigative work. In other words, what significance might such images have *in excess of* their forensic work? And how do such images relate to representations of the dead produced in the service of personal memorialisation or political interests, broadly defined? This is informed by

pathology, physical/biological anthropology, cognitive psychology) and related fields of practice, such as medical illustration.

a longstanding interest in the 'limits of tolerance' in visual representation, specifically those provoked by encountering images of the dead.²

With reference to the human body, the idea of tolerance has a psychological expression as well as a physical one, describing our resistance to something we find stressful, difficult, distasteful, or unpleasant. What can you tolerate? What are you *prepared* to tolerate? It also has a technological expression: how much variation or pressure can be accommodated before a system, structure or object fails? It is a feature within digital image processing (a principle method in this study), where it refers to a permissible range of error, inaccuracies, or adjustment relative to a given parameter. For example, will the resolution of an image (relative pixel value) allow it to visually tolerate significant adjustments of brightness or contrast, or will unacceptable distortions result if its tolerance levels are exceeded? For example, areas of flat tone (little or no detail) in high-resolution images often develop 'banding' when saved as lower resolution image formats, particularly when the image has undergone post-processing, which may be visually unacceptable. Thus the principle of tolerance limits can be applied metaphorically to identify a set of conditions or boundaries within which an image appears to function, imagined as a spectrum and associated with accepted 'laws' (explicit conditions) or otherwise tacitly (socially) agreed principles that condition how images are put to work within certain contexts or frameworks, the stories we tell about them, or use them to tell (lore). As such, images have ethical, cultural, political, forensic, and cultural potencies that may exceed their original purpose or intention. These limits determine how such images signify at different moments in history and in different contexts and are imagined as expressions of visual affect which in turn reveal the social, cultural and political lives of images that may not be immediately obvious. Certain images, usually those which depict a 'taboo' subject (however defined), provoke these limits with different effects. The post-mortem face possesses particularly potency here, supported by how

² This is most closely related to representations of the body in pain; visual affect and the ethics of spectatorship which extends to any image considered in some way explicit, obscene or transgressive (Foster, 1996) and is discussed further in Chapter 2.

such images are regulated, mediated, hidden, or absented from our visual experience, whether in the media, museums or visual art.

The function and efficacy of images are shaped by their conditions of production and circulation. This includes scientific and technical images which, instead of possessing some sort of self-evident authority, are as contextually determined as any other type of image (Elkins, 2007; Flusser, 2011; Coopmans et al., 2014; Bredekamp et al., 2015; Mitchell, 2015). Gillian Rose’s work on visual methodologies (Rose, 2016), specifically her ‘four sites’ model of critical visual analysis encompassing the sites of Production, the Image Itself, Circulation and Audiencing, as well as three related modalities – Technological, Compositional and Social (fig. 14) – underpins the analysis of the work of post-mortem forensic facial images.

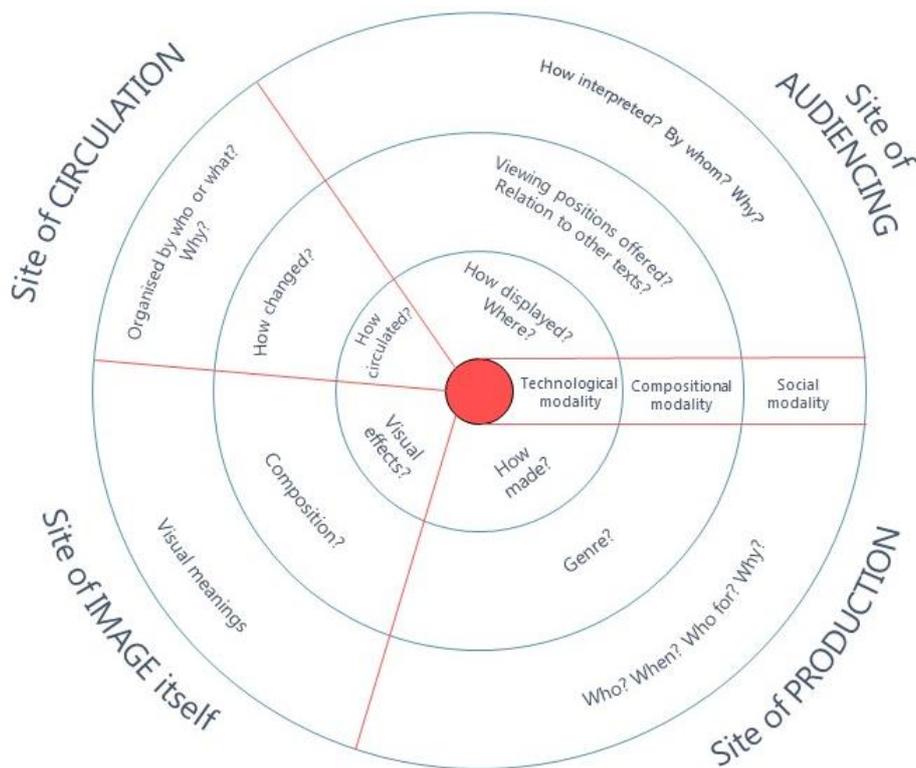


Figure 14: The sites and modalities for interpreting visual materials. Redrawn from Rose (2016)

In addition to rendering ethically and legally sensitive material acceptable for a public audience, these images rely on public exposure to be effective. Forensic facial depictions push the limits of tolerance *because* of these specific conditions. If an unidentified decedent is part of a vulnerable group or community known to be historically wary of engaging with authorities, for instance in the case of possible undocumented migrants or trans*/gender-variant individuals, these images require specific sensitivity and context-awareness to be truly effective. How should the right communities be targeted, and how to ensure that those who might recognise the person feel safe about coming forward with information? This study therefore attempts a holistic consideration of sites and modalities which may result in post-mortem depictions that are more attuned to their contextual and situational demands.

Part 1: Forensic Art: histories of a boundary praxis

Forensic Art is the umbrella term that refers to a collection of methods and techniques to aid in the identification of unknown living and deceased persons in forensic investigations by generating plausible facial images of the unidentified dead, missing persons (including known fugitives), criminal suspects (Taylor, 2000; Wilkinson, 2015b) and demonstrative evidence for use in court.³ As Taylor shows, examples of these four main modes are documented within the history of criminal investigation prior to 1915 (Taylor, 2000, loc.350). Forensic Art is invested in stylistic techniques and modes of presentation that trade on a balance between likeness and recognition, which is to say that even if they don't resemble photographs, they must still appeal to realism's truths and construction's ambiguities simultaneously: they must be specific enough to prompt recognition of a particular person, but not so specific as to exclude a candidate due to lack of accord in certain features. This is a difficult balance to strike.

³ The definition offered here focuses on how theoretical underpinnings are reflected through leading practitioners operating in specific global contexts, and the nature of their influence.

Forensic Art is grounded in the interdisciplinary field of craniofacial analysis and identification (facial anthropology), associated with anatomy, anthropology, odontology and pathology as well as clinical imaging (radiography and computed tomography being the most valuable), which is a critical aspect of research enabling the formulation of anatomical standards (George, 1993; Işcan, 1993; Lebedinskaya et al., 1993; Rynn et al., 2012), *in vivo* validation and shape accuracy studies (Wilkinson et al., 2006; Quatrehomme et al., 2007; Lee et al., 2012; Short et al., 2014; Miranda et al., 2018), and providing useful data for post-mortem reconstruction cases (Quatrehomme et al., 1995, 1996; Hadi and Wilkinson, 2014). Its visual methodologies are closely aligned with cognitive psychology (face perception/cognition) in respect of the effects of familiar- and unfamiliar face recognition, which is what such images rely on (Benson and Perrett, 1991; Stephan and Arthur, 2006; Stephan and Cicolini, 2008; Klum et al., 2013; Lee and Wilkinson, 2016), optimising presentation of facial depictions to benefit from this research (Davy-Jow, 2013; Wilkinson, 2015b) and in cognitive interviewing techniques for eyewitness memory retrieval (Fisher and Geiselman, 1992).⁴ Despite close affiliations to historical/traditional medical illustration and more contemporary forms of biomedical visualization where digital technologies proliferate, Forensic Art as a form of scientific imaging is under-represented (omitted) from such studies. Theory and practices of contemporary art and post-photography which explore the tensions between socio-cultural identity and techno-scientific regimes of identification appear to be more invested in the social and cultural work of forensic facial images as examples referred to in this study suggest.

The phrases ‘Forensic Art’ and ‘forensic facial imaging’ are used interchangeably in this study, which keeps an eye on the past, present and future simultaneously. The focus here is on post-mortem facial images and thus excludes other forms of demonstrative evidence for court, except to

⁴ Eye-witness studies, the history of composite art and its attendant technologies (manual featural kits have evolved into software packages that generate holistic faces) is beyond the scope of this study but is referenced in part in Smith (2018), and in *Speaking Likeness* (see for instance P02, P19, P24, P27a, P38).

acknowledge that all art produced in the service of legal enquiry represents a legitimate claim to being categorized as Forensic Art. Depictions of the living (composites, age progressions) are relevant to questions of disambiguation between Forensic Art and Facial Identification as well as to the evolution of manual methods to digital and hybrid approaches. Methods and techniques are increasingly digital, and technologies are constantly improving, proliferating and becoming more accessible to individual agencies and practitioners, enabling remote working and minimal handling of remains for post-mortem cases, which is ethically preferable. Semantics may be one of the most controversial issues within the field and a stumbling block in agreeing standards or guidelines to practice, as will be shown.

Further, this study recognises that the epistemological history of the field has been fundamentally shaped by artists who remain a significant presence within it, yet not all practitioners identify as artists, which prompts the question of whether the term ‘Forensic Art’ adequately represents the types of work and expertise represented within it. In its broadest sense, this study is principally invested in two lines of scholarly engagement with forensic facial depiction: the socio-cultural implications of the knowledge claims post-mortem representations are seen/assumed to make (see for example Buti et al., 2015; Hayes, 2016; Johnson, 2016; Wilkinson, 2020), and the legacy of its methods in the construction of racial difference (M’Charek and Schramm, 2020; Schramm, 2020). Anticipating significant changes to the future of the field already underway via the development of DNA phenotyping or “molecular photofitting” (Stephan et al., 2019), this study seeks to shift focus from normative theorisations of forensic facial imaging based in craniofacial theory to arrive at an expanded view of this work, particularly its post-mortem functions, via its cultural affordances.

Forensic Art in the United States

As a sustained practice within forensic cultures, a ‘disciplinary’ history of Forensic Art has been most fully articulated within the United States (Taylor, 2000). It became the ninth forensic discipline formally accepted

within the International Association for Identification (IAI) in 1986 (Taylor Stewart and Richlin, 1989)⁵, two years after Frank Domingo organised the “first ever” meeting of forensic artists (then defined exclusively by composite art) at the World Trade Centre in New York in 1984, and after he eventually agreed to an all-encompassing name for the field to include post-mortem methods (Smith 2020, pp. 185; 190). The potential of 3D facial reconstruction from the skull in forensic anthropology had been set out in a paper co-authored by forensic anthropology pioneer Clyde Snow working in collaboration with sculptor Betty Pat. Gatliff some fifteen years prior (Snow et al., 1970), referred to thereafter as the ‘American’ method, which relies principally on the application of averaged, population-based soft-tissue thickness measurements to recreate facial morphology.⁶ This becomes significant in relation to other methodologies and makes it possible to talk about method as an ethics which carries material-semiotic significance.⁷

As time passed, the worlds of research and law enforcement continued to develop along largely separate tracks with only occasional interface. Until relatively recently when it became more inclusive, training in the field was restricted to members of law enforcement, offered through agencies such as the Federal Bureau of Investigation but also through established and formally endorsed practitioners such as Gatliff and her protégé Karen T. Taylor at art schools and colleges in Oklahoma, Arizona

⁵ Within the IAI, ‘disciplines’ are formally referred to as Science and Practices committees, served by members of the relevant specialisation who co-ordinate the curriculum for the annual educational conference; design and assess certification applications and author/co-ordinate the writing of guidelines or other relevant documentation as required.

⁶ A publication by Milton Krogman in the FBI Law Enforcement Bulletin (1946), cited in the above study, served as a precedent for Snow & Gatliff’s work.

⁷ This thesis is not a study of the development of facial reconstruction as a practice, however its importance and visibility as a method of post-mortem facial depiction means that it is absolutely foundational to forensic facial imaging practices, for several reasons: it requires the most comprehensive anatomical and anthropological knowledge; it has a relatively well-documented history; it has generated a significant body of scientific literature, and it is the most heavily traded example of this work in the public realm (reconstructions of historical figures, for example). It is also the primary object from this field receiving attention from STS scholars (cf. Schramm, 2020), along with faces produced from DNA phenotyping (cf. M’Charek, 2020). A history of the practice and key studies informing its development and current standards can be gleaned from core literature (*inter alia* Gerasimov, 1971; Prag and Neave, 1997; Taylor, 2000; Wilkinson, 2010, 2004) from whose references and bibliographies a comprehensive view of the practice can be reconstructed and critically assessed. The online exhibition *The Evolution of Facial Depiction from Human Remains* (Face Lab, 2015) provides a detailed visual overview of the practice.

and more recently, Texas.⁸ Credited with developing the 2D method of facial reconstruction (Taylor, 2000, loc. 4240-4257), Taylor remains a very influential teacher and mentor to many current practitioners, and continues to be the source of the most evidenced-based and theoretically informed training currently available in the United States. Her textbook, *Forensic Art and Illustration* (2000), along with Caroline Wilkinson's *Forensic Facial Reconstruction* (2004, republished 2008), are primary desktop references.⁹

Forensic Art in the rest of the world

In the rest of the world, Forensic Art has a largely unwritten disciplinary history with dispersed origins usually linked to pioneering practitioners and the (mainly academic or other institutional) contexts in which they worked, which become important centres for research and training. In the United Kingdom, Richard Neave is credited with developing the Manchester method of 3D manual reconstruction (named for his leadership of the Unit of Art in Medicine at the University of Manchester), heavily influenced by the pioneering work of Mikhael Gerasimov's Russian anatomical method (Gerasimov, 1955, 1971), which continues through the work of numerous researchers mentored by him at the Russian Academy of Science and next-generation researchers working in this tradition.¹⁰ The Manchester method

⁸ Taylor is now affiliated faculty at FACTS, Texas State University San Marcos, which incorporates the largest human taphonomic research facility in the world (FACTS, 2020, online)

⁹ The subject of training is elaborated in Chapter 4.

¹⁰ P22 in this study is one example. Ullrich and Stephan (2016, 2011) mounted a detailed re-investigation of how Gerasimov's methods have been interpreted and, as they argue, 'erroneously entrenched' in the English literature, ostensibly as a way to advance anatomical methods over quantitative ones as being more methodologically sound without sufficient 'evidence.' This position is an extension of Stephan's general critique of claims to scientific method for the practice where he doesn't see one, which goes something like, 'accurate anatomical interpretation is multifactorial and requires a measure of artistic skill to make results look plausible, whereas purely quantitative methods based in statistical probabilities remove this perceived risk of 'error,' even if the results look mechanical.' Ullrich and Stephan's main contention is that existing interpretations of Gerasimov's method wrongly claim that he avoided using tissue-depth data and instead relied exclusively on rebuilding the facial muscles to reconstruct basic face shape and. Yet their contention is equally contentious; other practitioners who have worked closely with Gerasimov's unpublished notes believe Ullrich and Stephan are equally guilty of misinterpretation, and it is more a question of where Gerasimov placed emphasis i.e. anatomy (pers. comm.; fieldwork). So, claims and counter-claims abound, in which legitimacy of 'voice' is also a factor i.e. who was closer to or further from the source, i.e. it becomes about claims to authenticity. Stephan hosted a workshop in Gerasimov's 'authentic method' at the IACI 2017 in Brisbane (Stephan, 2018), in which I participated.

(Prag and Neave, 1997; Wilkinson, 2004b) is characterised as a combination method which prioritizes anatomical patterning and accurate reconstruction of facial muscles and other soft tissue over the (individualistic) scaffold of the skull, and refers to averaged soft tissue thickness (STT) data as a rough guide to face shape, but discards this information if it does not seem plausible relative to a specific skull's architecture.¹¹ The Manchester unit also contributed to the development of Facial Identification in the UK context (P42 in Smith, 2020a, p.309) and produced key academic practitioners in the field, including Caroline Wilkinson and Christopher Rynn, who along with Caroline Erolin established the only available academic qualification in Forensic Art & Facial Identification at the University of Dundee in 2006, with a related programme in Medical Art (Erolin, 2015; P50 in Smith, 2020a, p.338). The Manchester method has since been adapted for the Geomagic Freeform virtual sculpture environment (Mahoney and Wilkinson, 2012), a system which has been taken up by major non-profit, public sector, law enforcement and academic centres internationally through training provided by the Dundee team, or

First editions of Gerasimov's published works were on display with white cotton gloves supplied for browsing, and participants worked with a version of Gerasimov's original modelling mastic, produced from an ostensibly original recipe, but with some ingredients substituted to meet contemporary health and safety standards. This performance of authenticity through re-enactment felt quite theatrical, an elaborate attempt to convert lore to law, although theatricality was surely not the intention.

¹¹ This approach is highly sensitive to the errors implicit in averaged data *inter alia* that it cannot account for individual BMI which cannot be determined from the skull alone; and that genetic populations exist on a spectrum which may not represent the nationalistic manner in which such data is usually collected ('Brazilian,' 'Japanese,' 'Egyptian' etc). Further, accurate ancestry determination via anthropological assessment is error-prone, including via craniometrics (Morris, 2014a; P31, 2018; P32, 2018), and more importantly, how someone self-identifies may not confirm to stereotypical ideas of what such an identity 'looks like.' Wilkinson (Wilkinson, 2004b, pp.151–6) has demonstrated there is no significant difference in applying the 'wrong' data to a reconstruction; the face was still recognisable. This strongly supports the primacy of individual anatomy, as well as Stephan's suggestion of averaging all adult and juvenile data across populations (Stephan, 2015a, 2017). Therefore, placing excessive value in STT data is not only not useful, but it may be a significant source of cognitive bias and error in itself if an anthropological determination is ambiguous, and the investigation insists on a particular presentation, or the artist doesn't offer multiple possible presentations. The philosophical investment in such data as proof of facial reconstruction's continuing exploitation of the legacy of race science which is implicit in Schramm's critique of the practice (Schramm, 2020), suggests an inadequately nuanced understanding of the ways in which such material is actually used and what it represents.

programme alumni adopting the technology in their home/adopted countries.¹²

Other countries which have made significant contributions to forensic facial imaging include South Africa, through the scholarship of Maryna Steyn, William Aulsebrook, Vince Phillips, Alan G. Morris and Tobias Houlton, and practitioners within SAPS Victim Identification Centre (cf. P27a and P27b in Smith, 2020a). Australia¹³ and Brazil¹⁴ are also important knowledge-producing sites.

Practitioner-authored literature

Forensic Art is characterised by practitioner-authored literature which evidence a blend of technical method and memoir/autobiography, in which personal experience (emic, empirical knowledge) is relied upon to confer authority and authenticity to the instructional aspects of the texts. The majority of authors are women, and the texts (many self-published) represent a range from the rigorously academic and thoroughly researched, to practical and colloquial, to the emotionally idiosyncratic and ethically and factually questionable, representing a remarkable assemblage of Ginzburg's conjectural knowledge in all of its strengths and weaknesses.¹⁵

¹² Including the National Centre for Missing and Exploited Children (NCMEC), the South African Police Service (SAPS); FACES Lab at Louisiana State University. Individual practitioners include Dr Özgür Bulut in Turkey and Germany (University of Tübingen), and Dr Won-Joon Lee in South Korea (National Forensic Service).

¹³ In Australia, John Clement was a leading figure in establishing the academic credentials for craniofacial identification, including computer-based methods, with two major publications in the field (Clement and Ranson, 1998; Clement and Marks, 2005). Ronn Taylor (now retired) was a leading practitioner (Taylor and Angel, 1998; Taylor and Craig, 2005), with anatomist/forensic anthropologist Carl Stephan (see note 10) and artist Susan Hayes (Hayes et al., 2005; Hayes, 2017) also contributing to the field's literatures.

¹⁴ Practitioners include Cicero Moraes and Diego Pires. There is a high concentration of research interest in forensic odontology and facial reconstruction (de Freitas et al., 2007; Janson et al., 2011; Fernandes et al., 2012; Herrera et al., 2013; Dias et al., 2016; Miranda et al., 2018).

¹⁵ Examples include [Gibson, 2008](#); [Mancusi, 2010](#); [Trepkov, 2011](#); [Bailey, 2014](#); [Hayes, 2017](#); [Murry, 2018](#). For composite artists specifically, Samantha Steinberg has produced two visual reference catalogues for practitioners compiled from mugshots, *Steinberg's Facial Identification Catalog* (Steinberg, n.d.; printed in its fifth edition in 2012) and the more recent *Steinberg's Ethnicities catalogue*, both available to purchase from her personal website. Whether or not it is ethically acceptable to monetise mugshots in this way, regardless of how useful practitioners find these visual aids, remains a question.

Professional Issues in Forensic Cultures: a growing global profile

This project reflects a growing interest in how forensic science and biological anthropology is practiced globally, informed by challenges to its scientific authority. The earliest instance of the application of forensic techniques in criminal investigations is credited to thirteenth century China, as recorded in Sung Tz'u's *The Washing Away of Wrongs* (trans. McKnight, 1981), but the professionalisation of the forensic sciences is a relatively new concept, maturing in lockstep, some might say, with its representations in popular media which have boosted interest in forensic science as a career, generating a host of degree programmes internationally as well as precipitating the CSI Effect and its significant impact on the criminal justice system. In particular, the profile of forensic anthropology has been raised by its application in post-conflict territories, documented in academic and popular non-fiction publications which have a distinctly humanitarian flavour (Joyce and Stover, 1991; Koff, 2004; Jennings, 2013; Rosenblatt, 2015), as well as their reflection in entertainment media (e.g. *Bones*, *Silent Witness*) which trade on the forensic aesthetic, and the increasing awareness of forensic genetics, especially in citizen forensic initiatives.¹⁶ The increasing international profile of the field has seen a concentration of publications since 2015 which map relative representations of expertise, distribution of services/capacity and professional cultures in relation to legal frameworks within international contexts (Houck, 2015; Ubelaker, 2015; Parra et al., 2020) but forensic facial imaging is conspicuously absent from these studies and surveys.

Semantics and knowledge claims

Semantics in forensic facial imaging remains a persistently knotty problem with reference to facial reconstruction specifically – some regard ‘facial approximation’ to be a more accurate reflection of the results of this work (Stephan, 2003a, 2015b) – and then in the disambiguation between Forensic

¹⁶ The case of the so-called Golden State Killer, recently identified as Joseph James DeAngelo. exemplifies this. He was arrested in April 2018 [on the basis of forensic genealogy evidence](#) which has raised important concerns about ethics and privacy of such data, but it was the work of journalist and blogger Michelle McNamara who provided the impetus for rethinking the links between previously unlinked cases (McNamara, 2018).

Art and Facial Identification. The conflict of naming in facial reconstruction turns on the method's claims to accuracy, which appears to mean different things to different people. Producing a morphologically accurate face does not necessarily mean it is a recognisable one: face shape without textural information (age-appropriate skin textures, wrinkles and so on) is unrelatable, and even technically poor reconstructions may still elicit positive recognition, suggesting that metric accuracy is only one aspect of what makes a forensic facial depiction effective. The argument about scientific accuracy would be more productively understood as a process of interpretation and extrapolation, using one shape to infer another, with close attention to form in relation to function.

Even if they are executed in 3D, forensic depictions are more frequently encountered as 2D images in print or on screen, and tend to follow the conventions of institutionalised portraiture (frontal or profile views) even though a three-quarter head pose is optimal for recognition (Wilkinson, 2015b, p.20). Circulation is a major factor: these images have to reach the right people to be recognised at all. Current research suggests that attending to 'face space' (Dakin and Watt, 2009) – referring to the *proportions* between internal facial features relative to overall face shape – is particularly salient for recognition, possibly more so than the details of individual features themselves.¹⁷

That the field has such trouble with naming reflects the broader issue of knowledge claims within the field, and where such claims originate. These themes are explored more fully in Chapter 4 and *Speaking Likeness*.¹⁸ Racialised language is particular sticking point, particularly in relation to the

¹⁷ Estimating the shape of individual features from skeletal remains can be challenging despite considerable literature on the subject attending to the **eye** (Wilkinson and Mautner, 2003; Stephan and Davidson, 2008; Rohrich et al., 2009; Guyomarc'h et al., 2012; Dorfling et al., 2018), **ear** (Guyomarc'h and Stephan, 2012), **nose** (Stephan et al., 2003; Rynn and Wilkinson, 2006; Rynn et al., 2010; Davy-Jow et al., 2012; Ridel et al., 2018), **mouth** (Stephan, 2003b; Stephan and Henneberg, 2003; Wilkinson et al., 2003; Houlton et al., 2020), **fat distribution relative to shape** (Ezure et al., 2009; Stephan and Devine, 2009; Stephan, 2010), and **facial creases** (Rubin et al., 1989; Hadi and Wilkinson, 2018; Schmidlin et al., 2018). However, spatial proportions between features is easily determined by the skull's architecture.

¹⁸ In *Speaking Likeness*, the narrative pathways 'The names we give' speaks to this semantic impasse directly, whilst 'Interdisciplinary interactions' and 'Evidence or intelligence' address issues of knowledge claims and other professional issues which may directly or indirectly refer back to terms of reference.

concept of ancestry and which the claims of DNA phenotyping is perceived to exacerbate (M'Charek, 2000, 2016, 2020; Toom et al., 2016). For some, the role of art within forensic investigation is a source of epistemological insecurity as by definition, art is taken to represent the opposite of 'objective' and 'evidential.' Haglund (1998) even puts scare-quotes around the word 'art' in his chapter on the subject included in a primary resource for the field (cf. Clement and Ranson, 1998). Others have mounted sustained attempts to introduce what is ostensibly greater 'scientific rigour' to the practice (Stephan, 2003a, 2015b; George, 2007; Hayes and Milne, 2011), which of course erroneously implies that art itself is devoid of rigour and methodological awareness. Stephan (2015, p. 566) has described the notion of "scientific art" – specifically referencing facial reconstruction – as 'bizarre.' This is nonsensical, as demonstrated by a rich and documented history of visual depictions in Western visual culture from the Renaissance onwards in the service of science (medical and scientific illustrations, anatomical sculpture) and utilizing science principles (mathematical equations to achieve perspectival illusionism, for example). At best, it betrays a dangerously narrow view of what constitutes the 'scientific', which cannot be reduced to the purely quantitative. In contrast, well-designed method validation studies (Wilkinson et al., 2006; Wilkinson and Lofthouse, 2015; Smith et al., 2018) embrace the contingencies of the method.

Clarifying terminology

Based on a review of the primary literature and empirical research conducted for this study, the following clarifications for key terms pertaining to 2D and 3D post-mortem methods are suggested for general use:

Reconstruction: interpreting facial appearance by prioritising individual facial anatomy, including modelling individual features based on current, validated anatomical standards/regression equations. Average STT data may be referred to. May be performed through 3D manual/virtual sculpture or 2D drawing via the Taylor method (2000), although if anatomical structures

(e.g. muscles) are not reconstructed this method tends to conflate reconstruction and depiction (see below) into a single process.

Approximation: interpreting face/feature shape by prioritising averaged numerical values for STT data at landmarked points on the skull and interpolating related intermediary values, and applying current, validated methods for individual feature estimation. Performed through 3D manual/virtual sculpture or 2D drawing but can be computer-automated, which is an increasing focus.

As a matter of principle, ‘reconstruction’ and ‘approximation’ should both be understood as processes of estimation, but in prioritising different data, these terms should not be used interchangeably.

Depiction: the process of applying plausible textures to a reconstructed/ approximated face towards promoting recognisability, or working from a post-mortem photograph to present a plausible in-life appearance by either digitally manipulating a post-mortem photograph or redrawing the image to reverse post-mortem effects or repair facial trauma. In the case of 3D reconstructions, the depiction process is performed through sculpting, or the application of photographic and/or sketch-based textures to 3D reconstructed/ approximated shape and presented as a 2D image for publication (referred to as 2.5D depiction).

Disambiguating Forensic Art and Facial Identification

The significance of the massively high-profile murder trial of athlete and actor OJ Simpson to the credibility and integrity of the forensic sciences cannot be overestimated, so much so that some US-based practitioners interviewed for this study relate their professional experience to ‘before OJ’ or ‘after OJ’ (Smith, 2020a, pp.197, 322). This watershed moment led to a large-scale investigation that produced the report *Strengthening Forensic Science in the United States: A Path Forward* (National Research Council,

2009) which had major consequences for the field.¹⁹ The impact on the justice system was considerable, demanding prior convictions based on evidence now in question being re-opened or re-tried with the benefit of DNA as the ‘gold-standard’ identification technology (Innocence Project, 2019), and an appeal for a research culture to be fostered within forensic science as a whole (Mnookin et al., 2010).²⁰ Forensic Art is mentioned in the report (with lower case spelling) while Facial Identification is not mentioned at all.²¹

One way of understanding the role of Forensic Art in forensic identification is to look at the professional space it occupies relative to its parent disciplines, and professional organisations who may offer accreditation/certification. Forensic facial imaging and analysis is an established transdisciplinary practice that is a subfield of anatomy, pathology and biological anthropology but also draws on cognitive psychology, imaging science and jurisprudence. Professional associations for these individual disciplines exist across the life and social sciences, which practitioners may find useful to join depending on the particular focus of their work in facial imaging/analysis, but forensic application overlays a rigorous set of medico-legal demands relative to the context of practice (country, state etc) that require special professional attention.

Forensic organisations and accreditation/certification

The **International Association for Identification (IAI)** was founded 1915, with 6,700 members worldwide.²² The focus of the IAI’s

¹⁹ *Inter alia*, it called for greater scientific rigour to support evidentiary claims made for certain techniques, particularly in the pattern analysis fields, and unequivocally disregarded others (e.g. hair analysis).

²⁰ The dynamics between practitioner and academic cultures is an important discussion in Chapter 6.

²¹ With the exception of a reference to a “standard data format for the Interchange of Fingerprint, **Facial**, & Scar Mark and Tattoo Information, through the American National Standard for Information Systems-NIST (ANSI-NIST-ITL 1-2007)” developed by the Scientific Working Group on Friction Ridge Analysis, Study, and Technology (SWGFAST) (National Research Council, 2009, p.205) The link between facial information and fingerprinting is explored further in Chapter 6.

²² Although the association positions itself as ‘international’ and is the oldest professional forensic association in the world, it is by and large dominated by American interests. Individual states host branch meetings and a week-long educational conference is hosted annually, comprising a full curriculum of lectures and workshops organised by the various Science & Practice committees that represent individual disciplines.

activities is “pattern evidence” (National Research Council, 2009, pp.76–77), and represents “front end” activities i.e. practice. This is in contrast to the **International Association for Craniofacial Identification (IACI)**, which is an academic meeting focusing on research to inform practice and is the only subject-specific meeting of its kind globally.²³ The two meetings attract very different participants, representing unsuccessful academic/practitioner interface, explored further in Chapters 4 and 6.

The IAI offers the only certification in Forensic Art globally (National Research Council, 2009, p.210; Houck, 2015, p.197) and Forensic Art has been a Science and Practice subcommittee within the IAI since 1986 (Taylor Stewart and Richlin, 1989). IAI certification requires membership of the organization, a minimum number of training hours and attendance of the annual educational conference, where workshop participation counts towards training hours.

Composite sketching is the prevailing legacy and predominant function of Forensic Art in the United States (see P19 in Smith, 2020a) and until recently, this was strongly reflected in the certification programme and Forensic Art subcommittee representation/membership. As of 2018, there were thirty-three certified forensic artists on the IAI’s register, including only three non-US-based practitioners (IAI Forensic Art Subcommittee, 2019), of which one has since relocated to the US (P09). It is impossible to know how many practitioners are currently active within the field globally, or the balance between suspect- or victim-related work, and to what extent these are designated as separate functions as per the South African Police Service.²⁴ Delineation along suspect/victim lines roughly reflects the academic disciplines from which grounding theory emerges (psychology

²³ The IACI is a biennial meeting, founded after a special-interest meeting in 1987 during the International Association of Forensic Sciences conference (Vancouver, Canada). Initially the group referred to itself as the Craniofacial Identification Group (CIG) but was reformed as the IACI from 1992. The first meeting was held in 1988 in Kiel, Germany, hosted by Dr Richard Helmer (IACI, 2017). Membership is currently free but requires participation in a meeting; the association does not offer certification.

²⁴ Founders of the LinkedIn Forensic Artists Discussion Group compiled a practitioner database in 2016 which lists <150 practitioners in law enforcement or academic contexts worldwide (Falsetti and Enslow, 2016) to enable agencies without internal access to such services to locate a practitioner nearby. I received a copy of this document when Falsetti handed over group administration to myself and Suzanne Lowe Birdwell (current IAI Forensic Art chairperson) in 2018.

and anatomy respectively) but empirical findings suggest that better inter-environment/inter-practitioner communication would enhance productivity, methodological advancement and practitioner motivation. Recognising these practices as grounded in distinctive but complementary skills, with the face as common object, unfortunately appears to be the exception rather than the rule within professional contexts.²⁵

The **American Academy of Forensic Sciences** (AAFS) was founded in 1948, and has 6,000 members worldwide (National Research Council, 2009, pp.74–75) and like the IACI, is more academically orientated. No representation or certification for Forensic Art or Facial Imaging, but forensic anthropology is represented. Certification in forensic anthropology is via the American Board of Forensic Anthropology (ABFA), conferring Diplomate status to practitioners (D-ABFA).

Scientific Working Groups (SWGs) were established in the United States in the 1990s (some have origins as Technical Working Groups or TWGs) to improve practices and build consensus standards for forensic disciplines. SWGs represent collaborations with academic institutions, law enforcement agencies, and industry, many with international members, but have no inherent authority or force of law (National Research Council, 2009, p.205). Facial Identification was a SWG focus (FISWG, n.d., online) but Forensic Art was not.²⁶ Since 2014, the SWGs have been subject to reorganisation under the **Organisation of Scientific Area Committees** (OSAC) (NIST, 2020, online)²⁷ with some absorbed into the new structure

²⁵ In 2014, the IAI introduced a specific certification in facial reconstruction to recognise those practitioners who specialise in this work and as of 2018, the certification board was developing specific parameters for certification in post-mortem depiction. See IAI Forensic Art Subcommittee, 2020, online.

²⁶ A charter for a SWG in Forensic Art was drafted, but never implemented. Versions of these and similar documents can be found in the archives of individual practitioners who served on various committees and were shared during fieldwork. However, there are FISWG documents that are relevant to Forensic Art practice.

²⁷ OSAC is a NIST (National Institute of Standards and Technology)-funded initiative formed in response to the damning 2009 National Academies report on the forensic sciences (National Research Council, 2009) as a way to strengthen empirical and practitioner standards across the landscape of forensic analysis by “facilitating the development of technically sound standards and guidelines and encouraging their use throughout the forensic science community.” (OSAC, 2017, online)

whilst others, including FISWG, continuing to operate in parallel or partnership for the time being.

The disambiguation of Forensic Art from the related field of Facial Identification thus began with the SWGs and has been cemented within the OSAC structure, as fig. 15 shows.

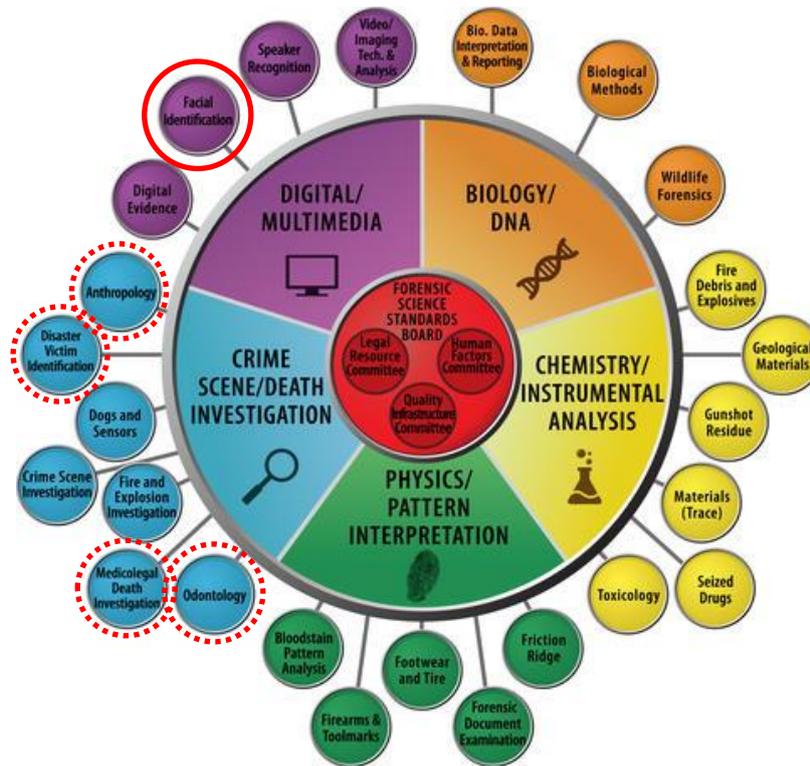


Figure 15: OSAC structure indicating Facial Identification subcommittee (solid red circle) and subcommittees relevant to Forensic Art, and to which it contributes (dotted red circles). Modified from OSAC online, 2017.

Under OSAC, Facial Identification (solid red circle) is a subcommittee resorting under the Digital/Multimedia. Dotted red circles indicate the subcommittee areas Forensic Art works alongside/contributes to, namely Anthropology, Disaster Victim Identification, Medicolegal Death Investigation and Odontology under the Crime Scene/Death Investigation umbrella,²⁸ but as a discrete discipline it has no dedicated seat at the table. As the understanding of DNA genotyping/phenotyping advances, it should

²⁸ This is also the committee with the greatest number of subcommittees (seven). Chemistry/Instrument Analysis has six; Physics/Pattern Interpretation have five (including fingerprinting); Digital Multimedia has four; and Biology/DNA has three subcommittees.

be anticipated that there will be a closer relationship between Digital/Multimedia and Biology/DNA, which will impact facial imaging accordingly as such services are already being offered commercially to law enforcement by companies such as Parabon Nanolabs with their ‘Snapshot’ DNA Phenotyping Service (Parabon Nanolabs, 2020). In 2014, Facial Identification also became a separate discipline within the IAI structure, dedicated to developing a certification in that field (P33, 2018).

Similar patterns of professional organization and accreditation are seen in other global contexts. In the **United Kingdom**, accreditation as a forensic anthropologist may be sought via the [British Association of Forensic Anthropology](#) (BAFA) at three levels.²⁹ [The Chartered Society of Forensic Sciences](#) in the UK has a Forensic Imaging Artist division for Facial Identification work, and Crown Prosecution Services (CPS) provides guidelines for expert witnesses. It is also possible to be listed as an expert witness on the [Register of Chartered Forensic Practitioners](#). In addition, the Major Crimes Investigative Support (MCIS) manages an [Expert Advisers \(EA\) Database](#) which contains details of internally vetted experts and professionals with a wide range of specialisms or experience to assist major police investigations, sourced in various ways including recommendations, proactive research and individual application.³⁰

In **Europe**, forensic anthropologists may be accredited by the [Forensic Anthropology Society of Europe \(FASE\)](#) but there is no specific pathway for craniofacial specialism. In **South Africa**, the recently constituted South African Academy of Forensic Sciences (SAAFS) has opted to echo the OSAC structure (Heyns et al., 2019). The Forensic Anthropology Interest Group (FAIG) operates under the Anatomical Society

²⁹ BAFA was formed in 2011 and is aligned with the British Association for Human Identification (BAHID). The accreditation process is supported by the Royal Anthropological Institute (Royal Anthropological Institute, 2020, online). Postgraduate qualifications in Forensic Art along with a named mentor, involvement in UK-based casework (casework from other environments is not accepted), and appropriate CPD hours may meet the requirements for Level 3 accreditation, but further advancement is unlikely without further training in forensic anthropology. Level 2 accreditation involves a written exam and ongoing mentorship. There is only one Level 1-accredited practitioner recognised as a craniofacial specialist (Prof. Caroline Wilkinson) and none at Level 2.

³⁰ MCIS does not accredit or otherwise manage listed experts; it simply maintains the database from which details are provided to UK law enforcement.

of Southern Africa (ASSA), which provides support and development of professional standards for the discipline, and encouraging academic-practitioner communication. On the African continent, the African Society of Forensic Medicine (ASFM) hosts regular international conferences, receives support from the ICRC (Springer Medizin, n.d., online; ICRC, 2017, online) and has published minimum standards for that discipline for the continent, including for mass disaster response protocols (Eze, 2013, 2015).

Practitioner standards and guidelines

Outside of scholarly literatures (to which practitioners may have limited or no access depending on their work context), the IAI Forensic Art subcommittee is the only centralised source of practitioner guidelines for Forensic Art and Facial Identification (Richardson *et al*, 2010). With the recent admission of Facial Identification as a separate S&P subcommittee within the IAI, these are due to be updated.

The FISWG has developed a number of robust practitioner standards and guidelines for facial analysis and identification, some of which are relevant to Forensic Art practice (morphological assessment, facial feature stability, craniofacial superimposition) and post-mortem facial image capture (ASTM, 2018), but this research shows that few practitioners cite these sources.³¹ Falsetti *et al.* (2017) have published guidelines for evidence handling in forensic art and imaging, and other instructional notes circulate informally between peers (Bendig, 2018).

In 2018, the AAFS's Standards Board (ASB) for Forensic Anthropology released the draft document 'Best Practice Recommendation 089 for Facial Approximation' for public comment (AAFS Standards Board, 2018). Detailed feedback from practitioners was submitted,

³¹ This appears to be part of a culture of minimal reporting concerning post-mortem casework, which is addressed further in later chapters, especially Chapter 6, as well as limited access to academic studies within work contexts without journal subscriptions. However, FISWG content is open access. Wilkinson (Wilkinson, 2015b) stresses the critical importance of reporting in building internal disciplinary rigor as well as external confidence in Forensic Art as a forensic tool.

including questioning the use of ‘approximation’ (cf. clarification of key terms above), which the committee opted to retain.³²

The establishment of practitioner standards impacts the varying degrees of forensic authority that a discipline or practice may claim. For example, Facial Identification analysis may be presented in court (evidence), while Forensic Art is considered an investigative tool (intelligence).³³ The diverging pathways of these two practices has implications for how expertise in either field is perceived and formally recognised going forward. The representation of Facial Identification on FISWG and OSAC and the related scientific support it has enjoyed, along with its recent acceptance into the IAI’s portfolio of disciplinary subcommittees, has established a new discipline with associated standards by design. By contrast, Forensic Art has evolved over time, in response to operational needs and technological developments. Ongoing tensions between modalities within the practice, practitioners with certain affiliations and preferred methods, and between professional contexts and philosophies (academic vs practitioner) appear to be the source of its lack of cohesion and thus its inability to assert its cognitive authority. Chapter 4 and *Speaking Likeness* share further evidence that Forensic Art practitioners remain ambivalent about establishing standards in a field susceptible to rapidly evolving technologies, which informs the concluding discussion presented in Chapter 6.

³² The researcher led a consortium-based response to the public consultation process for these Recommendations, informed by this research and co-signed by Suzanne Lowe Birdwell, Beth Buchholtz, Dr Emily Craig, Betty Pat. Gatliff, Steven Johnson, Dr Ginesse A. Listi, Dr Jessica Liu, Larry Livaudais, Dr Sarah Shrimpton, Karen T. Taylor, Prof Caroline Wilkinson and Dr Teresa V. Wilson, and worked with the IAI Forensic Art subcommittee to submit a separate input which largely agreed with the consortium input. The AAFS anthropology committee, on which no established/expert craniofacial depiction practitioners are represented, revised aspects of the document in line with our input, but most suggestions were rejected.

³³ Smith (2018) details the Norman Simons case in South Africa where a facial composite was controversially used to support finding the defendant guilty of murder (i.e. as primary evidence), and again in sentencing procedures.

Part 2: Scoping the Theoretical Terrain

Forensic Art is a scientifically-informed imaging practice that works with the human face towards specific objectives focused on the identification of unknown persons, in service of criminal justice. Its artefacts (eyewitness composites, post-mortem reconstructions/depictions, age progressions etc.) capture the public imagination in powerful, albeit ambivalent and controversial ways. The phrase ‘Forensic Art’ links two words with very different implications, intentions, and practices. On the face of it, the phrase appears to embody a paradoxical conjoining of science applied to legal investigations on the one hand, and creative interpretation and invention on the other (Wilkinson, 2010, 2015b). Further, the discipline introduces ethical considerations (working with human remains and personal data) to practices that are primarily, but not exclusively, aesthetic.

The extent to which Forensic Art mitigates or ‘filters’ post-mortem images within global media cultures became a committed interest whilst training as a forensic artist after years of research-based practice in the visual arts.³⁴ Its general omission from critical consideration as either a cultural object within visual studies, or an object of knowledge within scientific illustration, suggests a lack of appropriate theoretical framing in either field. Neither has it found a place within scholarship focused on representational modes with which it shares iconographic or contextual parallels, such as histories or theories of portraiture, or artefacts of criminal investigation such as crime scene photography. A key objective of post-mortem facial depictions is to ‘work against deadness,’ reversing the effects of trauma and early signs of decomposition to present a plausible living

³⁴ This was true of facial images encountered within an anatomical/anthropological context in general, including those produced in psychological experiments or within clinical research which is based in facial anthropometries and aspires to some aesthetic ‘norm’ (Farkas, 1994; Naini, 2011). In Facial Identification (including the construction of eyewitness composites), the instrumentalization of the face and its features is inescapable. Language easily slips into typecasting and stereotyping as descriptive shorthand to achieve a visual result, and the same has been observed in post-mortem depiction/facial reconstruction training. This remains a point of ethical discomfort and informs the overall motivation of the study to interrogate the implicit ethics of forensic facial imaging practices towards a more intersectional approach to the application of these skills, and greater self-awareness amongst practitioners.

image that optimises recognition as well as mitigating the potential trauma of encountering such images. Critiques surrounding the publication of photographic representations of the dead face were considered in terms of their practical use to the process and objectives of forensic post-mortem depiction, or ways in which the *effects* of such images may be better understood. The technical and ethical demands of forensic post-mortem depiction relative to their source materials and intended audience recalls the work of the “boundary object” (Star, 1989), “part of multiple social worlds” and enabling communication between these worlds through circulation whilst maintaining specificity relative to their site of production (Star, 1989, p.409). This chapter builds on this idea to locate forensic facial depictions as ‘edge objects’.

Locating Forensic Art epistemologically means engaging the practice in two interrelated ways: via the materials with which post-mortem Forensic Art does its work (human remains, including personal effects) and the representational modes of this source material (direct interaction or via documentation);³⁵ and via its work products, both in terms of its techniques and modes of presentation, and the work these images are intended to do. This prompted a visual enquiry into the relative in/visibilities of both post-mortem images (unaltered) and forensic post-mortem depictions (remediated) within mainstream media on the one hand, and within academic scholarship that principally attends to the visual (including visual culture studies, media and communication studies, art histories and anthropologies of art) as well as disciplines which have not traditionally considered images as primary research objects, such as history or the social sciences, but which have an interest in forensic cultures. The media presence of these images is culturally determined, whereas their absence from critical scholarship suggests these images are either uninteresting, illegible, or their epistemological value has yet to be fully explored.³⁶

³⁵ While recognising the role of Post-Mortem (Facial) Imaging, which includes all imaging modalities used in post-mortem identification (post-mortem photography, CT, Lodox and so on) as part of the broader suite of forensic facial imaging practices, this study is focused on remediated images designed for recognition by the public.

³⁶ The essay *Portraits? Likenesses? Composites? Facial Difference in Forensic Art* (Smith, 2018b) represents an initial effort in this area, published in parallel to this thesis and reflecting relevant early research. See Appendix 1.

In/visibilities of the post-mortem body in contemporary culture

Laws of the Face began with visual research into contemporary (post-1960) images of the dead circulated in cultural, professional and public contexts, including social media.³⁷ These included *inter alia* images produced within and for forensic investigations; in the interests of human rights (the unidentified, including cold cases and mass fatalities) and by visual artists, where the artists in question seek to convey particular affects through their representations³⁸ or are actively referencing forensic methods in their practice.³⁹ Focusing on the post-1950s period (the last 70 years) locates this interest within contemporary histories at a moment when late modernity (Scott and Marshall, 2015) also characterised as post-modernity, began to produce many other ‘post-’ moments or declarations of critical ‘turns’. This reflects two influential conditions. Firstly, image cultures (production and circulation) were heavily influenced by the burgeoning media and information age running parallel with significant global political events including the Cold War and revolutions in South America and Africa, during which certain post-mortem bodies would become iconic through the mediatisation of their image, which in turn guaranteed their mobilisation (Verdery, 1999; Troyer, 2007), producing them as ‘iconic’ (Bunn, 2012;

³⁷ The photographic representation of the dead by contemporary visual artists has been a consistent research focus for two decades, which informed the exhibition *Between Subject and Object: human remains at the interface of art and science*, curated by Josephine Higgins, the researcher and Penny Siopis (Higgins et al., 2014), mounted the year prior to beginning this study.

³⁸ Of many possible examples, an exemplary one is Walter Schels and Beate Lakotta’s *Life before Death* (2003-2004) in which photographer Schels and journalist Lakotta collaborated with terminally ill hospice patients to produce portraits and interviews prior to death, and then a second portrait captured soon after the moment of death, with the final work presenting living and dead portraits juxtaposed. As such, it offers a rare opportunity where AM and PM versions of the same face may be compared. The work featured on *Between Subject and Object*.

³⁹ For example, Christine Borland’s *L’Homme Double* (1997) in which she asked six different sculptors to model busts of Josef Mengele based on contradictory descriptions of his physical appearance (Mengele once again appearing as a central figure in forensic aesthetics); and the work of Teresa Margolles, which has generated significant scholarly attention (cf. Bacal, 2018; Bray, 2017, 2011, 2007) and Šejla Kamerić’s *Ab uno disce omnes* (*From one learn all*), commissioned for the *Forensics* exhibition at the Wellcome Collection in 2015, on which Margolles and Borland’s work also featured. All of these projects embody a humanitarian ethos.

Schwartz, 2015) and enabling them to continue to signify in various and changing ways.⁴⁰ Digitization and storage of personal data would become the norm, and media/popular culture would undergo a radical transformation with increasing access to new technologies that would soon become broadly ‘digital’, affecting modes of circulation in unprecedented ways. Secondly, it was during this time that Forensic Art began to be consolidated as a professional practice, recognising the cognitive authority conferred by scholarly and popular publications which began to circulate in the 1970s (as described above), and the growing power of the mass media in targeting publicity around cases.

This initial visual research confirmed that despite death’s alleged status as a marginalised social taboo (Walter, 1991) where funeral practices protect the living from the reality of the dead body – what Walter would describe as ‘barrier deathwork’ (Walter, 2005) – representations of death and dying are in fact everywhere in western visual culture in an excess of documentary and fictionalised modes, exposed through news, actuality and entertainment media as well as visual art. It is almost as if we are so preoccupied with how allegedly socio-culturally occulted death is in the western world (or has been in the past) that we cannot stop talking about it, indicating that the socio-cultural taboos by which the regimes of post-mortem visibility are apparently structured are actually pretty flimsy. As Tony Walter’s influential scholarship shows, the more interesting questions are how, and under what conditions, are the dead rendered *visible* in modern

⁴⁰ In the Americas for example, the lynching of teenager Emmett Till in 1955, and the assassinations of US President John F. Kennedy in 1963 and Cuban revolutionary leader Che Guevara in 1967 represent three very different violent deaths, but in all cases their post-mortem images were highly publicised. As with any major political figure, the post-mortem legacies of Kennedy and Guevara will be subject to prevailing narratives of history, which may be variously controversial or conspiratorial, staging each as a hero or villain accordingly, but through which their iconic status is established. In contrast, Till became a public figure through his post-mortem visibility enacted by his mother Mamie Till Mobley, who transformed her trauma into a powerful visual activism. An open casket at Till’s funeral ensured his beaten and decomposing face would be visible at his funeral, and Mobley gave permission for the event to be photographed and published in the popular *Jet* magazine to “Let the people see what I see...I believe that the whole United States is mourning with me” (Rankine, 2015). Till’s post-mortem image continues to embody the ongoing struggle for racial equality and anti-violence in the US, more recently through the appropriation of one such image by the artist Dana Schutz as a reference for her painting *Open Casket* (2016), the inclusion of which on the 2017 Whitney Biennial in New York triggered a “cultural earthquake” around the ethics of representation (D’Souza, 2018), and was famously protested and reworked by artist Parker Bright.

society (Walter, 2013). The cultural visibility of death is a politics, supporting Sir William Gladstone's alleged observation that how a society treats its dead is a good measure of how it treats its living.⁴¹

Interdisciplinary death studies, or thanatology, tends to prioritise socio-cultural rituals and phenomena surrounding the histories and processes of death and dying of death and dying (Laqueur, 2015), grief and bereavement studies, or the discourses of 'good' and 'bad' deaths.⁴² If thanatology is already identified as intellectual 'edge work', this study contributes to existing thanatological work from its outermost edges.⁴³ Forensic deathwork is hardly present within the existing thanatological literature, which personal experience and empirical observation suggests is a challenge of access; forensic deathwork is a closed world which limits the presence of external actors. By definition, entering the medico-legal system suggests a 'bad death', however the impact of the dead on the living is a well-established trope within death studies (Goodwin and Bronfen, 1993; Bradbury, 1999), to which the role of the visual in forensic deathwork is relevant.

Visual thanatology is a personal shorthand used to refer to studies of historical or contemporary visual representations of death and the corpse.⁴⁴ Historical post-mortem representations have already enjoyed much scholarly attention (Ariès, 1981, 1985), particularly nineteenth century post-

⁴¹ The full comment attributed to Gladstone is "Show me the manner in which a nation cares for its dead and I will measure with mathematical exactness the tender mercies of its people, their respect for the laws of the land, and their loyalty to high ideals." According to Bartleby.com, this is an unverified (but much-cited) quote originally published in *The American Cemetery* (March 1938, p. 13), and was also used in an Amnesty International campaign on forced disappearances and unmarked graves in Jammu and Kashmir. Also cited in Evert (2011).

⁴² The principle academic home for death studies is the social sciences and the journal Mortality (Taylor & Francis). The closest home for 'non-natural' (forensic, humanitarian) death studies is the open access journal Human Remains and Violence (Manchester University Press).

⁴³ Thanatology is regarded as an 'edge' (interdisciplinary) field, yet further 'edge work' (Lyng, 1990) is considered to exist within it, for example socio-culturally focused death studies are considered marginal to law or policy-based studies (Wittkowski et al., 2015). Voluntary risk-taking is a definition of edge work, although the risks here are disciplinary and scholarly (i.e. limited). Given its multimodal approach, cross-contextual analysis and operational objectives, this study sits on multiple edges.

⁴⁴ Echoing Groebner's dilemma, it is impossible to attempt to write a comprehensive account of post-mortem representations spanning the entire recorded history of visual representation across cultures. The canon of Western religious iconography alone is too vast (De Pascale, 2009), based as it is in the depiction of the dead Christ.

mortem photography produced principally for memorial purposes (Ruby, 1995; Barger and Mord, 2014).⁴⁵ Historical forensic photography (mainly crime scene) is receiving increased critical attention (Sante, 1992; Parry, 2000; Bond, 2012; Dufour, 2015; Neale, 2020). Within contemporary art, photographic and performative modes predominate (Linkman, 2011; O’Neill, 2011b; a; Higgins, 2016; Bacal, 2018), reflecting trends within media studies and death-on-screen (Sobchack, 1984; Gibson, 2001; Tait, 2009; Bray, 2017), while the concept of the rights of the corpse (Baglow, 2007; Taylor and Spital, 2008) and posthumous personhood is becoming a focus of research within digital and online cultures (Meese et al., 2015; Van Ryn et al., 2017; Arnold et al., 2018) as a new effect of post-mortem representation via digital ‘immortality.’ Insofar as memory and memorialisation are innate functions of the post-mortem portrait, this study also considers to what extent these might be an unexpected affordance of forensic post-mortem depictions.

The post-mortem body, photography and the ethics of spectatorship

The dead body represents an existentially potent thing that operates on a spectrum between subject and object but which, as Julia Kristeva (1982) famously observed, is the ultimate ‘abject’. Dead bodies produce fascination and repulsion in equal measure and challenge our sense of intersubjective stability. The corpse has received sustained scholarly attention regarding its visibility in visual and popular culture (Townsend, 1998; Klaver, 2004, 2005; Foltyn, 2008, 2016; Penfold-Mounce, 2010, 2016; Schwartz, 2015;

⁴⁵ Immersion in the thanatology community in 2016-2017 (see Appendix 1, conference abstracts) was productive as an orientation to current ideas, methods and the range of researchers that is a hallmark of the field, but resulted in two overriding frustrations, namely the focus on modern/pre-modern Western culture (study objects >100 years) or the focus on death/burial practices (including non-Western) from a Western vantage point. In respect of social and visual/media cultures, Victoriana and the Gothic predominate, which have had considerable time to generate significant scholarly foundations and bodies of knowledge, along with their respective pop-culture expressions and contemporary media tropes including procedural crime dramas and celebrity death (another iteration of the ‘iconic body’). These are no doubt rich seams to mine, with which personal past work has engaged (see for example Smith and Richards, 2004). However this is a heavily trafficked terrain with nostalgic-fetishistic effects, and is largely irrelevant to contemporary forensic deathwork, where histories of the anatomised body are more instructive (Richardson, 2001; Sappol, 2002).

Elam and Pielak, 2018) and as Verdery (1999) has shown in the context of postsocialist countries in Eastern Europe, the dead are also powerful political tools and may be mobilised through exhumation and reburial to serve the agenda(s) of prevailing regimes.

Via the influential work of Roland Barthes (1993), Susan Sontag (1979, 2003) and more recently Kaja Silverman (2015), death and photography have become philosophically as well as conceptually and iconographically entangled. Photography possesses a privileged relationship to both realism and the potential for visual affect “because of the quality of the relationship between the image and the thing it depicts” (Harries et al., 2018, p.10). This tension between indexicality and depiction (Pettersson, 2011) is what informs photography’s forensic (evidentiary) authority (Mnookin, 1998; Albers, 2010; Carrabine, 2012; Berrebi, 2014; Keenan, 2014a), and with reference to forensic aesthetics as discussed in the previous chapter, the tension between depiction and indexicality is also what is thought to characterise the technical-visual operations of post-mortem Forensic Art both iconographically and intersubjectively.⁴⁶

From their respective perspectives in social science and media studies, Troyer (2007) and Schwartz (2013) have attended to the materialities of the dead body by which it ‘becomes an image’ (i.e. is re-mediated, we could say) through physical or visual preservation. Photography and embalming are identified as twinned technologies of the nineteenth century, their chemical actants enabling the simultaneous stabilisation and hyper-mobilisation of the post-mortem body in unprecedented way. A dead body was thus able to travel, in both a physical and representational sense, far from the site of a death or interment without any changes to its chemically-fixed or imprinted appearance, extending and securing its material-semiotic power. The extent to which material

⁴⁶ The technical image has been the subject of some attention in recent critical visual culture (Flusser, 2011; Bredekamp et al., 2015), building on a general turn towards what Elkins has referred to as visual cultures of disciplines other than those which traditionally work with images (Elkins, 2007; Klaus Hentschel author, 2014). This study does not focus on a theorisation of Forensic Art relative to a ‘science’ of images (Mitchell, 2015) although the notion of visual agency in relation to the image (Paglen, 2016; Bredekamp, 2018), and the paradigm shift machine-learning poses to conventional models of visual culture are topics of future interest.

transformation (re-mediation) of the dead makes us more or less comfortable with their display is open to debate, as studies focusing on preserved bodies richly show (Desmond, 2008; Lantos, 2011; Durbach, 2014; Yurchak, 2015).

Dominant discourses within critical photographies⁴⁷ on the ethics of spectatorship in late modernity have been most enduringly shaped by Sontag, even as her earlier ideas in *On Photography* (1979) which suggested that photography was implicitly and irrevocably violent, were somewhat modulated in her later *Regarding the Pain of Others* (2003). The ethics of spectatorship tend to dominate enquiries into images of atrocity, pain and violence (Scarry, 1985; Elkins, 1999; Dauphinée, 2007; Lentricchia and McAuliffe, 2007; Costello and Willsdon, 2008; Hanusch, 2010; Zelizer, 2010; Batchen et al., 2012; Malkowski, 2017), which is also the general terrain of forensic images of the dead. The attention which post-mortem images receive tends to resort to a moralising dialectic surrounding the image-maker or the transgressive qualities of the image – *Who has the right to represent? And what is a 'righteous representation' of death?* – and less about the social or cultural value of such images – *Have these images, as difficult as they are, effected positive change?* Rarely is the 'right to look' defended (Mirzoeff, 2011). Images of the post-mortem body which predominate in documentary reportage on war, famine and disease thus engage ethics of representation and display in particular ways. Such images perform somewhat differently to forensic images of the dead body, which are not intended to be circulated as visual reportage, however the *effects* of the visibility of the dead are arguably similar: the dead body may have a humanising effect, drawing attention to criminal injustice or humanitarian abuses, but as Jessica Aughter observes (2017, online), a converse dehumanizing effect is also possible, where post-mortem images may circulate “in the service of a narrative that depicts enemy bodies as killable.”

⁴⁷ 'Photography' is pluralised here to draw attention to the broad range of practices that not only reflect photography as the product of a mechanical or digital visual apparatus, but also the discursive and philosophical potential of 'the photographic' which extends a medium into an epistemology (Flusser, 2013; Fontcuberta, 2014; Silverman, 2015), a position illustrated by the journal [Photographies](#).

The following examples circulated via various formal and social media platforms variously demonstrate the ambivalences of visual representations of the dead while also evidencing the circulatory power of social media as a challenge to both the normative social (in)visibility of the post-mortem body/face and its re-mediations, and its potential humanitarian affordances.

Qaddafi as icon



Figure 16: Journalists and bystanders photographing the body of Muammar Gaddafi. Screenshot from personal Facebook newsfeed, October 2011.

Amateur footage circulated via social media was the principle way the world learned of the capture and assassination of Libyan leader Muammar Gaddafi on 20 October 2011 (Human Rights Watch, 2012). In one particular image (fig. 16), at least three digital devices can be seen, all capturing different views of Gaddafi's body to be stored and circulated in any number of ways, rendering his post-mortem body infinitely mobile and meta-textual and apparently disregarding any concerns about consent, dignity or his family's wishes (which are unknown).⁴⁸ No attempt is made to hide Gaddafi's face as it represents proof of identity, but it is unclear whether the urgent image-making by this cluster of anonymous onlookers portrayed in

⁴⁸ At least one device, partially visible closest to the lens of the invisible camera that captured this image and therefore in soft focus, is a smartphone, and therefore has the capacity to transmit the image again, immediately, whereas the other two devices resemble digital point-and-shoot cameras.

this image venerates or subjugates – is Gaddafi idol or trophy? Either way, his iconographic status, like that of Che Guevara or Osama Bin Laden, also captured violently and photographed post-mortem, is assured (Bunn, 2012; Schwartz, 2013).

Mandela's two deaths



Figure 17: A putative post-mortem portrait of Nelson Mandela lying in state as circulated online. Screen capture from unrecorded website, 15 December 2013.



Figure 18: The same image republished with pixelation via Twitter, 15 December 2013



Figure 19: The source of the false post-mortem portrait, 2 July 1991. Screen capture from Getty Images website, 15 December 2013

One day after public viewing commenced during the state funeral of Nelson Mandela in Pretoria, South Africa on 15 December 2013 (Canter and Stone, 2013), a putative image of his post-mortem face began to circulate, allegedly first via a Twitter account ‘@nQOW_bee’ with the caption, “He is resting” and including running commentary of the funeral (Damarla, 2014) (fig. 17). The story was quickly picked up by local and international news media and denounced as a hoax (Arnott, 2013; eNCA, 2013; Hurd, 2013; McQueeney, 2013; SAPA, 2013; Taylor, 2013) as the Associated Press confirmed it was in fact an altered version of a portrait taken of Mandela on 2 July 1991 in Durban, at the first ANC National Congress after the organisation was unbanned (Taylor, 2013; Damarla, 2014). The image is available on the AFP/Getty website (fig. 19)

The facts of this fake post-mortem image suggest a peculiar inversion of the iconographic conversion described by Bunn (2012) in relation to the post-mortem image of Steve Biko⁴⁹, testing ethics and secular sanctification: why was there the need to capture an image of the dead Mandela? To assist us in the acceptance of the imaginative impossibility of his loss, where his notional presence (believed if not actually seen) was keeping the tenuous social fabric of a nascent democracy from unravelling?⁵⁰ Or as a trophy from his detractors to the rest of the nation/world saying, *See? He is mortal, and no longer; the pathway to a new (i.e. less compromising) politics is now clear*. Or was the image not nearly so conceptually-driven, rather just the most sensational image left in the visual lexicon of a man who, like Che Guevara, had become more image (icon) than person? To be sure, the (im)possibility of spiriting an image of the dead Mandela from his closely guarded coffin would no doubt make such an image all that more alluring.

As fig. 18 suggests, there was some ambivalence about the veracity of the image at first, and it is unclear whether Twitter user '@Sidesha1' pixelated the image before reposting it, or whether the alteration was performed by the online news site that reproduced in accordance with sensitive image conventions. It is an enduringly curious example of visual

⁴⁹ Shannen Hill (2005, 2007, 2015) has written in detail on the iconic image of Biko's post-mortem body, which was mobilised as a political tool by his family in similar ways to that of Emmett Till, through photography and publication in *Drum* magazine. A central aspect of Hill's analysis of Biko as icon/ography; she tracks the significance of Biko's death and representations of his post-mortem body by a number of visual artists, including Colin Richards, who has written on his own implications with Biko's post-mortem photographs (Richards, 1999) and Paul Stopforth, to whom the Biko family lawyer entrusted images of his autopsy as references for works such as *Elegy* (Smith, 2016b), among others. Although working at different historical moments, neither Richards nor Stopforth, as White artists, attracted the level of criticism that Schutz did for her painting of Till (see note 40, this chapter).

⁵⁰ This was the general tone of conspiracy theories circulating at the time which suggested that Mandela's public death did not necessarily coincide with his private death; they may have been two separate events, and fearing a socio-political and economic collapse (so powerful is Brand Mandela) around the time of his 'real' death, it was decided to delay the announcement by several months. No evidence of this theory exists. The 'Mandela Effect', which is a theory of false memory, further elaborates the lore surrounding him (Drinkwater and Dagnall, 2019)

re-mediation used to both produce a false post-mortem image, and then to protect viewers from its effects.⁵¹

Caesar's counter-forensic courage

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Figure 20: The affective power of the Caesar images of fatal torture embodied by visitor reactions to the exhibition at the United Nations in New York (images cropped to focus on viewing subjects and reduce visibility of the post-mortem images). Photographs by Lucas Jackson/Reuters, reproduced in *The Guardian* [online](#)

Evidence of atrocities within the Syrian regime came to light via a collection of over 53,000 photographs smuggled out of that country by a photographer known pseudonymously as Caesar, who defected from the military police in 2013 (Human Rights Watch, 2015; Oakford, 2015; Syrian Human Rights Commission, 2015). Nearly 7,000 images depict Syrian detainees tortured to death, a selection of which were put on public display in the United States in 2014, at the United Nations (fig. 20) and the US Congress respectively (Documenting Death Inside Syria's Secret Prisons, 2015; Finally naming Syria's dead: These are the victims of the Assad regime, 2015), and which subsequently toured internationally (Jones, 2020).

Is the publication of images of atrocity justified by the exposure of human rights abuses? These questions cannot be usefully approached without considering the context of their circulation and the intentions of the

⁵¹ It is also perhaps interesting to note that Mandela was also one of the first subjects of a forensic facial comparison in the earliest days of the ID Kit unit within the South African Police, c.1986 (P29, 2018; Steyn et al., 2018). Labelled a terrorist by the apartheid government and imprisoned on Robben Island at the time, it was illegal to publish images of him or his face.

image-maker.⁵² The existence of this archive represents a radical and courageous counter-forensic action where a state agent risked his life by exposing the Assad regime in a most extreme way. The mobilisation of these images out of their context of production further enabled the positive identification of some of the victims, bringing resolution to surviving families.

Caesar's counter-forensic gesture enabled a significant humanitarian investigation which has also indirectly produced a useful forensic reference database. For those victims subsequently identified, their in-life appearances published side-by-side with the post-mortem become an invaluable reference for post-mortem depiction (Finally naming Syria's dead: These are the victims of the Assad regime, 2015). The facial changes they evidence are startling, rendering some almost unrecognisable in death, making the point about the difficulty, technically and ethically, about using post-mortem images for forensic visual identification.

Necropolitics of the visual

The intersectional conditions of conflict, poverty and deep insecurity which produce the dead in vast numbers globally point to the politicisation, criminalisation and expendability of politically undesirable bodies, what Achille Mbembe (2003) has referred to as necropolitics, expressions of sovereignty which "define who matters and who does not, who is *disposable* and who is not." (p.27, original emphasis).⁵³

The crisis of unidentified bodies concentrated in particular international global migration zones can be understood as an effect of

⁵² If images of those viewing the images are anything to go by (they are hugely affecting), this is a case where impact and intention are contiguous. It is unlikely that the question of whether it is appropriate to produce a travelling exhibition of the images will reach consensus, but it is suggested that the work of such images is more productively understood through Mbembe, Azoulay and Mirzoeff than Sontag.

⁵³ Necropolitics (and the related necropower) is formulated in response to Michel Foucault's notion of biopower and biopolitics (Coole, 2014; Adams, 2017) and its inadequacy, in Mbembe's view, to account for ways in which contemporary conditions contribute to "the creation of *death-worlds*, new and unique forms of social existence in which vast populations are subjected to conditions of life conferring upon them the status of *living dead*." (Mbembe, 2003, p.40; original emphasis)

necropolitics. The border-zones represented by the Mediterranean sea and the Amexican desert⁵⁴ in particular are haunted by a politics of visibility where living bodies are a greater threat than dead ones, and technological investment in border security technologies and personnel to contain this perceived threat is proportionately far greater than the resources required to translate post-mortem anonymity into personhood.

Iconic bodies of the migrant crisis

Two recent post-mortem photographs have become iconic embodiments of the crisis of the refugee/migrant body in these zones. One is the image of the body of drowned Syrian toddler Aylan Kurdi washed up on a Turkish beach in 2015 (fig. 21). The other is the photograph of the bodies of Salvadoran father Oscar Alberto Martinez Ramirez and his nearly two-year-old daughter Valeria, drowned in the Rio Grande in Matamoros, Mexico in 2019 (fig. 22).⁵⁵

Other than the obvious tragedies they communicate, several features of these images are striking. Both images involve very young children, which was no doubt a contributing factor to the impact these images had on public attention and growing awareness of these crises. It may also be that the overwhelming response to Kurdi's image established certain conditions that enabled Julia Le Duc's image of Ramirez and his daughter four years later to frame a narrative about migration on another continent that is similarly contentious, politicised and frequently fatal.

⁵⁴ 'Amexica' is a term used by journalist Ed Vulliamy in his eponymous book to describe the deep entanglement of lives and livelihoods on either side of the border, as well as the border's literal and figurative porosity which renders it both real and fictional, thus enfolding the two zones on other side of it, constructions of nationhood as they are, into one another. This concept gains significance through both scholarly and memoir-based accounts of dealing with American border politics (Anderson, 2008; Reineke, 2013; De Leon, 2015; Cantu, 2018)

⁵⁵ The decision to reproduce these images is not taken lightly. On the one hand, because they are already very public, what might be gained from perpetuating the exploitation of vulnerable bodies (as discussed regarding the ethics of spectatorship) for the sake of convenience, when they can quickly be Googled? On the other hand, the power of these images in drawing attention to a crisis which is still not being adequately addressed or supported must be acknowledged, in line with Ariella Azoulay's concept of photography as a 'civil contract' (Azoulay, 2012). If anything, political sentiments are hardening against the interests of the vulnerable, so rendering them visible can be seen as an act of resistance (a politics of counter-action). See also M'charek (2015; online)

The image originally presented here cannot be made freely available via LJMU E-Theses Collection for reasons of copyright. The image was reproduced in [The Guardian online](#), accessed 25 February 2020. It is also available at [Time online](#), accessed 13 November 2020

The image originally presented here cannot be made freely available via LJMU E-Theses Collection for reasons of copyright and associated costs of reproduction. The image was reproduced in [The Los Angeles Times online](#), accessed 25 February 2020

Figure 21: Body of Alan (var. Aylan) Kurdi on a beach near Bodrum, Turkey, 2015. Nilüfer Demir/Reuters

Figure 22: Bodies of Oscar Alberto Martinez Ramirez and daughter Valeria, drowned in the Rio Grande in Matamoros, Mexico in 2019. Julia Le Duc/Associated Press

Photography as a ‘civil contract’

The socio-cultural policing of response to images of the dead – how we should react – is less compelling than how such images might compel us to *act*. Instead of turning away and criticising the ethics of the image-maker, what if such images made us turn *towards* the event that the image captured, in the way Emmanuel Levinas appeals to the face of the Other as an ethics (Levinas, 1979; Levinas and Nemo, 1985), acknowledging the difficult position of the image-maker but recognising a broader scope for action in the interests of what (or who) is represented, as matters of both concern and care.

These images of Kurdi and Ramirez and his daughter evoke the various and entangled conceptual threads previously introduced through the mediated materialities and visibilities of the post-mortem body, and the signifying realm of the photograph in respect of the ethics of spectatorship and the authority of images. These images (and others like them) are most powerfully staged in relation to Ariella Azoulay’s notion of a ‘civil contract of photography’ (Azoulay, 2012).

Azoulay’s proposition marks a significant departure from established theories of photographic ethics influenced by Sontag, in which photographs become uncoupled from conventional expressions of the ‘responsibility’ we might feel towards images of suffering and the vulnerable and ‘flawed’ citizens they depict. In Azoulay’s model, photography’s citizenry is its

users, and it produces a different type of citizenship to that produced by nation-states, as “a property distributed by power” (Azoulay and Institute for Public Knowledge, 2011).⁵⁶ This is a visual citizenship, and therefore no one can claim sovereignty in relation to it (although the photographer has been traditionally held to occupy this role). As Thomas Keenan suggests, Azoulay show us that photographs ‘fix nothing’⁵⁷ and ‘belong to no one’ (Keenan, n.d., online).

Photographic participation is thus triangulated between all its primary stakeholders namely, the photographer; the person/s or object/s depicted; and a photography’s audience, and its civil contract can be framed as a question: “Under what legal, political or cultural conditions does it become possible *to see* and *to show* disaster that befalls those flawed citizens in states of exception?” (Azoulay, 2012; emphasis added).⁵⁸ As discussed above, the counter-forensic courage of Caesar smuggling images of torture and political murder out of Syria to draw attention to the abuses of the Assad regime, and how these images have performed subsequently, is an exemplary staging of photography’s citizenry in Azoulay’s model. Further, this ‘triangulation of mediation’ gains significance in relation to Walter’s theory of mediator deathwork and how these ideas come together within forensic cultures of post-mortem identification and imaging, and how these processes also encourage an expanded sense of citizenship. As Keenan elaborates, “Even or especially when it is a photograph of a crime or an injustice, *a photograph is more than evidence*. It imposes another sort of obligation on us, to address and readdress it in a way that challenges what it

⁵⁶ Azoulay uses the phrase “regime-made disasters” to refer to current “catastrophic” global conditions and the politics which shape them. Azoulay remarks that even though images of disaster circulate far and wide, we are not able to fully register them *as disaster*, which is less about compassion fatigue and more about an extension of sovereign regimes into the work of media (Azoulay and Institute for Public Knowledge, 2011). Therefore, a critical aspect of the work of visual citizenship is to render visible and interpretable actual conditions of disaster through the images that record such events, as well as to transform them from matters of non-concern (*this does not concern us*), to matters of concern as well as care. In this way, she suggests, the relationship between visibility and human rights can be reconsidered.

⁵⁷ ‘Fix’ here is interpreted in the photographic sense, which is to ‘make permanent’, but the implicit provocation is that they have no remedial capacity, which of course Azoulay is suggesting they do, if we rethink our terms of engagement with photographic images.

⁵⁸ ‘States of exception’ is a central idea in Mbembe’s necropolitics where parallels with how both reference the concept of sovereignty.

shows of our life together.” (Keenan, n.d., online; emphasis added). In other words, how do images provoke us to *act*?

Photographs do not only document events but have an afterlife that shapes public understanding of those events in ways that cannot be assumed as fixed. We work on images as much as they work on us, and our understanding of certain events may change over time. Writing on images of atrocity both direct and ‘askance,’ Batchen et al. (2012, p.133) observe,

Photographs of atrocity also produce publics, potentially establishing within the viewer a particular affiliative “civic” relation – a feeling of connection with the subjects in the photographs. Photographs are part of a particular culture’s memory bank but can often cross national bounds. What’s seen and most circulated can accord with, but also inflects, public memory.

As the symbol of the Twitter hashtag [#humanitywashedashore](#), the image of Kurdi has produced numerous re-enactments aligned with the political plight of refugees. It became the key signifier for numerous public memorials-as-protests circulated online, including monumental sand sculptures on international beaches, which the celebrity Chinese artist and activist Ai Weiwei was accused of exploiting when he re-enacted the image of Kurdi as part of a sited memorial to the refugee/migrant crisis on the Greek island of Lesbos.⁵⁹

Unlike the enduring lore attached to many of the unidentified John and Jane Does who become the *causes célèbres* of a network of internet sleuths (see Chapter 6; Halber, 2014), what sets the images of Kurdi and the Ramirezes apart is that we know their names, and the potential to access their individual life stories thus exists. In the context of hundreds of others

⁵⁹ This image was captured by an embedded team from *India Today* (India Today Web Desk, 2016) who followed Ai’s work on the island over a 48-hour period. The image was then staged as a closing feature of the Indian Art Fair (Lakshmi, 2016). The artist’s re-staging of the image using his own (very much alive, adult and privileged) body rapidly went viral, owing to the convergence of the circulation of the original image and the artist’s international celebrity. However, it evoked deeply divided opinion, from being denounced as an exploitative and careerist stunt to an image of humanist empathy which solidified the severity of the crisis (Steadman, 2016; Tan, 2016; Deutsche Welle, 2017; Mortensen, 2017). The original image and its various appropriations and re-enactments point to the complex ethics of claiming/representing the dead, as well as appropriate languages for art/image-making that also claims an activist agenda.

like them who remain unidentified, and even unrecoverable, this renders them to some extent exceptional, and contributes to their iconicity. While they act as ciphers for a global crisis, they are not anonymous, and knowing their names brings their personhood a step closer. These images not only crossed national bounds through the intense circulatory power of internet-enabled mass and social media, but in so doing they provoked action from the civic body, as well as vindicating and drawing attention to less visible – and often necessarily counter-forensic – actions being taken by forensic professionals in international migration hot-spots.

Part 3: Thinking through facialities

Scholarly work on the post-mortem face is conspicuous for its absence, suggesting that the face possesses an abject potency that exceeds even that of the post-mortem body.⁶⁰ This makes it a provocative subject for visual artists O'Neill (2011b; a), particularly those working in photography (Higgins, 2016; Troyer, 2017) where it is seen to engage traditions of memorial photography in new ways.⁶¹ Conditions under which images of the post-mortem face may circulate can work to keep these images interpretable (as difficult but acceptable) or create trouble if they reach the 'wrong' (unintended) audience or are perceived to function 'wrongly' within a given context. Social and cultural norms have conventionally worked to protect personal privacy through controlling access to the facial image (to which surveillance culture and the creation of face-based datasets without consent is perceived to pose a critical threat).⁶² For example, biomedical ethics insist on the anonymisation of identifiable information, so

⁶⁰ There is however some scholarly interest in the decapitated and/or preserved head (Dickey, 2009; Larson, 2014; Houlton, 2015; Nikolić et al., 2017), suggesting a correlation with this idea of potency of the head/face relative to the rest of the body.

⁶¹ See notes 37, 38, 39. In addition to artists already mentioned, Jordan Baseman, Jack Burnham, Sue Fox, Elizabeth Heyert, Andres Serrano and Joel-Peter Witkin have also engaged with the post-mortem body in a sustained way.

⁶² See Murgia and Harlow, 2019. The work of Adam Harvey and Zach Blas cited in Chapter 1 speaks to this directly, as does the project *Spirit is a Bone* (2016) by Adam Broomberg and Oliver Chanarin, discussed in this chapter.

clinical or forensic images of the face become a critical site of intervention in a way that other highly individual body parts (hands, feet) do not (with the exception perhaps of genitals). The convention of black eye-blocks/bars or other visual masking techniques as a tool of visual mediation/intervention (see fig. 23) signals a visual claim to privacy which frequently falls short as not enough of the face is altered to effectively protect identification (Engelstad et al., 2011).⁶³ Is the face (living or dead) an especially troublesome site because it is widely accepted as the locus of personhood and dignity?

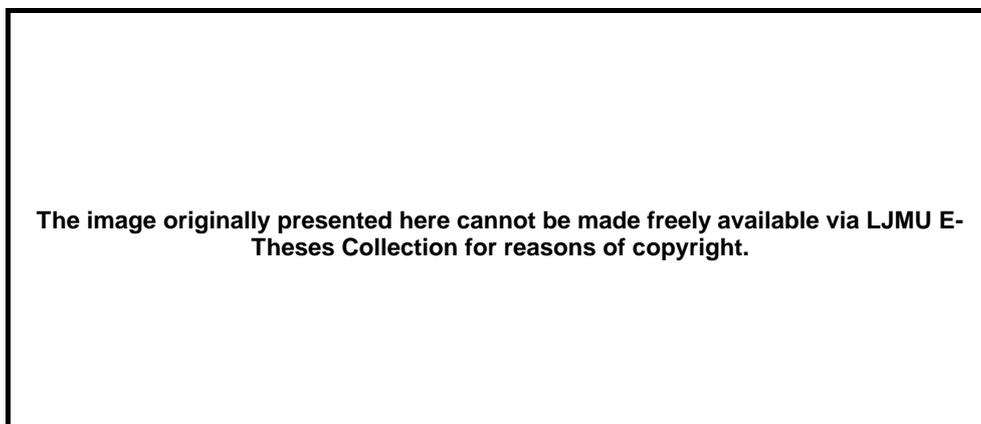


Figure 23: Example of facial image mediation for both post-mortem and antemortem facial images. This image was reproduced in an MDM-DVI report/reference manual to show the comparison of frontal facial image and teeth (Chung and Yoon, 2009, p.37)

The literatures broadly related to facial anthropology or craniofacial identification are a wealth of technical theory but are generally short on philosophical reflection. In addition to the scientific demands of forensic facial imaging, particularly for post-mortem identification, the socio-cultural and ethical considerations surrounding the production and circulation of facial depictions cannot be ignored, given the high-stakes expectations of the work that such images are expected to do. With the exception of a few

⁶³ This is also the case in *Steinberg's Facial Identification Catalogue* (Steinberg, n.d.) which uses criminal mugshots to provide a range of facial feature references for composite artists working with eyewitnesses. Various shapes (oval vignettes etc.) mask out non-salient features for a given category. However at least two faces are very well-known and identifiable despite significant masking (John Wayne Gacy and OJ Simpson). Face perception is well-studied (Bruce and Young, 1998; Todorov, 2017) but how much of a face can be retained to still ensure anonymity is less well-known (Shrimpton, 2018).

studies which have attempted to quantify ‘likeness’ in various ways in respect of facial composite imaging or portraiture in the context of forensic applications or face perception more generally (*inter alia* Hayes et al., 2020, 2018; Hayes and Milne, 2011; Hayes and Tullberg, 2012; Klum et al., 2013; Perdreau and Cavanagh, 2013), there has been no sustained focus on how individual stylistic or aesthetic language may impact on the success or efficacy of facial depictions.

The absence of the face in visual thanatology or forensic cultures to date is particularly conspicuous given the focus on the face in visual culture in general, whether this is the long history of the portrait as genre in Western art (Brilliant, 1991; Woodall, 1997; Podro, 1998; Ewing, 2006; Pointon, 2013) relative to the politics of the selfie, for example (Brown, 2015; Kuntsman, 2017), or the prevalence of masks as both concept and performative object globally through history (Sorell, 1973; Belting, 2017).⁶⁴ This is even more curious considering photography’s role in constructing ideas about human ‘types’ on the one hand (Sekula, 1986; Edwards, 1990; Tagg, 1993) and perceived affinity to reality and its inescapable role in the construction of visual evidence (Siegel, 2011; Fontcuberta, 2014; Morris, 2014b; Dufour, 2015) on the other.

Western scholarship on the face is dominated by two contrasting theories of faciality, one fundamentally humanizing and the other abstracting. Emmanuel Levinas has advanced a humanist ethics of the face which centres on mutual recognition with an ‘Other’ to which we must ‘turn towards’ in an act of mutual recognition which fosters personhood (Levinas, 1979; Levinas and Nemo, 1985). As an act of looking, this enables a facial image (or even a human fragment) to be recognised as a subject. In contrast, Deleuze and Guattari’s ‘abstract machine of faciality’ (Deleuze and Guattari, 1987) is seen to exemplify a dehumanizing, classificatory politics which produces ideas about whole bodies through facial fragments and accoutrements, sorting out their owners into human types. This type of operation could be seen to characterise the work of physical anthropology

⁶⁴ References given are those consulted in the context of this research and are necessarily very limited, recognising that the subject could fill a small library and would cross a range of disciplines and approaches (practical, theoretical, philosophical).

and forensic identification, and is exemplified in Bertillonage, a ‘signaletic’ system of human (criminal) identification (Siegel, 2011) developed by Alphonse Bertillon (1853-1914), aimed at an ‘unambiguous’ translation of physical appearance into a series of measurements. The extension of this system into his *portrait parlé* (trans. speaking portrait) which includes frontal and lateral facial images of his subjects, embodies the material-semiotic flows that operate between the biometric interests of our contemporary forensic age and the evolution of facial compositing and recognition software, further articulated through related conventions of the institutionalised portrait – what we might recognise as the clinical or ethnographic image, the criminal mug shot or the passport photograph (Sekula, 1986; Edwards, 1990; Tagg, 1993; Albers, 2010). The idea of a ‘speaking portrait’ holding a wealth of hidden information that can be unlocked if correctly recorded, analysed and interpreted/performed by an appropriate expert, is a foundational concept in how visual evidence is constructed within forensic cultures via photography’s indexicality (Sekula, 1986; Mnookin, 1998; Siegel, 2011; Ellenbogen, 2012; Dufour, 2015). A detailed academic examination of these theories is beyond the scope of this project, and less interesting than their application in relevant scholarship, particularly the work of Butler (2006a) and M’Charek and Schramm (2020), and in how they are performed in *Speaking Likeness*, for which Chapter 5 provides a detailed exposition.

A critical turn to the face

If science is politics by other means, the vantage point from which to explore the connection between science and politics also needs to be made explicit. (Schramm, 2020, p.2)⁶⁵

In a special section on *Face and Race* in the journal *American Anthropologist* (June 2020), section editors Amade M’Charek and Katharina

⁶⁵ See also Haraway (1988)

Schramm advocate for a “critical turn to the face,” motivated by the relative neglect of the face compared to the critical interdisciplinary attention given to the body in STS, gender and post-colonial studies.⁶⁶ Faces in particular, are ubiquitous, apparently “everyday and self-evident”, giving the “impression of simply being out there, available to look at” yet carrying but also reproducing a “heavy classificatory load” that is primarily about racial difference and discrimination (M’Charek and Schramm, 2020, p.1) As such, M’Charek and Schramm seek to “denaturalize the face as an assumed given identity as well as the practice of seeing as an assumed unmediated operation.” (2020, p.2)

Their work is significant for this study for its direct engagement with craniofacial analysis (facial anthropology) and forensic imaging practices, particularly in relation to the ‘re-biologization of race’ through DNA phenotyping. Through the work of the face, “cut into its components, turned into a circulating reference,” they advance the idea that methodologies and technologies informed by certain ideas and values (in method and design) will implicitly or explicitly reproduce those ideas. Because the past work of the face “reaches into the present as part of comparative data and genealogies of knowledge that inform contemporary scientific practices” (M’Charek and Schramm, 2020, p.4), the traces of these ideas and values as remnants of their site of production will thus be embedded in the objects they generate, which then become technologies of these particular visions which possess material-semiotic power (possessing social and ontological significance).⁶⁷ Attending to the work of faces in this way is directed at transcending a representational model of the face towards a generative one.

Staging the face at the intersection of a number of fields and interests at the interface of science and culture develops a critical

⁶⁶ In so doing, they echo the appeal by Zuckerman and Crandall (2019) for an intersectional approach to biological interpretation of skeletal remains and Joanna Sofaer’s appeal to a materialist approach to human remains (Sofaer, 2006, 2012), all of which offer methods to retrieve and reposition anthropology relative to the spectre of race science which haunts its legacy. Visual and cultural studies, including photography and visual art) should also be included here.

⁶⁷ M’Charek regards both the face and the phenotype as ‘material-semiotic objects’ as they instruct the viewer about what to “take into account.” In other words they both fashion (in the crafting sense) and typecast in particular ways, and create interest (i.e. provoke affect) (M’Charek, 2020, pp.2–3).

vocabulary with which the potency of the face may be understood as a generative object as well as a representational subject that speaks to concerns in the life sciences as well as the humanities, thus extending the existing repertoire of discourses of faciality.

Following M'Charek and Schramm's thinking, the critical difference between the humanist philosophy of Levinas (where the face represents an ethical obligation to an 'Other' on the basis of shared humanness) and that of Deleuze & Guattari's 'abstract machine of faciality,' is that in Levinas, a face-to-face encounter represents "an ethical moment that *precedes* culture and politics" (M'Charek and Schramm, 2020, p.1, my emphasis), whereas in Deleuze & Guattari, the face is not a natural or a biophysiological entity but a classificatory object by which a subject may be inferred. Thus, culture and politics precede the face, rendering faces effectively illegible outside of these frames. In Levinas, a face signifies a subject/personhood; in Deleuze and Guattari, a face produces a subject that may represent a collective identity as much as an individual one.⁶⁸ Their argument orchestrates a three-dimensional, theoretical move from ethics to politics, encompassing the historical legacies ("sedimented histories") of anthropology, read as a nexus of racial politics and scientific ideas; the technological apparatuses that mediate faces and make them legible in various ways; and the idea of face as surface, which turns appearance into an object of analysis.⁶⁹ "The work of the imagination in relation to the face," M'Charek and Schramm maintain, "is built on prior expectations and the capacity to 'read' the face in a 'proper' manner." (2020, pp.3–4) Institutional photography, specifically that of colonial-era scientific and criminological practices, is acknowledged as especially complicit in the production of the face as a material-semiotic object.

⁶⁸ Another way to think about this difference is how the 'abstract machine' turns the face into a classificatory object, where an entire body might be inferred from a single stereotypical (i.e. racist) facial feature e.g. 'large nose = Jewish', 'beard or head scarf = Muslim'

⁶⁹ M'Charek and Schramm argue that "it is precisely this aspect that constitutes the major contribution of this special section to scholarly debates on race" (M'Charek and Schramm, 2020, p.4) but of course facial analysis and the concerns of appearance are also an essential part of the work of others, for example craniofacial specialists whose objectives may be to restore functionality in living patients, or address concerns that produce social stigma.

These ideas are best understood when performed through the critical gaze of contemporary art. The face as a technology of identity and identification received a striking twenty-first century update via Adam Broomberg and Oliver Chanarin’s application of sophisticated Russian 3D CCTV technology as a tool of “non-collaborative” portraiture in their project *Spirit is a Bone* (Broomberg and Chanarin, 2016), the products of which are described by the artists as “the digital equivalent of a death mask” (Broomberg et al., 2016, p.207) (see fig. 24) The humanity they identify as being present in conventional portraiture, through the engagement and capture of “the subject’s gaze, or any connection between photographer and sitter that we would ordinarily rely on in looking at a portrait” – a feature we would associate with the Levinasian face – is completed “negated” here, rendered “a fiction.” This observation creates explicit material-semiotic links between surveillance/facial recognition technology as contemporary expressions of Bertillon’s *portrait parlé*, and the use of death masks as tools of racial and psychological pseudo-sciences in which the face is instrumentalised in precisely the manner described by Deleuze and Guattari’s ‘abstract machine of faciality’ (Deleuze and Guattari, 1987).⁷⁰



Figure 24: Adam Broomberg and Oliver Chanarin (2016) Three portraits from *Spirit is a Bone* (left to right) *The Fighter or Revolutionary*; *The Philosopher*; *Student of Philosophy*. Courtesy of the artists

⁷⁰ Extending the trope of ‘classification by type’, Broomberg and Chanarin explicitly reference August Sander’s epic project *People of the Twentieth Century: A Cultural Work of Photographs Divided Into Seven Groups* (Sander et al., 2013), which documented people of his native Westerwald, Germany. The final section, ‘Matter,’ included images of the dead as well as a photograph of his son’s death mask.

In M'charek's view, the forensic face is Deleuzian in character: able to infer and organise whole bodies into categories, it operates as pure surface, embodying Deleuze's concept of the 'intensive' (versus 'reflective') face. Tendencies of the reflective face may be seen in the work of physiognomists, anthropologists and criminalists beginning in the eighteenth century, where it functioned as "a tool for sorting out differences between categories of people," (M'Charek, 2020, p.7) focusing on common parts and arrangements that can be compared, but which ultimately combine to produce a whole (p.2). Galton's facial composites as an early form of data visualisation are a strong (and inherently problematic) example (Wilkinson et al., 2019). In contrast, the intensive face speaks to facial "tendencies and trajectories" (M'Charek, 2020, p.7) where parts of the face come to represent the whole body/person, as in 'the eyes of a killer.' The whole face is not the sum of its parts, but subservient to them.

Both concepts echo Forensic Art practices, whether it is recall-based composites, post-mortem depictions or age progressions, or a hybrid sculptural/photographic 2.5D reconstruction.⁷¹ All require a consideration of individual features in the context of a facial *gestalt*. Depending on the technique used, a process of featural abstraction (identification, selection, placement) in the process of creating a plausible face may be amplified.⁷² But it is in the face produced through DNA phenotyping that enables M'Charek to advance the stimulating analogy of faces (forensic ones in particular) as "tentacular" (M'Charek, 2020, p.7), working like an octopus in sensory mode, able to reach out, probe many directions and do various things simultaneously (M'Charek and Schramm, 2020, p.4) in ways that may also be somewhat tentative. In M'Charek's view, the technique of

⁷¹ See Chapter 2 for definitions. This may refer to a 3D sculptural reconstruction (manual or virtual sculpture) photographed or screen-captured and to which digital textures are applied to enhance reliability

⁷² Facial composites have evolved from manual, feature-based reference systems (e.g. Identikit) to holistic, software-based ones (e.g. eFit, EvoFit), which represent best-practice as it more accurately reflects how faces are cognitively and perceptually encoded, to which the concept of 'facial gestalt' relates. Although in reality, it is a negotiation between the two in the process of translating an eyewitness account and then refining the image.

DNA phenotyping introduces the problem of (re)naturalising race as a matter of fact by attaching molecular concepts “to the body and its appearances,” which risks undermining the work of cultural and social theory which have established race as a social construct (M’Charek, 2020, p.5). This problem is amplified in forensic science where DNA represents the ‘gold standard’ of identification technologies,⁷³ and points to an imminent paradigm shift in forensic anthropology, which is being forced to revisit and rearticulate outdated assumptions about biological difference/sameness in respect of genetic ancestry in relation to race, and sex in relation to gender. These ideas are explored further in Chapter 6.

Facelessness and affect

The post-mortem face fundamentally challenges human interaction and reciprocity (or lack thereof) from something that we recognise as very much like ourselves, and thus is perceived as an existential threat. The potency of the post-mortem face is therefore a problem of affect.⁷⁴

Our resistance to gazing too long at dead faces may be reflected in our parallel discomfort with animated digital faces that are not quite plausible yet make a claim to possessing a degree of agency. This is partly accounted for by the Uncanny Valley theory which emerged from robotics (Tinwell et al., 2011; Mori et al., 2012; Tinwell, 2015) but which may be

⁷³ M’Charek reminds us that even though the framing of the human genome to the world was a “testament to human commonality and as the evidence that race did not exist” (M’Charek, 2020, p.6) the importance of subsequent work in genomics in the life sciences has focused on the 0.1% difference between us than on the 99.9% of sameness (p.4) The way such work is reconfiguring how ‘individuals’ are conceived relative to ‘population’ is what drives her questioning of the assumed causal relationship between genotype and phenotype, and the claims made as to how this causality might produce behaviour and appearance (echoing the ideological perversions of race science that linked cranial capacity to intelligence, for example), thus re-introducing a new form of reductive typology (racial, gendered) “through the front door.” (p.5)

⁷⁴ The recent experimental work of David Freedberg (2014), often in collaboration with mirror neuron theory pioneer Vittorio Gallese (Freedberg and Gallese, 2007) marries art history and cognitive neuroscience to provide a scientific basis for affect/empathy. Jill Bennett (2002, 2005) has made an in-depth study of art as an agent of empathic vision, including with reference to death representations, and Jane Bennett’s notion of ‘vibrant matter’ (Bennett, 2010) really animates the field of ‘new materialisms’ (Coole and Frost, 2010) as well as anthropological approaches to visual art (Pinney and Thomas, 2001). Taken together, these provide a set of co-ordinates by which the effects and affects of the contemporary facial image may also be theorised.

further elucidated through the Still Face paradigm (Adamson and Frick, 2003; Tronick, 2003; Mesman et al., 2009), an influential theory in development psychology that has become a standard method to test hypotheses of person perception, and differences in attachment and communication.⁷⁵

In politics, visual culture & the media, the work of Edkins (2015), Schwartz (2013, 2015), Talley (2014), Biernoff (2010, 2011, 2012, 2017), Troyer (2017), Berger (2005) and Angel and Gibbs (2006), are instructive in their respective explorations of the face as object, idea and technology, drawing attention to its social and political power, enacted through its materiality and evanescence.⁷⁶ As Biernoff (2017) has shown, the visual record of traumatised and post-mortem faces from two World Wars and subsequent conflicts is considerable. Edkins (2015, p.170) suggests the literal and metaphorical effects of the post-mortem face as a kind of facelessness, suggesting that exposure to a Levinasian face “entails an awareness or realisation of the mortality, material misery, defencelessness and vulnerability” of the other. It is traumatic, whereas “the contemporary western face, the face that is a politics for Deleuze and Guattari, does the opposite: it allows us to forget these things.” Lack of facial integrity is a threat to social and cultural norms, driving the surgical focus on repairing damaged and disfigured faces (Talley, 2014; Biernoff, 2017; Pearl, 2017) and discrimination against those with facial difference (Garland-Thomson, 2009; Pop and Widrich, 2013; Skinner and Cock, 2018). “Facelessness,” Edkins writes, “profoundly unsettles notions of the individual subject as separate, distinct and whole. It threatens to destabilise the whole of western

⁷⁵ The Bukimi no Tani Genshō effect was described by Masahiro Mori in 1970 (2012), later translated as ‘uncanny valley’ by Jasia Reichardt in 1978. In her work on digital images, specifically the sophisticated CGI creations of gaming and animation, Tinwell interrogates the affective quality of such bodies and faces, theorising Mori’s concept of the uncanny valley in relation to Tronick’s Still-Face Effect. In her work on facelessness, Edkins (2015) also puts forward a link to mirror neuron theory but does not close the circle to include attachment theory as Tinwell does. This may offer a significant new way to theorise the potency of post-mortem faces and their depictions in future work.

⁷⁶ James Elkins goes even further to ask, ‘What is a Face?’ (Elkins, 1996) which offers an art historical (iconographic) perspective on face perception and cognition. Many of the ideas mentioned here have been discussed in a chapter published in parallel to this study which attempted to think through ontologies and epistemologies of forensic facial depictions (Smith, 2018b); see Appendix 1.

ideology and politics built around a fantasy of a social contract founded on individual responsibility, and a collective made up of singular beings.” (2015, p.171). The idea of facelessness is developed further in Chapter 6 via Judith Butler’s concept of radical effacement, which connects these ideas to Mbembe’s necropolitics.

The general position taken in this thesis is that a Levinasian ethics of the face demands recognition that the social and political marginalisation of certain peoplehoods exists, which is enacted through the Deleuzian faciality machine as the dominant social and forensic mode. It is suggested that both modes *co-exist* within forensic facial imaging work, characterizing its different expressions and perhaps even informing core motivational values within the field. In other words, victim-related work is distinctly more Levinasian than criminal identification work, where facial compositing and recognition systems are material embodiments of faciality’s abstracting machines.

Materialities and Mediations

In this thesis, mediation refers to processes by which information is translated or made legible/comprehensible between one context and another e.g. mediator deathwork. Extending this to visual methods, re-mediation refers to a process by which visual artefacts are altered or manipulated either at the site of the image itself, or through translation from one medium to another. For example, a post-mortem photograph is digitally manipulated or redrawn to repair the effects of post-mortem changes, or a forensic sculpture is photographed in particular ways in order to produce a controlled image (or set of images) for publication by which the possibility of recognition may be optimised. Re-mediation therefore may involve dimensional translation (3D to 2D) and/or introduce a range of other values (lighting, tone, colour and so on) that may not have been present in the first iteration. The process of sampling and compositing photographic textures onto a virtual reconstruction is also a re-mediating process. Re-mediation is hyphenated to emphasise the nature of media itself while maintaining the

connotations of repair, improvement, intervention and interface, and their associated values.

Regardless of the task at hand or media employed, all forensic facial imaging techniques are processes of visual re-mediation, of which facial reconstruction probably represents the most dramatic translation from one object to another. The conceptual origination of facial reconstruction as a practice may be plausibly located between 6000 – 9000 BCE in ancient Jericho, where a number of human skulls were discovered, their soft tissue and mandibles removed and overworked with plaster to reconstruct a sense of facial form and individual features, including shells to represent eyes (Strouhal, 1973; British Museum and Shore, 2017; Hirst, 2017). This particular re-mediation of human remains results in an ontologically ambivalent object, although they suggest relationality – continuing bonds between the living and the dead through the face as an emblem of personhood – from which conceptual kinship with a Levinasian face might be inferred.

One of the most powerful aspects of facial reconstruction's hidden curriculum is the extent to which practitioners report varying levels of intersubjective connection with cases they work on, which frequently involves multisensory inputs such as smell and touch. Touch has been suggested to foster intersubjective relationality within osteology (Sofaer, 2012), and this is not limited to the material. Haptic-enabled virtual sculpture used for 3D facial reconstruction is closer to the modelling processes involved in manual sculpture and face-casting and enables a different relationship to the skull and face compared with 2D methods (Smith et al., 2020).

Face casting (life- and death-masks) also suggest ways of thinking through the ontology of forensic facial depictions as these objects fundamentally trouble the relationship between portrayal and portraiture, extending the idea of photography's 'indexical trace' in material terms, while also connecting technically and conceptually to facial reconstruction. Face casts are produced directly from the living or dead face and are

considered the sculptural analogue of the photographic portrait.⁷⁷ In combination with other references (skulls, photographs, portraits), such objects have been used to validate early experiments in facial reconstruction (Kollmann, 1898; Von Eggeling, 1913; Stadtmüller, 1922); authenticate identities of historical figures including William Shakespeare (Edwards, 1995; Buncombe, 1998; BBC, 2010, online), John Dillinger (McCrone Associates, Inc, n.d.) and Abraham Lincoln (Volk et al., 1915; Bloom, 2014), and have potential for future analyses of post-mortem facial changes if antemortem and post-mortem casts of the same individual are available for comparison, which a historical phrenological collection may facilitate.⁷⁸

Even if cast from a living face, the resulting artefact can fudge the sense of aliveness in the subject due to the process of their production, and which may also show signs of subsequent intervention (Pointon, 2014).⁷⁹ As objects cast directly from the face alive or dead, they may also retain biological material, further complicating their ontological and affective status. The indexical/depictive ambiguities of face casts (a status shared with forensic facial depictions) has thus led to them being referred to as 'artifacts on the edge' (Pointon, 2014) based in their precarious ontological (material-semiotic) status between indexicality (photographic) and depiction

⁷⁷ A technology available to directly 'record' a likeness prior to the invention of photography. This point is also made well in its inverse, where Higgins writes, "A photographic portrait is like a death mask in that it is a material trace of a subject. The residue remains even though the subject is now absent. Through the use of photographic post-mortem portraiture, similar to that of the death mask, there is a desire to 'shore up the subject', or to preserve the individual in the face of death." (Higgins, 2016, p.4).

⁷⁸ The University of Edinburgh's Department of Anatomy museum has an extensive collection of life and death casts accumulated around the interest in phrenology in that city (and elsewhere, of course) (see Cromarty et al., 1988; Kane, 2008). Some exploratory research was conducted within that collection in 2017, which identified several examples of life and death masks of the same individual, some with associated skulls. On the same day, I observed a training class in advanced post-mortem facial reconstruction for mortuary science (funeral embalming) to enable open-casket viewings of people who suffered facial/head trauma, offered by the [William Purves Embalming Academy](#).

⁷⁹ The pressure of protective and moulding materials may subtly alter or deform the soft tissues of the face or whether the subject is sitting or lying supine. Joanna Kane's project, *The Somnambulists* (Kane, 2008) works directly with this idea, photographing face casts as black and white portraits of people as if caught between sleep and death. The nineteenth-century death masks of hanged criminals from Newgate Prison, now part of Scotland Yard's Crime Museum (Keily and Hoffbrand, 2015, pp.12–17) include the neck, ostensibly to show the rope compression as a grotesque signifier, establishing such objects as both trophies and object lessons.

(crafted intervention).⁸⁰ What face casts once enabled as a pre-photographic technology, 3D scanning can now achieve virtually, along with the opportunity for non-destructive re-mediation.

Harries *et al.* (17) have appealed for photographs of human remains (of which, following the preceding argument, face casts are a type) to engage in an ‘ethics of unsettlement’ in which they become sites of “participatory critique” of the epistemological legacies and networks they embody and engender, because of photography’s ability to simultaneously engage the mechanical and the affective. In a similar way, face casts are now being deployed to explore histories of race science within anthropology (Rassool and Hayes, 2002; Schramm, 2016), with Houlton and Billings recognising them as undeniably difficult artefacts but still possessing some positive retrieval potential (Houlton and Billings, 2017).

As such, this thesis seeks to put forensic facial images to work in similar ways, as agents of their own self-reflexive appraisal regarding not only their role in forensic identification but other forms of knowledge they contain and transmit, or at least provide an initial set of tools with which this work can begin, as objects of tactical visual re-mediation.

Forensic Art is a boundary praxis somewhat precariously located at the edges of art, science and the law, and it is suggested that objects also operate at the outer edges of the disciplines and practices which inform it, in ways resembling that of boundary objects (Star, 1989). Moving across boundaries requires some level of mediation, an ability to speak a common language or demonstrate connections through or despite difference. Tony Walter’s theory of mediator deathwork (2005) provides a crucial link

⁸⁰ In popular culture, the face cast known as *L’Inconnue de la Seine* (the unknown woman of the Seine) is probably the most internationally famous object of its kind, birthing a literary and artistic industry from 1900 onwards, through the reproduction, circulation and re-mediation of the object both as a popular decorative object (Saliot, 2015; Sciolino, 2017), and then later as the face of the commercial CPR doll *Resusci Anne* (Grange, 2013; Dockrill, 2018) as well as a feature of a recent installation project, *Memento Mori: Sonata for Light* (Chan, 2017; Chan and Smith, 2017). Although the lore of this object is invested in its post-mortem indexicality as well as the fact that she is unidentified, it has also been suggested that it is more likely a life cast of a young Italian woman (Calchi, 2012) which supports how she is referred to in the US (*La Belle Italienne*), an object simultaneously inferring death and life as post-mortem depictions also do. The ambivalence of the object is partly invested in what some interpret as an enigmatic smile similar to that of Leonardo Da Vinci’s *Mona Lisa* (1503).

between the forensic and the artistic through the concept of media and mediation, a thread which extends into Chapter 5 (the artist/research as medium in *Speaking Likeness*) and culminates in Chapter 6 where the link is made to forensic humanitarianism objectives. The developing argument will therefore work to locate post-mortem forensic facial images as ‘edge objects’ in the way they work against time (against deadness); appeal to photographic authority even through sculpture and sketching; carry the traces of their context of production via their technological and social modalities; and interface between professional and avocational investigative cultures to perform the work of forensic care and relational citizenship.

To sum up, *Laws of the Face* is not a study of images of the dead but rather attends to how, under what conditions, and with what effects the unidentified dead are rendered visible (re-imaged or indeed *re-imagined*) through post-mortem forensic depiction methods, with the objective of reuniting an unidentified individual with their name, their community, and by extension, their personhood. The focus here is on the restoration of legal identity through visualization, and how this produces forms of citizenship and contributes to the work of justice.

Part 4: Contemporary migratory trends: framing a humanitarian crisis

Increasingly, reports of unnatural death events resulting from single-event mass fatalities or irregular attempts to cross international borders are reaching us via the media. Many of those involved are unidentified and their countries of origin are unknown. These deaths require medico-legal investigation but their complex circumstances trouble standard identification workflows, which place stress on ordinary medico-legal services in affected countries/regions and often require specialized response protocols or expertise. Further, the deceased cannot be reconciled with their source communities, and families cannot adequately mourn or conduct appropriate post-mortem rituals, which produces enduring social and cultural effects. Collaborative responses to such events has become the focus of a new form of forensic deathwork, referred to as Humanitarian Forensic Action

(Cordner and Tidball-Binz, 2017) or forensic humanitarianism (Moon, 2016) which has emerged in the context of human rights violations and the application of science to determine the identities of those killed by oppressive political regimes (Rosenblatt, 2010; Gaggioli, 2018), but also includes the work of mass disaster management (MDM) and Disaster Victim Identification (DVI).

Response protocols for MDM and DVI are well-established in local, regional and international contexts, supported by organisations such as Interpol, the International Committee of the Red Cross (ICRC) and the International Federation of Red Cross and Red Crescent Societies and the World Health Organisation and their affiliates (Cordner et al., 2016). Such events involving victims from multiple countries are supported by multilateral international co-operation, as seen with the Thai Tsunami in 2004 (James, 2005; Lessig et al., 2006; Scanlon, 2006) and have advanced best-practice methods and recommended protocol informed by improved sensitivity to cultural conditions, largely through heuristic processes and experience (Black et al., 2010, 2011; Tillotson, 2011).

More regionally focused events may be assisted by international MDM-DVI specialist delegations from better-resourced countries and/or those with experience in specific events. For example, the collapse of the TB Joshua Synagogue Church of All Nations in Nigeria's Lagos State in 2014 killed 115 people. Of these, up to eighty-four were South Africans, making it the largest single-event mass fatality involving South Africans abroad in recent history (BBC World Africa, 2014 online; Sanderson, 2014). South African Police Service Victim Identification Centre (SAPS VIC) section commander Brigadier Helena Ras headed the South African rescue and recovery team; Ras also chaired the Interpol Disaster Victim Identification Steering Committee from 2012-2014.

South Korea has made significant contributions to international MDM-DVI response protocols led by its National Forensic Service (Chung and Yoon, 2009; Chung et al., 2014, 2017; Chung and Seo, 2015). The country has had a number of tragic events including ferry, train and airline disasters, and has both innovated in the field and extended this experience to assist others, and is now considered a leader in the Asia-Pacific region

(Chung, 2018; P07, 2018). And of course, the events of 9/11 in New York City represent one of the most intensive and protracted MDM-DVI missions in recent history and was one of the first in which molecular identification technologies (DNA) were engaged on a massive scale (Thomsen, 2017, p.380). These two conditions, coupled with the event context in the epicentre of the world's leading global power, produced a cottage industry of scholarship focused on the intersection of trauma, national identity and patriotism, forensic identification, political and legislative consequences and media representations of death. The most intense debate centres on appropriate forms or processes to memorialize such an event; in other words, how might a range of competing interests, belief systems and concerns receive adequate 'voice' in an enduring, cohesive representation of terror and tragedy, whilst also maintaining the messy entanglement of all those things? Jay Aronson cogently summed up these tensions in his provocative question: Who owns the dead? (Aronson, 2016).

Single-event tragedies that impact tourist hot-spots or major world cities become matters of global concern by virtue of their media visibility. 'Man-made' disasters – various expressions of domestic or international terrorism outside of theatres of war – are by contrast criminal acts which operate according to more conventional tropes of victim-perpetrator-investigation-justice than earthquakes or tsunamis, where it is more difficult to apportion blame and responsibility. We do not necessarily think of an event like 9/11 as a humanitarian crisis per se, the multiple strands of its personal narratives being eclipsed by the political narrative of international terrorism and Islamic extremism. And we tend to associate humanitarian crises as taking place in marginal places, economically bereft and abject locations ravaged by war (Syria), famine (Yemen) or natural disaster (Haiti) which must find ways of coping with the metaphorical or literal aftershocks long after the original event. In other words, the latter fit more comfortably within the existing frameworks of the humanitarian.

From the late 1980s through to the early 2000s, the identification of perpetrators and victims of war, political conflict and genocide provided a constant source of scholarly and popular interest as forensic anthropology gained international prominence in this 'era of the witness' (Wieviorka and

Nordenskiöld, 2006; Guerin and Hallas, 2007) As the sustained work of Adam Rosenblatt (2019, 2015, 2010) and Claire Moon (2014, 2013, 2012, 2011) has shown, along with journalistic or autobiographical accounts of those involved in such work such endeavours, from the identification of Mengele, to Bosnia, Kosovo, South Africa, Rwanda and beyond, have been situated squarely within the framework of the ‘humanitarian’.⁸¹ While this work (both practical and scholarly) is ongoing, the ‘migrant body’ appears to have replaced the ‘genocidal body’ in current humanitarian forensic focus with numerous fatal journeys recorded along routes from Africa and the Middle East into Europe, and between South and North America. This so-called ‘migrant’ or refugee crisis⁸² is widely recognised as a humanitarian problem on a global scale, yet it does not attract the kind of multinational co-ordinated response of experts in ante-mortem and post-mortem data reconciliation that characterises best-practice MDM-DVI work. Irregular migration has produced a significant number of fatalities worldwide over the past two decades – 46,000 since 2000 and 3,514 reported dead or missing in 2017 alone – although the actual numbers are thought to be much higher due to non-reporting ([IOM Missing Migrants project, online](#)). The accretion of bodies over time, perishing during treacherous journeys over inhospitable terrains (deserts, war zones, oceans), as well as the victimology of the refugee/migrant crisis, would appear to be the primary factors contributing

⁸¹ In the South African context, see Krog, 2010; Morris, 2011; Hayes and Paolo, 2018. In South Africa, the Missing Persons Task Team continues to locate, identify and return to families the bodies of freedom fighters killed by the apartheid regime. Formed in the context of the TRC, which prioritised restorative justice processes over criminal procedures, and trained by forensic humanitarian organisation the EAAF, the work of the MPTT has advanced the use of DNA for identification in the SA context.

⁸² Refugees (who must be able to show that they are fleeing conflict or persecution) are protected under the [1951 Refugee Convention](#) and by law, cannot be sent back to their countries of origin (Sengupta, 2015). Migrants are not offered the same legal protection. So while it is possible to say that while all refugees are migrants, not all migrants are refugees. This distinction has become a point of political manipulation in the EU and in the United States, and the UK’s ‘hostile environment’ for migrants (Yeo, 2018) is reaching new heights with attempts to stop Channel crossings in 2020 (Busby, 2020). The term ‘migrant’ is politically preferable as it sets up the conditions for othering and deportation. It is also the term used throughout the relevant HFA scholarship and NGO reports. In this thesis, the term ‘refugee/migrant’ is preferred and will be used outside of direct/contextual citation to resist the political exploitation of the vulnerable, and signal the need to expand the definition of refugee to include climate refugees, who due to climate change are unable to support themselves from the land and seek survival opportunities elsewhere (Lustgarten, 2020).

to this neglect. Yet this crisis is not without single-event mass fatalities involving people from many countries. For example, the shipwrecks near the Italian island of Lampedusa in 2013 which killed over 400 African refugees (including Eritreans, Somalians, Ghanaians), have turned the world's attention to the crisis, but the political will to recognise the equivalence of these tragedies to other types of mass disasters is conspicuously absent, and with it the international support that would otherwise be mobilised to support recovery and identification efforts. Not even the shipwreck in the sea between Libya and Italy on 18 April 2015, "the worst disaster of its kind in the Mediterranean," (Scammell, 2015) which resulted in a large number of unidentified dead (Cattaneo et al., 2015, 2020; Piscitelli et al., 2016; Olivieri et al., 2017) was enough to be recognised as worthy of broad international support.

These events show the 'accretion over time' argument against employing standard MDM-DVI protocols and transnational co-operation in these situations is deeply faulty, and we are left with what these 'third world' bodies thus represent to the 'first world' countries they are trying to reach via these fatal journeys. At best, they are a social and economic burden; at worst, they are a threat. This political resistance to act humanely tacitly confirms that some bodies matter more than others. Mbembe's necropolitics (2003) gains specific purchase here, in the production of certain bodies as 'less equal' and connects with Butler's notion of 'radical effacement' (Butler, 2006b) both metaphorically and literally, given the role of the face as a technology of identification and a locus of personhood.

Humanitarian Forensic Action or forensic humanitarianism?

During the implosion of the Former Yugoslavia, the ICRC, as it has historically, was focusing closely on the humanitarian aspects of resolving the missing from that conflict. As part of its 2003 Conference on The Missing and their families, the ICRC clearly articulated a fundamental lesson learned from that conflict and also an ethical cornerstone of forensic practice: that it is wrong to investigate the dead from armed conflicts or disasters if this investigation focuses exclusively on the cause and manner of deaths of victims (i.e. for accountability purposes) and it does not also include efforts to identify the

remains (for humanitarian purposes) (Cordner and Tidball-Binz, 2017, p.67)

The year 2003 represents a turning point in the consolidation of forensic expertise towards humanitarian interests, for what was put forward at the conference referred to above also led to the establishment of the forensic unit of the ICRC, and provided the foundational tenets of technical and other best-practice guidelines that have since been applied elsewhere (Cordner and Tidball-Binz, 2017, p.67). In its investigation of an actual conflict, the International Criminal Tribunal for the Former Yugoslavia (ICTY) brought another conflict to the fore, namely between criminal and humanitarian interests versus those of the surviving victims. Collecting evidence towards proving war crimes took place was given priority over *identification* of individual victims, which was thus recognised as a major unmet humanitarian need (Cordner and Tidball-Binz, 2017, p.66) and led to the founding of the International Commission on Missing Persons (ICMP).⁸³

According to the ICRC, who coined the phrase Humanitarian Forensic Action (HFA) in 2012 (Cordner and Tidball-Binz, 2017, p.65), HFA is directed at mitigating the “corrosive uncertainty” for living relatives in the case of missing loved ones. As an act of humanitarianism, it plays a part in relieving human suffering in the face of catastrophe. According to their narrative, the Grandmothers of the Plaza de Mayo (whose activism led to the establishment of the EAAF) and International Humanitarian/Human Rights Law (referred to here as IHL) are the two primary sources for ‘organised’ HFA (Gaggioli, 2018; ICRC, 2020)⁸⁴ but as both Claire Moon (2016, 2020) and Adam Rosenblatt (2019) have independently cautioned (their respective discussions tracking many similar points), a single narrative can be dangerous. As Moon points out, the ICRC’s close association with the term (she uses the phrases “key entrepreneur” and “proprietary relationship”) could be seen as an act of ‘self-authentication’

⁸³ The ICMP has since acquired intergovernmental status and the ICTY was later expanded to include Rwanda to support investigations into the genocide in that country.

⁸⁴ With reference to frameworks, *The Minnesota Protocol on the Investigation of Potentially Unlawful Death* (United Nations, 2017) functions as an additionally important tool.

whereby a new style of reasoning generates its own truth conditions.⁸⁵ She suggests that the phrase ‘forensic humanitarianism’ more accurately locates this work in relation to its “longer and broader histories of humanitarianism, law, science and politics” that is, forensic work structured and shaped from *outside* the field (Moon, 2020, p.41) versus the implication that humanitarian objectives are somehow endogenous to forensic work, which is not the case. In fact, the history of forensic science would place humanitarian objectives as counter to criminalistic ones.⁸⁶ Significantly for Moon (and the argument presented in this study) “the HFA label starts to unfasten forensics from law,” presenting the possibility of a reconceptualization of forensic work, making way for values other than legal objectives to come to the fore (Moon, 2020, p.40).⁸⁷

As Rosenblatt observes, the greatest danger of a “hegemonic” story of forensic humanitarianism ... promoted through global channels” is the way it “might limit visions of the field's present and future,” which include ways in which forensic specialists can shed light on endemic and structural violence (i.e. necropolitics) within certain communities, most notably unidentified migrants. Yet the ICRC do recognise this, with Cordner and Tidball-Binz (2017, p.68) listing no less than twenty-two instances of global disasters from tsunamis to irregular Mediterranean crossings which have lacked adequate management of the dead. As much as a philanthropic tradition exists within the field in respect of hosting transnational outreach training, the challenges and resources within developed countries may differ

⁸⁵ This is supported (‘self-vindicated’) by the revised Minnesota Protocol and its explicit inclusion of humanitarian objectives and attention on the living.

⁸⁶ This point is reinforced by Thomsen (2017, p.379) who draws an informative distinction with forensic human rights work (FHW) which in his view is inherently “inquisitive,” aimed at gathering and reporting evidence of human rights abuses with the objective of ending the abuse. HFA is not concerned with establishing culpability. As Rosenblatt points out (2019, p.76), the ICRC's mandate and the rules which prevent it from getting involved in direct investigation and evidence-collection, “gives the organization an interest in maintaining and articulating a clean separation between humanitarianism ... and justice. Other experts object that these efforts cannot be separated so easily – politically or scientifically.”

⁸⁷ For Moon, HFA and forensic humanitarianism are two complementary stories about a practice rapidly becoming a knowledge-field, with “conferences, speeches, labels, protocols, special journal issues and training programmes” indicating that the conscious development of HFA is well underway (Moon, 2020, p.40). Where HFA speaks prosaically to the humanitarian features of forensic work, forensic humanitarianism addresses a phase within a longer history of humanitarianism itself (Moon, 2020 note 3).

vastly from those within less developed contexts (Cordner and Tidball-Binz, 2017, p.70). Likewise, as the literature demonstrates and fieldwork undertaken in this study further evidences, the specificities of each encountered context contributes to the “gray spaces and endless negotiations” (Doretti and Burrell, 2007) that characterise this work. The future demands of this work, they suggest, will be shaped by the context of growing threats to individual and geographic security globally, many of which are “interactive and compound each other,” requiring an approach sensitive to complexity, and must be “co-development” (vs capacity) focused (Cordner and Tidball-Binz, 2017, p.68), exemplified by responses to the refugee/migrant to which this discussion now turns.

Mirror sites: the Mellili Model and Operation Identification

In the face of the ‘regime-made’ disaster of the refugee/migrant crisis, specific identification initiatives in two sites – the Amexican border zone represented by Operation Identification, led by the Forensic Anthropology Centre at Texas State University San Marcos (FACTS), and the Mediterranean region represented by the Mellili Model, led by the *Laboratorio di Antropologia e Odontologia Forense (LABANOF)*⁸⁸ at the University of Milan – are resisting this position through a recognition of basic human rights and a methodological approach that foregrounds collaboration – and which has been largely voluntary – and challenging legislative restrictions on data access, particularly in the US context. It is suggested that their multifactorial and collaborative approaches demonstrate what is truly possible if the principle and spirit of post-mortem identification as an “obligation of means” (as expressed by the various conventions and customary international humanitarian law that requires parties to do all that they can with all means available to them), is fully embraced as an ethos and commitment.⁸⁹

⁸⁸ *Trans.* Forensic Anthropology and Odontology Laboratory

⁸⁹ Including the 1949 Geneva Conventions (GC I–IV) and their two Additional Protocols of 1977 (AP I and AP II) (ICRC, 2020)

The crisis of unidentified decedents in the South African medico-legal system finds a number of parallels in these international contexts, and in these specific response initiatives. Thus the Mellili Model (referred to as Mellili) and Operation Identification (referred to OpID) are staged as mirror sites against which alternative approaches to forensic deathwork at the Salt River medico-legal mortuary in Cape Town and the Wits ID Unit in Johannesburg indicate future ways of working, drawing on humanitarian methodologies in the face of minimal resources that are also producing innovation in forensic identification in their demonstrating of the significance of so-called ‘secondary’ methods, particularly of the visual (Caplova et al., 2017; Olivieri et al., 2017; Spradley and Gocha, 2020). These sites attend to ‘neglected things’ (Puig de la Bellacasa, 2011) in particular ways, embodying intersectional spaces of scientific and humanitarian concern, expressed in terms of forensic care (M’Charek and Casartelli, 2019). The complexity of these contexts necessarily forces the boundaries of conventional forensic protocol which is leading to methodological innovations that are especially instructive for the South African situation.

That these initiatives are led by women, and that their staffing complement of each initiative (faculty and student) is overwhelmingly female is noteworthy, not to reinforce any gender stereotypes about who is predisposed to matters of care, but to recognise that within a historically male-dominated scientific field, forensic anthropology in particular (and the forensic sciences increasingly) is a disciplinary space which is flipping the script on gender representation in science (Houck, 2009; Dawley et al., 2014a; Barbaro, 2019).⁹⁰

⁹⁰ Reflecting international trends, forensic anthropology in South Africa is also overwhelming female, as P32 notes: “Very much! Ja. It’s nearly all female. I think in academia, it’s very much female-dominated. It’s becoming that, here, in South Africa. I’m thinking that females do it quite a bit because of the conviction that goes with it. You know the thing that, ‘I’m going to do this, because I think it’s important and it should be done. And these people should be identified and we need to do something about this, no matter the fact that I’m going to earn a crappy salary and then I’ll struggle to find a job and that I’ll do this horrible job, but I think there’s value in it.’ (P32, 2018) The academic leads for Forensic Pathology Services in both field contexts (the Universities of Cape Town and the Witwatersrand) are women, as are the lead forensic anthropology practitioners in the four South African universities that offer training in this discipline.

An entanglement of factors, including the closed nature of forensic cultures, unequal distribution of services and expertise within and across jurisdictions, competing legislation (from local to national/federal and international), and political agendas, has served to keep such problems contained, but these bodies cannot stay hidden forever. The kinds of forensic humanitarianism exemplified by these initiatives across three continents and under extremely under-resourced conditions, represent a form of forensic activism, or ‘extreme’ forensics, not just as ideals but via practical methods that advance the science.

The Mellili Model

Professor Cristina Cattaneo and her LABANOF team (University of Milan) have become central to post-mortem identification initiatives in Europe in countries affected by irregular migration across the Mediterranean, since the Lampedusa disaster in 2013. In recent years, over 20,000 people have perished during irregular Mediterranean crossings from Africa and the Middle East and have been buried in cemeteries in Mediterranean countries, 60% of whom were unidentified (Piscitelli et al., 2016). A pilot study focusing on two wrecks off Lampedusa in 2013 led by LABANOF comprehensively demonstrated the value of blending routine forensic and counter-forensic actions towards successful identification in complex cases (Piscitelli et al., 2016; Olivieri et al., 2018).⁹¹ Their Mellili Model was refined during the process of retrieving and attempting to identify over 720 individuals who perished when a fishing boat sank off the coast of Libya, trying to reach Sicily, and has been analysed ethnographically (M’Charek and Casartelli, 2019), in which it was referred to as Mellili5.

Two key contributions are identified. Firstly, scientific advancement is not divorced from political advocacy for the disenfranchised and the

⁹¹ Focusing on two Lampedusa wrecks of 2013 in which 386 people died, routine actions included collecting post-mortem data as per mass-disaster response protocol, but counter-forensic initiatives were necessary to generate antemortem data for comparison. This included making open calls to NGOs and embassies throughout Europe soliciting information from refugee families who may be missing loved ones, which resulted in 50% of the victims being identified and death certificates issued (Piscitelli et al., 2016). This is also discussed in M’Charek and Casartelli (2019).

vulnerable; LABANOF have forced an acknowledgement of these events as a humanitarian crisis that should be receiving the same level of co-ordinated response that single-event natural or transport disaster receive (but which do not). Secondly, this method advocates for increased scientific investment (research attention) in visual methods of identification, recognising the value of facial images (photographs found in pockets) as a preliminary sorting tool (Gibelli et al., 2016; Caplova et al., 2017) and personal belongings (Cattaneo et al., 2010); the applications of imaging technologies such as 3D cranial scans (Nadeau, 2017); and the need for a database for better AM/PM data reconciliation as well as public reference (Cattaneo et al., 2015, p.167.e5).

Operation Identification

OpID was established in 2013 as a service learning and outreach project led by Dr Kate Spradley and a team of faculty and students based at the Forensic Anthropology Centre at Texas State University San Marcos, Texas (FACTS, 2019; Spradley and Gocha, 2020). As with the LABANOF team, OpID's work is largely volunteer-reliant, receiving no official state support until 2019 (Texas State Newsroom, 2019), the work of both contexts being sustained through goodwill, interest and the invaluable educational, ongoing professional development and public engagement opportunities they offer forensic identification specialists (Cappella et al., 2017).

Its work is based in protocols developed in the Office of the Medical Examiner in Pima County, Arizona (PCOME) (Anderson, 2008; Spradley et al., 2016), where the Missing Migrant Project was established in 2006⁹² (Reineke, 2013) in response to this county experiencing the greatest concentration of 'UBC' (Unidentified Border Crosser) deaths due to changes in US migration policies that made it more difficult to access the US via previously high-traffic routes through California or Texas (Anderson and Spradley, 2016). OpID's founding in 2013 is no coincidence because in

⁹² In turn, Missing Migrants has subsequently grown into the [Colibrí Center for Human Rights](#), which is one of OpID's key organisational and institutional collaborators.

that year, the effects of new changes in US federal immigration policies began to be felt in South Texas, specifically in Brooks County, with the state surpassing Arizona in the number of deaths associated with irregular border crossing that year and in every year since (Gocha et al., 2018, p.143).⁹³ As the largest human taphonomic research in the world, FACTS itself is a research leader in this subject, contributing specifically to predation studies via various forms of observation including drone surveillance (Associated Press, 2012).

Spradley advocates for the need for joined-up thinking and sharing of records between law enforcement agencies, border control and NGOs working in the interests of families and trying to reunite them with missing loved ones. Contrary to common sense, this is not standard operating procedure. The initiative has embraced social media ([Facebook](#)), and the media in general, to promote awareness of its work and solicit support.⁹⁴ Along with recognising the significance of clothing and personal effects, and circumstantial information, Spradley has also teamed with experienced forensic artists including Karen T. Taylor and Lisa Sheppard to create post-mortem depictions of unidentified bodies (see figs. 25 and 26), which has proved successful (Spradley and Gocha, 2020, pp.543–544).⁹⁵

⁹³ This policy is part of a suite of US immigration policies known as ‘Prevention as Deterrence.’ However, the active relocation of checkpoints which effectively forced undocumented border-crossers to attempt the journey across more treacherous terrain, thus promoting the likelihood of death (Spradley and Gocha, 2020), is referred to as ‘death as deterrence’. The weaponization of the desert this produces has become a matter of human rights advocacy (Shivone, 2013; Carroll, 2016; No More Deaths, 2020). Work to identify bodies of migrants continues in Arizona (De Leon, 2015; Romero, 2018) and California.

⁹⁴ Allowing tabloids such as the Daily Mail to publicise this work (Collins, 2017) may be viewed by some as tasteless or inappropriate, however the reach of such publications is hard to argue if the point is to raise awareness of these efforts towards ongoing sustainability (including financial), and this is also a body-donor facility for taphonomic research.

⁹⁵ Two OpID cases, [OpID 379](#) and [OpID 401-E](#), for which facial depictions have been produced and which have been identified, have detailed visual albums on the [Operation Identification Facebook page](#) (accessed 17 September 2020). The precise role the visual image played in producing a lead is not known. Taylor is adjunct faculty at FACTS.



Figure 25: 2D facial reconstruction (left, digital sketch) by Lisa Sheppard for OpID 401-E, and antemortem photograph of identified man. [Online](#), accessed 17 September 2020



Figure 26: 2D reconstruction sketch (left, pencil sketch) by Karen T. Taylor for OpID 379 and antemortem photograph of identified woman. [Online](#), accessed 17 September 2020

The cultural part of the biocultural approach advanced by OpID finds further critical and theoretical expression in Jason De Leon’s book *Land of Open Graves* (2015), a ‘contemporary archaeology’ of border-crossing that stands as a key example of the kind of intersectional scholarship this research aspires to. It is a multi-sited, counter-forensic ethnography that incorporates visual documentation and embodies HFA objectives of enabling proper grief and mourning and the re-establishment of the bonds between the living and the dead that such processes enable. And it also offers a significant challenge to the field: where the ‘migrant body’ is concerned, De Leon suggests an archaeological model over a forensic one, in order to ‘decriminalise body of the migrant’.⁹⁶

Expanding the counter-forensic to ‘extreme forensics’

As described in the previous chapter, the concept of the counter-forensic is well-placed to embrace ‘extreme forensics’ as one of its various expressions, with its roots in forensic humanitarianism as a collaboration between professional and citizen-led initiatives, but now pointing to new assemblages of practical actions developed through ‘tinkering’ with methods in relation to “unexpected encounters” and “the ability to experiment within the situation at hand” (M’Charek and Casartelli, 2019,

⁹⁶ Other concepts advanced by De Leon include methods discussed in this study e.g. four-field anthropology, necropolitics, Actor Network theory, and participant-observation, and Butler’s notion of public grieving, which come together in De Leon’s advocacy for a ‘hybrid collectif’ approach.

p.2). The phrase ‘extreme forensics’ originated in a popular article on the Mellili project:

Generally, if DNA specimens are too small or damaged, they are not considered legally valid for a positive match; Cattaneo found new ways to collect and record DNA because she had to, given the degree of decomposition on such a mass scale. The anomalies she and her colleagues find are being used as a new study in what amounts to extreme forensics. (Nadeau, 2017)

Although the article suggests Mellili’s innovation focuses exclusively on DNA as the primary (scientific) method of forensic identification, such methods are infrequently effective with citizens of developing or poorly resourced countries as no comparative samples are likely to exist. Secondary methods including facial images or personal effects (clothing and objects carried) may prove to be more effective. The assumed promises of sophisticated identification technologies like DNA reflect an implicit bias in these contexts, both in the limits to their application and how this technology might be used to reassert ‘otherness’ within populations (see for example M’charek, 2016, 2013, 2000; M’charek et al., 2020).

Citizen-led cold case investigations, including forensic genealogy might be considered ‘extreme’ forensics. It is recognised that describing forensic methods as ‘extreme’ is likely to be off-putting to some in the way that the phrase ‘Forensic Art’ also provokes scepticism, because ‘extreme’ is associated with ‘radical’, ‘maverick’ or ‘activist’ positions, none of which are wholly inappropriate given the circumstances. That these multifactorial and richly contextual approaches are delivering positive results demands that their legitimacy be tested in other environments facing similar challenges. Further, these initiatives attract significant media interest – an intersection of the CSI Effect and human rights missions (disaster recovery/mass grave investigations) and the extreme, often unpleasant conditions in which this work is undertaken.⁹⁷

⁹⁷ Popular articles seldom fail to remark on the materials with which it must engage, such as the visual and olfactory experiences of decomposition and almost domestic nature of the processes involving in cleaning both bodies/remains and their associated belongings (Scammell, 2015; Stromberg, 2015; Bucktin, 2016; Thomas, 2016; Collins, 2017; Mallonee, 2017; Nadeau, 2017; Gilbert, 2020)

A revised definition of ‘extreme forensics’ is thus advanced here, with reference to Mellili and OpID, as referring broadly to multifactorial forensic responses to complex contexts where purely scientific protocols and actions are insufficient to treat the unidentified dead and their surviving families with necessary dignity. These responses include new biocultural approaches (Siegert et al., 2016) as well as widening the network of communication to include extra-legal organs of national representation in other countries (Reineke, 2013; Piscitelli et al., 2016; Spradley and Gocha, 2020), suggesting the future of transnational forensic identification should attend to social and cultural signifiers, in parallel with biological/biometric ones.

Chapter 3: An Operational Study of Post-Mortem Visual Identification in South Africa

The control of corpses is always simultaneously about the social production of life. (Posel and Gupta, 2009, p.308)

Interestingly, a universal right to be identified in death is a relatively recent development, recognized in 1996, by INTERPOL's General Assembly. (Cordner and Tidball-Binz, 2017, p.66)

Introduction¹

The human face is a primary site of interpersonal recognition, its features representing a concentration of organs of sensing and communication. Facial features are now the focus of a host of new biological analyses (DNA) and digital biometric technologies. The face is also the first part of the body to be most noticeably affected by early post-mortem changes (Taylor, 2000, loc.3665; Wilkinson and Tillotson, 2012, loc.7221), rendering even the most familiar faces strange, even unrecognisable. An image of a person with closed eyes is not a familiar image of that person, unless it is someone with whom we are very intimate. The combined effects of post-mortem changes to the face, which assert themselves immediately at the point of death. Karen T. Taylor (Taylor, 2000; Kindle loc. 3613-4) cites Clement and Ranson, 1998) describing the challenges of visual identification of the dead:

... a dead body may bear much less similarity to the person in life than might be first anticipated. The pallor of death, the unkempt hair or an unrecognizable hairstyle, the lack of expression, make-up or dentures, all make identification more difficult. In life, there is a rich but subtle exchange of signals by means of expressions or gestures between people, which mutually reinforce recognition. These exchanges are obviously entirely lacking, and that too is very disconcerting for someone who may previously never have seen a dead body.

¹ This chapter is based on a sub-study carried out in collaboration with University of Cape Town Division of Forensic Medicine and Western Cape Forensic Pathology Services Salt River medico-legal mortuary/laboratory (UCT HREC reference 772/2017) and is supported by fieldwork carried out with members of the South African Police Service Victim Identification Centre (SAPS reference 2018/06/26).

These factors negatively affect the accuracy of post-mortem facial recognition, and the emotional burden of the experience for next-of-kin has also been shown to have a negative effect on accurate recognition (Wilkinson and Tillotson, 2012), especially if exhibiting evidence of trauma or taphonomic changes, or if poorly photographed. This has been demonstrated in several Disaster Victim Identification contexts, where ‘open list’ disasters (natural disasters, accidents on public transport or terror attacks, for example) increase the challenges associated with identification (Tillotson, 2011; Wilkinson, 2014; Wilkinson and Lofthouse, 2015), whereas closed-list mass fatalities such as aeroplane crashes provide a database of registered persons from which to proceed with identification processes. Post-event excavations of clandestine or known burial sites, such as those seen in genocide or war-crime investigations, or contemporary mass fatalities involving refugee/migrants, are an example where both ‘closed’ and ‘open list’ scenarios may be relevant.

Legally acceptable forms of identification are related to their scientific power. Of the primary methods, fingerprint analysis is by far the most common and cost-effective; odontology is a powerful but specialised skill, and DNA remains the gold standard although costly and dependent on the nature of the sampling method and subsequent analysis. However, all these methods are comparative, relying on existing records or ante-mortem data to be successful. In low-income countries, dental records and DNA databases are often less likely to produce results than fingerprint analysis, assuming it is possible to lift viable prints from the remains.

In cases where identity is suspected but where no biometric records exist, trained forensic facial imaging specialists can test for exclusion through craniofacial superimposition and morphological analysis. Should these methods fail, a forensic facial depiction of the individual may be commissioned for publication in the media. The technical demands of Forensic Art are focused on creating accurate facial depictions of unidentified persons, but they also involve an ethical imperative to ensure visibility and recognition of the vulnerable.

One of the positional leitmotifs of the broader study presented here is that visual identification of the dead presents challenges that are context-specific, which therefore require context-responsive methods. This includes being sensitive to local resources and infrastructure, as well as cultural and religious sensitivity regarding

post-mortem representation. This chapter reports on a sub-study undertaken in a particular operational context, the Salt River Medico-legal mortuary (SRML) in Cape Town, South Africa, referred to as the Salt River Study (SRS). This site is significant for reasons concerning access, the social context of forensic work, and ways in which innovation is possible in conditions with limited resources.

A South African crisis

The website of the Human Variation and Identification Research Unit (HVIRU), within the School of Anatomical Sciences at the University of the Witwatersrand contains the following simple statement: ‘The situation in South Africa with regard to unidentified bodies remains dire.’ (HVIRU, n.d., online) Having spent the past several years studying post-mortem identification and representation in South Africa and elsewhere, it is fair to say that is this statement, as unvarnished as it is, is one of the greatest understatements in this field of work.

South Africa is battling a national crisis regarding the identification of human bodies. The transient lifestyles of workers, indigent people and undocumented migrants from beyond the national borders no doubt contribute to the unknown post-mortem population of the country. Although no formal statistics are kept on ‘unidentified’ people – the unclaimed are an easier quantity to record, but their identities may be known – conservative estimates suggest that one in ten people (10%) admitted to national medico-legal facilities each year remain unidentified, amounting to ~10,000 per annum nationally.

Forensic deathwork in South Africa relies on a mandated collaboration governed by a Memorandum of Understanding (Department of Health and South African Police Service, 2018) between the National Department of Health (NDoH) and the South African Police Service (SAPS), two public services that face particularly intense pressures given the country’s socio-economic realities. In the event of death, it is a legal requirement to establish cause of death and the identity of the individual concerned. NDoH manages the country’s Forensic Pathology Services (FPS), who are responsible for custodianship of the dead and establishing cause and manner of that death. SAPS is responsible for investigating the circumstances that might cause someone to be admitted to an FPS facility, and to identify that person using legally acceptable methods if they are admitted as ‘unknown’. Fingerprints,

dental records and DNA are part of the primary suite of biometric methods employed, followed by secondary methods including forensic anthropology and facial depiction. Within SAPS, the Victim Identification Centre (VIC) specialises in post-mortem facilitation (crime scene and victim recovery) and resorts under the Forensic Science Laboratory section of the organisation. Cases which cannot be identified by fingerprinting alone should be referred to VIC, including decomposed, partial, or skeletal cases. They may also be referred to university-based forensic anthropology laboratories with established relationships with SAPS, of which there are four in the country (two in the Western Cape and two in Gauteng). The specific distribution of resources and capacity for post-mortem identification is described in more detail later in this chapter.

Medico-legal mortuaries are graded according to facilities and case load, and those linked to universities are referred to as academic centres.² For the sake of illustration, the two largest mortuaries in the Western Cape province are Salt River and Tygerberg, each of which serve a sector of the City of Cape Town metropole. The total provincial population is 6.76 million people (South Africa's total population is approximately 59.2 million people), of which 65% (4.43 million people) live in the City of Cape Town (Krige, 2019). Both are academic centres: Salt River is associated with the University of Cape Town and Tygerberg with Stellenbosch University.³ They are comparatively well-resourced, but they also process huge caseloads, a minimum of 5,800 autopsies per year between them. From the year 2014, records indicate approximately 1500 cases admitted to these facilities remain unidentified. Brits *et al.* (2020) documents the Johannesburg (Gauteng) experience, which reflects similar figures in a much more densely-populated geographical area.⁴

² Mortuary grading in the Western Cape is outlined here: <https://www.westerncape.gov.za/general-publication/our-facilities>. The Salt River Academic Centre is classified M6 Academic and serves the West Metropole of the City of Cape Town, specifically the Western, Southern, Klipfontein and Mitchells Plain districts (Clark et al., 2017) and deals with an average case load of 3,000 cases per annum. The other academic centre is Tygerberg, served by Stellenbosch University, also classified M6, and serves the East Metropole of the City of Cape Town, dealing with an average case load of 2,800 cases per annum. The province also helpfully has a Public FAQ page: <https://www.westerncape.gov.za/general-publication/your-questions>.

³ A similar pattern exists in Gauteng; this is described in detail in [Appendix 3: An Entangled Legacy](#).

⁴ Significantly for this study, and the broader research presented in this thesis, it is the first publication to report on a collaborative initiative between an academic institution and a humanitarian aid organisation (ICRC) to assess statistics of unidentified cases, which I had the opportunity to observe and participate in as part of my fieldwork.

South Africa is a violent society with one of the highest crime- and murder rates in the world, and it is regarded by the World Bank as “the world’s most unequal nation” (Greenwood, 2018, online). By comparison, the United Kingdom has a relatively equivalent population (66.65 million people), albeit distributed over a much smaller area, and it is also one of the world’s wealthiest nations with an admirable social welfare system, recording an average of 150 unidentified bodies per year for the whole country (Cawley, 2016). By quantitative comparison alone, the estimated number of unidentified dead in South Africa’s medico-legal mortuaries is startling. It is analogous to an ongoing disaster situation and demands an appropriate response.⁵ However, the situation is not framed as a ‘disaster’ per se, as it is not a single event resulting in mass fatality. Rather, bodies accumulate daily, a slow accretion that tallies in the thousands across the country year on year.

The structural relationships that govern and manage forensic services in South Africa are critical to understand as they have informed and impacted the motivations, methodology and results of this sub-study, illuminating the dynamics of emic-etic knowledge transfer within and between stakeholders, and revealing critical flaws in the practices which facilitate post-mortem visual identification, the main focus of the SRS.

Opening up closed spaces

Given the closed nature of forensic cultures, and the particularly sensitive nature of post-mortem identification, it is extremely difficult to access published information about how this work actually occurs in practice. Past personal experience with South Africa’s forensic cultures over two decades testifies to this (see Preface). And given the messy contingencies of life in contemporary South Africa, where large cities are magnets for those seeking even the most meagre economic opportunity, and mortuaries cannot accommodate their post-mortem populations, one can be sure that the cool, rational logic of a Standard Operating Procedure protocol is tested in practice at every opportunity. The directional flows do not go in a straight direction (M’Charek and Casartelli, 2019) but encounter numerous obstacles as well as counter-forensic interventions.

⁵ The final stages of writing this thesis is taking place during the Covid-19 lockdown. I recognise that this analogy may no longer hold, given the entire globe is in a state of emergency.

Two events occurred in late 2016 and early 2017 which uncannily paralleled the early phase of this sub-study design and with hindsight, it is reasonable to infer that these events had a significant impact on the conditions of possibility that enabled it. In September 2016, the Office of the SAPS Divisional Commissioner circulated a National Order titled *Investigation of Unnatural Deaths; Unidentified Bodies and the Disposal of Unidentified Human Remains as Paupers* “for strict immediate compliance,” prompted by concerns raised by the provincial police ombudsman (Office of the Divisional Commissioner, 2016) which ostensibly causes “much embarrassment and taints the image of the Service and in particular that of the Detective Service.” Outlining the mandatory steps to be taken to determine the identity of an unknown decedent with reference to documentation, sampling, analysis and timeframes, it clearly speaks to the need for better internal communication within SAPS.

In January 2017, the first of a three-part journalistic investigation by Sarah Wild was published in the *Mail & Guardian* newspaper, revealing the plight of the unidentified and unclaimed in South Africa’s mortuaries, with a focus on Gauteng province (Wild, 2017a). This series of articles drew back the veil on the hidden labour of forensic deathwork in Gauteng province (and by implication the national experience), drawing clear lines between how our treatment of the dead impacts the living, and representing a searing indictment of the necropolitics of post-apartheid South Africa. The National Order had a direct impact on the forensic art unit of the SAPS Victim Identification Centre (VIC) (P27a, 2018; P27b, 2018), and Wild’s reporting revealed a corner of the healthcare system that may be approaching a human rights crisis (Wild in Schwartz, 2018).⁶

In contexts like South Africa where the police are subjected to consistent criticism, accessing representatives who are prepared to go on record for a research

⁶ This series of stories won the 2017 American Association for the Advancement of Science/Kavli Science Journalism Gold Award in the Small Newspaper category ([online](#)). A Storygram interview with Wild (Schwartz, 2018) echoes our respective experiences as journalist and researcher setting out to explore a system and the individuals within it at more or less the same time, including the lack of response to requests from government official and the police who have a public duty to respond yet do not, until they can no longer avoid it (usually from external pressure); the impact of the mortuary and death management process on one’s mental health and well-being; and the key finding that a major contributing factor to the unidentified crisis is a broken system: “There’s a lot less space these days for stories about how systems are broken. And when they are done, [journalists] tend to do it through an individual and trace their story through the system. But no individual’s experience is the same, and that’s particularly true in this case when someone goes missing. I wanted to show that a system was broken, as opposed to an individual life.” (ibid.)

interview is notoriously difficult. With almost no public-facing representation of the specialist skills that exist within SAPS and an instruction to members not to engage the media, it is no wonder that the service has a major visibility problem. But what this study also revealed is that specialist skills and services may also be invisible to members *within* the organisation, which exhibits significant in-group/out-group dynamics, and is hostile to external enquiries. FPS on the other hand is a notably more welcoming service although it is also operating under extreme conditions which produce their own frustrations. Taken together, these factors makes SAPS and FPS, individually and in relation to one another, extraordinarily rich sites to conduct a form of multi-sited ethnography (Marcus, 1995) and evaluate the dynamics and transfer of emic and etic knowledge in respect of forensic deathwork.

This chapter examines what it means to enter the medico-legal system in South Africa as an unidentified individual, and the stakes of attempting to access this deeply stratified system as a researcher. It recognises that the services responsible for death investigation and identification have uneven capacity across the country, and struggle to deliver on their mandates, so it explores how current operational protocols, and those tasked with carrying out these policies and practices, perform in relation to the enormous case load. Ultimately this raises two questions: *Who forms part of the large post-mortem population residing in the national mortuaries?* and *What practices might be introduced to address the crisis?* The identification process is governed by timeframes – a facility may legally release an unknown decedent to a State-appointed funeral director (i.e. as a pauper) after thirty days for burial.⁷ This is generally agreed to be woefully insufficient time, yet facilities struggle with space to store bodies for much longer. Attention is therefore given to additional factors such as context, location, and manner of death to suggest any demographic patterns or population vulnerability in such cases.

Key findings from both the photographic review and broad cross-category analysis are presented in relation to a smaller sample of active cases active from 2018 selected for digital post-mortem depiction and to track the identification

⁷ See [Appendix 3](#) for more detail on operational flow and related tasks. FPS tries to avoid cremation in Unknown cases in case an identification is made in future and remains can be returned to family, but cemetery space is limited, so pauper burials are not always possible. Interlocutors report that it is not uncommon for IOs to instruct bodies be released for pauper burial while scientific analysis is still in process, resulting in the additional time and expense of exhumation and reburial/cremation by the family if identification is eventually successful.

process. With the focus of this broader study being visual representations of the post-mortem, this chapter works to closely contextualise empirical findings, drawing on interviews and meetings with key stakeholders in the Western Cape, as well as those responsible for this work on a national level. It is especially concerned with the apparent under-use of post-mortem depiction as a technique by SAPS. Forensic Art, specifically post-mortem imaging, is a largely ‘invisible culture’ in the South African context. Limited sites exist to circulate this work, and initial research suggested that although this work is being produced, it is not as effective as it could be, because it is not reaching the appropriate audiences. Further, it appeared that no formal process exists to aggregate and reconcile missing persons and unidentified decedent records in South Africa (they are separate divisions within SAPS) and certainly no publicly accessible platform exists to search for both missing or unidentified persons in a single database, whether under formal mandate (e.g. [NamUs](#), [Missing Persons UK](#)) or charity/citizen-led (e.g. [The Doe Network](#), [Missing People](#)). Two non-government/public benefit organisations, [Missing Children South Africa](#) and the [Pink Ladies](#), will circulate depictions if they are provided, but their focus is overwhelmingly on missing children and adults represented by candid snapshots, school portraits or identity document headshots.

If a decedent exhibits no excessive facial trauma or effects of decomposition that distorts the face beyond recognition, visual identification by next-of-kin is a requirement in the South African context. Visual identification from post-mortem images has been shown to be unreliable, as well as being a possible source of further emotional trauma for those involved (Wilkinson, 2014). It is a process that is accepted as traumatic for affected families, who from personal observation demonstrate a range of responses from silent and solemn to vocal emotional expression. But ‘those involved’ must of course also include the Forensic Pathology Officers (FPOs) who facilitate the visual identification process, yet the impact of this work on service members, whether it involves presenting the body itself or post-mortem facial images, has not yet been explored in any sustained way.⁸

Past experience with mortuary archives suggested that there may be additional benefits to producing post-mortem depictions that exceed and extend the

⁸ The independent documentary film *Six To Six* (dir. Six to Six, 2016) gives some insight into the personal perspectives of officers working the night shift in this facility.

vital work of identification to care for the living. If instead of mortuary admission photographs, the public-facing iteration of mortuary archives are populated with depictions as we see with some online databases (see Chapter 6) this is likely to mitigate the emotional burden of families being exposed to distressing images of other deceased persons in the search for a loved one as well as optimise the possibility of recognition.

Post-Mortem Identification in South Africa

All medico-legal services resorted under SAPS prior to 2006, but were transferred to the Department of Health at that time in the interests of a more just, ethical and scientifically sound public service delivery, and one which views care for surviving family members as an extension of their forensic care for the dead (see [Appendix 3](#) for more detail). However, this means that FPS now competes with resources that are already stretched beyond capacity in a country where poverty is a major contributor to the burden of disease and has a significant impact on matters of public health. In such circumstances, it is understandable that the living or about-to-be-born will take priority over the deceased, but this fact also inevitably contributes to inequality and injustice through the tacit production of ‘lesser’ persons in death.⁹ It is thus helpful to consider provisions and challenges for post-mortem identification.

False recognition or misidentification of a body affects two families. In South Africa, ‘family’ is a social as well as a biological concept. Economic hardship forces many to live itinerant and precarious lives, and many immigrants to South Africa, legal or otherwise, find that the promise of economic opportunity or refuge from violence or oppression experienced their home countries, is not met. Xenophobic as well as opportunistic violence is frequent. People become separated from their kin within and beyond South Africa’s borders. Next-of-kin may not be able to produce acceptable forms of documentation, or they may be difficult to reach at all during the timeframes described in the existing protocols. Further, the opportunities for corruption and abuse, where claims to a body may serve the interests of insurance pay-outs and other death-associated benefits, are additional burdens to the system.

⁹ P32 (2018) also noted that that this negatively affects research funding; it is difficult to get support to conduct post-mortem-related research.

Where minors are concerned, circumstances of death may have particular relevance in relation to exploitation, abuse and other contexts of neglect.

With these particular issues informing their experience (mirroring other contexts in which irregular migration is common, as described here), FPOs kept returning to the role of images in their work, and the emotional impact of the visual identification process on family members. Further, given the reported delays on SAPS identification processes experienced by FPOs, conducting a ‘proper investigation’ to prove the identity of an unknown person within the mandated thirty-day period was agreed to be unreasonable. FPS may only release bodies to families or State-appointed undertakers if proof of legal identity has been met, or if “*all attempts* to establish the identity of the deceased had been unsuccessful.” (National Order 2016: 3, section 5, my emphasis) According to the MOU between SAPS and FPS,

6.9.3 If the remains cannot be reliably identified by visual means, (for example in cases of severe burning/charring, decomposition or mutilation), then, at the behest and discretion of the FMP in consultation with the SAPS, **further investigations must be performed to assist with the identification and may include consultations with experts in forensic anthropology, forensic odontology, radiology and facial reconstruction.** Such experts must be recognised by the FMP and SAPS VIC. (NDOH/SAPS 2018: 14, my emphasis)

The experts in forensic anthropology, forensic odontology, radiology and facial reconstruction referred to here are relatively scarce skills in the South African context and are generally affiliated to universities. Because the decision to refer cases for additional analysis beyond the autopsy lies with the pathologist in the first instance, it follows that pathologists would need to be aware of expert practitioners and available services in order to fulfil this responsibility to make the recommendation, as well as believing the recommended methodology has integrity. Of the analyses mentioned above, facial reconstruction, as a sub-field of forensic anthropology, is considered the least scientifically robust which no doubt impacts on a pathologist’s tendency to recommend the method.

The absence of facial reconstruction in the relevant medico-legal literatures compared to the other analyses listed in the MOU is conspicuous and telling. As a sub-field of biological (physical) anthropology with a rich history in the North American context in particular, the development of forensic anthropology itself has

been uneven across the globe, with even the designation of ‘discipline’ attracting critical discussion (Adovasio 2015). The integration of forensic anthropology within forensic medicine and forensic sciences more generally is a relatively recent development internationally, only formalised over the past three to four decades (Dirkmaat, 2015; Ubelaker, 2015). Bernitz et al. (2015) offer a comprehensive description of the history and status quo of forensic *science* in South Africa, paying specific attention to the interaction between forensic pathology and forensic *anthropology* in this context. L’Abbé and Steyn (2015) describe the establishment and advancement of forensic anthropology specifically within South Africa, and Obertová et al. (2019) have compared the development of forensic anthropology between South African and European contexts, finding parallels in population sizes (South Africa, pre-Brexit UK, Italy, Spain) and an increased integration of this field in medico-legal investigations over a similar timeframe of the past ten to twenty years.

Looking After, Looking For

SAPS is duty-bound to report all unnatural and suspected unnatural deaths to the FPS. FPS takes care of body custodianship and death investigation, and SAPS must confirm legal identity of those admitted to medico-legal facilities, a process with which FPS assists, in consultation with the Investigating Officer (IO) appointed to the case by SAPS.

Key FPS staff are the pathologists or Forensic Medical Practitioners (FMPs) as they are referred to in the MOU, who are supported by Forensic Pathology Officers (FPOs) during the actual post-mortem examination. FPOs conduct the initial dissection/evisceration process but also carry out a veritable laundry list of other tasks for which no specific formal qualifications exist. As with forensic facial imaging practices, training takes place largely on-the-job, although some officers may have formal qualifications.¹⁰ These tasks include:

- body recovery and transportation to facility
- scene and admission photography

¹⁰ One of the participants in the FPO focus group is a qualified microbiologist but neither academia nor benchwork appealed to her. See Chapter 4, Field vignette 6.

- custodianship of the body (releasing bodies to FMPs for examination)
- post-mortem examination
- co-ordination of identification processes with the South African Police Service, or SAPS
- visual identification to next-of-kin
- confirmation of identification of those claiming the body
- releasing the body to next-of-kin, funeral directors or the state, in the case of unclaimed persons ¹¹

Consider for a moment the combination of explicit and tacit knowledge these officers must possess, from dealing with often chaotic or risky body recovery situations, anatomical pathology and dissection, preparing decedents for viewing (visual identification), interviewing grieving families, document verification where fraud is rife (cf. Evert, 2011) and managing the interests of expedient funeral directors soliciting for business in the mortuary reception.¹² They are the public face of otherwise hidden labour, operating at the interface of every interaction and exchange within the forensic deathwork system. As such they were identified as a critical resource for this study. The following chapter benefits enormously from their insightful voices.

From Admission to Release

The investigation/identification workflow is guided by agreed timeframes that are complicated by many factors that are endemic to contemporary life in South Africa as previously mentioned. Table 2 summarises the process flow from scene recovery to admission. Grey cells are standard practice for all body recovery situations, **with the exception of EMS and hospital admissions** where procedures differ slightly, and present particular difficulties when it comes to facial photography, confirmation of visual identification and the retention of personal property/effects.

¹¹ The NDOH/SAPS MoU contains a more detailed breakdown of the legal mandates of both parties, but it is surplus to requirements to list them more detail here. As the research process revealed, a full picture of the general and stakeholder roles can only really be composed by internalizing what these various protocols and guidelines describe, and then observe these protocols in practice.

¹² Actions taken to avoid this at SRML include separating visitor hours from body-collection hours, and the display of posters in the reception warning against this practice.

Table 2: Process and responsibilities for unidentified bodies between FPS and SAPS developed with reference to MOUs, SOPs and VIB process flow documentation

CONTEXT	FPS	SAPS
SCENE (all cases)	Complete relevant documentation; take own photographs	LCRC photographs, collects evidence; releases body to FPS with relevant documentation
MORTUARY	FPS	SAPS
On Admission	facial photo, with tag indicating WC case number, weight and height	
Within 3 days	Post-mortem conducted	Should attend
Within 7 days	Fingerprints taken (with SAPS support) and submitted to SAPS	SAPS/VIC take prints if specialized techniques required
Within next 5 days		fingerprint result to FPS
Fingerprints +	25 days to trace family for collection Family may choose State burial	
Fingerprints -	Status shift from UNIDENTIFIED to UNKNOWN Other analyses requested	SAPS VIC involved
	Unknown/Unclaimed person can be legally paupered within 30 days or	IO must give permission to bury, confirming that all attempts to ID/trace family have been exhausted

Close study of the various SOPs and related process-flow documents indicates a thorough system on paper. During an observational visit in 2016 to inform the design of the study protocol,¹³ staff of various levels of seniority within the facility confirmed this, but were also frank about how some day-to-day experiences challenge these systems, which the SOP documentation simply cannot capture, and often came with remedial proposals, which suggest these issues are being constructively discussed but perhaps get stuck in the staff-supervisor-management communication flow.¹⁴ They include:

¹³ This visit included introductions to key staff; an orientation to the LiveLink server environment and the key documentation that populates case files; discussing permissions, indemnities and limitations to my activities on-site (I was not permitted to travel in any FPS vehicles, attend recovery scenes or observe night-shifts); observing a morning's autopsies under senior forensic pathologist Dr Linda Liebenberg; and several attempts to host a study briefing with all associated forensic pathologists, which had to happen virtually due to campus protests and shut-downs as the #RhodesMustFall movement (which began on the UCT campus) morphed into the nationwide #FeesMustFall movement. I extend special thanks to D, the shift supervisor who facilitated my observation of a day's work in the Reception (public front office) area on 27 September 2016, including the process of visual identification with next-of-kin.

¹⁴ This is confirmed in the focus group which took place two years later, described in the following chapter. Like several other FPOs, shift supervisor D (see note 13) has many years of service behind him and served in the pre-democracy SAP in various capacities. He has been at Salt River since the late 1990s. He acknowledges the improvement in professionalism and resources since the transition to the Department of Health, but suggests current systems are unduly complex, preferring the 'simpler paperwork' of the previous dispensation (Smith, 2016a).

1. Identity documents presented are often decades old or in poor condition. Matching the current (PM) face (actual body or admission photograph in case file) to a much younger version of that face on an ID document can be very challenging, if not impossible to do with any confidence. Therefore current photographs should be requested from identifying next-of-kin.
2. Comparative visual images pre- and post-autopsy would be very helpful too, as even a slight mismatch when replacing skull/stitching scalp can distort craniofacial appearance (reported as a frequent occurrence which is complicated by any peri-mortem facial trauma).
3. Feet have special significance in familial identification. Families often ask to view the feet as alternative to/confirmation of the facial identification.
4. Proving identity of those claiming bodies in addition to the identities of the bodies themselves is challenging.
5. Religious motivations are evoked to either expedite or delay post-mortem examination. Cape Town has a large Muslim community and Islamic law states that burial must take place within twenty-four hours (similar rules apply in Judaism), which presents bureaucratic challenges but also presents opportunities to abuse the system with people claiming sudden religious conversion, ostensibly to avoid a thorough examination. Charismatic evangelical churches are also very prevalent. In one case a Nigerian pastor convinced a female parishioner that her husband would rise from the dead, so she insisted the autopsy was delayed in case this was true.
6. Delays due to waiting for SAPS forms or identification results, making adherence to SOP timeframes very difficult. With Unidentified cases, this is regarded as nearly always impossible. “We must be patient,” was an oft-repeated phrase.
7. Personal property being planted to misdirect identification.
8. Misinterpretation of DNA reports.
9. Mothers being expected to identify deceased new-borns and infants is regarded as unnecessarily traumatizing.

This list speaks to two specific burdens: the responsibility experienced by an FPO of signing off on identification when so much exists to complicate this process, and the

emotional burden of the process and environment that they witness on some families.¹⁵ An unpublished study (Evert, 2011) on the management of unidentified bodies in South Africa¹⁶ echoes these issues, and also stresses the high incidence of identity theft and life insurance fraud in which medico-legal mortuaries are frequent targets (2011: 20-21).

Routine and non-routine

Visual identification of the deceased by next-of-kin is considered **routine procedure** and must be accompanied by valid documentation proving identity of both the deceased and the identifier (Department of Health and South African Police Service, 2018:13). Where visual identification is not possible – facial trauma or taphonomic change may render the individual unrecognisable – or the identity of the identifier is itself in question, it is the responsibility of the SAPS Investigating Officer (IO) appointed to the case to verify the identity of the decedent and/or identifier and give permission for FPS to proceed. However, the FPS facility manager reserves the right to refuse to proceed if they are not satisfied SAPS has investigated thoroughly. These **non-routine** cases are the focus of this sub-study.

Ratification of the Western Cape Victim Identification Board

Designing this study coincided with the establishment of the Victim Identification Board (VIB)¹⁷ in the Western Cape in 2016, an inter-institutional oversight initiative which further strengthens the province's capacity and leadership role in bringing stakeholders together to proactively address the crisis of Unidentifieds.

FMOs and FPOs associated with SRML have identified that thirty days is insufficient time to deal with the various challenges facing identification of highly mobile and often itinerant populations, and where communication between FPOs and

¹⁵ Return visits in 2018 would deepen my appreciation of these challenges as I observed many of these situations first-hand and appreciated the (mostly) diplomatic and observant handling of very sensitive interactions with next-of-kin, loved ones, officials or other professionals. Two accounts from frustrated service users at this facility recorded during the 2018 fieldwork session are included in Appendix 6, providing perspectives from service users.

¹⁶ Focusing on the number of unidentified deceased at the Pretoria Medico-Legal Laboratory in the context of Gauteng province, and considers these numbers relative to reported international statistics (Evert, 2011, pp.16–19)

¹⁷ Draft document: Normal Process Flow for Identification at FPS in the WC (internal document); Western Cape Government Forensic Pathology Service Standard Operating Procedure: Identification Procedure, Management of Unidentified Bodies and pauper burials, April 2016.

SAPS IOs often breaks down. The number of unknown and unidentified deceased persons in the Western Cape, including those whose identities are in question, has reached such significant levels that FPS and SAPS VIC acknowledged the need for a co-operative board to assess cases. The VIB assesses the steps taken to establish identity, and requests further techniques be attempted if appropriate. One such technique is facial reconstruction from the skull, a time-consuming and highly specialised process that *can* produce excellent results if up-to-date standards and best-practice presentation and publication methods are followed. However, circumstances in South Africa cannot adequately account for the demands of this technique, nor it is actually necessary in the majority of cases.

FPS, SAPS, academic service provision

You've got different mortuaries, and depending on who runs a mortuary, and how invested they are in the success of their mortuary, for lack of a better term, you have different things happening in different mortuaries. [...] So when [SAPS VIC] get to the remains, or to the body, it's really past any visual intervention of any kind. (P28, 2018)

National demographics in relation to medico-legal service provision and non-natural death statistics should be considered alongside national distribution of post-mortem identification services as they currently stand, as strengths and opportunities for improvement become clear. Medico-legal services in South Africa are distributed across the country according to population concentrations, with full-service mortuaries based in major cities. Many small towns and rural areas do not even have a pathologist, and post-mortems may be conducted purely 'visually'. In the case of unknown bodies, especially decomposed or skeletal remains, these become literally shelved as investigating officers focus on cases that are more likely to be solved or until such time as SAPS VIC become aware of the need for assistance (P28, 2018).

With reference to fig. 27, South Africa is made of nine provinces, of which the largest (Northern Cape) is the least densely populated, and the smallest (Gauteng) is the most densely populated. About 25% of the total population (about 14.7 million people) live in Gauteng. The same number of people are unemployed nationally. Five million people within South Africa's 'revolving door' borders

are thought to be undocumented migrants, but contrary to popular perception, they tend to be victims rather than culprits of crime (Brits et al., 2020).



Figure 27: Map of South Africa showing provinces and post-mortem identification service provision concentrated in Gauteng and the Western Cape. Map adapted from <https://municipalities.co.za/>, accessed 17 June 2019

The country has three capital cities. In the economic centre of Gauteng, Pretoria is the executive capital, neighbouring South Africa's largest city, Johannesburg. Cape Town (Western Cape) is the legislative capital and Bloemfontein (Free State) is the judicial capital. For the purposes of this study, Gauteng and Western Cape are key sites as they are academic centres of forensic anthropology, and the only two provinces in which SAPS has VIC representation within their Forensic Science Laboratory facilities. VIC services are concentrated in Pretoria, with AM/PM teams, anthropologists, rescue and recovery specialists and Forensic Art. A similar unit is replicated in the Western Cape on a smaller scale, with no facial imaging provision, yet a forensic artist at SAPS VIC confirms that 50% of their cases come from the Western Cape. There is one other SAPS FSL in the Eastern Cape (P28, 2018).

Statistics South Africa (2018) reports that South Africa's total annual mortality is 456 612, of which non-natural deaths amount to 51 242, a national

average of 11.2%. There are 56 murders per day on average.¹⁸ The three leading provinces for non-natural deaths are Western Cape (13.3%), Kwa-Zulu Natal (12.1%) and Mpumlanga (11.5%), with the Western Cape also showing the highest incidence of death by assault (24.4%)

Four major South African universities – the University of Pretoria (UP) and the University of the Witwatersrand (Wits) in Gauteng, and Stellenbosch University (SUN) and the University of Cape Town (UCT) in the Western Cape – all offer support to SAPS for unidentified cases on a formal (contract) or informal basis via a specifically named research and teaching unit with their respective departments of anatomy, broadly defined. UP’s Forensic Anthropology Research Centre (FARC), UCT’s Forensic Anthropology Cape Town (FACT), SUN’s Victim Identification Stellenbosch University (VISUN) and Wits’s Human Variation and Identification Research Unit (HVIRU) have contributed in various ways to the international bio-anthropological and bio-history literature regarding skeletal study repositories, archaeological investigations, and forensic casework (and the array of acronyms necessary to communicate in this world). Table 3 below compares and summarises the forensic casework of two such centres.

Table 3: Forensic cases recorded by FARC (UP) and VISUN, 1993-2019¹⁹

	FARC (UP)	VISUN (SUN)
Relationship with SAPS	Formal contract	No formal contract
Forensic cases p.a.	954 / av. 36 pa	67 / av. 9 pa
Years recorded	2010-2019 535 1993-2009 419	2011-2019
Number of forensic cases held in repository	727 remain unclaimed	175 from 1975-present

¹⁸ ‘Other accidental injury’ makes up 67.8% of non-natural deaths, followed by assault (15.1%), transport accidents (12.8%), undetermined intent (3.3%), suicide (0.8%) and sequelae of ext. morb./mort (0.2%) (Statistics South Africa, 2018)

¹⁹ Thanks to Dr Mandi Alblas (SUN) and Prof. Ericka L’Abbé and Gabriele Krüger (UP) for assisting with this data. UP data from 1993-2009 is also published in L’Abbé and Steyn (2015: 628).

Demographics and Self-Identification in South Africa

Identity and identification, as two different but inter-related concepts, are highly contentious issues in contemporary South Africa, a direct legacy of apartheid-era racial classification and social segregation. Fig. 28 interprets population distribution data according to how South Africans self-identified in Census 2011. The categories – Black African, Coloured, Indian or Asian, White, Other – reflect the four basic racial categories police use for identification purposes (‘black’, ‘white’, ‘Indian’, ‘coloured’).

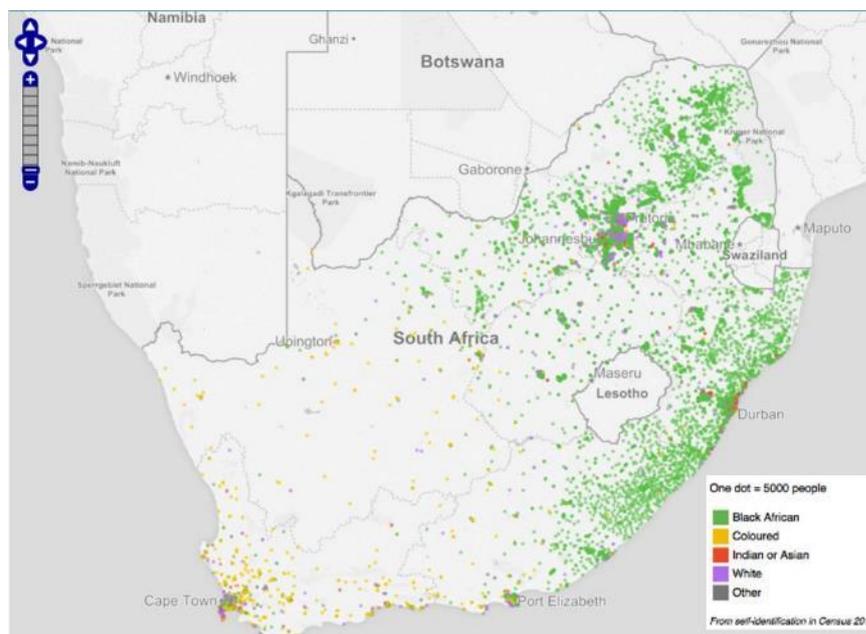


Figure 28: Visualisation of self-identification data from South African Census 2011. One dot represents 5000 people. Modified from Adrian Frith [Online](#), accessed 15 May 2016

Those that self-identify as Black African represent the vast majority of citizens and are clustered in the north-east part of the country. Tiny pockets of self-identifying Whites, Indian or Asian and Others are clearly minority demographics clustered around the major (economic) centres of Johannesburg, Cape Town, Durban and Port Elizabeth, with a few isolated dots distributed through the sparsely populated rural centre and north of the country.

The south-west of the country has a majority population who self-identifies as Coloured. This distribution spreads north and east across the rural heartland, with a micro-concentration in Gauteng. In South Africa, ‘Coloured’ denotes anyone who might be indigenous Khoisan, Cape Malay or of mixed ancestry. It has significance

in terms of how people identify socially and culturally (Adhikari, 2005; P03, 2018; P27b, 2018), but is largely meaningless from an identification perspective. This is of course true of any race-based taxonomy.²⁰ It is useful to think about this in relation to fig. 27 that depicts South African provinces in relation to distribution of specialist post-mortem identification service provision. This particular and relatively discrete demographic distribution supports the need for context-driven responses to identification across the country, given the balance of casework referred to VIC from the Western Cape (which in turn reflect patterns of violence and migration). The unit's facial imaging specialists describe the difficulties they experience in applying existing anatomical standards to skulls designated 'mixed ancestry' by a consulting forensic anthropologist and the differences they perceive in facial shapes and textures between individuals identified as Coloured in Gauteng compared to the Western Cape.

As P31 remarked, "In the past, someone identified you *for* you. Now we can identify ourselves." Issues of racialised nomenclature, and the extent to which methodology (qualitative versus quantitative) may embody ethics shaped by historical disciplinary legacies have additional expressive valence in how bio/forensic anthropology is practiced in the South African context. The country's recent history has created conditions where such matters cannot be ignored and are robustly debated (Legassick and Rassool, 2000; Rassool and Hayes, 2002; Morris, 2014a).

Recognising Practitioner Knowledge

Revisiting the challenges of visual identification that FPOs shared during a period of formative observation work at SRML in 2016, the use of images – current and potential – was discussed with everyone encountered during subsequent fieldwork. The shared provincial statistics, witnessing families attending visual identification sessions, and past experience with mortuary archive books now updated to what must be one of the most depressing Excel spreadsheets in existence, which families

²⁰ This contemporary population distribution has its origins over several hundred years of forced and voluntary human movement to and through the area now defined by national borders, including pre-colonial migration, colonial occupation, slavery and indentured labour, the Anglo-Boer South African war, gold and diamond rushes, and modern-day conflicts and poverty across the continent.

consult with the assistance of an FPO in the search for missing loved ones, all suggested that current protocols would benefit from a more strategic and effective use of images. These are best represented in three fieldwork vignettes compiled from fieldnotes from this period (Smith, 2016a), from shift supervisor A; two IOs encountered over two consecutive days of mortuary observation; and the pathologist who allowed job-shadowing (see note 13). Their respective registers of communication carry the indelible traces of their training and experience, and each in different ways express the conviction that a greater investment in images and imaging will benefit visual identification for both service providers and the bereaved. In hindsight, these exchanges proved to be the most valuable in shaping the methodologies employed in this sub-study as a microcosm of the broader research, marking a formative shift in attention from the literature as a primary source to the practitioners themselves. These voices were not present in the literature (or at least not in a way that engaged their heuristic knowledge and emotional engagement) and they clearly had something to say.

Field vignette 3: Notes from a conversation with an FPO, 27 September 2016

D is familiar with facial reconstruction as a method, but unfamiliar with post-mortem depiction. I explained the technique using Photoshop or drawing and showed him some published examples from other forensic artists that I had saved to my phone. His response was immediate and positive:

—It would be much better for a family to see such an image on the database, and maybe even before viewing the actual body, wouldn't it? We could put them up on a noticeboard in the front office for families to see!

I explained that according to the current protocol, such images would only be commissioned after the thirty days but that I was exploring if it might be useful to start the process sooner, like within two weeks say, when FPS receives the initial SAPS fingerprinting results?

—If they come back with negative or questionable results from their side, the body has already been in the fridge for two weeks. Its condition is not improving. It takes so long to get results from Home Affairs and to trace families that the decedent will not be in an acceptable condition for visual identification when – or *if* – a positive result is obtained.

So having a depiction ready on the visual ID database would be useful?

—Yes, the timing is crucial. We have to retain bodies for *so* long; it's not good. It would be great to get such pictures in *The Daily Sun* [high-circulation tabloid newspaper]. Everybody reads that paper; people would see them. We couldn't use it to prove identity, but they would definitely be useful in unknown cases, or where identity is questioned, even just for an initial comparison, you know? To say definitely yes or no, or maybe? Even with this case here [shows me a document], this guy is very young in his ID book. But if this family had a more recent picture, it might look more similar to your depiction. So, we could compare all of them. That would be useful for us.

Field vignette 4: Notes from conversations with IOs, mortuary courtyard & reception area, 27 & 28 September 2016

27/9/2016: I am observing a morning's business in the front office. D introduces me to P, an IO carrying several case files and awaiting assistance from an FPO. He is polite enough, but not friendly. I ask what the most challenging parts of his work are here. Infant and child deaths, he answers flatly, slapping the pile of folders down on the counter in front of me.

—All of *these*. They are the most difficult to identify and a constant strain.

His face registers a combination of resignation, frustration, pragmatism. No eye contact, no smile lines.

28/9/2016: Dr L and I are taking a smoke break in the courtyard between autopsies. We are discussing mutual connections to a current high-profile murder case and an exhibition I am working on involving an infamous Cape Town cardiologist. An IO attending the day's autopsies approaches; she introduces me to him and explains what I do. He is very interested, immediately pulls out a folder and starts flipping through documents of unknown cases, giving one-line summaries of how each are causing him frustration and asking what could be done? This question is partly rhetorical and partly directed at me. Such a typical South African interaction, which some might see as presumptuous or overfamiliar, but it's so human: *I have a huge problem, you have skills; can you help me? Can we make a plan?*

I explain I am preparing a research project and have no mandate or capacity to assist, but he could request facial reconstruction or depiction from the VIC.

—Huh?

I explain they have an office here in Cape Town, but no facial. He looks stunned.

—You mean we have these people in SAPS?

Yes, they are some of the best in the world. They are only two, in Pretoria, so you might wait, but you can request it. They will advise you.

I can't tell if he is pleased or angry; the bureaucratic processes he will face seem to be already playing out in front of his eyes. But he is here to attend to his cases; it is much more than can be said for most of his colleagues. This makes him two of the most important things – interested and committed. He thanks us and heads off.

Field vignette 5: An email interview with FMP Dr Linda Liebenberg, 30 September 2016

I refer to bodies as 'the patient' or 'case'. 'Corpse' and 'cadaver' to me are harsh words. 'Remains' indicate mutilation or an incomplete body. Identification remains a priority in both unnatural and natural death cases. Criminal cases more frequently demand more intense measures due to mutilation *inter alia*. But so can a decomposed natural death case.

I have extensive experience of unidentified or unknown bodies; I have been involved in several aeroplane disasters' DVI. Depending on the gruesomeness, facial recognition will often be deemed undesirable both because of being unreliable (unrecognisable) and the impact on the viewer.

I attend scenes to estimate time of death before the body is moved and refrigerated, and to identify evidence that needs to be preserved/sampled. I also prefer to get the hang of circumstances in certain cases, looking around, noticing finer details which may add to the context.

An integral co-operation between role players – investigating officers, LCRC and SAPS Victim Identification team – is mandatory. As with any other role players, dedication amongst SAPS officials differs.

The race of a body is an important biological descriptor. Due to the loaded and political nature of race in RSA context (also Namibian) I use 'flat' terms for purely visible biological features – black not 'Black'. Subtle differences within race groups sometimes suggest the origin of the person e.g. Ovambo vs Herero vs East African. All are 'black' but eyelashes, ear shape, natural midline gap of the maxillary incisors, nose shape are pointers. 'Asian' is a very broad term and there are features which suggest Chinese vs Japanese vs Filipino. But I prefer purely descriptive language, e.g. 'a new-born baby with dark brown, softly wavy hair' is unlikely to be of the black population group.

With rapid interracial and transglobal exchange of genes, the use of descriptive (written) information should be replaced by images – a picture is worth a thousand words and it also sidesteps subjectivity of the describer.

(In)visibility of Forensic Art in the South African context

In the South African policing context, Forensic Art is practised across two environments – Facial Identification and Victim Identification – with distinct mandates, different techniques but the same objective: using and producing facial images to prompt recognition, or assessing likeness on morphological analysis, expressed as levels of confidence (Steyn et al., 2018).

This study is concerned with the production of post-mortem images, and how these images are circulated and perceived both within the forensic deathwork environment and beyond it. At the time this study was being designed, both VIC artists and Facial Identification members were known to produce post-mortem depictions, yet when both units were asked about what motivated this apparently shared mandate and how this work was distributed/commissioned, a similar answer was received from both sections: ‘It’s not something we really do.’ Members of both units are skilled in digital image editing software like Adobe Photoshop, but producing images from eyewitness memory, and reversing the effects of trauma and decomposition, are two distinct knowledge-bases and skill sets (see numerous instances of practitioners in both areas reiterating this point in Chapter 4 and [Speaking Likeness](#), Chapter 5). By the time formal fieldwork commenced in 2018, the situation had been clarified: it is the exclusive mandate of the VIC forensic artists, based in Pretoria.²¹

The VIC has two full-time members in their forensic art unit serving the entire country of 59.2 million people, 11.2% of whom count among the annual non-natural death statistics, and thus pass through the FPS system. Of those, approximately 10% are unidentified in death (Evert, 2011; Wild, 2017b), and should be referred to VIC. Framed in this way, their ostensible case load is so enormous as to be unrealistic, yet it does expose them to some of the richest experience in the world, and they produce work of very high technical and aesthetic quality that has been successful in generating leads in cases of unknown and suspected identity and capturing international fugitives (P27b, 2018).

²¹ This question was put to National and Provincial section heads of Facial ID and the VIC during initial research into the viability of this sub-study in 2016 and preparing the necessary protocols. Prior experience with both units suggested that post-mortem depictions were being produced across both units in an entirely *ad hoc* and unregulated way as figs. 29a and 29b demonstrate. Facial ID members presented dPMD casework examples at a biannual Face Science seminar convened during my membership of the UCT Eyewitness Research Group (2014-2015), which VIC members did not attend.

Despite this, post-mortem representations of the unidentified seldom circulate widely – i.e. in public – with the exception of a handful of cases that are deemed high profile enough to warrant media exposure (traditional or social). Once work product is handed off to the IO, SAPS artists have control over what is done with that image. Feedback is exceedingly rare. Images designed to optimise familiar-face recognition, i.e. by someone who knew the individual in life, get stuck in SAPS internal databases and investigative docket, completely defeating the purpose of requesting such a depiction in the first place.

There is no central database where one can search for South Africa's unidentified, where such depictions might be seen. Even within SAPS's internal systems, there is no centralised database or clearinghouse where missing persons reports can be checked against the unidentified. IOs must check a number of internal systems, and every SAPS respondent interviewed confirmed several critical factors where Unidentifies are concerned, the chief being that individual caseloads are just too great to direct the energy required to such cases. They are perceived to be less immediately urgent than active criminal investigations or cases with a higher likelihood of resolution, so it makes more sense to channel one's limited time and resources elsewhere.

It is a truism that you cannot identify a suspect without knowing the identity of a victim, so if a victim is identified, this reactivates an investigation and an IO's caseload swells further. Wanted and missing persons therefore receive much greater exposure visually-speaking, with suspect EFits populating public notice boards; two officially recognised charities ([Missing Children South Africa](#) and the [Pink Ladies](#)), championing the cause of missing children and adults on social media; and an official SAPS television show, *When Duty Calls*, profiling current criminal and missing persons cases (South African Government News Agency, 2010). The timeframes of investigations involving unidentified persons usually means that facial reconstructions or craniofacial superimpositions for suspected identification in skeletonized cases usually take precedence over other imaging modalities. As such, there is no visible culture of post-mortem Forensic Art to speak of in South Africa.

Secondly, the approval procedures necessary for image circulation by the SAPS media office are reported as complex and time-consuming, and there are always other cases absorbing media attention. Finally, some IOs are unaware that post-mortem Forensic Art services are available to them within their *own*

organisation, and if they are aware of the service, they assume it will ‘take too long’ and/or they will not get budgetary approval. The delay may be real, but the VIC may not refuse a viable case; the section head is convinced of Forensic Art’s cost-effectiveness and return on investment (P34, 2018) and it has been proven successful enough times to warrant significant investment in international training opportunities and cutting-edge virtual sculpting systems (P27a, 2018; P27b, 2018; P28, 2018). Within South Africa, a broad-based awareness of facial reconstruction from documentary and fictional international television shows exists,²² but without seeing such images in local media or even in museums (where we might expect to see the technique applied to tell the human story through the faces of past people²³), no general training opportunities and only the most minimal engagement with related research and practice at South African universities means that post-mortem Forensic Art remains a largely invisible culture in that context.

The FPS/SAPS MOU makes specific reference to facial reconstruction as an investigative tool that should be requested in the case of unidentified persons:

4.4.4 Send a set of **photographs of the deceased's body and face** to the Victim Identification Centre (VIC) within the FSL for the compilation of a **presentable facial reconstruction or Identikit for broadcasting purposes**.

The presentable facial reconstruction and/or identikit must be collected and filed under the "A" clip of the case docket.

4.4.5 Complete a SAPS 55 (B) and **send to the Provincial Bureau for Missing Persons together with the photographs and/or identikit** of the deceased, **accompanied by a request for the broadcast** of the information in the local and national media.

The Bureau for Missing Persons will **circulate** the deceased's particulars on the Circulation System: Persons and **conduct a comparative search** against the Missing Persons database.

The Bureau for Missing Persons will also be responsible to liaise with Corporate Communication for the publication of the information in the media. (National Order 2016: 3, my emphasis)

²² This was evident in the request for facial reconstructions by descendent families involved in the UCT Sutherland Reburial Project (Smith and Wilkinson, 2019)

²³ With the exception of some hominid reconstructions, such as those at the Maropeng Visitor Centre (Maropeng.co.za, n.d., online). However, international institutions tend to be more likely, and have the resources, to commission exceptional artists to do so, such as Elisabeth Daynes’ reconstruction of *Australopithecus sediba*, commissioned by the University of Michigan Museum of Natural History (Understanding *Australopithecus sediba*, 2019, online)

The wording in the National Order also includes mention of an “Identikit” alongside “facial reconstruction”, reflecting the basic distinction – and frequent confusion – regarding responsibilities in forensic facial imaging within the service, where the line is drawn between victim-related depictions (post-mortem representations, age progressions) as the mandate of the SAPS VIC (resorting under the Forensic Science Laboratory section); and suspect-related imaging (eyewitness-derived composites and facial image comparisons) handled by the Facial Identification section (resorting under the Crime Scene Management and Criminal Records Centre section). The reference to the “set of photographs” in section 4.4.4 above is more suitable to producing a post-mortem depiction than a facial reconstruction, which is presumably what is mistakenly referred to as an “Identikit.” Facial reconstruction should only apply to those bodies exhibiting evidence of trauma or taphonomic change to render them visually unrecognisable. According to current SAPS protocols, they are produced with reference to the actual skull, often requiring costly and time-consuming maceration to prepare skulls for physical transportation to the VIC head office in Pretoria. Those involved in this work directly and as external service providers are well aware of the lack of efficiency, additional expense and risk to the integrity of whole-body remains that the current arrangement entails and are frustrated by it. SAPS VIC does not yet operate a digital workflow using 3D scans of skulls, although this is planned for.²⁴ The Circulation System mentioned in section 4.4.5 is of particular interest to this study namely, how to make use of this provision more effectively. Currently forensic facial images, if they are in fact requested from the SAPS VIC, are ineffectively circulated, or circulated to the wrong audience.

All facial imaging work within SAPS VIC is considered non-routine according to their case registration systems because no one case requires exactly the same steps from referral to completion. The FSL system allows twenty-eight days for routine cases, and seventy-five days for non-routine cases, from registration to completion.

²⁴ This process is referred to in a number of research interviews, including (P27a, 2018; P27b, 2018; P28, 2018; P31, 2018; P32, 2018; P37, 2018; P41a, 2018; P41b, 2018)



Figure 29a/29b: Two digital post-mortem depictions produced by SAPS and circulated via social media. Screenshots captured on Facebook, 2013 (left) and Twitter, 2016 (right)

Fig. 29 shows two post-mortem depictions produced by SAPS. Fig. 29a was produced by a member of the SAPS VIC forensic art unit in 2013 using a recognised digital methodology and the original post-mortem photographs as a basis. It received high-profile circulation in a major newspaper and via Missing Children South Africa (which is the version reproduced here as circulated via their Facebook account). The most significant change in this image is the addition of open eyes, yet the effect is not wholly successful; this does not look like a living portrait, however it produced a successful identification in a very short time (P27b, 2018). Fig. 29b was posted on the SAPS Twitter feed in June 2016, appealing for information about an individual who had died in hospital. It is visually very similar to an ‘identikit’ or more accurately an E-Fit. The quasi-orthogonal frontal view achieved here is very unusual in post-mortem photographs as the body is usually photographed prone, at an angle and/or too close-up which introduces significant distortion. Here, the neck does not appear to belong to the face, as indicated by the sharp edges of the jawline. With the addition of some open eyes, and grayscale presentation, it is an acceptable result, if a little too obviously cut-and-paste. It has been impossible to establish where exactly it originated or if it was successful, but members from SAPS Facial ID consulted as part of this research suggested it was very likely produced by a member of this section.

The link to a hospital case is noteworthy as such cases are considered particularly challenging when it comes to unidentified decedents. Evert (2011, pp.ii; 56; 79) notes that that unknown persons who die in hospital from (presumed) natural causes are not included in FPS stats as they are not referred for investigation, and

P27a reports that they find it difficult to verify assigned IOs or SAPS case reference numbers for hospital cases received at mortuaries and referred to the VIC, making further investigation as outlined in the National Order quoted above very difficult.

As in the case of the young child described above, social media has become a powerful circulation platform which is both recognised by law enforcement officials and practitioners, but with several significant cautions as described in Chapters 4 and 6. Elchenette Rademeyer (Fig. 30) was identified via a post-mortem depiction circulated on social media, within twenty days from initial recovery and within three days of the depiction being posted online. The practitioner involved confirms the necessity of effective circulation particularly where post-mortem depictions are concerned:

P27b: in the past, what... 3 years?... I've had more positive results with my post-mortem depictions because it gets more media exposure. So the one case, it was a white female, found here in Centurion, did the post-mortem depiction, sent it out, it was placed on Facebook, Twitter... a couple of your social media platforms...

KS: By SAPS or by charities?

P27b: I think it was the media, by charities... I'm actually not sure. *That* one could have been the IO. And she was identified within three days. Her father actually saw it on [Facebook](#). (P27b, 2018)



Figure 30: Post-mortem depiction of Elchenette Rademeyer (left) by SAPS VIC, as circulated on social and other media; and a photograph of the identified woman (right). Her body was found on 12 September 2015, and an antemortem image sourced from Facebook was published by the *Centurion Rekord* on 2 October 2015 (Kgosana, 2015)

The question therefore is, despite being cost-effective and efficient, with proven success, why is this method of post-mortem depiction not better exploited in the South African context when so many unknown cases may benefit? If the South African situation resembles a mass disaster situation in every other way *other* than resulting from a single event – slow accretion does not qualify for the kind of co-ordinated response a MDM-DVI situation would – and there is agreement from stakeholders that investing in visual methods would assist them, why is this not happening?

Improving Protocols for Visual Identification and Facial Imaging

From what has been described thus far, it is clear that visual methods of identification, specifically post-mortem facial imaging, are under-utilised in the South African context. Facial reconstruction is an acknowledged identification tool according to existing protocols, but this relies on clean skulls being physically transported to SAPS VIC national headquarters in Pretoria, which is time-consuming, costly and a matter of cultural sensitivity, which places demands on space and infrastructure (P27a, 2018; P27b, 2018; P28, 2018; P41a, 2018; P41b, 2018).²⁵ The rationale for producing full reconstructions from the skull where remains are in an advanced state of decomposition, mummified or full skeletonised is obvious. Yet statistics and the handful of available studies mentioned above suggest that these cases are less prevalent than unknown decedents in medico-legal facilities who are visually identifiable.

Post-mortem depiction (PMD) relies on adequate soft tissue to reasonably suggest living appearance, and appropriate photographic documentation of an unknown decedent's face. Any additional visual documentation of characteristic features (tattoos, scars, etc), clothing and personal effects will assist the process.

If the basic image criteria are met, a PMD can be produced by a trained practitioner in one-two days (averaging eight-ten hours per depiction), versus the thirty-100 hours it takes to produce a reconstruction from the skull, which is the

²⁵ Between November 2018, when I conducted fieldwork there, and June 2019, the SAPS VIC WC unit has doubled in size, from six to twelve members. They have received new office and storage space, but no dedicated lab as yet.

range estimated by trained practitioners with regular case experience interviewed for this study (see Chapter 4). A PMD may include the additional depiction of clothing, jewellery or tattoos (BBC News, 2014, online; @SAPoliceService, 2015, online)

Salt River as a model study site and other precedents

The Western Cape operates a comparatively better-resourced forensic pathology service than other provinces in South Africa. It is the only province to have digitized case files that are remotely accessible via the provincial LiveLink server, which played an essential part in making this study possible. This relative accessibility to data, coupled with SRML's academic affiliation with UCT's Faculty of Health Sciences has also enabled it to become an important hub for research and training demonstrating the relationship between pure and applied science, and the need not only for a research culture within forensic science (Mnookin et al., 2010), but the affordances of an interdisciplinary one (since 2014, UCT has also offered the unique interdisciplinary [MPhil Biomedical Forensic Science](#)). Academics and students in forensic pathology, anthropology and genetics have produced a significant body of scholarship in collaboration with this facility over the exact period this study has been designed and undertaken (Clark et al., 2017; du Toit et al., 2018; Baliso et al., 2019; Mole, 2019; Reid et al., 2019; Bennett et al., 2020). Taken together, these studies represent a significant evidence-base for policymakers in forensic science, public health, social welfare and policing, and support continued work to understand the emic/etic dynamics between stakeholders in forensic deathwork. They also build cognitive authority for the proposed transformation of the existing facility into the Observatory Forensic Pathology Institute (OFPI), on which construction began in 2016 and promises greatly enhanced capacity and infrastructure, purpose-built viewing facilities for families and in the future, in-house laboratories.²⁶ Yet with the exception of Baliso et al., which tracks the use of forensic anthropology for identification at Salt River, none attend specifically to facial imaging or visual

²⁶ A [short film](#) by UCT TV (Forensic Pathology Institute - UCT, 2013) documents the status quo in the current facility which was built in 1957 and has been stretched beyond capacity for many years. The film makes particular mention of the poor conditions for grieving families and the problems for families and the justice system created by backlogs in state forensic laboratories. Construction commenced on the new facility in 2016, on an existing public works site below Groote Schuur hospital and adjacent to UCT's Health Science campus. It is scheduled to open in May 2020.

identification for unknown decedents, which once again points to the paradoxical ‘invisibility of the visual’ in post-mortem identification culture.

Only one study regarding unidentified cases at this facility was found (Lerer and Kugel, 1998), in which an epidemiological methodology to analyse trends in delays in identification was applied (cf. Hanzlick, 2006; Hanzlick and Smith, 2006; Paulozzi et al., 2008). Undertaken prior to SAPS-FPS transfer, it is interesting and relevant to this study insofar as it allows for the comparison of trends in such cases over two decades, under two different managing authorities. Evert’s unpublished 2011 study, focusing on data from the Pretoria medico-legal facility, went further in attempting to address the context of shared responsibility in post-mortem identification between SAPS and FPS, and proposing remedial action. Her work informed what is presented here and is shaping current developments in this space.

But what of public awareness of the crisis of the unidentified in the Western Cape specifically? Since construction began on the new OFPI facility, media reports have raised the public profile of the plight of the unidentified in FPS facilities in lockstep with this study. These reports have focused variously on factors contributing to the province’s high murder rate (Geach, 2019); the large numbers of unidentified bodies being admitted to the two major facilities in the city that already promise to overwhelm capacity in the new facility (Chothia, 2019; Fokazi, 2019b; a); and the provincial decision to effectively ignore the mandatory thirty day holding period before bodies can legally be paupered to facilitate more thorough identification processes and/or locating next-of-kin (Bodies stored in containers in Cape Town due to mortuary backlogs, 2019). These sources provide a rich and granular set of primary data against which to measure the findings reported here, bringing public awareness to this hidden world of work and its emotional affects, and pointing to instances of counter-forensic activism from stakeholders *within* the system as they try to ensure delivery of a humane and respectful service.

Materials and Methods

Grounded in the principle that visual identification of the dead presents context-specific challenges and therefore requires context-responsive methods, the siting of

this sub-study at SRML carries significance, representing a microcosm of the broader research project and demonstrating conditions that are broadly applicable to forensic deathwork contexts facing similar challenges elsewhere, particularly where resources are poor. A multi-modal approach based in a records review of Unclaimed & Unidentified cases from Salt River, focusing on the quality of post-mortem facial photographs and their viability for use as source images for digital post-mortem depictions was followed.²⁷ Based in empirical observation and supported by in-depth fieldwork, it offers a unique participant-observer perspective on this particular operational context that is consistently managing crisis-level caseloads by reporting on the data as well as critically reflecting on the experience of the work itself. Observational and interview data with key stakeholders in FPS and SAPS VIC, including academic forensic anthropologists who aid SAPS VIC in unidentified cases provided a thick interpretive framework against which descriptions of protocol could be evaluated and compared. What follows is a summary of key findings with additional information included in [Appendix 3](#).

Records Review

In partnership with FPS Salt River (UCT HREC reference 772/2017) a records review of unidentified cases spanning a 8.5-year period (2010 – mid-2018; n = 1011) was carried out to assess the quality of the facility's post-mortem facial photography relative to the facial integrity of unknown cases, and, therefore, how many cases may be good candidates for post-mortem depiction. Ethical approval was granted in December 2017, and access to the relevant files on LiveLink was activated in February 2018. Records were made accessible in two batches, with batch 1 covering 2010 – 2016, followed by 2017 and 2018 (cases admitted up to and including 10 August of that year).

Firstly, a scoring system was devised to score post-mortem facial photographs from 0-5 for both quality of the image, and integrity of facial appearance at admission.

²⁷ Accessing identifiable data, particularly post-mortem data (where individual consent is impossible), even where the individual's identity is not known and the research is motivated by improving forensic identification methods, can be seen to work against the core principles of research ethics, and so is a noteworthy part of this story by itself, adding a further layer to the leitmotif of access that runs throughout this project. The ethical approval process and related challenges are detailed in [Appendix 3](#).

Secondly, a set of data capture values was designed to track trends in unidentified cases that may suggest if any demographic is particularly vulnerable to either being unidentified or unclaimed in death. The relevant records data were then entered into an Excel workbook (one sheet per year).

Thirdly, an illustrative sample (n = 20) of current unidentified cases (cases admitted between 01 January – 10 August 2018 under active investigation) was selected from this general dataset and assigned project codes (01-20). From these, ten dPMDs were created (01-10), and ten were retained as ‘likely to require a depiction’ (11-20). Factors contributing to the selection included an average score of ≥ 4 for photo quality and soft-tissue condition, as well as context and manner/cause of death. Once the data analysis process was completed, a progress update on these cases was requested. This was received on 23 April 2020 and is reported on in the subsection [Sample Set Identification Trajectory](#) below.

Fieldwork

A secondary objective was the assessment of the projected operational effects of routinely introducing dPMD to unidentified cases. **Was it practically viable or would it be a burden, or otherwise obstructed?** This was carried out via a reflection on the experience of communication with facility staff, in person (during observational sessions/on-site fieldwork) and via email and telephone. An initial observation period (27-28 September 2016) informed the research design for this sub-study in the context of the broader research project and provided essential knowledge of internal systems and documentation that could only be gathered through direct engagement with staff.

As the research progressed, it became clear that additional fieldwork was necessary to provide context for the data being collected, towards informed analysis and reporting findings/recommendations and history for post-mortem identification procedures within, and specific to, the South African context. To this end, a second round of fieldwork/operational observation was undertaken in Sept-Oct 2018. During this time, a **focus group** (n = 15 FPOs) generated qualitative data to support the production of dPMDs based on a sample selected from the general dataset. This is reported on in Chapter 4. A combination of background meetings and **semi-structured interviews** (n = 15) were also carried out with Salt River senior

management, SAPS VIC members in the Gauteng (Pretoria) and the Western Cape (Platteklouf) facilities, and consulting forensic anthropologists and pathologists at three academic institutions (HVIRU/Wits, FARC/UP, VISUN/SUN). In addition, **two days of participant-observation** were granted by the Wits ID Unit (a collaboration between HVIRU/Wits, FPS Gauteng and the ICRC) in Johannesburg, where DVI protocols are being applied to unidentified cases in the Johannesburg mortuary with reported success (P46, 2018; P49, 2018).

Developing a dPMD visual Public Appeal template

Circulating images without adequate context or supporting information may limit how the depiction is understood (what it is meant to represent), especially in contexts which have a very limited exposure to forensic post-mortem representations. In South Africa, post-mortem Forensic Art has no consistent public presence and further, diverse cultural and religious beliefs may challenge the ethics of depicting the dead in unpredictable ways. Both of these conditions are potentially significant barriers to the visual literacy and acceptance of such images. For example, African and Islamic belief systems predominate in the Western Cape, and co-exist alongside Christianity, Judaism and a range of other faiths. Although not strictly prohibited, aniconism is widely observed within Islamic tradition. Within African traditional religions, ancestors figure strongly, with traditional healers representing intercessionary figures between the living and the dead.²⁸

The FPO focus group enabled the evaluation of previously published post-mortem depictions from a range of contexts to better understand responses to such images in this context, and their suitability within the visual identification workflow for which they are responsible (see Chapter 4) In general, the group supported the introduction of such depictions into their visual identification environment. They were quick to identify their potential use-value, and agreed they will aid grieving families, but were equally quick to caution against ‘making these people look like criminals’ (FPO transcript, 2018). In other words, they easily identified the parallels

²⁸ The *sangoma* is a Zulu word that has become the colloquial reference for such healers within different ethno-linguistic groups. They are akin to a diviner or shaman figure, and are distinct from *nyangas* or herbalists, who work with traditional medicines (*muti*). Sangomas may also prescribe traditional *muti* (plant and animal-based) but their primary role is to ensure harmony between the living and the dead through ritual practices that work in response to *ngoma*, a philosophy based on the belief in ancestral spirits. Needless to say, their interest is holistic, and not limited to purely physiological issues.

to the kinds of forensic facial images with which South Africans are much more familiar – suspect EFits – and were sensitive to the perceived victimisation (indeed, criminalisation (which the public might then associate with this familiar visual language associated with criminography (Eburne, 2008). A low-cost template for publishing dPMDs in this environment was envisioned, informed by current SAPS practice, visual research into international practices, and fieldwork, to be used as the presentation format for dPMDs to be produced for this study.

Literature and Other Sources

In parallel with the above research activities, a range of relevant literature and documentation (including *inter alia*, published studies, unpublished theses, legislation, policies, protocols and agreements, media reports, documentary films and internal presentations), reflecting emic and etic perspectives were consulted, which provided empirical and primary data with which a granular history of medico-legal investigation in South Africa could be pieced together. From this, a sense of the institutional cultures, practices and legacies involved in forensic deathwork from internal and external perspectives could be shaped and considered in terms of how they may be impacting the identification of unknown decedents.

Trends in Unidentified cases at Salt River pre- and post-2006 transfer

Lerer and Kugel's (1998) retrospective review for cases of non-natural mortality at the Salt River Facility between the years 1980 and 1995 attempted to quantify delays in time to identification. Data from 1995 was subjected to additional analysis for manner and cause of death ('forensic data'). Of a total of 4091 admissions in that year, 142 (3.5% of total cases) were unidentified. They reported an average of unidentified cases of 137 p.a., or 3% of total admissions, with no substantial changes in this trend observed for the time period but noting that deaths resulting from interpersonal violence and transportation injuries were a growing public health concern.²⁹ This observation was prescient, borne out by the findings presented here, as are their following remarks:

²⁹ Mole (2019) correlates a significant spike in gun-related deaths to changing firearms legislation.

The process of identification has also largely remained unchanged between 1980 and 1995, and the sequence of events leading up to an official identification of the deceased warrants some description.

[...]

Delays in the identification of various categories of deceased victims of violence and unintentional injury reflect the social impact of poverty and impose an unnecessary hardship on next-of-kin. **Forensic pathologists should devote both scientific and administrative efforts to reducing such delays.**

By contrast, Reid et al. (2019) report a total of 2476 bodies were unidentified between 2010 and 2017 out of a total number of 27,060 cases processed during this period, with ~320 bodies remaining unidentified following post-mortem investigation per annum.

Table 4 below summarises key data from relevant studies undertaken at SRML River. The most conceptually-adjacent study to this one is Baliso et al. (2019), which also tracks a very similar timeframe. Mole (2019) also records a ten-year period (2007–2016) which correlates with the year digitised records were introduced in this province.

Table 4: Summary of relevant studies undertaken at Salt River 1998-2019

Authors	Year	Focus	Years under Review	Total cases under Review
Lerer and Kugel	1998	<i>Delays in Identification of non-natural mortality</i>	1980 - 1995	Annual Range 3647 (1980) 5885 (1991) Mean Unknown p.a. 137 (3%) 1984: 4.9%; 1994: 1.8%; 1995: 3.5%
Baliso <i>et al.</i>	2019	<i>Use of forensic anthropology for unidentified cases</i>	1 January 2008 – 31 July 2018	84 of which 73 Forensic non-forensic were archaeological (8) or non-human (3) 70 Unknowns (3 only required trauma analysis)
Reid <i>et al.</i>	2019	<i>Evaluation of DNA profiles obtained from deceased individuals</i>	1 to 887 days after death (study written up in 2018)	75 n = 37 adults n = 38 infants
Mole	2019	<i>Trends and Manner in Cause of Death</i>	2007-2016	32,127

Data Familiarisation and Verification Process

Despite many months of discussing the viability and practicalities of study with key stakeholders to inform the design, and then preparing the protocols for ethical approval, the fact that FPS actually only records whether a body is Unclaimed or not was never mentioned. Trying to establish whether an individual has been identified or not cannot be ascertained at a glance. A major challenge was understanding the role of the various documentation included in LiveLink Folders 1-3 in relation to the death investigation process in general, and what was immediately salient to the task.

An initial survey of the first seven years' records enabled a familiarisation with the relevant documentation and an identification of which records were the most salient for the questions this study was trying to answer. This 'first pass' suggested the majority of cases had been successfully identified and/or released to the state. Given that records for 'Unidentified' individuals had been requested, this was initially very confusing, as was establishing the use-value of the various documents in each case file (see [Appendix 3](#)). Part of this confusion also related to understanding operational terms of reference – the difference between Unknown and Unidentified, for example – that developed through this process.³⁰ Establishing these terms of reference means that:

- Unclaimed does not mean Unidentified.
- An Unclaimed body may be identified.
- An Unidentified body is never claimed (but will be released to the State)

For each case file, between three and six folders were made available, but not all contained documentation. For the second data transfer, only three folders were made available.³¹ All folders are listed below, with the ones common to all records received, noted in bold:

³⁰ Identification involves several stages, as shown in the Records Review Process Flow (see [Appendix s, fig. 79](#)). This may be the case if on admission the person is not carrying any documentation. In this case, an assumed name is recorded, usually from witnesses or members of the community at the scene of collection. If cases are admitted via EMA, an 'aka' is recorded. Until identification is proven, an individual is considered Unidentified. If a negative or questioned fingerprint result is returned, they are categorised as Unknown.

³¹ Under the terms of the transfer, only folders 1-3 were deemed necessary for the study. It seems folders 4-6 were originally uploaded in error (pers. comm.) but it also became clear that this filing system is not consistent. For example, documents which ostensibly should appear in Folder 5 may appear in Folder 2.

1. **Body Receipt**
2. **Identification / Unknown**
3. **PM / Doctors Reports**
4. Property / Specimen / Exhibit Management
5. Body Release / Pauper
6. Other

For folders 4, 5 and 6, some folders contain information, and some do not, so these have not been included in the analysis. This complicates the ability to determine whether a body has been released for burial or not. This is significant as it goes to whether identification was confirmed or not.

Without access to Folder 4, it was not possible to assess whether or not contents would have benefitted the visual analysis of material associated with Unknowns. Clothing or personal effects might support or enhance recognisability, particularly with itinerant or indigent individuals whose few items of clothing may become characteristic of them, as Mellili and OpID have shown (see Chapter 2). In extreme cases where no facial image is available or suitable, personal effects may be used in lieu of a facial image. Details included on FPS002 (Scene Script) and scene photographs proved most useful for the production and suggested presentation of clothing and personal effects in sample dPMDs.

Photo Scoring System

With reference to the description of post-mortem depiction as a forensic facial imaging technique in the previous chapters, a basic set of inclusion/exclusion criteria was established to assess the facial photographs present in each file, as shown in Table 5.

Table 5: Basic inclusion/exclusion criteria for post-mortem facial photographs

Inclusion	Exclusion
Visually identifiable person Sufficient soft tissue to reasonably suggest face and feature shape, based on available visual records. Facial trauma and early decomposition (not excessively bloated or discoloured) are not excluded	Insufficient features or tissue to qualify as ‘visually identifiable’ Burnt or fragmented remains; excessive facial trauma that obliterates the face; advanced decomposition; other facial obscuration
Acceptable detail and quality of photographs Min. 1 good quality frontal photograph, preferably frontal/lateral facial views, with minimal distortion or other artefacts. ‘Good quality’ at minimum describes an image that includes the entire face in the frame, including ears and jawline; is photographed more or less orthogonally; and is in focus	Very poor image quality Bad angle, poor focus, lens distortions, lighting, disallowing reasonable assessment of facial features and distance from camera

For the Inclusions, a two-part photo scoring system to assess preservation of soft tissue (ST) and facial Photo Quality was applied, using the range 0 (unacceptable) to 5 (excellent). Inclusion for dPMD was based on the following score combination:

- A score of 3 was the borderline threshold for both conditions
- If ST score is 3+, dPMD is viable. If ST score is <3, dPMD is not viable

In some cases, scene images were preferable to admission images, and included additional views of the face (lateral, three-quarter) that would provide salient data for the facial analyst to more fully assess facial appearance and features that may not be visible in a frontal image, such as a characteristic scar or facial mark on the side of the face.

It was clear that some exclusions (skeletal, advanced decomp, burned bodies) were viable for facial reconstruction, but only a handful were recorded as being referred to VIC, or whether they had been identified by other means, making facial depiction unnecessary.³²

If documentation indicated a case was identified but unclaimed (released for pauper's burial/cremation), this would immediately eliminate them as dPMD candidate, but not for general facial photograph analysis. Hospital/EMS admissions were generally immediate exclusions due to intubation, bandaging and other devices obscuring the face, with some exceptions.

Results

Table 6 summarises the records review process according to six basic exclusion conditions to arrive at a total number of cases for which dPMD could be applied, if appropriate. Of 1010 total cases, 714 cases would be suitable for dPMD in principle.³³ To this revised total the photo scoring system was then applied.

³² PMCT and digital imaging techniques enable facial reconstruction without maceration/destructive analysis, including in burned body cases (Thali et al., 2002; Coty et al., 2018)

³³ 'Concealment of birth' cases (including non-viable fetuses and neonates) accounted for 22.7% of all Unclaimed cases over the period under review, excluding 2018 where none were recorded. Only 2 featured in the 2017 records. It is unclear whether protocol was revised to no longer record such cases as Unclaimed from this time. Their vast number can be illustrated by calculating the average age of this cohort with or without these data. Including it lowers the average age by half.

	2018	2017	2016	2015	2014	2013	2012	2011	2010	TOTAL
Total cases available	102	52	111	143	125	158	134	138	47	1010
Exclusion 1 Foetal/Infant	0	-1	-33	-53	-34	-55	-56	-53	-11	-296
Exclusion 2 Decomp/Skeletonisation/Mummification (non-infant)	-15	-4	-11	-9	-12	-12	-12	-16	-1	-92
Exclusion 3 Burned beyond recognition	-6	-4	-2	-4	-3	-2	-10	-1	-1	-33
Exclusion 4 Total destructive trauma	-1	-1	-2	-3	-1	-4	-2	-1	0	-15
Exclusion 5 Face obscured (ETI*/MI**/Other)	-13	-10	-6	-17	-20	-14	-9	-13	-1	-103
Exclusion 6 No image available/incorrect or no records/postcrania/organs only/non-human bones	-2	-5	-12	-17	-20	-20	-18	-8	-5	-107
Viable adult/juvenile cases for dPMD	102	51	78	90	91	103	78	85	36	714
Inclusion for Soft Tissue Preservation (scoring 3 or more)	70	36	55	66	55	65	42	49	18	456
Exclusion for Facial Photo Quality (scoring 2 or less)	-15	-17	-53	-88	-85	-101	-99	-103	-37	-598
Total viable dPMD (combined score of 3+ for ST and FP)	61	31	44	43	30	39	23	26	9	306
of which Admission	60	30	13	21	16	24	14	21	3	202
of which Scene	0	1	31	22	14	15	9	5	6	103
Total viable CFR	15	4	11	9	10	11	10	12	1	83

*ETI endotracheal intubation / **MI medical intervention

Table 6: Summary analysis of Unclaimed Records from 1 January 2010 to 10 August 2018

Trends/Cross-Factor Analyses

Sufficient soft tissue was determined to be present in 456 cases (63.9%) but the quality of facial photography excluded 598 of these cases (83.8%), leaving 306 (30.3%) cases with adequate visual documentation for dPMD remaining. Of these, ~50% of scene images offered better visual data for facial analysis and depiction compared to admission photographs. **This suggests that with improved facial photography, post-mortem depiction would be a viable visual identification method in more than two-thirds of unidentified cases in this environment.**

Only one case from 2012 indicates successful identification by forensic odontology, with DNA returning positive results in two cases each for years 2015 and 2017.³⁴

Records indicating cases referred to UCT/FACT for anthropological analysis or SAPS VIC for Facial Reconstruction are present for 2017 and 2018, the years immediately following the National Order.³⁵ In 2018, records indicate one confirmed and five possible FACT referrals; this is confirmed by Baliso et al. (2019) who report 6 cases of which one was non-forensic. In 2017, records indicate three confirmed and one possible FACT referrals; Baliso et al. reports eight forensic cases. In the same year, FPS records suggest five cases with a possible further two cases were referred to SAPS VIC for facial reconstruction. This uptick could also be a result of greater awareness of these methods, increased capacity in forensic anthropology available to the facility or simply an artefact of record-keeping.

Only four cases include mention of where the IO has appealed for information via the media to locate family of deceased (two cases), or where they intended to do so (two cases). The implication is that the media are seen to be a risk, likely to generate negative press. Engagement with SAPS indicated an unspoken rule that members will not engage with the media; any communications from within or to the organisation must go through the SAPS media office.

Two cases admitted from funeral parlours appeared to indicate a considerable delay between the event of death and admission to FPS, clearly indicating the significant changes that also take place in refrigerated conditions, rendering them

³⁴ Unlikely to be accurate but rather reflecting incomplete or inaccessible records.

³⁵ FACT referrals: 2018.

visually disturbing and possibly unrecognisable to next-of-kin. As cases are retained for a long period while identification and familial tracing occurs, conceivably the same problem exists at FPS. After two weeks, a body will no longer be suitable for visual identification. These cases further support the urgent need for improved photography on admission and post-autopsy.

Table 7: Trends in Unidentified/Unclaimed cases 2010 – mid-2018

Most vulnerable groups	Average age	39.7 years	
	Predominant sex	Male	
Most common context of death/recovery*	Total cases	768	%
	Road/Street <i>incl. roadside, pavement, alley</i>	177	23
	Open land <i>incl. Mountain, Park, Farm</i>	112	14.6
	Informal residence	110	14.3
	Other <i>incl. SAPS (partial remains, bones), funeral service, EMS, N/R</i>	68	8.9
	Railway/Bridge	60	7.8
	Private property <i>incl. Formal residences, hostels/hotels</i>	39	5.1
	Beach/Water	37	4.8
	Concealed (buried); Construction sites	9	1.2
Most common locality (over 41 SAPS districts)	<i>Nyanga</i>	115	14.9
	<i>Cape Town Central</i>	73	9.5
	<i>Mitchell's Plain</i>	64	8.3
	<i>Milnerton</i>	48	6.3
	<i>Woodstock</i>	48	6.3
Hospital Admissions	Excluding EMS admissions	156	20.3
Seasonal distribution	All cases excluding 2018	904	
	Spring	240	26.5
	Summer	203	22.5
	Autumn	203	22.5
	Winter	244	26.9
	No date recorded	14	1.5

*cases reported as Concealment of Birth are excluded

In general, data support Lerer and Kugel's caution two decades prior that interpersonal violence and vehicular accidents (mainly involving pedestrian casualties) would become major public health issues.

This cohort reflected total of 159 homicides, 158 accidental and 26 suicides recorded at the scene, with the remainder of cases (648) unable to determine from available documentation.³⁶ 338 of these are variously attributed to disease (TB, pneumonia being most common) or stroke, post-operative complications. Descriptions reflect the knowledge at the point of body recovery/admission, prior to formal post-mortem examination. For example, 'polytrauma' is recorded in 168 cases, but could describe a victim of an accident, assault or suicide. At least 75 deaths involving pedestrians hit by vehicles or trains were counted. Suicide by hanging predominates (13 cases); drowning is recorded in 20 cases. 151 cases involved different modes of assault, of which 27 were shootings and 48 were stabbings. Cases recorded as 'community assault' (20) refer to individuals being attacked by members of their community because they were witnessed committing a crime or are assumed to have done so (i.e. they are victims of rumour or prejudice). Such cases often present complex trauma as they may also involve burning the victim (or attempting to), and they tend to involve considerable facial trauma. Occurring outdoors, the face may be further obscured by blood or other matter on admission.

Data administration challenges

The records review process itself presented a number of challenges, including difficulty in interpreting case status (unclaimed v unidentified; unidentified vs unknown); slow communication with the facility (queries about specific documentation and cases directed to facility managers); positive fingerprint results does not necessarily mean positive identification; and difficulties in working with Livelink, including the image/document preview frequently failing, which requires downloading the file to view its contents (a potential data protection issue); the server connection was slow or frequently failed; and some administrative errors were noticed (e.g. wrong records in case files, or correct images but incorrect file names).

³⁶ Without a full PM report (not accessible for this study), this data is provisional, reflecting what was recorded on the Scene Script and Contemporaneous Note (Lab27). FPOs completing scene documentation may enter cause and manner in alternating fields.

Trends in data-capturing quality over the period 2010 to 2018 showed a consistent improvement in record-keeping, however facial photography has not improved, with the exception of better resolution file sizes. Storing high-resolution files is necessary for optimal facial identification and dPMD production, but scene images could be compressed as data-load in some records is extremely (unnecessarily) heavy. Many viable cases that could benefit from dPMD are ruled out due to unstandardized photography, which introduces error at the point of admission.³⁷

Creating Exemplar Post-Mortem Depictions

Twenty unidentified cases from January to mid-August 2018 were selected as a sample set to track the identification process in different ways and assigned project codes 01-20. Ten cases (01-10) were selected for the creation of exemplar post-mortem depictions, to demonstrate the potential value of this technique to assist visual identification of unknown decedents. These are represented in Table 8 with their associated source photo scores and identification results as of 23 April 2020. The additional ten (11-20) were retained as ‘likely to require a depiction.’

Factors contributing to the selection included an average score of ≥ 4 for photographic quality and soft-tissue condition, as well as manner and date of death. These are indicated below each depiction. From the available scene images, it was possible to also create a lateral view for dPMD 02, as shown in fig. 31, which also shows a possible presentation format for such cases where two views may support visual recognition.

Working with optimal or near-optimal conditions for post-mortem depiction where facial photographs are concerned, each case enables the illustration of a specific feature of possible value in post-mortem identification, including the representation/reconstruction of clothing (all, 09), including suggesting colour or other graphic elements of clothing (01, 04, 05, 10); revealing characteristic dentition

³⁷ ASTM guidelines should be introduced, as well as a number of other sources consulted for context-relevant guidance (Lee et al., 2010; Wilkinson and Tillotson, 2012; Wilkinson, 2015a; JHB FPS ID Working Group, 2017; Bendig, 2018). Academic departments may have their own SOPs for skull photography (FARC UP, n.d.) but this is not suitable for an unresponsive subject who cannot be placed in the Frankfurt Plane, who must be photographed supine, who may be in rigor etc.

(02, 05, 07); and retaining a sense of individualising details such as hair styles (02, 06, 07, 08), ear shape (if visible); and jewellery (07).

In keeping with best-practice guidelines, dPMDs are presented as grayscale images; the discrepancies between skin tone in scene images compared to admission images being too great to reasonably estimate this with any accuracy. As studies suggest, there is no loss in recognition capacity with grayscale presentation (Davy-Jow, 2013; Wilkinson, 2015). All facial images required significant adjustment for lens and distance distortion, and adjustment to suggest a life-like head pose.

Working in layers in Adobe Photoshop CC 2019, these corrections were first made to a copy of the original photograph. Basic adjustments to facial structure and features were then done using the Liquify and Puppet Warp functions to suggest in-life appearance, with individual features (including open eyes) replaced and modified accordingly from a database of appropriate photographic sources, and then blended using Layer Masks, a non-destructive method which enables steps to be reversed if necessary. If clothing could not be reconstructed from the original image, similar clothing was researched and included, using the same technique of layers and layer-mask blending.

Given that this research received formal ethical approval of both FPS and SAPS, and all FMDs associated with Salt River FPS were briefed on this research, these depictions meet the external specialist consultation requirements as stated in the MOU: “Such experts must be recognised by the FMP and SAPS VIC.” (Department of Health and South African Police Service, 2018, p.14) and the depictions may thus form part of the existing investigative intelligence into these unresolved cases.

Sample Set Identification Trajectory

Table 9 summarises the sample set used to track identification progress. From the ten cases selected for dPMD, 50% (five cases) were still unidentified as of 23 April 2020 and of those, three have been paupered and two are still awaiting identification.

Of the three who were paupered, two returned positive fingerprint results and one is recorded as ‘fingerprints negative’ but it is not clear if these were checked via Home Affairs as well as AFIS. FPS does not regard identification in these cases as proven, but the IO would have had to satisfy the facility that everything had been

done to try and identify them or contact family. The other five cases were identified, claimed by family and released.

From the ten cases selected as 'likely to require a depiction,' 40% (four cases) have been identified, claimed by family and released. Three cases have been paupered, two of which returned negative fingerprint results, with one producing positive results. As above, FPS would not regard identification in these cases as proven, but the IO would have had to satisfy the facility that everything had been done to try and identify them or contact family before bodies were released.

The final three cases are recorded as 'Awaiting Fingerprints' as of 23 April 2020 and have not been released.

The table below summarises key data regarding these cases in respect of admission date; identification date; further analysis; context/manner of death; jurisdiction where case is registered; and basic biographical information of each individual. The extent of VIC's involvement in these cases is unknown as this data is not available, but it provides a snapshot illustration of general trends in this facility that could be extrapolated to reflect trends at other facilities in major urban centres in South Africa.

These data show that fingerprint analysis remains the most established method of identification. This is supported by findings reported by the Wits ID Unit (P46, 2018; Brits et al., 2020) and in the European migrant identification context (Cattaneo et al., 2010)

In most cases, bodies are released to families shortly after identification is verified, ranging from **0-2 days** in the current sample. However, in some cases there is a considerable delay, ranging from **250 days** (19) to **481 days** (07). In both cases, these individuals lived in informal circumstances (sleeping rough or in ad hoc shelter) in central Cape Town. This not only has implications for storage capacity in the facility but also impacts the family who are charged a daily storage fee by the facility until the individual is released. Of course this is unavoidable if the intervening time is an indication of how long it took for next-of-kin to be tracked, but may also indicate an inability to afford immediate collection by a undertaker, thus having to accept the storage costs until such time as funds could be accessed for burial.

For the sample set, days from admission to identification or release are summarised as follows:

- Min. number of days from admission to identification: **80**
- Max. number of days from admission to identification: **399**
- Max. number of days from admission to release without identification: **687**
- Average number of days from admission to release (identified and/or paupered): **383.5 days**

With 60% of cases in this illustrative sample still unidentified one year post-admission, yet with suitable images on file to produce high-quality post-mortem depictions, it suggests dPMD should be introduced within the FPS identification protocol if the initial fingerprint results are negative or questioned/inconclusive.

Whereas IOs would ordinarily submit cases to SAPS VIC for production, these depictions have been produced as part of a research project in partnership with an FPS facility directly, with the understanding that should these individuals remain unidentified, these depictions would be made available for the Salt River visual identification archive ('photo album') and for possible publication, either for display within the facility and/or circulated to media outlets and missing persons charities, but with the understanding that they will be ineffective in soliciting information unless a circulation strategy is agreed. This could be simple – a dedicated display in the reception area that distinguishes them from other visual information already present in the space (the suggested presentation pre-empts this) – or via recognised channels such as Missing Persons SA or the Pink Ladies. They should also be passed on to the IO in the first instance.

Of the identified and released cases, the identifier would have had to provide proof of the decedent's identity, a copy of which would now be in the relevant case file. If this includes an ante-mortem photograph, it would be possible to compare the resemblance between the actual face and the depiction, as an extension of the current research protocol. This may also support other challenges with identification described by FPOs such as age discrepancies in ID photos, and poor quality/damaged documentation.

Table 8: Sample dPMDs produced for ten unidentified cases, 2018, with photo scores referring to source images. Identification status updated 23/04/2020.

																			
dPMD 01 Train casualty 1 Feb 2018 Claimed 390 days				dPMD 02 Pedestrian casualty 3 Feb 2018 Claimed 256 days				dPMD 03 Pedestrian casualty 7 Feb 2018 Unidentified, paupered 687 days				dPMD 04 SUDA 27 Feb 2018 Unidentified				dPMD 05 Assault (stab) 3 March 2018 Unidentified			
ST score	4	Photo score	4	ST score	4	Photo score	4	ST score	4	Photo score	3	ST score	4	Photo score	4	ST score	4	Photo score	4
																			
dPMD 06 SUDA 14 March 2018 Unidentified, paupered 687 days				dPMD 07 SUDA (TB) 26 May 2018 Claimed 561 days				dPMD 08 SUDA 31 May 2018 Claimed 158 days				dPMD 09 SUDA 26 June 2018 Unidentified, paupered 211 days				dPMD 10 Assault (Shot) 27 June 2018 Claimed 113 days			
ST score	5	Photo score	5	ST score	5	Photo score	5	ST score	5	Photo score	5	ST score	5	Photo score	5	ST score	5	Photo score	4

Table 9: Illustration of the identification trajectory for ten sample cases at SRML admitted over a six-month period (1 Feb – 6 August 2018)

code	ADMISSION N dd/mm/yr	DATE ID'd	STATUS	RELEASED	DAYS SINCE ADMISSION* As of 23/04/2020	ID METHOD	DNA taken As of 02/10/2018	dPM D	LOCATION	SAPS station	Age	Sex	Cause/Manner	
01	01/02/18	25/02/2019	ID / Claimed	26/02/2019	389 / 390	FP+	N/R	Y	Railway	Cape Town	50	M	Train	Polytrauma
02	03/02/18	16/10/2018	ID / Claimed	17/10/2018	255 / 256	FP+	Awaiting	Y	Road/Street	Wynberg	60	M	RTA	Polytrauma
03	07/02/18	No	Unclaimed / Pauper	26/09/2019	596	FP*	Awaiting	Y	Road/Street	Mowbray	50	F	RTA	Polytrauma
04	27/02/18	Awaiting FPs	Pending	N/A	Not yet released	N/A	Awaiting	Y	Open land	Woodstock	45	F	SUDA	Undet.
05	03/03/18	Awaiting FPs	Pending	N/A	Not yet released	N/A	N/R	Y	Other	Claremont	30	M	Murder	Stab
06	14/03/18	No	Unclaimed / Pauper	30/01/2020	687	FP*	Awaiting	Y	Open land	Milnerton	55	M	SUDA	Undet.
07	26/05/18	14/08/2018	ID / Claimed	18/12/2019	80 / 561	FP+	No	Y	Informal res.	Cape Town	30	F	Natural	TB
08	31/05/18	05/11/2018	ID / Claimed	05/11/2018	158	FP+	N/R	Y	Hospital/Clinic	Lentegeur	60	M	N/R	N/R
09	26/06/18	No	Unclaimed / Pauper	23/01/2019	211	FP-	No	Y	Other	Sea Point	60	M	SUDA	Undet.
10	27/06/18	17/10/2018	ID / Claimed	18/10/2018	112 / 113	FP+	N/R	Y	Open land	Philippi-East	25	M	Murder	Shot
11	12/03/18	15/04/2019	ID / Claimed	17/04/2019	399 / 401	FP	N/R	N	Road/Street	Cape Town	35	M	SUDA	Undet.
12	31/03/18	Awaiting FPs	Pending	N/A	Not yet released	N/A	N/R	N	Other	Nyanga	25	M	Murder	Shot
13	01/05/18	No	Unclaimed / Pauper	17/04/2019	351	FP-	No	N	Road/Street	Philippi	40	M	Murder	Shot
14	27/05/18	Awaiting FPs	Pending	N/A	Not yet released	N/A	N/R	N	Other	Wynberg	30	M	Murder	Stab
15	01/07/18	Awaiting FPs	Pending	N/A	Not yet released	N/A	No	N	Road/Street	Milnerton	35	F	RTA	Polytrauma
16	02/07/18	No	Unclaimed / Pauper	08/08/2019	402	FP-	No	N	Open land	Sea Point	50	M	Natural	TB
17	05/07/18	No	Unclaimed / Pauper	25/10/2018	112	FP*	No	N	Other	Cape Town	30	M	Natural	TB
18	28/07/18	06/11/2018	ID / Claimed	08/11/2018	101 / 103	FP	N/R	N	Road/Street	Langa	32	M	Murder	Stab
19	06/08/18	16/01/2019	ID / Claimed	23/09/2019	163 / 413	FP	Awaiting	N	Informal res.	Cape Town	28	M	Murder	Stab
20	10/08/18	05/03/2019	ID / Claimed	07/03/2019	207 / 209	FP	Awaiting	N	Road/Street	Mowbray	28	M	Police shooting	Shot

Notes

[Days since admission*](#): the second figure in bold indicates the release date if it differs from the date of positive identification, which impacts on storage capacity and storage fees charged to the family; FP = fingerprints; + or – indicates positive or negative result; N/R = no records; FP*: where the table indicates fingerprints were taken but ID is negative, this suggests the fingerprint record does not reflect the individual's true identity. If the individual has a history of past arrests, for example, it is common for the record to reflect aliases.

dPMD Public Appeal Presentation Format

Following a bespoke poster template design informed by empirical findings (see [Appendix 3](#), fig. 80), Public Appeal posters for five Unidentified cases (from samples 01-10) were produced, with relevant contextual and contact information. These are included in [Appendix 3](#) (figs. 81-85)

For dPMD 02, the additional lateral view is added as a floating image at a reduced scale alongside the main depiction, virtually ‘pasted’ within the poster format. Referencing the photographic vernacular of personal photo albums and snapshots is intended to demystify and familiarise an otherwise difficult visual subject.

UNIDENTIFIED PERSON

Pedestrian casualty, 3 February 2018

About 60 years old, 1.68m tall with greying hair and beard/moustache. Found on the M5 wearing a beige jacket and blue t-shirt with a design of white wavy lines across chest.

This is a **DIGITAL COMPOSITE** which suggests the most likely appearance of this person in life, based on available information. It is **not intended to be an exact likeness or portrait.**

Forensic Pathology Service
+27 21 448 4456

IF YOU RECOGNISE THIS PERSON,
PLEASE CONTACT
WYNBERG SAPS
OR
FORENSIC PATHOLOGY SERVICES
SALT RIVER

+27 21 799 1300

Figure 31: Proposed Public Appeal presentation format for dPMDs based on sample case 02, including a lateral view of the subject

Parallel Initiatives

The fieldwork process enabled knowledge of and direct engagement with a number of related initiatives including the Wits ID Unit (Brits et al., 2020) and a newly-constituted SAPS VIC data reconciliation team, against the backdrop of the first-ever South Africa Academy of Forensic Sciences being established in 2018 and other professional organisations that co-ordinate relevant forensic interest groups locally (see Chapter 2). The success of these initiatives relies upon appropriate internal and external communication, visibility and reciprocity, i.e. collaboration, across and within the various services and stakeholders involved.

Wits ID Unit

A lot of irregular migrants are anonymous in the last stages of their life, and this continues into death [...] No one knows where they are buried, and no one comes to visit them. This is a small project, but it's a reflection that humanitarian organizations and state authorities could do something more. (Fonseca quoted in Bax, 2018)

In South Africa, the Wits ID Unit pilot project unfolded in parallel with this research, providing the privilege of engaging as participant-observer in September 2019 as part of the general fieldwork. A group of Wits University biomedical science students with an interest in forensic identification assist project manager Trisha-Jean Mahon with data collection sessions two afternoons per week, once the facility has concluded the morning post-mortem examinations. Participation is voluntary but makes an essential contribution to practical experience in real casework.

The ICRC supplied basic materials and the mortuary allocated a room specifically for this purpose. An additional room downstairs was allocated as a base for researchers who are able to macerate small batches of human and non-human remains, and store the ID Unit's shared PPE supplies.

The weekly cases are identified from FPS records, and on the days attended, two were processed on the first afternoon and four the following day, depending on the number of team members available. The Johannesburg mortuary has an official forensic photographer (a technical post shared with Wits University) who leads the

imaging requirements for the team, operating the Lodox machine to capture 2D digital radiographs of each case, and then photographing each individual in detail, focusing on marks, scars and tattoos, and ensuring proper capture of facial images, and sometimes supervising a second photographer. Clothing is laid on sheets of brown paper and photographed, and all information (colour, type, fabric, size, manufacturer labels) is carefully transcribed.

Advanced fingerprinting techniques are employed (rehydration and degloving as appropriate), and samples for DNA are taken (hair and nails in lieu of blood if necessary). Data is captured on forms modified from Interpol standards.

Brits et al. (2020) reports on the work of this unit in the context of Gauteng's unidentified decedent population, evidencing the success of systematic data collection and consolidation. The unit is enacting Cattaneo's appeal to place focus on secondary identifying methods and are considering replicating dPMD methods described, based on this research protocol, in its future work.



Figure 32: Observation of the Wits ID Unit, Johannesburg, 2018. Clockwise from top left: Lodox scan of decedent; Facial and other relevant clinical photography; Team 1 lays out clothing for written documentation and photography; Team 2 attends to the body, documenting tattoos and marks, taking fingerprints (advanced techniques) and biological samples for DNA analysis (Kathryn Smith)

SAPS VIC Data Reconciliation team

The original research protocol for this sub-study expressed the ambitious hope of developing a framework for a national database that neighbouring countries could also access. Interviews with senior members of the recently established SAPS VIC data reconciliation team in October 2018 suggests this may be in fact be in development, despite many false starts (see Evert, 2011). At that time, they reported they were testing various options, including collaborations between sections, internal systems and communications unit, as well as the relationship between SAPS internal systems and the ‘external world.’ The value of social media and the importance of involving community support officers and the public in this work is appreciated, and this requires a commitment to be public facing in order to be successful and not just report success based on coincidence. Our conversation also raised the issue of possible legal implications that might arise if a facial depiction is released of an individual who has already been identified. Poor data reconciliation across various services as it currently stands would make this very likely and could be interpreted as ‘doing cases for stats’, which would be wholly inappropriate:

P35a: That is why specifically we've embarked on this together with the communications people so that we follow the right steps...

P35b: Protocols...

P35a: ... and that they've agreed, and that they're saying, ‘OK, this is something viable, this is something we’re really passionate about, that we are going to attempt to do with you guys. Because obviously our biggest thing was the legal implications. [...] So for us currently, like we said, what we'll do initially is just publish the reconstructions because we know those come from skeletons and we don't have that risk. But when we start doing depictions, then we're going to have to start looking at the criteria that we’re going to use, to say, is this is a viable one to use? Has he been ID'd by fingerprints? Phone the mortuary to find out. Has the family ID'd? Has he been buried? And then you only proceed (P35a; P35b, 2018)

Trying to isolate the Unidentified from the Unclaimed presents a significant challenge in the attempt to understand the full extent of the problem, as the records review component of this study indicates. Because formal statistics on Unidentifieds are not formally recorded, and with most provinces still operating on paper-based records, the challenge of data reconciliation cannot be over-estimated. The

Unclaimed are a much easier number to count, as the release of a body to family or state undertaker marks a clear end to the process and responsibility of custodianship. By contrast, Unidentifieds can take years to resolve, as the results from this sub-study show, and some are never resolved. There are no ‘backlogs’ per se, as SOPs are in place to take cases to the next level, but the caseload is such that the work does inevitably accumulate. Improved data consolidation is also supported by investing in adjacent or complementary procedures that have proven or promising efficacy, such as secondary identification methods, which includes facial imaging.

Discussion

This sub-study sought to understand whether digital post-mortem depiction (dPMD) is a viable and promising forensic imaging modality to introduce into visual identification protocols within the FPS environment in South Africa. It is recognised that it is possible to request such imaging from SAPS VIC, but a number of factors suggest this is unlikely to happen and if it does, the timeframes are impractical. It was hypothesised that this method offers great potential as a critical tool within the visual identification process *from the point of admission into a medico-legal facility*.

It is proposed that adopting dPMD as part of the routine visual identification protocol within the FPS Standard Operating Procedure of FPS – much earlier in the process than SAPS would be requested to assist – would ensure four critical things that would allow these partner services to meet the objectives of their respective service mandates:

1. Appropriate visual documentation of unknown persons is produced at the earliest opportunity, which could be used to produce an optimal, publishable facial depiction if primary identification methods fail. Currently, these images are unstandardized, with faces showing distortion and trauma, and the likelihood of misidentification is significant.
2. It would also serve an important humanitarian role in mitigating the emotional burden and re-traumatization associated with conducting visual identification by facial photograph taken on admission, as currently practiced. If next-of-kin arrive after the mandatory identification period of

thirty days, they are likely to be directed to the mortuary archive (digital or manual ledger) to search through any number of such images that meet the broad criteria of a missing loved one. Again, the likelihood of misidentification from post-mortem images alone is significant.

3. Unstandardized post-mortem facial photographs present sub-optimal visual data for staff tasked with managing the visual identification process, which is beset by numerous challenges including attempted identity fraud.
4. Establishing a culture of producing post-mortem depictions early in an investigation would also provide visual data appropriate for sharing with the media/general public to elicit leads in the identification of unknown decedents. Such images have proven success in the South African context, and would be necessary to populate a proposed national searchable database to reconcile data related to the missing and the unidentified, an initiative which SAPS now recognizes as a critical tool in response to this national crisis. SAPS are currently developing an online database as well as a smart-phone app (P35a; P35b, 2018).

The key challenges impacting on identification of unknown decedents can be located within **visual documentation** in the first instance; procedures by which unknown cases are referred for further specialist analysis cases; and reconciling post-mortem and ante-mortem, including linking missing persons cases to unknown decedents, and family tracing. This study shows that **images ‘do work’ in two senses of the word**; they have a specific kind of function (investigative and humane) and they produce results.

The most immediate issue is the quality of **post-mortem facial photography**. Poor facial photography introduces error at the point of admission and minimizes the chance of accurate visual identification later on, as well as ruling out the possibility of using this visual documentation to produce dPMDs if necessary.

The unidentified/unclaimed ‘photo album’ at Salt River is maintained as a digital archive (Excel spreadsheet) but when inserting and resizing images, scaled proportions are not maintained, which alters facial appearance.

Timeframes impacting fingerprinting results (via SAPS databases, then Home Affairs) and referral for further analysis also present problems. Referral for further analysis is the responsibility of the pathologist. Although recognised methods

for further analysis are described in MOUs/protocols, they are not considered routine or executed with any consistency, as interviews with members of the SAPS VIC team in Cape Town confirmed (P41a, 2018; P41b, 2018)

Given the considerable time-difference between **routine and non-routine** procedures as defined by the SAPS case registration systems, because no single case requires exactly the same steps, and the comparative efficiency of dPMD versus full reconstruction from the skull as shown in [Appendix 3](#) (cf. Table 16 and 17), there may be value in reconsidering how post-mortem depiction and age progression cases are defined (as routine or non-routine), which is also to reconceptualise how ‘time-sensitive’ these types of cases are (they are not considered time-sensitive – the dead are already dead, and a missing person still missing after the first forty-eight hours is less likely to be found). The current VIC forensic art supervisor agrees that dPMD should be a routine procedure (P28, 2018). To this end, [Appendix 3](#) puts forward some specific recommendations in this regard.

Forensic facial imaging is acknowledged as cost-effective, which is supported by academic opinion (P32, 2018; P34, 2018). This sits in distinct opposition to received information from law enforcement agencies who believe human operators are ‘expensive to train and maintain’ and who have been sold on the promises of technological automation. **The SAPS VIC forensic art unit must expand to meet demands** that are also context-specific (demographic differences between Western Cape and Gauteng).

Facial depictions are ineffectively circulated. They need to be brought to the public forum in more effective ways, to clear or bypass internal roadblocks, towards improved reconciliation of missing persons and unknown decedent cases. SAPS experts have no control over this process, and they do not receive feedback. They therefore cannot evaluate their work, and the public is unaware of a scarce skill within the police that could positively impact the public perception of that organisation. The ‘hivemind’ of social media is a natural progression and can have great affordances (case visibility; public appeals for information) if the risks are adequately managed.

The under-utilisation of post-mortem depiction reduces the ability to fairly assess the true impact of this technique in the work of visual identification outside of a handful of instances of high-profile cases that make it into traditional media (newspapers), or are circulated on social media. The role of the image in such

investigations needs to be better understood; they are investigative tools, but they work alongside other factors. But how did this happen? **Thus far, the only clear correlation is effective circulation.** Was this person identified from the image, or from the image being introduced into a broader investigation? But the fact remains that the image often plays a significant role in a successful resolution. We know this but we need to be able to *show* it. And no one else can collect that information other than the people who are doing the work.

Significant in-group/out-group dynamics persist within forensic cultures, even within a single institutional culture (SAPS), which produce low-trust, poor morale and sub-optimal levels of knowledge-sharing, as well as obstructions and feedback loops in knowledge transfer both within and beyond service environments. Accessing the environment for research purposes was protracted and obstructive, requiring unreasonable levels of persistence and constant communication. FPS was more a welcoming environment, while still maintaining strict access and research ethics protocols.

And while **everyone wants better collaboration**, this will require shifts in institutional cultures and attitudes, and engagement with professional organisations such as FAIG and SAAFS. It cannot be said that FPS and SAPS are unaware of the obvious problems they face, but this research revealed critical problems with communication and visibility *within* SAPS and FPS respectively; *between* these services relative to their complementary roles and responsibilities; and *beyond* their walls, i.e. what the public understands about the services they offer. For example, SAPS VIC artists were suddenly overwhelmed with over 400 PMD cases delivered in a single batch in 2017/2018, but had no knowledge whatsoever of the 2016 National Order that provoked the sudden move to review medico-legal records and submit the cases to the unit (P27a, 2018; P27b, 2018).

A conflict exists between ‘need to know’ (and the system trying to protect itself) and the desire for collaboration within and between services, and between services & academic institutions. The engagement with SAPS members during fieldwork, which were unexpectedly frank and open, left the distinct impression that an insider/outsider role had value as a proxy or messenger who could carry information out of a closed system, for mutual benefit, in ways not possible or productive using standard internal channels. Conducting research and reporting findings is to enact vectors of knowledge, in line with the figure of the **pracademic**

as ‘boundary spanner’ (Posner, 2009), a concept which has precedent in law enforcement (Caldwell and Dorling, 1995) and echoes the spirit of positive counter-forensic actions taken in comparative contexts, but has not yet been introduced to forensic facial imaging.

The existing status quo is a disaster; it **does not meet the stated medico-legal service objective** of supporting a just society. Protocols must change in order to meet service mandates. The 2016 National Order is insufficient without the resources to reinforce it. With reference to unidentified decedents, this requires re-evaluation where, when, and how work happens, and by whom, and then who is trusted to initiate change; meeting, but also *challenging* policy requirements, within severely constrained conditions (space, budget, case load); and rethinking routine vs non-routine procedures.

An unknown decedent who is further marginalised through investigative inattention effectively dies twice. Demographic patterns for this cohort identified through the records review support the view that those particularly vulnerable to being unidentified in death are transient, indigent or in some way ‘migrant.’ Already excluded or marginalised from full civic recognition, this is a politically cloaked group that becomes doubly invisible once dead. A consideration of current discourses surrounding the global ‘migrant’ crisis as described in Chapter 2 is therefore useful to demonstrate the broader significance of this single mortuary in Cape Town, and the South African situation in general to global challenges, where parallels with mirror sites (Mellili and OpID) are identified as possessing counter-forensic power in how they are reframing post-mortem identification work as a form of humanitarian action. This discussion is expanded in Chapter 6.

Chapter 4: Forensic Cultures In the Field

When I am introducing a person to the concept of facial reconstruction, I like to show them Frank Bender's *Girl with Hope*. It is one of the most uncanny resemblances I have seen, beyond simple recognition. I think it helps people who are unfamiliar with Forensic Art understand the goals of facial reconstruction, and it personalizes the mission of Forensic Art in a way that perhaps a less tender representation might not.

(P51 in Smith, 2020b, p.354)

Introduction

This study is grounded in primary data produced through empirical and sited observation of various aspects of forensic death investigation. In turn, the fieldwork undertaken to produce these data directly or indirectly informed the general trajectory of the research development and enabled its findings. This was partly demonstrated in the preceding chapter, the content of which represents a microcosm of the general project, specifically sited within an operational forensic context (SRML) that functions as a lens through which a national crisis can be understood, in the context of relevant international work, and building an evidence base to support positive intervention. Here, a participant-observer approach conferred shape and meaning to records review data and revealed systematic and structural conditions within and across the stakeholder services involved that would have been otherwise impossible to acquire.

In parallel to this process, semi-structured interviews were also being conducted with participants working in forensic deathwork environments in ten countries across the world, which broadened the critical perspective on local challenges, finding resonance, contrast, and knowledge-sharing opportunities in these cross-cultural interfaces. These interviews were designed to assess comparative pathways of entry into the field; experience within the field; knowledge transfer within and outwith the field; and how factors such as socio-cultural and professional context might influence practice. Hundreds of hours of conversation, transcription and textual analysis generated a wealth of data impossible to summarise in a way

that gives granular detail to each individual voice.¹ The first part of this chapter presents a selective synthesis of results from interviews as general trends, reported and grouped into four sections – *Professional Experience, Current Practices within Post-Mortem Identification and Facial Imaging, Motivations, and Language, Affect and Knowledge in Forensic Deathwork* – supported by additional information in [Appendix 4](#), providing a detailed account of research processes and supporting data (cohort demographics, verbatim quotes).

The second part of the chapter returns to SRML to explore the impact, efficacy and reception of post-mortem depictions – the work product of many of the individuals encountered in the first part – in a context where such images are largely absent from visual culture and the media, and where cultural and religious diversity demands particular sensitivities to the matter of post-mortem representation. This activity was particularly instructive in demonstrating how the various strands of forensic deathwork are brought to bear in the figure of the forensic officer in their role as *mediator* between the intersectional interests of law enforcement, scientific investigation, and familial bonds between the living and the dead. Again language, professional motivations and less recognised forms of knowledge-making emerge as key talking points in a focus group debriefing in which officers clearly felt empowered by an experimental format directed at improved service delivery in which their singular experience and individual opinions were valued and given a platform.²

A note on methods

The ‘four sites’ critical visual analysis model (Rose, 2016) functioned as a grounding principle, informed by the ‘four field’ model of anthropology (archaeology, biology, language, culture) considered in relation to applied anthropologies (forensic, facial). The data collection process was practice-led, guided by an action-reflection approach to ensure optimal critical (self)reflexivity throughout. For example, it was anticipated

¹ Total recorded interviews exceeded fifty-five hours. Including interviews completed by email, this primary data set represents about half a million words.

² Deep gratitude is extended to participating FPOs from the A and D shifts, namely *Anon.*, Zizipho Boyce, Siphosethu Cako, Nathan Cornelius, Gwendoline Francke, Sheila Hill, David Hoogbaard, Taariq Jabaar, Andile Klaas, Mpho Koeli, Marshall Maritz, Toka Molongoana, Andile Nqanqase, Christopher Selani and Damian Solomons who shared their clear-eyed insights with refreshing candour, wit and faith. This project would be much poorer without your input.

that the interview framework may need to be adjusted according to participant needs, and interview circumstances would be dynamic and require a certain responsiveness and agility.

The semi-structured interview was organised according to five broad areas of analytical interest conceptualised as focalising lenses (Bal, 2001), namely 1) Work Context; 2) Professional Experience; 3) Terms of Reference; 4) Policy and Procedure; and 5) Heuristic/Tacit Knowledge, with the structure intended to reinforce data collection objectives and frame the terms of the analysis to follow.

A grounding assumption was that empirical findings will reflect the context of the encounter, as a *dialogue* between researcher and participant/s in general as well as specific ways, of which *site* plays an important role e.g. in-person or online; one-to-one or group interview; personal or professional environment and so on. Results are reported discursively which is intended to echo the critical reflexivity that shaped the process as well as the analysis. The resemblance of this approach to other social methodologies is noted.³

In respect of creative research methods rooted in heuristic strategies, the data collection process highlighted the complexities (benefits and challenges) of a participant-observer, practice-led methodology, and the responsiveness such an approach requires. Realising the affordances of conversation as both method and material was the impetus for the accompanying artwork, *Speaking Likeness*, discussed in the following chapter, which provides a medium for some of the individual stories emerging from the interviewing process to be heard in a more sustained manner. These verbatim accounts perform the interface of emic and etic knowledge and give shape to the findings reported in this chapter, which in turn provide the basis for the critical discussion presented in Chapter 6.

The process of conducting interviews, transcribing the raw data and then analysing the text is thus considered a significant source of embodied and generative knowledge, actively contributing to forms of writing, knowledge translation and re-

³ For example, a retrospective assessment of the fieldwork and data collection process as a whole draws parallels with features usually associated with Actor Network theory (ANT) (Latour, 1987, 2017), based on the frequency with which this theory (more accurately a strategy) is invoked in Science and Technology Studies (STS). The shared interest in the material and semiotic interactions between actants (objects, people and things), ideas and processes within (and producing) particular practices and operations that ANT offers is very clear, but no specific methodological claim to this strategy is made.

mediation evidenced within this thesis. Whether this extends to other similar forensic environments will require additional studies that adopt similar ethnomethodological approaches that engage embodied knowledge work (Michel 2018, online).

Identifying the cohort

Participants include forensic artists with post-mortem identification case experience/exposure; Human identification researchers/practitioners working with craniofacial and/or post-mortem identification or conducting research applicable to forensic identification (disaster victim identification etc.); Forensic pathologists or support officers; forensic medical examiners and allied personnel; Bio-anthropologists working with post-mortem identification or conducting research applicable to forensic anthropology; Forensic standards and policy makers working in facial depiction and identification; and Facial Identification practitioners.

Experience of post-mortem identification and/or representations (broadly defined) was a primary criterion of participation, and the specialized nature of this work required participants to be individually invited to participate. As previously described, this is a closed field with a high expectation of trust and confidentiality. Trust (and its correlative, suspicion) were critical factors in respect of access, and once ‘inside’, assumed practices and values were not always enacted as anticipated. Many participants were already within the researcher’s professional network, whilst others were referred or encountered as part of fieldwork activities and invited to participate.

Part 1: Semi-structured Interviews Results

Where possible, quotes from interviews are cited from the *Speaking Likeness* e-book (vol.2 of thesis), otherwise reference is made to unpublished interview transcripts or written responses. Please consult [Appendix 4](#) for additional information on Methods, Materials and Results.

Defining ‘participants’ and ‘interlocutors’

Within the overall cohort, a distinction was drawn between these complementary contributions as ‘participants’ and ‘interlocutors’ respectively. All participants are interlocutors but not all interlocutors were participants. Participants engaged in a formally recorded and transcribed semi-structured interview⁴ whereas interlocutors engaged in an open, research-related conversation that provided necessary context and background to empirical observation.⁵

According to the permission of the interlocutor, background interviews were not always audio-recorded and transcribed, but in the absence of an audio recording, written and/or visual notes were always taken. Some interlocutors were informal and circumstantial, appearing only in fieldnotes, but these encounters gave essential colour to an understanding of how forensic deathwork is understood by the living (and indeed were the source of some emotionally-instructive moments) and they appear throughout this document, in the main narrative or within footnotes. They might be considered informants.

Seeking parity in representing respondents who chose anonymity versus full disclosure, respondents are referred to by their participant code (P-) in the body of the thesis. Participants who agreed to full disclosure are listed below along with affiliation and professional salutation/rank, if applicable.⁶

⁴ Interviews (online or face-to-face) were recorded using a Zoom H1 audio recorder with a micro-SD card (audio files saved as *.mp3), as well as an Apple iPhone SE with Voice Memos app as a back-up (with audio files saved as *.m4a) and were transcribed using a combination of automated and manual transcription methods.

⁵ Participants provided individual consent for formal interviews, with gatekeeper permissions provided by their managers/institutions where applicable. At least one participant working in a law enforcement context did not seek permission from their supervisor as they felt it would not be granted (or not granted in time) and chose to participate in their personal capacity.

⁶ Full disclosure, with thanks: Dr. Amanda Alblas (Stellenbosch University); Grace Anderson; Capt. Teunis Briers (SAPS); Beth Buchholtz (Longmont Department of Public Safety, Colorado); Dr. Nack-Eun Chung (independent practitioner, Korea); Dr. Madalina Diac (Institute of Legal Medicine, Iași, Romania); ‘Elizabeth’; Ray Evans (SRi Forensics); Paloma Galzi (National Centre for Missing and Exploited Children); Dr. Tobias Houlton (University of the Witwatersrand); Dr. Victor Jitaru; W/O Nicolet Keyser (SAPS); Dr. Sang-Seob Lee (National Forensic Service, Korea); Dr. Won-Joon Lee (National Forensic Service, Korea); Larry J. Livaudais (FACES Lab, Louisiana State University); Trisha-Jean Mahon (University of the Witwatersrand); Natalie Murry; Cpl. Jean Nault (Royal Canadian Mounted Police); W/O Sanette Nel (SAPS); Dr. Jong-Pil Park (National Forensic Service, Korea); Col. Laché Rossouw (SAPS); Dr. Chris Rynn (University of Dundee); Dr. Sarah Shrimpton (Face Lab, Liverpool John Moores University); LaVonne Stickrod; Karen T. Taylor (Facial Images); Dr. Ronn Taylor; Capt. Edward van der Westhuizen (SAPS); Dr. Elisaveta Veselovskaya (Russian Academy of Science; Russian State University for Humanities); Capt. Henrico Visser (SAPS); Tim Widden; Prof. Caroline Wilkinson (Face Lab, Liverpool John Moores University), and Dr. Linda Liebenberg, University of Cape Town (field observation, FPS Western Cape 2016).

Sites, Network and Access

Professional meetings and workshops made a significant contribution to developing this cohort. These events brought to light a number of implicit dynamics around work context; motivations; age; and gender, not as factors in themselves, but rather how they intersect, and what this might reveal about sensibilities and tendencies within the field. For example, participating in Karen Taylor's post-mortem drawing workshop at FACTS and the IAI educational conference in 2018⁷ had a significant impact on the interview process by extending an existing network of potential participants, and being exposed to a wider range of international practitioners from diverse work contexts, particularly law enforcement agencies.⁸ These are usually closed spaces, but in a workshop or conference context, those boundaries are temporarily dissolved due to the focus on a common activity directed at acquisition of knowledge and skills, as well as social time in an unfamiliar space away from home and work. The IAI educational conference in San Antonio, Texas led to an appreciation of the extent to which the two disciplinary pathways within Forensic Art, orientated around suspect and victim identification, might also reflect something of the driving motivations for being involved in this work.

Caldwell and Dorling (1995, p. 108) have demonstrated the significance of prior relationships within professions characterised by academic and practitioner exchanges such as law enforcement. A participant-observer methodology would not have been possible without existing relationships in this field⁹ established through years of building trust and cognitive authority amongst peers and colleagues, and the

⁷ IAI conference participation was as an invited speaker on the Forensic Art curriculum, poster competition entrant and workshop participant. The poster was based on an unpublished MSc Forensic Art research project (2013) and was judged overall winner (cf. Smith et al., 2018). The poster competition was sponsored by [Ideal Innovations Incorporated](#), a leading provider of biometric and forensic services and training for Government and commercial clients worldwide, and is a 'Face Centre of Excellence.'

⁸ Six participants (P04, P08, P11, P18, P19, P25) were acquaintances from the FACTS workshop; an additional three were as a result of connections made at the IAI meeting (P21, P23, P33) and four were connections from past IACI meetings (P01, P12, P17, P20). Many of these also agreed to participate in *Speaking Likeness* (see Table 24, Appendix 5).

⁹ Within this cohort, prior relationships existed with all but fifteen respondents, which transferred varying degrees of (in)formality and intimacy to the interviewing process, as well as enabling and expediting access to other participants and gatekeepers.

support of teachers and mentors.¹⁰ Tables 20 and 21 ([Appendix 4](#)) demonstrate this, with ‘Colleague’ indicating a prior relationship of varying length, from someone met during the course of a professional conference or workshop to ex-classmates, tutors, and those who have become friends through professional association.

Observing conversational patterning as a source of knowledge

Semi-structured interviews were designed to capture both technical information (e.g. imaging modalities and associated timeframes, standards, and reporting practices) as well as more reflective considerations on the cultural impact of this work and vice versa. On the whole, respondents were comfortable providing granular detail about their work experiences, but were less comfortable with or accustomed to more philosophical reflection on post-mortem representation, or critiquing dominant methods or practices in Forensic Art. Concerns tended to reflect immediate, instrumental and functional challenges rather than abstract ones.¹¹ For example, in face-to-face interviews, the question of whether a dead body is an object or subject was frequently met with amusement, surprise, circumspection, or comments about it being a ‘thinking question.’

Interviews would become conversations faster with participants with whom a relationship was already established, characterised by mutual reciprocity most likely due to trust already existing ‘in the room’, as it were. However, it was observed that in all interviews, participants provided increasingly personal information, or were more willing to discuss professional challenges and interpersonal dynamics with colleagues or superiors, as the conversation developed, indicating a distinct shift in interviewer-interviewee power dynamics and levels of comfort. Interviews that extended beyond sixty to ninety minutes produced the richest responses, with those running two to three hours delivering very personal accounts towards the end of the session.

¹⁰ Special acknowledgement to Profs. Lorna Martin and Alan G. Morris (*emeritus*), University of Cape Town; Prof. Caroline Wilkinson; University of Dundee and Liverpool John Moores University; and Karen T. Taylor, independent practitioner.

¹¹ The quality of responses to the open questions were generally more nuanced in face-to-face interview than those completed via email, which suggests that conversational methods were more effective at fostering reflective processes. With written interviews, fluency of language, linear organisation, and the labour of producing detailed written responses are acknowledged limits.

Recording as much of the non-verbal aspects of the conversation as possible was a priority in the transcription process. This is elaborated on further in Chapter 5. Recalling unspoken communications (tone, mannerisms, body language, affect, shifting comfort levels around certain subjects, when knowing looks were exchanged around shared/assumed-shared experiences) and the general ambience of an interview (a sense of the day's weather, the feel of the sofa or chair, whether we were drinking tea or coffee, and so on), was essential to the eventual textual analysis, almost functioning like context reinstatement in the cognitive interview (Fisher and Geiselman, 1992), highlighting the potency of sitedness and memory.

Video-chat interviews were cleaner to edit than in-person encounters as online conversation tends to be more controlled or structured: each person waits for the other to finish, especially if there is a slight bandwidth delay, and with the exception of facial expressions, non-verbal signs are less immediately available. In-person conversations were less linear and relied more on non-verbal cues. Talking points may trail off, or jump to a related or tangential point, and then be brought back. Like the often lengthy and ranging conversations on which they were based, the transcripts did not keep to their own boundaries; they may have been variously supported by additional material sent; by email exchanges about and around them; by social media posts; by looking up references, articles and cases discussed, aligning these with the literatures, discovering more thought-lines through these interactions, and closing others down. In themselves they represent rich sites of knowledge production and provided stimulating material with which to write alongside, fostering a reciprocal, dialogical process where the encounter with a participant endured long after the actual interview session was concluded. This realisation was a significant driver in the development of *Speaking Likeness*.

Results

Cohort Demographics Summary

Of the total cohort of seventy interlocutors, roughly two-thirds (n = 48 or 68.6%) contributed semi-structured interviews and roughly one-third (n = 22 or 31.4%) provided background or contextual information. Across the total group of research

interlocutors, there was an exactly equal gender distribution, but within the participant group, gender representation was predominantly female (62.5%).

Fig. 33 illustrates distribution of responses by country. Roughly one-third of participants (~50% of total) work in the South African context. On the one hand, this provides rich contextual support to the sub-study as a key site/case study around which the broader project pivots. It also points to the issue of access, and the affordances of a professional network built up over many years, including enabling access to interlocutors at all levels of law enforcement from a Brigadier and a Colonel, two Lieutenant Colonels, several Captains and a number of Warrant Officers.

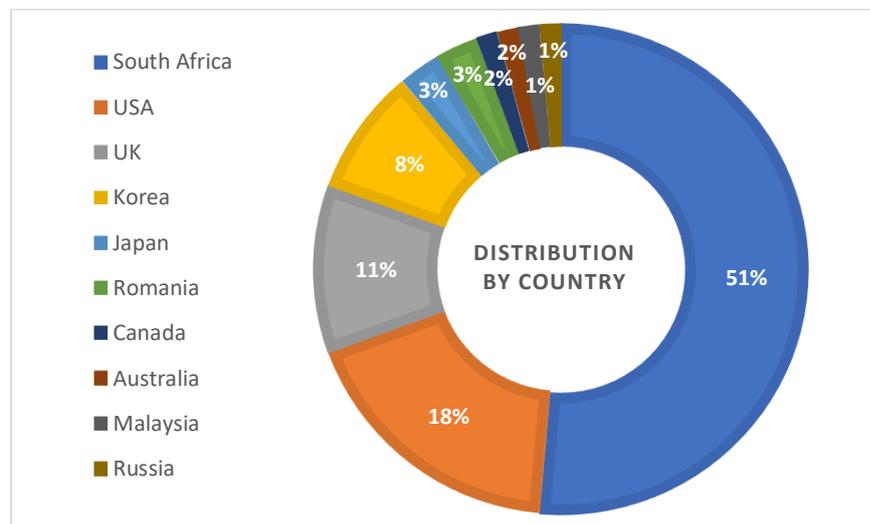


Figure 33: Cohort Distribution by Country

Interlocutors represent all global continental contexts with the exception of South and Central America. This was not due to lack of effort but was an effect of time and resources. More than ten respondents in Brazil and Chile were contacted, of which one responded positively, but required the questionnaire to be available in Spanish. A second group of participants in Brazil was then identified¹² but having secured sufficient participants by this time, it was decided to rather consider this as a

¹² With thanks to Catyana Falsetti and Dr Thais Lopez Capp

potential area of future research where ideas surrounding critical approaches to identity and identification, and counter-forensic action might be explored.¹³

Defining Work Contexts vs Roles

Based on self-declaration of Work Context, and then further categories of Primary, Secondary, and other Roles, a general distribution across the entire cohort was considered. This was first done according to Work Sector, defined as Law Enforcement (LE); Academic; Public Sector; NGO/Charity; Private Sector; Freelance as shown in fig. 34.¹⁴

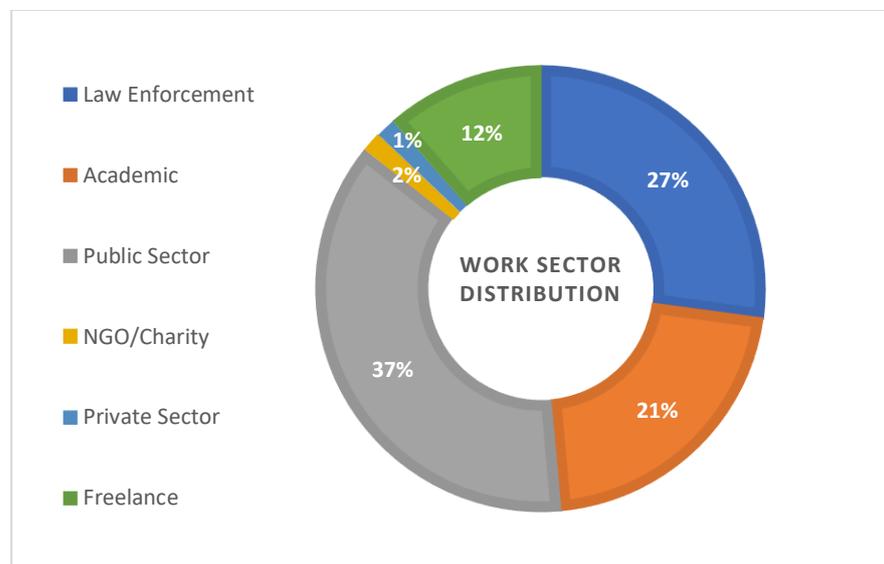


Figure 34: General Cohort Distribution by Work Sector

While this illustrates the service-orientated character of this field, it fails to capture the interdisciplinarity skills within each sector, as well as informational transfer across research and practitioner skill sets. It is impossible to fully unravel interdisciplinary affiliations in forensic deathwork – practitioners tend to represent at

¹³ Brazil is an important research site as described in Chapter 2, suggesting that visual methods are of increasing interest and relevance to post-mortem identification in the global South, which also has strong socio-political, economic and population diversity parallels with South Africa. Mexico is also a focus of academic and citizen action in the humanitarian/counter-forensic space via the work of Ernesto Schwarz-Marin and Arely Cruz-Santiago, Claire Moon, and Forensic Architecture, and the work of Frank Bender in Ciudad Juarez (Botha, 2008) and Mexico Missing Persons initiatives (P02, 2018) represent precedent and current attention in the forensic facial imaging space.

¹⁴ In this study, ‘public sector’ refers to a medico-legal context (government institute or service). Four participants represent this sector, whereas all informants (n = 22) work within the public sector in different capacities.

least two roles or work contexts – which is considered a significant asset as well as being the source of much frustration. Thus, some adjustments to the interview categories were necessary to better sort this distribution snapshot. For example, if a participant’s Work Context is ‘Academic’, it may follow that ‘Research/Teaching’ are primary roles. In this case, the participant’s discipline (e.g. Anthropology) becomes a primary role, and research/teaching is a secondary role.

For some forensic artists represented in this cohort, the desire to remain active means doing the work alongside other full-time employment, often voluntarily.¹⁵ It may also be that practitioners have transferred or retired from one role into another e.g. from law enforcement (sworn or civilian) to freelance or the private sector (P24, P33), or from the public sector (death investigation) to law enforcement (P25). Prior roles are important factors, and if they exist, they were grouped with secondary roles. Fig. 35 shows the general distribution of roles/skills represented within the cohort as a whole.

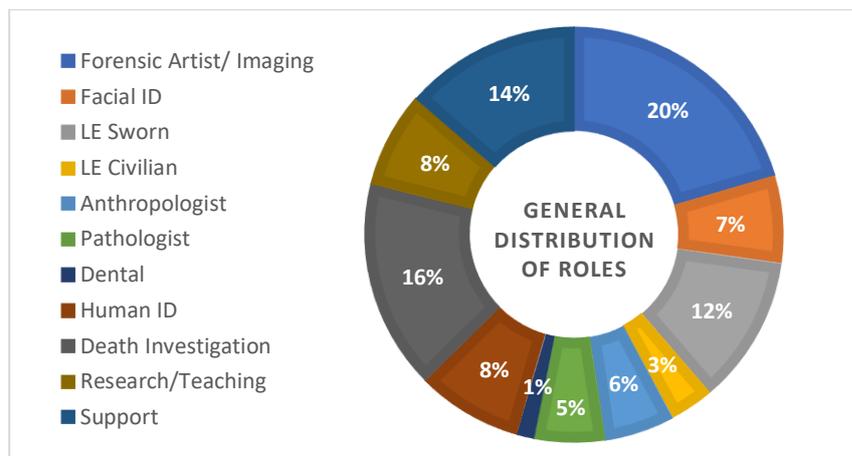


Figure 35: General Cohort Distribution of Roles/Skills

Perhaps counter-intuitively, it was thus decided to re-categorize Law Enforcement (LE) as a Role rather than a Work Context/Sector. This is because law enforcement represents a closed culture with highly determined internal structures, definitions of duty, and reporting pipelines, and therefore defining LE Sworn and LE Civilian status as Roles more accurately reflects both self-identification and external

¹⁵ This outside work is generally unrelated to the field and amongst freelancers represented here, this includes *inter alia*, bookkeeper, probation officer, communications specialist and graphic designer/illustrator.

perception of those working within those structures around the world. This is also because within law enforcement roles, Forensic Art/Imaging or Facial ID is very seldom a full-time role. Practitioners may have other duties alongside any imaging or visual comparison work.

The cohort was thus reorganized according to Primary/Current and Secondary/Prior Roles by Participant or Informant status, represented by the categories Forensic Artist/Imaging; Facial ID; LE Sworn; LE Civilian; Anthropologist; Pathologist; Dental; Human ID; Death Investigation; Research/Teaching; and Support, as shown in figs. 36 and 37, comparing distribution of skills across Primary and Secondary applications.

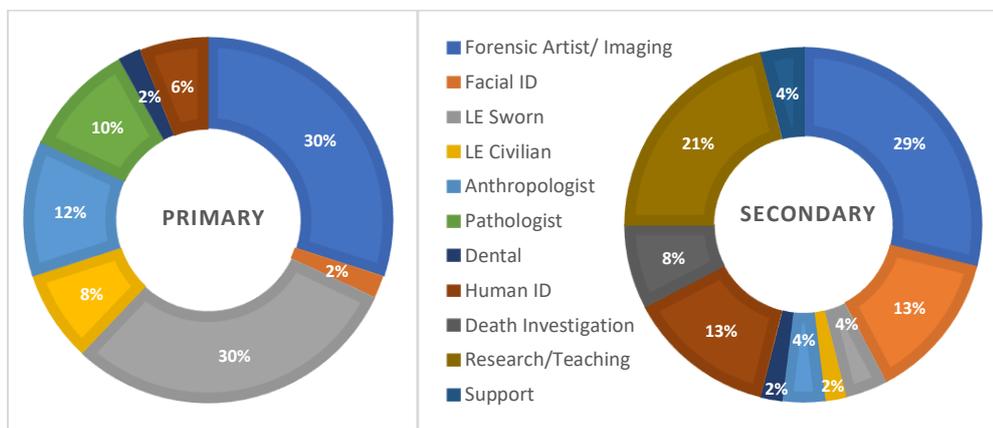


Figure 36: Comparative Distribution of Primary/Current & Secondary/Prior Roles/Skills amongst Participants

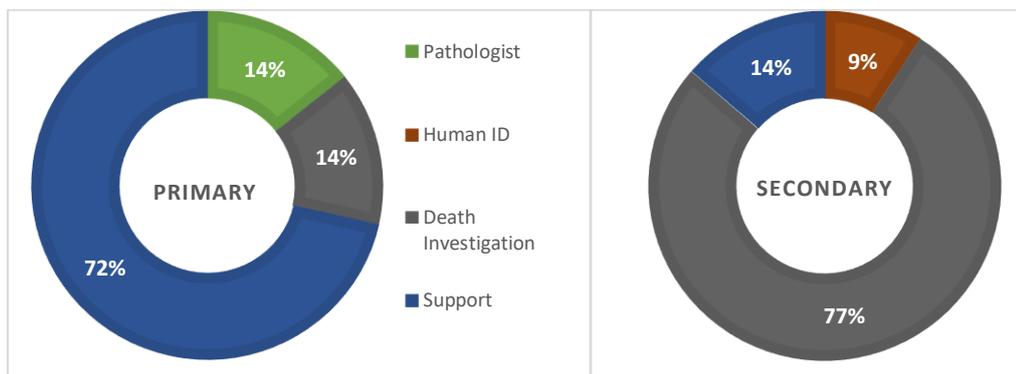


Figure 37: Comparative Distribution of Primary/Current & Secondary/Prior Roles/Skills amongst Informants

Some participants will be represented in more than one work context e.g. some practitioners work across Anthropology or PM Identification and Facial Imaging (e.g. P06, P07, P17, P20). Facial Imaging also includes two practitioners who practice Forensic Art in a tertiary capacity i.e. one is retired, and the other is civilian personnel in a law enforcement agency whose duties do not include Forensic Art but they do casework for other agencies, and have a forensic anthropology qualification.

Within medico-legal contexts, forensic pathology is a first-order control in post-mortem investigation and identification. This means that forensic pathologists are the gatekeepers to further specialized analysis of unidentified decedents in that they decide whether further analysis is required (as is the case in South Africa), or they must fulfil this function themselves in countries/contexts where forensic anthropology is not represented, such as Romania (Dirkmaat, 2015; Ubelaker, 2015).¹⁶ As P06 (Malaysia) affirms, “Skill in this area is developed independently from other forensic scientists in the department. The department consists of varied academician qualifications related to the forensic field. I am the only one doing Forensic Anthropology here.” (P06, 2018)

P07 (Korea) brought facial reconstruction to the National Forensic Service of the Republic of Korea for the first time in 2014, an otherwise very well-resourced environment with an outstanding record of mass-disaster management based in international cooperation (Chung and Yoon, 2009; Chung and Seo, 2015; Chung, 2018; P07, 2018), and clearly committed to investing in excellent post-mortem identification practices informed by humanitarian values.¹⁷

In Japan, P20 sees opportunity even without a forensic culture or training opportunities in that country, due to the unique nature of the services offered by his institute (Smith, 2020b, p.220).

¹⁶ Ubelaker (2015) provides a detailed global snapshot of forensic science capacity. Of the countries represented in this study, Romania, Malaysia and Russia are not included in Ubelaker’s anthology. With reference to the lack of participants from South or Central America, Ubelaker includes chapters on Argentina, Chile, Colombia, Mexico and Uruguay (all Spanish-speaking) but conspicuously, not Brazil.

¹⁷ I thank Dr Won-Joon Lee, his staff and colleagues at NFS, Dr Nack-Eun Chung, Youn Kwan Hyun and his Biomedical Art students at Incheon Catholic University, and especially Joon Yeol, for being superlative fieldwork hosts in November 2018.

Gender Distribution

Gender representation in forensic science is a subject which is getting increasing attention (Houck, 2009; Barbaro, 2019). Considered by some to be another aspect of the CSI Effect, women in forensic anthropology programmes globally are in the majority. Within the total cohort, it has been noted that it is equally split between male and female practitioners. Primary and secondary roles/skills were then combined to examine gender representation across the four main work contexts as illustrated in fig. 38. The outer ring represents female practitioners, the inner male.

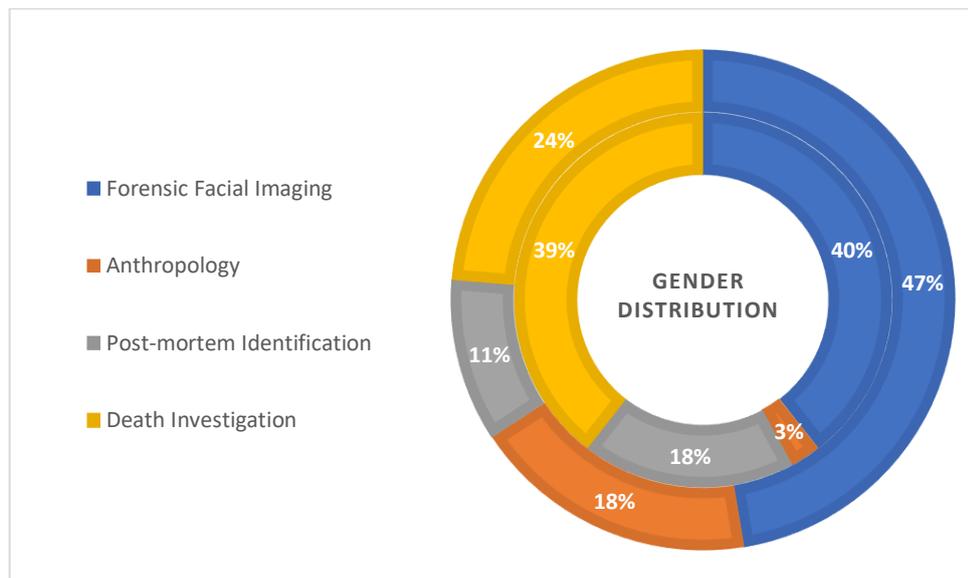


Figure 38: Gender Distribution across Work Contexts

Two-Group Narrative Analysis

The initial cross-sectional analysis provided a granular sense of distribution of skills across and within work environments. With imaging being the primary focus of this study, the participant group was then divided differently into two groups: **Group 1** (~35) is involved with imaging as a primary or secondary aspect of their work, and **Group 2** (~10) only engages with post-mortem imaging in a supervisory role (e.g. lab director, LE commander) or as a part of their work as a forensic analyst, pathologist or anthropologist. This distribution once again reflects a roughly two-thirds/one-third ratio across primary and secondary relevance to the central research questions.

Maintaining the primary focus on post-mortem imaging/representations, **the majority of analysis focuses on Group 1, i.e. those producing analytical or evidential material that is visual- or image-based**, with those in Group 2 providing a reflective view, as echoes or counterpoints to matters concerning imaging. The narrative analysis follows the basic structure of the interview framework, moving from professional experience to more personal perspectives, identifying major trends suggested by the data and culminating in a discussion focusing on the Motivation Scale.

Professional Experience

Within Group 2, about two-thirds are in full-time academic roles that provide forensic expert services to medico-legal and law enforcement agencies, and the rest are full-time law enforcement. All have at least a Masters-level postgraduate qualification in their primary field, or closely related to their current role.

Group 1 represents a greater diversity of roles distributed across academia, law enforcement, public sector, and private sector (technicians and freelancers, including volunteers, industry, and charities). This includes representatives of national forensic institutes in Japan and Korea; the Russian National Academy of Science; and in the USA, the Defense Forensics and Biometrics Agency, two Medical Examiners offices and Departments of Public Safety and NCMEC.

Training

The issue of training is as contentious as perceptions about whether Forensic Art is cost-effective or not (it is). Only one academic Forensic Art and Facial Identification programme is currently offered globally, at postgraduate level, at the University of Dundee, in Scotland. Eight participants are graduates of this programme (MSc and/or PhD) of which four followed Human or Facial Identification pathways and four are Forensic Art graduates.¹⁸

¹⁸ This suite of programmes was established in 2006 by Caroline Wilkinson as part of the Centre for Anatomy and Human Identification led by Prof. Sue Black, and became a hub for international students wishing to pursue academic training and postgraduate specialization in human identification, as well as offering CPD to members of UK and international law enforcement agencies. Alumni represent a global network of practitioners occupying positions in state agencies and institutions around the world. Prior to 2015, Facial Identification was a separate study pathway in the MSc

Most forensic artists practicing in the United States have undergone field training (short courses and workshops) offered by a range of practitioners.¹⁹ For the sake of comparison, workshops are usually equivalent to one week or forty hours. The UK academic year is thirty-nine weeks, and the academic year in the USA is approximately thirty weeks. P11 reports taking >400 training hours (ten weeks) and P25 reports 600 (fifteen weeks), equivalent to one college semester in the USA (P11, 2018; P25, 2018).

Artists with field training only state they need more training in basic anatomy, feature prediction and taphonomic change, as well as the opportunity to experiment with style in a guided way (i.e. not just self-learning) to feel more confident in carrying out their work.

Professional certification, accreditation, and membership

Even more controversial than training or the cost-effectiveness of Forensic Art as an investigative tool is the question of certification. While certification will not transfer evidentiary status to the generative or interpretative (vs comparative) work products within the full suite of forensic facial imaging methods (rendering generative or interpretative methods by definition counter-forensic)²⁰ and is not a requirement to practice as a forensic artist, similar arguments for or against certification characterize the debate for standards of practice (addressed further on), and are bound up with the nature of training and what constitutes expertise in this field, and who is tasked with professional recognition and moderation (i.e. trust, cognitive authority).

Seven participants currently hold IAI certification (out of a total of thirty-three people internationally at the time of writing), while another is IAI-certified in Latent Print. However, certification is also somewhat controversial on the basis that

programme at Dundee, but the degree has since been integrated as MSc Forensic Art and Facial Identification. Students can also follow a Medical Art focus.

¹⁹ Training undertaken by this group includes Forensic Art workshops (post-mortem, composite and anatomical sculpture) offered by Karen T. Taylor (TX, USA), Betty Pat. Gatliff (OK/TX, USA), Jorge Molina (TX, USA), Phillippe Faraut (VA, USA), Duncan Way (OPP, Canada), Marla and Kelly Lawson (GA, USA), Lois Gibson (TX, USA) and Stuart Parks (Idaho, USA and Canada)

²⁰ As P27b puts it, "...they're not going to use this in court because it's not evidence. You've got your primary identifiers and then you've got superimposition, which is more classed as a secondary identifier. And below that – way below that – is investigative tools. Which you wouldn't actually find in court." (P27b in Smith, 2020b, p.281)

the IAI requires artists to show evidence of ‘hits’ (positive identifications) as a measure of accuracy and success, which are exceedingly difficult to provide in unidentified post-mortem cases²¹, and which are in fact no indication of accuracy at all, as P50 passionately explains (Smith, 2020b, p.334), appealing to the critical importance of context in making such assessments.

Lack of regulation in the Forensic Art field however means that workshop attendees can make certification claims (versus the more accurate claim of receiving a CPD certificate) and even offer training themselves after minimal workshop hours or field experience, as well as some trainers offering ‘pay-to-play’ certification (P04, 2018).

As one UK-based respondent reported (P16, pers. comm., 2018), inclusion on the Expert Advisers (EA) Database requires demonstrable working experience in forensic cases, which is obviously a limitation for someone who might have a formal qualification in a forensic field but no case experience.²² So even with a formal qualification, aspiring forensic imaging specialists in the UK may still face significant barriers to entering the professional milieu if they are unable to secure mentorship that provides access to active casework, or wish to work independently of a law enforcement agency.

Other accreditation opportunities are anthropology-focused (see Chapter 2); one participant holds RAI Level I (craniofacial specialism) accreditation (and is the only person to do so), whereas another holds RAI Level III. Three forensic anthropologists are FASE and D-ABFA accredited respectively (P13, 2018; P31, 2018; P32, 2018).²³ Table 10 shows other relevant professional organisations of which participants in both groups are members of various standing.

²¹ Post-mortem work is impacted by particularly contingencies and conditions, time being a critical factor: it may take many years for a depiction of an unidentified decedent to be recognized, if ever. The time factor in post-mortem work seems to correlate with a general inattention/lack of urgency around such cases, which contributes to how easily such cases are shelved, and conversely, why they might be taken up as *causes célèbres* amongst the ‘Doe Nut’ communities (see Chapter 6).

²² As far as this research has been able to establish, specialist forensic services in the UK have been privatised, with the rationale of mitigating bias (P42 in Smith, 2020b, p.319). Where forensic imaging is concerned, UK constabularies have adopted E-Fit and VIPER systems for suspect-related facial identification work. None have full-time forensic artists on their staff although they may have an Imaging unit that produces EPE packages (as P42 does as an external service provider), with further protocols for video and other forms of visual identification set out by the Forensic Science Regulator.

²³ Of the D-ABFA accredited practitioners, one is based in ZA, the other in the USA. The FASE-accredited practitioner is based in ZA. Accreditation is not required to practice as a forensic anthropologist in South Africa.

Table 10: Cohort Affiliation with Professional Associations

International	National/Regional	Special Interest
International Association for Craniofacial Identification (IACI)	American Academy of Forensic Sciences (AAFS)	Organization of Scientific Area Committees (OSAC)
International Academy of Legal Medicine (IALM)	American Association of Physical Anthropologists (AAPA)	Facial Identification Scientific Working Group (FISWG)
International Association for Identification (IAI)	British Association for Human Identification (BAHId) (also BAFA)	Facial Identification OSAC
International Association of Computer Investigative Specialists	Anatomical Society (UK) Royal Society of Edinburgh	
Worldwide Association of Women Forensic Experts	Anatomical Society of Southern Africa (ASSA); South African Academy of Forensic Sciences (SAAFS)	
Organisation for Women in Science for the Developing World	Forensic Science Society Malaysia	
Forensic Anthropology Society of Europe (FASE)	Japanese Society of Legal Medicine; Japanese Society of Dental Sciences	
	College of Physicians (Iași Romania); Romanian Association of Legal Medicine	
	Investigative Committee of the Russian Federation; Russian Academy of Sciences	

Supportive Work Environment

All in Group 2 indicate a generally supportive work environment, in which keeping ahead of the latest imaging technologies/methods is valued and afforded, along with advancing knowledge, and experimentation/validation through practice. In South Africa, informal relationships between SAPS and FPS and academic service providers are a source of frustration for the academics involved, as P37 describes, “Although [university] management is supportive of the [forensic] teaching opportunity for the postgraduate students, they are expecting that we must bill SAPS and FPS for consumables and time spent.” (P37, 2018) The bureaucracy which delays or obstructs the conclusion of formal service contracts thus exploits academic values of education and commitment to social justice.

Within Group 1, a greater range of positive and negative responses was seen, along with a wide range of prior roles and parallel skills, including nursing, veterinary science, dentistry (including the production of dental prostheses); mass disaster management services volunteering; media and television work; medical illustration; and archaeological work for the museums and heritage sector.

Shifts between an ME's office to a civilian LE death investigation role, or transferring from sworn LE to freelance forensic art consultancy were both observed, along with multiple roles within a single post, where a participant might be assisting with other functions such as conducting autopsies or GPR surveys; working in crime scene management & mapping, or training other analysts. One participant with long-standing employment in an unrelated field is supported in taking personal days to do suspect composites for a local police department, which is time-sensitive and remunerated, while also producing post-mortem depictions on a volunteer basis for the local ME's office (P23, 2018) enabling her to keep active in the field but also demonstrates the ad hoc treatment of Forensic Art, from which lack of perceived value or adequate understanding of its methods as an investigative tool, or the poor past experience of other detectives might be inferred (P08, 2018; P21, 2018).

Freelancers report a significantly greater difficulty in accessing casework to those working within law enforcement, or those with a previous law enforcement role, suggesting significant in-group/out-group dynamics. Even those within law enforcement who have Forensic Art responsibilities report difficulties in finding time to complete casework at all (P04), either doing it after hours or using personal time like freelancer P23.²⁴ In contexts with massive caseloads like South Africa, practitioners express frustration with the impact of high turnover on the quality of their work and the time to problem-solve through experimentation or develop new or improved skills (P27a, 2018; P27b, 2018). This is more of a concern in post-mortem casework than for eye-witness work, due to different time-constraints informing each practice, as mentioned previously (see note 22).

Among practitioners based in the USA, the value of conducting more research and building capacity within LE contexts is recognised. There is support for

²⁴ Like South Africa, Canada only has two full-time forensic artists. They are based in the New Brunswick RCMP and handle composites as well as post-mortem work, yet the two countries do not have comparable caseloads. In other provinces, Forensic Art is part of other policing duties, as is the case with P04.

developing professional standards and oversight as well as developing future Forensic Art and Facial Identification capacity (the latter especially within the anti-terrorism environment). South African practitioners report that although this was generally true in the past, it is less so now, especially in Facial Identification, and the withdrawal of provincial co-ordination in favour of national oversight and slow recruitment of new members despite significant loss of personnel from Facial ID (P26, 2018; P27a, 2018; P27b, 2018, p.29; P28, 2018; P29, 2018; P38, 2018; P40, 2018). Participants report massive despondency and limited opportunities for promotion which force members to transfer to other environments where they may not have requisite skills but may achieve a higher rank, or they may leave the service altogether. P22 (Russia) confirms that research directed at forensic application is supported whereas university teaching is less welcomed because it is considered a distraction from the primary task (P22, 2018).

P21 (USA) makes an interesting observation regarding how roles in forensic imaging are distinguished with law enforcement, with 'Forensic Imaging Investigator' referring to a sworn role and 'Forensic Imaging Specialist' used for non-sworn practitioners, a clear separation of responsibilities. Sworn roles are considered higher status, and attract higher salaries and benefits that civilian members do not receive (P19, 2018; P21, 2018), which further contributes to the in-group-out-group dynamic *within* LEAs, as well as those offering similar services as external consultants.

In summary, despite clear opportunities to improve working conditions in the field, particularly regarding communication between colleagues, peers and stakeholders, a willingness and commitment to continuing self-education is critical for success. Mentorship and peer-to-peer networking is highly valued. Stories of professional success producing personal satisfaction exceed complaints, especially where individual members track and record their own successes or develop personal methods where operational ones are lacking. This suggests that resilience and initiative, especially hierarchical structures – a counter-forensic spirit – produces job satisfaction despite prevailing negative conditions. The key takeaways are the need for continued investment in research and capacity-building across all work contexts, and although practitioners are grateful to be involved in field, the scramble for even

the most meagre of opportunities creates maximum opportunities for skills/resources to be exploited.

Current Practices within Post-Mortem Identification and Facial Imaging

Investigating the consistency and standards of practice within global forensic deathwork contexts offers a way of ascertaining whether those involved in different collaborating environments in specific contexts fully understand and appreciate the roles and responsibilities of mutual stakeholders. This also elucidates how expertise and authority are shaped, performed and most importantly *recognised* within this work. These findings augment other work that provides more detail on how forensic science and medico-legal services are structured within different countries (Dirkmaat, 2015; Ubelaker, 2015) As Ubelaker et al. show, forensic anthropology or facial imaging is not considered a routine part of post-mortem investigation, and the ways in which national legislation caters for the scope of medico-legal investigations in different territories varies greatly. Once again, connectivity and communication across multiple agencies (or the lack of it) emerges as a leitmotif, a different but related expression of the breakdown between policy and practice described in the South African context in Chapter 3. What this boils down to is that the specialists that may be required in non-routine post-mortem investigations operate externally to core services, or they may not be available at all. Unless experts are formally recognised, consulting them produced issues of timing and trust which become amplified when the practitioner is freelance, with no history of law enforcement service (P25, 2018).

Service providers have internal protocols that govern their workflow, informed by the relevant legislation of that country. They may triage cases based on a variety of factors including special request, high profile, suspected identity, media pressure, likelihood of resolution and order of admission/receipt.

Imaging Modalities: Work Rates & Case Experience

The cohort reiterated that semantic differences are the source of protracted and unresolved disputes within the field, with a line drawn roughly between the

scientific/anthropology community that favours quantitative, statistical data, and those that recognise the limitations of such numbers, i.e. the danger of the average. An in-depth discussion of this issue is beyond the scope of a study of post-mortem depiction specifically, but it does go to the principles underpinning a practice: from what philosophical basis does one proceed to develop a methodology, and are we aware of the legacies and biases of the knowledge we count on? It also speaks to the relationships between modalities and how knowledge might usefully transfer between anatomical standards developed for facial reconstruction and craniofacial superimposition. P27a and 27b address this directly, whilst also recognising where methodological standards might deviate from what has been observed in practice, and where new research would be valuable (P27a, 2018; P27b, 2018).

In general, practitioners report more training practice than actual casework, except in high caseload contexts that employ full-time forensic artists.

For facial reconstruction, P22 (Russia) reports 160 completed cases, including museum work, whilst P43 (UK) reports 130 cases, followed by 100 and 88 respectively (P27a and 27b, ZA), with the remainder of practitioners completing fewer than ten actual cases. Reported work rates vary from as little as three days to up to a month, averaging one month for a 3D reconstruction and one week for a 2D reconstruction. The general view is that graphical work is generally less time-consuming than sculptural work and is more efficient in caseload-heavy contexts. Automated systems for facial reconstructions are not widely used within this cohort. P20 (Japan) and P22 (Russia) have developed bespoke algorithmic tools for their own contexts, with measurable success. Personal preference and availability of resources largely determine decisions to work in 2D vs 3D, manually or digitally. 2D drawing remains favored amongst those without easy access to 3D virtual sculpting, after which 3D traditional sculpting follows. Working on the skull directly with clay is increasingly unpopular, whilst an increase in using digital image editing software to generate or enhance sketches or depictions is reported.²⁵ Many report an increasingly agile translation between digital workflows in 2D and 3D but also acknowledge the importance of not only keeping up manual skills (P27b) for the

²⁵ Some practitioners optimise composite sketches for improved reproduction (increasing contrast of graphite sketches, for example) but archive a copy of the original with the agency, as a visual statement of record.

sake of maintaining this facility, but that it is also enjoyable, and practical should computer systems malfunction.

For post-mortem depiction, once again practitioners report more practice cases than direct experience, with South African practitioners reporting the highest number of cases (203), followed by an artist in the USA with 47. Average work rates range from a minimum of one hour to five days, with experienced practitioners reporting an average of two days per case. Practitioners report a similar work rate for age progression, with some suggesting this most closely aligned with post-mortem depiction, especially where digital image manipulation is concerned (P02, 2018; P50, 2019).²⁶

Post-mortem methods with reported success

Practitioners report the greatest success for craniofacial superimposition (up to 90% by P20); it is usually employed as an inclusion/exclusion tool and supported by scientific methods such as DNA, as P06 (Malaysia) reports. P43 reports a 65% success rate (leading to identification) for post-mortem reconstruction and depictions, whereas P24 reports 36 known successes out of a combination of 117 post-mortem, age progression and superimposition cases. Cases may be resolved by means other than the facial depiction, but without consistent feedback, it is impossible to determine whether such instances outweigh cases where a forensic depiction represents a critical turning point in an investigation.

Cases that produce results from a depiction or updated depiction after decades are particularly satisfying, representing an ‘against all odds’ success that is a defining character of Forensic Art. P46 (Wits ID Unit) affirms the satisfaction that comes from a seemingly impossible case, where success comes from unlikely details that indicate the value of context-specific methods and innovation that can come from a resource-poor, but idea- and commitment-rich environment.

²⁶ P40 (2018) (LE, ZA) describes producing dPMDS using software designed for producing suspect composites, and then further refining/customizing the image using digital imaging software (see fig.29b, Chapter 3).

Documentation and Reporting

Group 2 evidences more consistent use of both peer review and formal reporting. Amongst Group 2, submitting a formal report on postmortem facial depiction work (photo clean-ups or full reconstructions) is unfortunately rare. Peer review may occur within agencies or labs, but unless freelancers have a network that supports this, they tend to work in isolation. The importance of quality standardized photography in evidence collection, referring to facial images (for identifying features) as well as personal effects, is stressed. Data-sharing protocol is very uneven within the field, raising a concern about the safety of privileged and sensitive data. Reporting practices are revisited in Chapter 6, as related to lack of feedback and attendant frustrations about self-evaluation and external perceptions of the value of post-mortem facial imaging as an identification tool.

Standards and Regulation

No practitioners specifically mention the IAI guidelines for Forensic Art and Facial Identification (Richardson et al., 2010) as guiding their work. Scientific and practitioner literature is the main source of reference material with Krogman and Işcan (1986) and Işcan and Helmer (1993) the most frequently cited for skeletal and cranial analysis, and Taylor (2000) and Wilkinson (2004b) for practitioner methods, alongside training materials from recognized service providers. For those who work with post-mortem facial depiction methods, average-tissue depth charts, and decomposition and taphonomy studies for post-mortem depiction are essential resources.

Of the artists interviewed, most are generally resistant to (and frankly suspicious of) attempts to introduce standards to practice. P18 is of the view that standards are more applicable “for controlling the end product that we see,” (P18, 2018) which seems to suggest that some form of quality control should be directed at what type of image is circulated. There is general agreement that some professional standards would be useful, but specific criteria remain elusive. It is also difficult to understand how such criteria might be developed without considering the specific methods that produced a result. Standardizing methods is not about regulating technique but would allow artists to account for their decision-making processes in a scientifically justifiable way. As P49 suggests, there could be a benefit in “exploring

noteworthy differences that might not be [reflected] in the current standards, or in the literature. To find better ways of doing things from perhaps borrowing from how others do things,” pointing explicitly to the importance of heuristic knowledge (P49, 2018). P10 supports standards that allow for the accurate exchange of information between authorities and external service providers, a point which P02 reiterates as being particularly relevant in the case of freelancers (P02, 2018; P10, 2018).

The standards argument is as contentious as the certification one, and they are not mutually exclusive. A lack of regulation is generally agreed to reduce confidence in the field and contributes to the exploitation of both artists and victims, with no repercussions for those who conduct themselves unprofessionally (P43). The benefits of standards and regulation are appreciated, but with so many existing barriers to entry, particularly with qualified freelancers, lack of regulation currently enables the few work opportunities that do exist, which develops a professional resumé and possibly paves the way for accreditation or certification. Others appreciate the freedom and agility that is necessary in a rapidly evolving field, at least where technology is concerned; the thought of being held to standards that are slow to change is anathema (P50, 2019). And as P43 and P19 both observe, law enforcement environments are generally slow to adopt new methodologies regardless (P19, 2018; P43, 2018). As it stands, the field of Forensic Art seems more comfortable with self-regulation. Its inability to reach consensus on the issue is the subject of decades of valiant but ultimately failed attempts by various practitioners, with the effect that Forensic Art may be seen as a counter-forensic operator within the field of forensic identification.

Motivations

Practitioners surveyed for this study present a diverse set of motivations for pursuing this work, including the opportunity presenting itself (P19, 2018; P49, 2018); intellectual/creative curiosity (P03, 2018); being service-oriented or interested in applied research (P02, 2018; P13, 2018; P51, 2019); bringing resolution, understanding and answers to families; being externally identified by a supervisor (P24, 2018); or executing a career-pivot based on improved access to training and information (P51, 2019), or a combination of the above. For the artists, many cite a

‘natural drawing ability’; an interest in drawing faces from early teens; or looking for ways to incorporate graphic design/visual art training this into a non-commercial career, or finding an internal opportunity within LE to move into an environment where these skills may be utilized. However, if they had some prior exposure to composite sketches seen on TV (two mention this), no one had a developed knowledge of Forensic Art prior to entering the field.

Regardless of their personal journeys, no one interviewed rests on their habits or routines; all are constant knowledge-seekers who strive to remain up to date with techniques and standards as far as their circumstances permit. Most imaging practitioners express frustration around theoretical standards that are not easily transferred into practice, which suggests more (or different) research and literature is necessary to visually demonstrate anatomical relationships particularly for those not working within, or in close relationship with academia.

A Likert-style scale, with a value of 1 representing ‘Get the Bad Guys’ and a value of 7 representing ‘Victim Advocacy’ further illustrated values-based motivations. Respondents selected a node on the spectrum on or between these two positions or provided a narrative response in lieu of a numerical value if they did not agree with either option. Additional comments in support of a score were welcomed. A total of 51 practitioners answered this question, of which 47 offered a numerical score, as illustrated in fig. 39. Additional data and narrative responses are included in [Appendix 4](#).

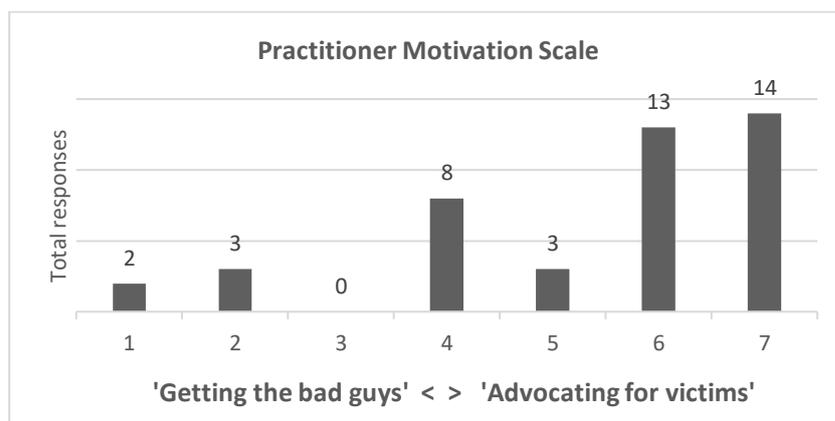


Figure 39: Motivation Scale Distribution of Scores per Value

As the distribution of scores shows, the balance is largely skewed towards victim advocacy, which suggests that the sense of justice operating within the forensic deathwork field is characterised by a stronger humanitarian drive than it is by ‘putting people away’. The majority of practitioners who work with post-mortem identification/depiction are women, reflecting similar tendencies in forensic anthropology.

This general tendency was also expressed when the data were resolved according to work context/role, and then when considering whether the country or state in which a practitioner is based actively carries out death penalty sentences.²⁷ Practitioners who work predominantly in suspect composites or Facial Identification tended toward the left side of the scale, and those who work in post-mortem identification tended towards the right.

Language, Affect and Knowledge in Forensic Deathwork

The Open section of the interview framework elicited the most discursive responses, offering dense and thoughtful perspectives that cross-referenced with other parts of the questionnaire. Questions sought to establish if participants are self-critical in their use of language in their professional context, and how this reflects or translates into concepts of postmortem personhood or social equality. A focus on key cases or noteworthy experiences offered insight into what aspects of forensic deathwork are particularly affective or otherwise valued by this set of respondents, and as such begins to tease out the limits of tolerance around the post-mortem body and brings focus to the emotional and heuristic (i.e. tacit) aspects of this work. *Speaking Likeness* offers the most granular reflection of these data.

The names we give²⁸

The interview framework sought to draw out how language is used within the forensic art and deathwork community, with reference to descriptive terms used to refer to both the dead body/remains and physical appearance, based in the

²⁷ See [Appendix 4](#). South Korea technically still has the death penalty, but is considered ‘Abolitionist de facto’, so the country is classed as not actively carrying out capital punishment sentences. There are still 61 people on death row in that country (Shin, 2018).

²⁸ This relates to a thematic pathway in *Speaking Likeness*

understanding that language is both symptom and trace of the implicit biases within our social and cultural relationships. As a product of society and culture, scientific practices reflect these biases, but they are less frequently interrogated within science compared to the arts and humanities. In other words, language is a signifier of the hidden curriculum at work within and across various institutional structures. Accepting that language is as dynamic as it is a signifier for taxonomic order, attending to it with this kind of critical lens is thus capable of revealing structural and systemic inequality in our terms of reference, and possibly reforming them to avoid perpetuating negative values.

In contrast, ‘bodily materialities’ addresses instances where the fact of the body itself cannot be avoided or abstracted through forms of presentation (visual, language) or when other objects might act as proxies of individual personhood with forensic identification potential in the absence of a body. These occasions may be a source of emotional burden for practitioners, especially if they must interact with family, offering additional instructive lenses into questions of personhood.

The most controversial and discomfiting issue is how race should be referred to (if at all) within post-mortem identification, reflecting a bigger issue in the human biological sciences. The close relationship of post-mortem identification and facial imaging to biological (physical) anthropology means that terminology relating to ancestry assessment developed within that discipline transfers into facial imaging, its scientific source conferring cognitive authority.

Debates about the continuing use or outright abandonment of certain terms reaches different environments at different times, a process reflective of broader socio-cultural norms, or the leadership of certain influential individuals. As P03 and P42 assert, greater sensitivity exists within academia than among law enforcement, which then transfers to practitioner communities associated with either work context or role respectively, developing habits in either direction (P03, 2018; P42, 2018).²⁹ Law enforcement contexts demand unambiguous language of a similar ‘plain talk’ kind used for reports aimed at a lay audience (i.e. court or next-of-kin). However, racialized descriptors are far from neutral, nor are they forensically meaningful or

²⁹ Both are academically-trained, independent practitioners based in the UK with close working relationships to both academia, law enforcement and related stakeholders, and thus represent ideal pracademic boundary figures, able to move between professional cultures and develop relational perspective.

internationally consistent.³⁰ As forensically meaningless as racialised terms might be, as social and cultural constructs they are fluid and contextual and thus full of meaning, demanding audience sensitivity (P01, 2018; P08, 2018, p.08).

Differences in interpretation between the terms ‘body’, ‘corpse’, ‘cadaver’ or ‘remains’ were captured, with ‘decedent’ emerging as the overall preferred term, referring explicitly to ‘a person who is dead’ (personhood being the operative value), alternating with ‘individual’ or ‘unidentified [male/female].’ For most respondents, foregrounding and restoring a sense of personhood to the anonymous dead represents a primary motivation for choosing this work. However, within humanitarian work, ‘human remains’ is the preferred term; phrases like ‘dead bodies’ should be avoided as it is considered impersonal and undignified (P46, 2018), suggesting an awareness of the ontological implications of object~subject transfer.

An implicit sense emerged that nicknaming beyond locational referencing is generally considered inappropriate, but some ambivalence is at work here. As P08 pointed out, when cases do get nicknamed in the press or by online communities, they become more easily searchable online. One forensic artist (P23, 2018) refers to a current case as ‘our friend’ when in conversation with her immediate colleague in the ME’s office, inferring a level of care and familiarization, which gets to a critical part of this job seldom talked about, that is, in order to figure out who someone is, practitioners get to know the unidentified dead in ways neither they or their families are ever likely to. This can produce a level of affective intimacy especially when physically handling material associated with the case (P08 in Smith, 2020b, p.131) which, coupled with the development of highly sensitive and personal information through the investigative process, contributes to feelings of responsibility as well as a sense of connection that engages empathy, but always within the bounds of professional service so perceived.³¹ Very few of the respondents in either group have regular contact with families, although this does happen from time to time.³²

³⁰ For example, the South African term ‘coloured’ and historical American ‘colored’ have completely different origins and signifying power and have been the unintended cause of unspoken tensions in some early dealings with USA colleagues until the problem was identified and addressed.

³¹ Some anatomy schools encourage their students to name their cadavers, a clear example of the ‘hidden curriculum’ at work. P32 (2018) mentions this as being intended “to bring the individual home” (ie make them relatable as a person) but that personally she finds it “a bit disrespectful.”

³² Contact with families is the role and responsibility of the relevant authorities tasked with custodianship of the deceased person (Coroner’s office or ME in the USA; FPS in ZA) and the investigating officer, if applicable. Participants prefer to avoid any contact with families if possible. Where families contact the specialist service providers surveyed here, they are referred back to the

The way the deceased are presented to families for identification or viewing is generally consistent across international experience as reflected by both groups. P46 and P49 agree that while conducting visual identification is “an extremely stressful process for family members,” it can aid the mourning process, along with allowing access to community members to carry out cultural traditions and practices prior to releasing a decedent from a medico-legal facility. Further, they suggest that virtual facial restoration via post-mortem depiction “would be of great value to the identification of the deceased, to make it less traumatic, and also more accurate” (P46, 2018; P49, 2018). In Malaysia, visual presentation of the body to family is generally avoided to mitigate trauma and rejection; in Romania, visual presentation is generally post-autopsy, with only the face revealed and with a minimum of facial restoration (cleaning, closing the eyes and mouth) to avoid compromising future investigations. P25 makes a clear semantic distinction between a ‘visual identification’ and a ‘viewing’, with ‘identifications’ inferring legal status which is only possible through scientific means, whereas viewings are conducted for families on request and only under certain circumstances, in support of the grieving process (P25, 2018).³³

Affective tensions

Some level of emotional investment is unavoidable in forensic deathwork, with some practitioners expressing feelings of responsibility to the individual’s family as well as other stakeholders in the investigation. This is particularly marked in post-mortem work but is also inferred by practitioners working with eyewitnesses to produce composite sketches. Victims of crime (identified or not) therefore engender a specific kind of care-taking, which has direct repercussions for next steps (identifying culprits, serving justice).

Even without direct interactions with families, their absence is a persistent and demanding presence. As with humanitarian forensics or DVI work, surviving

relevant authorities, unless it involves the collection of antemortem data for comparison (no participants are involved with this although some have colleagues who are). Ensuring that these boundaries are protected is an essential condition of rendering an effective service, as these services are only necessary on the worst days of anyone’s life and may also be a legal requirement in some contexts.

³³ The process of conducting ‘visual identification’ in South Africa is described in detail in Chapter 3.

family members are perhaps the most potent feature of forensic deathwork, whether they are known through searching for missing loved ones, or as anonymous as the unknown decedent whose face is being crafted for public consideration. They are the invisible client. Both groups consistently report that their primary objectives are to assist in achieving positive identifications, not contributing misleading information, and ultimately returning ‘sending decedents home’ to their families. For P13 (a scientist), diligence, thoroughness, and peer review are key tools managing the associated pressure (P13, 2018). Participants in Group 1 express the emotional impact of the work more directly. One describes a general decrease in optimism (P08, 2018); a shift from liberal-mindedness to a more conservative position (P19, 2018); questioning human behaviour and decision-making, and supporting capital punishment (P11, 2018; P19, 2018); and ‘indignation’ (P19, 2018).

The ability to detach is valued. For those in LE and adjacent services, counselling and debriefing are offered, often mandatory and as practitioners report, taken up with varying levels of enthusiasm. A key frustration with mandatory debriefings is the assumptions of the counsellor, and the generic nature of the sessions (P27a, 2018; P27b, 2018; P41a, 2018; P41b, 2018).

Bodily materialities: subject or object?³⁴

Initial reactions to the question, ‘Is the dead body a subject or an object?’ suggested it was somewhat philosophically over-invested, but it nevertheless provoked some genuinely self-reflexive responses where participants either admitted having ‘never thought about it before’, or revised their initial answer through a kind of thinking-aloud monologue.

Unless directly involved with body recovery or some form of support to the medico-legal process, those in Group 1 are less frequently in direct contact with the dead/human remains than those in Group 2. From an analytical perspective, the dead are acknowledged as existing on an object~subject spectrum. Responses reflect the various ways in which practitioners, particularly those with scientific training (predominantly in Group 2), become disciplined around the dead in order to engage

³⁴ As with the previous section, ‘Subject or Object’ is a thematic pathway in *Speaking Likeness*.

necessary objectivity and mitigate emotional attachment, but not at the expense of recognising individual life/rights. A similar imperative is recognized throughout Group 2, yet their responses tend to more explicitly identify with the personhood of the unknown individual, and speak powerfully to moments of transference where a case, through its material evidence or representations thereof, suddenly becomes a recognizable and relatable person, whether through handling objects from the recovery scene, or through manipulation of clay or pixels a plausible face begins to suggest itself. Both P04 (LE, Canada) and P08 (LE, USA) refer to post-mortem forensic art as concerned with ‘reanimation’ (as do P19, P27a, P27b in various ways) as an essential process in reinstating personhood, but where P08 expresses the transfer from object to subject in an embodied way through direct touch, for P04 the process of reanimation seems to offer a shield from the potential emotional burden of the work, seeing it purely as a matter of formal interpretation (P04, 2018; P08, 2018).

Clothing or personal effects function as powerful proxies for individual personhood, where might infer a belief system and thus indicate ways in which remains might be appropriately handled (P13, 2018). In a South African missing person case, a forensic artist who produced a relevant depiction was contacted by the family requesting she adjust the clothing in the image. About two weeks later, the individual was located based on this revised depiction (P30, 2018). Clothing was also reported as useful in cases of unidentified juvenile remains in South Africa with a high concentration of child disappearances (P32, 2018) and in a fire case involving an unidentified child in the USA (P23, 2018).

For some practitioners, certain experiences pierce the veneer of professional objectivity, and although it is rare to find accounts of this in the scholarly literature some interviews revealed a desire to share these experiences. Children, unsurprisingly, are frequently evoked, especially those that remind one of one’s own children and particularly when they are of similar ages (P37, 2018; P41b, 2018): “Those were the only ones I ever ‘took home.’” (P37, 2018). Faces were, somewhat surprisingly, less of a concern, although P37 described a student who was distressed at the sight of preserved ears on an otherwise defleshed skull; and her own aversion to encountering preserved eyes (a feature of personal significance to her) in otherwise decomposed remains (P37, 2018). But sometimes it is a relatively banal

object found ‘out of place’ in a perverse assemblage of the after-effects of violence that functions like a material signifier of Roland Barthes’ notion of the photographic *punctum* (Barthes, 1993), such as a balloon retrieved from a child’s pocket (see [Appendix 4](#)).

Yet of the all the individually humanizing features encountered in both anatomical and medico-legal contexts, nail polish is the most frequently mentioned (P10, 2018; P31, 2018; P37, 2018; P41a, 2018; P41b, 2018).³⁵ For P10, it was a dissection-hall cadaver, rendered doubly potent as it was also her first encounter with a dead body. For P37 and P41a, it was nail polish on toenails specifically. Such accounts work against the presumed process of desensitization believed to result from a combination of trained professional objectivity and prolonged exposure to a particular working environment, akin to what P20 infers about the “special feeling” he used to have when analysing tool marks on the bones of homicide victims having “decreased over time” (P20 in Smith, 2020b, p.219). Yet a recurrence of affect was also reported, resulting from specific exposures related to past or personal experience, such as a dissection workshop where a respondent was faced with a new (to them) cadaver preservation process which rendered subjects more life-like (P05, 2018).³⁶ And recalling how some artists describe the object~subject transfer happening in the forming of a relatable face, the intimacy of touch can make a practitioner doubt deadness itself. In diverse ways, these accounts support Schwartz (2015, 2013) and Troyer’s (2007) observations that the dead body does not only signify in symbolic terms; it means *as* matter, and that the shift from object to subject, i.e. the reinstatement of personhood has a particular potency when described in terms of direct interaction with the materiality of remains in a mortuary, lab or other investigative setting such as the forensic artist’s studio, versus photographs of the same. These accounts illustrate the dynamic and cognitively demanding vacillation between subject and object that the dead represent, which as Walter (2005) describes, requires a triadic process of mediation between professional and public realms invested in the individual story that particular types of deathworkers are tasked with telling.

³⁵ With the exception of P10 (an anatomically trained forensic artist), all respondents who mentioned nail polish work as forensic anthropologists or biological analysts. See [Appendix 4](#).

³⁶ This has also been my personal experience, described in *Speaking Likeness* as P00.

Valuing heuristic and tacit knowledge

Except for a single academic postgraduate programme in the UK, Forensic Art training occurs through short courses, professional workshops, and ongoing mentorship, with the United States representing the most active Forensic Art community with the most diverse group of practitioners operating across different work contexts. Across both groups, the most heavily emphasised point, directly or by implication, was the importance of direct experience (P09, 2018; P11, 2018; P17, 2018; P20, 2018) for which book-learning provides an important foundation but is never a replacement (see [Appendix 4](#)).

A critical skill is the ability to communicate with a variety of stakeholders – scientists, specialists, investigators, justice system – and although participants report relationships with stakeholders as being generally positive, they also express great frustration when such communication fails. Collegial and peer-network relationships are especially cherished because some practitioners, especially freelancers, report feeling isolated, especially without access to academic research or anthropological collections that provide invaluable empirical study opportunities. Experienced practitioners function as mentors, reflecting aspects of traditional craft/apprenticeship traditions. Those within law enforcement, particularly in South Africa but not exclusively, advocate for exposure workshops, to inform investigators of specialist services, especially as forensic anthropology or art are not part of routine medico-legal investigative protocol. The importance for continued learning and keeping ahead with new developments is stressed, but with limits. The need for practitioner guidelines and protocols are recognized, but experimentation does occur on the job within law enforcement specialist services which may lead to new techniques (P41b, 2018) but without the same kind of regulation, oversight or visibility through publication that exists in academia or other institutions, again highlighting the importance of heuristic discovery and accessing tacit knowledge.³⁷ This is akin to practice-based research within the arts, which is difficult to anticipate and capture through standard protocols and thus may stay hidden. A key emerging theme is the essential need for a multifactorial approach for complex identification

³⁷ See Chapter 6 for a discussion of tinkering.

cases, accompanied by excellent communication and data-sharing, but also the need to manage unrealistic expectations from other medical professionals.

Part 2: FPO focus group

The objective of this focus group (n = 15) was to gather qualitative data about the **relevance and viability** of post-mortem depictions to their workflow, focusing on cross-cultural responses to an array of previously published post-mortem depictions by a selection of recognised forensic artists working in various styles and media. These data informed the production of experimental dPMDs for this particular environment but also elucidated the ‘limits of tolerance’ that might exist for post-mortem representations from a group with extensive (and possibly singular) experience as mediators between the post-mortem faces of those in their custody, and the families that must identify them.

The rationale for engaging with this group was to capture and reflect on their direct experience as public-facing representatives of the day-to-day work of medico-legal investigation. Their roles require them to enact legislation and protocol, yet the conditions of their facility (caseload, infrastructure, training, experience, beliefs etc..) might affect how required standards of practice are met. They are often overlooked as voices of authority as they seldom have any academic training. Yet they perform a range of essential tasks associated with post-mortem identification and representation, including visiting scenes, assisting at autopsies, and liaising with families, police and funeral industry representatives (see Chapter 3). There is a bureaucratic landscape populated with a myriad of forms and acronyms and simultaneously an intensely emotional one for families attending to identify loved ones. Bureaucratic management and emotional engagement are traditionally incompatible processes and it was necessary, through exposure to this space, to acquire a new vocabulary of spoken and unspoken cues in order to fully receive its messages.

Materials and Methods

A sequential array was designed using ten post-mortem depictions sourced from various online sites, either from cases published in the media, or from forensic artists' personal websites. It was important that the practitioner was a professional or recognised in some way through their active work or profile within the field, producing 'successful' images and/or contributing to the professional and public conversation around post-mortem images in various ways. In other words, they all represent an established presence in this field. Further criteria included selecting faces that roughly reflected the Cape Town population and a variety of visual styles (lack of standardisation), techniques (hand-sketched, digital, combination) and presentations (colour or grayscale), that are present within this work. The success of the depictions (whether they had assisted in establishing a positive identification or not) was not indicated. In addition, each depiction contained a feature of interest known only to the researcher, informed by sample cases selected for dPMD from the records review (as described in Chapter 3), and case review discussions from workshops, conference sessions and fieldwork, on which it was hoped the group might comment.

The array was designed as a ten-page A4 format scoresheet that set each depiction on a single page with space below to record scores (see Appendix 8) according to four values – realistic, pleasing, respectful, believable – that are considered fundamental to the 'work' (objectives, function) that a post-mortem depiction is expected to do. If images were originally published in colour, this was retained.³⁸ Score values were designed to reflect a technical and ethical spectrum that also acknowledges the aesthetic as an additional factor that impacts circulation and audiencing.

Fifteen officers worked in pairs but recorded independent scores between 0 (not at all) and 10 (extremely) for each value (Realistic, Pleasing, Respectful, Believable), repeating this process for each image. After the session, these scores

³⁸ This is important to note as depictions may have been originally produced in colour but only widely reproduced in grayscale. Prior to the shift to digital news media, it was generally accepted that such forensic depictions would be reproduced in grayscale, and colour was only to be included if reliable and with particular identification value (Davy-Jow, 2013; Wilkinson, 2014, 2015b; P19, 2018; P27a, 2018). There have been cases where amateur artists have attempted to 'refresh' cold case depictions they have found online but have introduced inaccurate colour (P19 discussed personal experience with this issue). This is bad practice as it makes unjustifiable assumptions and may mislead the search.

were aggregated and compared to assess how depictions performed relative to each other.³⁹ Officers were encouraged to include comments to support or replace numerical scores if they felt a qualitative response was a more appropriate representation of their opinion than a quantified one, echoing the Motivation scale described in the previous section.

Table 11 presents the source images for experimental array, with any modifications indicated in **bold**, along with country of origin, visual technique, and mode of presentation (grayscale or colour).

A debriefing session/open discussion followed in which FPOs provided great insight on their experiences of operational processes both pre- and post-FPS management (some had also worked in the facility prior to 2006 when medico-legal mortuaries were managed by SAPS); public perception of this work; and proposals for improved service delivery. This was audio-recorded for the purposes of transcription and is cited directly. In the interests of parity, it was decided not to identify anyone by name in the transcript. All but one recorded their names on the scoring sheets and/or session register. For these reasons, the transcript uses the generic identifier ‘FO’ (Forensic Officer) for the various respondents in this session. It should not be taken to indicate a single voice. Where a group of officers are debating a point amongst themselves, they are distinguished by numbers to indicate different voices. The transcript includes indications of non-verbal communications and inter-group dynamics as these tell a critical part of the story of the institutional culture of FPS, and the working relationship these officers have with SAPS colleagues, as well as the other stakeholders with whom they interact. Retaining the tone and manner of the exchange, including phrases and expressions from Afrikaans and isiXhosa that are characteristic of vernacular English in the Western Cape, is a material reflection of the spirit of this engagement.

³⁹ The decision to get members to work together was anticipated ahead of the session, with a view to doubling as an ice-breaker if officers seemed reticent to engage, or if certain voices dominated the early part of the discussion. Based on an assessment of responses to the session’s introduction, it was decided the exercise would be more effective if officers were invited to pair up. The risk that this may influence scores, as members may collude and write the same thing, especially if paired with a more senior member, or stronger personality, was acknowledged, but considered worth taking. The importance of scoring and commenting individually was therefore repeatedly stressed. More officers were intermittently present as informal observers, obviously curious about the process.

Table 11: Post-mortem depictions selected for FPO focus group⁴⁰

	STIMULUS	Visual Technique	Original Presentation	Experimental Edit	Origin	Practitioner context	Source
1		Pencil sketch	Grayscale	Redact practitioner signature	USA	Freelance, ex-LE (sworn)	Personal website
2		Pastel sketch	Colour	None, image as found	USA	LE (civilian)	Social media
3		Digital sketch with photo montage	Grayscale	None, image as found	USA	Freelance, ex-LE (sworn)	Personal website
4		Digital photo-edit with montage	Colour	None, image as found	South Africa	LE (sworn)	Media reports
5		Digital sketch with photo montage	Grayscale	Redact agency badge	USA	Freelance, ex-LE (sworn)	Personal website
6		Digital photo-edit with montage	Colour	None, image as found	USA	Charity/NGO	NCMEC website
7		Digital photo-edit with montage	Colour	Redact practitioner signature	USA	Freelance	Social media
8		2.5D digital montage (screenshot of 3D reconstruction, digitally textured)	Grayscale	None, image as found	UK	Academic, researcher	Media report
9		Digital sketch with photo montage	Grayscale	None, image as found	USA	Freelance, ex-LE (sworn)	Personal website
10		Digital photo-edit with montage	Colour	None, image as found	UK	Freelance, academically trained	Missing Persons UK

⁴⁰ Practitioners represented (study participants and affiliations noted in bold): **Natalie Murry** (1); Houston PD/Lois Gibson/ (2); Michael W Streed (3, 5, 9); **SAPS VIC/Edward van der Westhuizen** (4); NCMEC (6); Carl Koppelman (7); **University of Dundee/Prof. Caroline Wilkinson** (8); **Tim Widden** (10)

This was quite a large group and clearly some officers were reluctant to speak openly, either due to interpersonal or hierarchical dynamics within the group. However, this was more than compensated for by several very engaged members. The first thirty minutes or so was spent establishing trust and mutual recognition of our work in this field through sharing experiences and anecdotes, before image-scoring commenced. The researcher shared some of the challenges to visual identification from her personal observation and conversations with management at the facility. Trading stories became a way of seeking opinion or affirmation as the discussion proceeded.⁴¹

Themes that emerged in this initial conversation also covered challenges in sharing information from the recovery scene with SAPS; seeking other identification opportunities beyond the standard procedures; the lack of active investigation to find next-of-kin by SAPS; how an Unknown person moves through the system; and the use of other anatomical features and personal effects to assist the visual identification process (next-of-kin requesting to view marks on the body, tattoos, any deformities, (male) genitals and feet). All these would be revisited in the debriefing/open discussion. These insights benefitted the critical reflection of the records review process and enabled greater understanding of the aesthetic and ethical impact of such images in a racially and culturally diverse context, as well as their potential role in an identification workflow in the context of death investigation more generally, producing knowledge which is ostensibly transferable to other similar environments both locally and internationally.

Results and Group Discussion

Numerical image-scoring notwithstanding, the data collected during this session is essentially qualitative in nature. Respondents made use of the full scoring range. All depictions received the maximum score of 10, and one (Depiction 6) received a 0, yet this was also one of the top two highest-scoring depictions overall, alongside

⁴¹ It was telling that the first anecdote about the challenges of visual identification involved a case of Community Assault, where the victim's face was largely destroyed. The officer was equally concerned about the practicalities of this situation as he was with the unavoidable emotional impact on the family. Community Assault is a type of assault common in South Africa and described in Chapter 3. It is usually associated with vigilante justice for alleged crimes perpetrated within specific communities and reflect frustrations with, and mistrust of the police.

Depiction 10. Depiction 2 received the lowest mean score for realism and aesthetics (6.3). Depictions 1 and 5 also scored low for aesthetics. Depictions 4, 6 and 10 scored the highest for believability, and Depictions 4, 8 and 10 scored equally highly for realism, with the group finding Depiction 10 to be the most pleasing overall. The relationship between scores and comments provides further insight into the serious consideration these images were given, and that they signify in excess of their technical requirements. Table 12 presents the depictions in ranked order according to total average score, alongside comments for each value where these were offered.

The visual array solicited responses which clearly demonstrate the effects that photographic technique can have on the facial depiction process. Three clear directives for improved operational efficacy and service emerged from this conversation, described below. All quotes are from the debriefing transcript.

A discussion around Depiction 10 opened the door to a conversation about optimal techniques for post-mortem facial photography and visual presentation to next-of-kin, whilst also indicating a healthy collegiality in how invested this group is in improving their skills and public service. Most of all, FPOs welcomed the opportunity to have a forum in which their views were heard and recorded with a view to implementation, but the discussion began with the images themselves:

FO1 to KS: Why does the deceased look like he's smiling in the last one?

FO2: When you do visual ID, some people do look like they're smiling...

KS: [to the wider group] Do you think he's smiling?

FO3: Yes...

FO4: Maybe he had a stroke or something?

FO5: But you get images like that. You get actual deceased coming in looking like that.

FO6: And he's shifting to the left.

Table 12: Post-mortem depictions ranked in order of preference, with comments

	STIMULUS	TOTAL AV. SCORE	REALISTIC	PLEASING	RESPECTFUL	BELIEVABLE
10		8.68	<i>Too real; displeasing (6)</i>			
6		8.68	<i>looks like two different sides of face* (n =2)</i>	<i>This imaging allows me to not feel attached (8)</i>	<i>Imaging is straight to the point/purpose (8)</i>	
4		8.15	<i>too real; not an image to be remembered (5)</i>			
8		8.15	<i>Clear facial image* (n =2)</i> <i>Eyes creeps me out; too cold and real (9)</i>	'yes' (9)		
3		8.05	<i>Too perfect*</i> <i>Will a family believe us when we show body? (9)</i>			
7		7.68	<i>blurry (8)</i>		<i>looks like an image on a funeral pamphlet (7)</i>	
5		7.63				
9		7.45	<i>Eyes come across animated (7)</i>	<i>Not very pleasing due to colour; too dark; image looks too grey overall, too flat (5)</i>		<i>still identifiable to family (no score; n =2)</i>
1		7.28				
2		6.7	<i>too artistic (6); faded (5)</i>	<i>nice to look at but not for this purpose (7)</i>		<i>too animated (6)</i>

*Starred comments indicate those given in lieu of a score; those given in addition to a score includes the associated score in brackets.

This is also indicated in Depiction 4, but interestingly, both depictions exploit the three-quarter view, which is optimal for recognition, and both these images received high overall scores (top 3). This discussion supported the records review findings: basic training in post-mortem facial photography represents a critical intervention towards improved service delivery. Along with improved visual identification presentation, this is a skill which this group clearly wants to improve.

An attempt to engage the group on the inclusion of personal effects in depictions, with reference to Depiction 7, also facilitated a discussion about the creation of unauthorised facial depictions by avocational practitioners who use social media to circulate them. This was met with some disbelief – “*Sjoe!*”, “What?” – yet the value of social media and smartphone technologies was recognised as a viable way to reach many people. Later, an officer returned to this issue, offering a valuable caution against assuming literacies and English competency across generations, and insisting we don’t forget this.

Asked how frequently they are faced with issues like next-of-kin not having adequate or appropriate documentation, or people making illegitimate claims to a body – ‘All of them!’, ‘Five times a day’ – two topics dominated. This group had all experienced various ways that “desperate” foreign nationals make fraudulent claims to (known) decedents in order to appropriate their identifies, and thus legal documentation.⁴² People swapping the photo in their own identity document is also common for reasons of vanity, which FPOs find equally amusing and frustrating.⁴³

In a move typical of the South African context, where sophisticated technology and indigenous knowledge systems operate hand-in-glove, an officer raises the issue of the importance of maternal determinations of heredity within his culture:

FO: [I]f for instance I impregnated a woman, it is acceptable in my family that my mother, or my aunt, or anybody that is older and close to my mother, will be the ones that identify whether the child is related to my bloodline or not ... like they look at the feet and other family characteristics. So I will advise that we go for this, because especially – my colleagues will agree or disagree with me – but it is mostly black families who will tell you, ‘We wish to see the feet.’ Or something like that.

⁴² They claim the identity of a decedent is incorrect and that *they* are in fact that individual.

⁴³ The introduction of smart ID cards is alleviating this issue somewhat as they are much more difficult to alter.

The group disagrees with pursuing this – “They [the police, courts] won’t recognise it” – but this clearly relatable point opens a line of enquiry into what the group believes would better enable the work of visual identification for themselves and for next-of-kin:

FO: I think sometimes that people are obviously very emotional. With the post-mortem changes, they are sort of like... disbelief. That it can’t be their guy. Some people, they come one by one. I mean, they're alone, with nobody else. Obviously, I inform them that, ‘If you’re not 100% sure then we can’t proceed with the process.’ So I’ve noticed that also, [...] with the skin discolouration and all that; the sunken eyes, especially after the post-mortem, if it’s been a while, and they had to now get someone ready, [...] like another relative that can maybe confirm. [...] Isn’t there another way? Ok obviously, people are not financially in a state to pay for DNA, so fingerprints, if they don’t show up in the system, what then? Because that’s the only two options that I know, other than the dental stuff. I don’t know of any other options.

This comment shows lack of awareness in respect of forensic imaging methods: even though they are a recognised methodology within identification protocol in South Africa, they are simply not *seen*. The group sees the value of dPMDs in supporting visual identification, but perceptively, expressed concern about whether families would challenge them about the perceived ‘perfection’ of the images (see comment on Depiction 3) compared to the actual state of the body. Ultimately, they agreed amongst themselves that families would understand this discrepancy if it was explained to them (FPO transcript, 2018, p.13)

In respect of presentation of post-mortem depictions, grayscale (‘black and white’) was insistently preferred over colour, as long as the tonal contrast was not too flat. Discussing Depiction 9, one FPO declared, ‘It’s like, *too* black, like a horror movie!’ and another responded with the very insightful and quite poetic, ‘So it’s a ‘dead’ picture?’ Despite the highest scoring depictions (10 and 6, and 4) produced in colour, it is perceived as generally distracting. Black and white is considered “softer,” more forgiving of “distortion,” while preserving useful details. It was also considered “cooler” than colour (in the aesthetic sense) and conducive to memorial/honorific function: “You can look at a black and white picture and stare nicely at that picture. It’s like a good memory of that person.”

‘Realism’ prompted the majority of comments, with ‘believability’ attracting the fewest; it may be that the group found it difficult to meaningfully distinguish between these values. Of the total collection, depictions that retained strong photographic textures were preferred over those that were more obviously hand-drawn, such as Depiction 2. This was the lowest scoring image and also attracted comments in relation to all of the values with the exception of respectfulness. The group did not respond positively to the perceived facial expression in this depiction (“too animated”), and the visual style was considered inappropriate for post-mortem identification. It is not known whether the comment “too artistic” was in response to visual style alone, but this was also the only image in which an obvious artist’s signature was retained.

Don’t make them look like criminals

The most valuable takeaway from this session was a comment made in follow-up to the “dead picture” comment above, as we discussed the function of post-mortem depictions as making a decedent look convincingly alive, “[a]nd not to make them look like a criminal.” The clarity and confidence with which the FPO concerned offered this assertion made an immediate impact, prompting general sounds of agreement from the group. In contexts where the public is more familiar with ‘Wanted’ images, forensic imaging practitioners could run the risk of presenting a post-mortem depiction where it looks too much like a mug shot or a suspect sketch, inadvertently creating an association with criminality, instead of the more likely reality of unidentified victims of crime, or poverty or homelessness or other circumstances. This semiotic confusion is a very real risk that implicitly criminalises a victim, further underwriting the concept of ‘second class citizens’, and reinforcing the necropolitics of the marginal and the invisible.

Without any prior knowledge or experience in forensic facial depiction, and demonstrating great sensitivity to issues of personhood and humanitarian care-taking, this group implicitly recognised key best-practice principles of producing and presenting post-mortem facial images (Davy-Jow, 2013; Wilkinson, 2015b), whether reconstructions from the skull or photo-derived depictions. Their insights provided a context-specific and theoretically supported evidence-base to apply to the dPMD work being done in association with Unknown records from this facility. Further, the

group also identified three other critical interventions that in their view, would greatly enhance the work of visual identification at this facility, which reflect and support the findings and recommendations of the sub-study and research interviews conducted across South Africa's forensic deathwork community.

Enable multiple angles for visual identification by next-of-kin



Figure 40: FPS Hillbrow (Johannesburg) family 'comfort room' (Kathryn Smith)



Figure 41: FPS Johannesburg visual identification room (Kathryn Smith)

The decedent should not only be seen from one angle, through the viewing window. One FPO highlighted how distracting the visual identification process can be for families, until they can no longer avoid looking at the face:

I know from doing the identifications, the family is so fixated with how the room looks itself, where the deceased is lying. They're looking at the door, they're looking at the trolley we're pushing in, they're looking at the sheet we're using. So they're not really focused on having to identify the deceased themselves. And so if we can remove those distractions, we can focus on having the family focus on identifying the face of the deceased.

These remarks highlight emotional burden, and concerns about dignified treatment of loved ones. Her suggestion of a video-feed from a ceiling-mounted camera to a screen in the family viewing room is a proposal which gets the whole group very engaged and receives their wholehearted support: "A camera that you can actually move at the instruction of the family... if the family says, 'I want to see more to the

left, or more to the right,' that birds' eye view will allow you to create almost like a 3D 'effect'?"

Internal politics obstruct the implementation of improvements



Figure 42: 'Communication is KEY', shift supervisor's office, FPS Salt River, November 2018 (Kathryn Smith)

FO4: Our contact amongst us [FPS colleagues] here in the Western Cape is already limited. So we just know about where we are working. So that's the thing: we're very misinformed and uneducated regarding what's happening around us, so we can be grateful for what we have, that we're really lucky! [...] That's why I say, most of our ideas just stay where we are. We can't get them out there. [...] Because even if we give it to our managers, they just get stuck. And they can also come back, saying they're forwarded them, escalated the information, but still it gets stuck. There is always one level where it's kept there, not allowed to go further. ... I'm sure it happens everywhere.... It can just be that one person who can't adapt to the organisation. ... People take their jobs too selfishly. They will rather see their colleague fall [*sic*] than succeed. That's sad. Because it's where we need to educate others, so that when we leave, others can continue. We really need this.

Interpersonal and management politics – “All the angles” – were roundly agreed to negatively impact how ideas for workflow improvements are shared and communicated up the pipeline. Officers describe “brainstorming moments, just like, off-the-top-of-our-head type moments... we just say, you know, ‘This could be done’, or ‘That could be done’,” occurring informally during regular shift-work. One FPO commented, “I think you [the researcher] must be here to remove all the

politics, and we try again...” was affirming insofar as it reflects the success of this session in relation to the irritation expressed towards past research projects (see [Appendix 4](#)), but probably overly optimistic in the greater scheme of things.

A register for Unknowns at all Police Stations

FO: But why is there no register for people who are Unknowns? Where the public can go there? Because even with the lousy police stations that we have in our communities, you go there, and then the police don't give you all the information. Families go there, and they are sent straight to us, to come and look for their deceased. Yet the police have also got a forensic officer that goes to scene. And what happens with that forensic officer? So is it possible that we can have a register of *all* the people that happen to be Unknowns, at police stations? Because *that* is where the people are.

This remark echoes the main recommendation of the sub-study, lending further support to what is clearly the most critical issue in the South African context, which is the consolidation and sharing of information about Unknowns, which must be done with sensitivity to the social inequalities that characterise this country:

FO: I understand that we need to meet international standards and all that, but generally South Africa is an illiterate country. And the sad thing is that the people who come by the door are people who cannot even understand English. Someone needs to translate to them. So we miss, and do not include, those people when we plan, and try to come up with these good initiatives. [...] The detective must be able to open a screen, just like we do here, and say, ‘These are the possibilities. Can you look here?’ You see, I’m talking about something like that. Or perhaps you will view a big screen there, because they’ve got resources at the police station, and then my grandmother will sit there, and the police officer will just go through those cases. My grandmother is very illiterate, you see? She doesn't have a smartphone. So I’m talking about that.

The frankness of our discussion suggests that this exercise created a platform that fostered mutual respect and was deemed of practical value to the work of visual identification. It enabled a nuanced understanding of the affordances of post-mortem depictions within this context, through unexpectedly unvarnished accounts of the identification verification process that is the responsibility of these officers.

Coming in as an outsider and asking questions about protocol to this group prompted reflection on what is habitual, routine: *Don't ask questions, just do it. There is no time for asking questions. Asking questions gets you into trouble. Not doing it means you are not doing your job, for which there will surely be consequences.* This group of FPOs clearly take pride in their work; they want to do their jobs well but are frustrated by the relationship with SAPS in the main, as well as feeling heard within their organisation. They are storehouses of essential information gleaned from primary sites of body recovery, and keen observers of criminal enterprise, but current systems do not enable these skills to be fully exploited. And there is some frustration around the lack of visibility this work has among the general public, as well as their own colleagues with FPS in the Western Cape and beyond. These entanglements are best left to the experience of one young female FPO, who wanted to talk one-to-one once the session concluded. So articulate is her account of her own journey to this role, it is included here uninterrupted. Touching on education, opportunity and personal limits; the social capital this job has afforded her, driven a sense of critical citizenship and deep humanity, her story embodies much of the focal points of this chapter, enfolding the concerns expressed and echoed by so many of the interlocutors heard from thus far, and the enduring hope that characterises forensic deathwork.

Field vignette 6: More than just a taxi for the dead (an FPO's story), 2018

All I knew was, I knew that I wanted to work with the dead... I studied Medical Bioscience at the University of the Western Cape. And then I was like, 'Oh, you're stuck in research! There's no place for you to go!', and I was completely discouraged. I didn't want to do lab work over and over, not knowing whether or not it's good enough to be funded. Or whether I could fund it myself. And then at the same time, when I was in high school, they took away Physics. So I never really got to do Physics, and so Life Science was the only thing I could really do in science. I told my family, like, 'What should I do when I'm done studying? Because I'm scared...'

Look, my reason is, I can go into a medical field anytime. But I can't just have someone die in front of me. Having to know that... Because it can get stressful, and I will not be able to give you the best of service you require that is health-related. But I still want to work in the medical field, so I can still do research. Because you need to know why people are dying to know how to keep them alive. And then I heard of a state mortuary, and a department like this. Ok, this is perfect! And I saw the internship and I applied for it. And then I was like, 'I'm really enjoying this!' I like being exposed to the families, because the families keep you sane while working in an insane environment! [laughs] ... Because, at the end of the day, on a psychological level, the family is more vulnerable if someone passes away. These head gangsters with these gold teeth, I'm alone with these guys in the [interview/viewing] room... I mean, I'm so small, and I'm alone with them. But it will be fine. Knowing that they're vulnerable, that it's their person who passed away, I can get to them on another level. I'm more safe. But if it had to be me outside my work, I'd be so scared!

So I got here, and it's where I want to be. And somehow, I will get further with this experience. Because experience is better. You can't have all the degrees and not have any work experience. I've been here for now just over two years now. I'm happy. Ok, I'm not always happy with the people I work with at all times, or what we're given. But the fact is that it's where I want to be.

My main goal is I want to end off educating people. These people holding all this information...! With families, they'll be like, 'Why are you so slow with this?' They're not informed. We have a time period of forty minutes to get to a scene. And I'll show them, "Look at the time we got the call, and the time we got here?" And there's so much to be done before we get there. Everybody's blaming Forensics – "We're waiting for Forensics to come back." Or when it comes to maybe losing of valuables, they'll say, "Forensics was the last, they must be by them." But by the time we get there, the deceased may not even have clothes on! A good example is hospital cases, and then we must really back-track.

People just say we're a taxi for the dead [laughing]. Or they mistake it for a funeral parlour. But it's so, so much deeper than that! So if it were up to me, I would go onto social media, just to inform people of this department. Because like me, I never knew about this department. And so many people don't know what it's about. And they want to help! And it's just that one hand, that extra hand. It takes one hand...

Chapter 5: On *Speaking Likeness*

If the best portrait is a like portrait, what is it like?

(Pointon, 2014, p.179)

Introduction

This chapter offers a self-reflexive account of the conceptual development and production of *Speaking Likeness*, an online artwork with an accompanying e-book in which the affordances of sited research, the flows and translations of information within and between academic and practitioner contexts, and the intimacy of the conversational methods which characterise the broader study come together in a gesture which is counter-forensic in spirit: (re)turning the gaze onto forensic artists and imaging specialists who eschew publicity as a professional requirement, despite the considerable public interest in the field. In the context of a participant-observer process, emic and etic knowledge is enfolded here, enabling a view from within and without to occur simultaneously, describing the technicalities of the field and its politics but also engaging highly personal perspectives that reveal aspects of the professional and emotional stakes of this work, signalling aspects of the field's hidden curriculum (Portelli, 1993).¹

Speaking Likeness is a stand-alone work of art as well as a document of practice-led research which speaks to the limits of writing in relation to artistic methods, in which conversation as a tool of data collection demanded recognition as a medium and a material in itself. Forensic Art is restaged here in the form of a durational, multimedia portrait archive that might be described as a form of forensic theatre (cf. Frieze, 2019). It claims the poetical potential of empirical research and

¹ Based on my own experience of training and working as a forensic artist, preceded by years of engaging forensic cultures as a visual artist, the likelihood of coming up against the limits of conventional academic presentation in respect of demonstrating (or at least pointing to) the wealth of tacit knowledge at work in this field was anticipated prior to commencing the interviews. As such, the possibility of re-presenting primary data as an artwork could be included in the general research protocol for ethical approval, along with the appropriate Participant Information and an appropriate consent form where participants could grant me permission to collect and use these data as part of 'a public exhibition in a form yet to be decided.' (see Appendix 2)

speaks directly to the internet as a global public forum which is becoming an ever-more significant site of counter-forensic action. A general essay describing and contextualising the work for an audience unfamiliar with the broader research project is included in the accompanying e-book and available as a downloadable PDF from the online landing page at www.speakinglikeness.online. With that in mind, this discussion focuses on the conceptual and formal strategies behind the development of the work as well as aesthetic and historical precedents informing it. These are closely integrated and considered significant aspects of its original contribution as an artwork, as well as with reference to the primary data it makes available, and the manner in which this data has been staged.

The historical trajectories and current professional dynamics between Forensic Art and Facial Identification and their respective work products have been discussed in previous chapters, as well as the work such images are expected to do. As has been shown, Forensic Art is something of a ‘frontier territory’ populated by colourful characters who embody the often-competing interests of art, science and forensic investigation. In terms of social capital, these roles traditionally sit in some tension – if not in direct opposition – to one another. There is no one way into the field, and once in, practitioners are faced with little oversight, other than peer-based regulation, in which personal affiliations may carry more weight than professional interest in the advancement of the field as a whole. Law enforcement is historically the origins and natural context for this work and those within agencies or with appropriate historical ties are at a distinct advantage in accessing casework. Trust is a significant asset. Outside of law enforcement (but often with connections that span the boundary), trainers and mentors represent more effective gatekeepers than the professional associations that represent the interests of the field.

From the scientific community, claims to the accuracy of the practice remain contested, which translates into reluctant investment as an investigative tool. Popular interest exceeds professional opportunities, and as such, the field remains niche, poorly understood, under-funded and under-utilised. Post-mortem methods are significantly under-exploited due to lack of resources, adequate understanding of their multiple use-values, and the ability of the relevant authorities to communicate effectively with stakeholder groups. This neglect is highlighted by new methods of DNA phenotyping, forensic genealogy and crowd-sourced investigations via social

media platforms (a form of citizen-led forensics) which are ushering in a new future for the field of post-mortem identification that law enforcement is struggling to fully embrace, whilst also foregrounding essential questions concerning data privacy, ethics and ‘authorized’ expertise.

A practitioner’s primary work context significantly influences their cognitive authority (agency and access) in relation to their practice, with complex and often unspoken dynamics impacting those within law enforcement contexts and those operating adjacent to them, and likewise, how this context enables or discourages peer-to-peer interactions across the boundaries of the primary work context, or translations between research and practitioner contexts. Because forensic art practitioners may represent a range of experience and training, with some possessing more scientific knowledge in relation to artistic skill and vice versa and some working within an academic research context and others not, practitioners within the field represent unique entanglement of these perspectives. They hold a range of tacit knowledge alongside values and ethics informed by personal concerns as well as institutional cultures that will inevitably influence their praxis, whether consciously or unconsciously in unquantifiable ways. Scientific and practitioner literature in this field does not reflect the emotional or personal investments of this work in any sustained way, and as such, does not appear to value these experiences as locations of knowledge or discovery. If such accounts are given or inferred, they tend to contribute to the lore of the field rather than being recognised as a source of valid knowledge that may benefit and advance its professional objectives.² How could this be brought to the fore without compromising professional standing?

Previous chapters have worked incrementally to develop the argument that forensic deathwork – and specifically post-mortem Forensic Art – may be seen as a form of critical social praxis (critical citizenship) when viewed through the lens of humanitarian interests. Capturing and communicating these *values* – not just the facts and findings of research – thus demanded an approach that would echo the

² In a relatively limited way, STS research in forensic cultures as well as some studies from within the field itself is beginning to focus on the role of women in the forensic sciences, and although it risks perpetuating unhelpful stereotypes that have directly shaped structural inequalities in scientific fields to suggest that an engagement with the emotional burden of this work will emerge from this sector, it is worth noting that at least some focus is being placed on how gendered approaches begin to shift the dominant narratives and introduce new concerns (Doretti and Burrell, 2007; Houck, 2009; Puig de la Bellacasa, 2011; Dawley et al., 2014b; Blum, 2017; Barbaro, 2019)

ethnographic techniques of the research process but re-situate them as a direct address between subject and interlocutor re-cast here as viewer/listener; an audience of one.

A key objective of *Speaking Likeness* is thus to foreground individual lived experiences of this work, from the practical aspects of accessing reliable information about how to enter the field, to the emotional dynamics of the work, for which no anthologised accounts exist. Presenting such knowledge in a way that echoed the colloquial tone and generosity with which participants engaged in this research process demanded an alternative mode of presentation to conventional academic writing. Where Chapter 4 used this data to present a detailed analysis of the state of the art in relation to forensic deathwork, here these stories are retold in a different register, attending to the traces of individual voice in speech, and troubling the dual function of voice and face as signifiers of individual identity as well as forensic objects in how these have been re-mediated. Within *Speaking Likeness*, the performative language of forensic speech and the mediator/interlocutor figure of the expert witness find direct form in the accounting of methods, values, and emotional investments of this work. By sharing aspects of research interviews recrafted into a collection of stories, it is possible to see more clearly how personal concerns are embedded in a profession that is also a vocation.

This expository discussion begins by tracing relevant epistemological and aesthetic co-ordinates which locate the work within the broader discourses of the forensic aesthetic and tactical visual mediation. Conditions of participation are described with reference to the transcribed voice as a narrative material and the genre of verbatim theatre, and the evolution of the online interface and related book are considered with reference to user experience and staging a type of simultaneously directed but open-ended interaction.

The chapter concludes with a critical reflection on a set of ideas that initially functioned as creative hypotheses. Staging the artist as medium, and considering how this contributes to notions of (in)visibility and authority via the operations of voice and face as signifiers of personhood and agency found significant resonance with the concept of ‘mediator deathwork’ (Walter, 2005), and enabled the clarification of the main argument presented in this thesis, elaborated in the following chapter.

Tracing conceptual and visual forms

Speaking Likeness is a creative response to the centrality of the face (and facial image) in identity, identification and personification. Based in an understanding of the human face as a primary site of relatability onto which we project our ideas about dignity and difference, the work is intended to encourage slow looking in order to focus our attention on the gaze and the ethics of reciprocity. Formally and conceptually, it embraces a range of ideas including the book as ‘corpus’ or body of knowledge (Barthes, 1993); the bureaucratic or institutional portrait (the clinical or ethnographic image, the criminal mug shot or the passport photograph); concepts of faciality; and ways in which photography embodies visual authority. It enacts the desire for a (re)turn to a Levinasian (humanist) ethics, in which engaging another person face-to-face fosters a mutual sense of personhood (Levinas, 1979; Levinas and Nemo, 1985; Butler, 2006a). This kind of looking enables a facial image (or even a human fragment) to be recognised as a ‘subject,’ whereas another kind of looking – scientific observation for example – might seek to professionally objectify such an image or fragment through a trained gaze that abstracts, discriminates and categorizes in the manner of Deleuze and Guattari’s dehumanizing ‘white wall/black hole’ system of their ‘abstract machine of faciality’ (Deleuze and Guattari, 1987; MacCormack, 2000; M’Charek and Schramm, 2020) which precludes empathic vision. The political consequences of these divergent theories of faciality are clear, with the operations of the ‘abstract machine’ closely associated with the social control of institutionalized portrait. All photographs, Roland Barthes maintained (Barthes, 1993), have a close relationship with death. *Speaking Likeness* embraces these references but also acts against them, seeking to find new potential in the conventions of the bureaucratic portrait by capturing the moving, breathing, blinking face of another person over time, rather than metaphorically embalming the subject in the fraction of a moment when the shutter clicks (Troyer, 2007).

‘Speaking likeness’ is the direct English translation of the French phrase *portrait parlé*, Alphonse Bertillon’s (1853-1914) term for his ‘signaletic’ system of

identification³ which is widely accepted to represent the origins of modern biometric and forensic human identification methods. The idea of a ‘speaking portrait’ holding a wealth of hidden information that can be unlocked, as long as it is correctly recorded, analysed and interpreted/performed by an appropriate expert, is a foundational concept in how visual evidence is constructed within forensic cultures, based in part in photography’s presumed indexicality (Sekula, 1986; Siegel, 2011; Dufour, 2015). In semiotic terms, an index is a direct trace of an object – a footprint can be matched with a specific foot and so on. In (analogue) photography, the mechanical documentation of a subject present before the camera is held to produce photography’s privileged relationship to reality and thus its capacity to record evidence. But as many of these accounts show, language is at best limited and at worst, a source of prejudice, violence and oppression, and bodies are rather unruly in actuality, ultimately resisting institutional taming, and so Bertillon’s ambitions of unambiguous translation from data-image to body have not been fully realised.

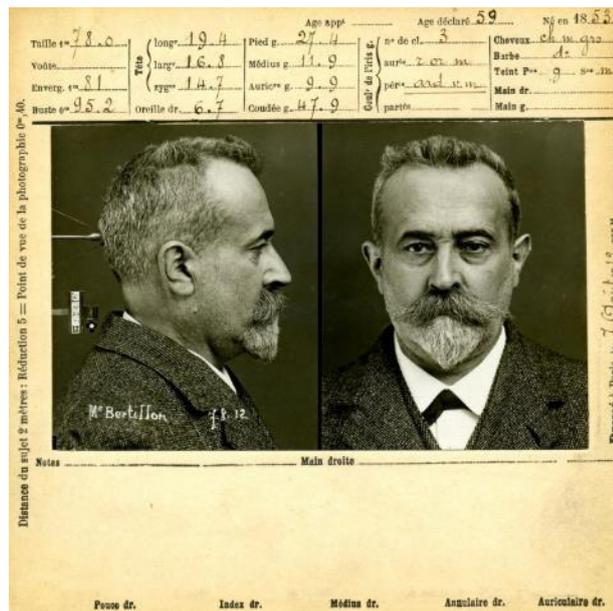


Figure 43: Alphonse Bertillon’s Bertillonage card, 1893. Archives of Service Regional d’Identité Judiciaire, Préfecture de Police, Paris. Wikimedia Commons image made available under the Creative Commons CC0 1.0 Universal Public Domain Dedication. Accessed 1 March 2020

³ This system, known as Bertillonage, included precise anthropometric measurements of a suspect's head and body, detailed descriptions of physical characteristics, and a 'double mug shot' in frontal and profile view (Siegel, 2011). The system is visually documented and theoretically positioned in Dufour, 2015 and Sekula, 1986, *inter alia*.

An alternative theory of photography's documentary power, which opens up more generously to abstract, digital and another post-photographic practices (Fontcuberta, 2014; Morris, 2014b), is described in terms of its '*depictive trace*' (Pettersson, 2011) which is to say that photographs are not merely (or only) accurate representations, but provide 'epistemic access' to what they depict (Harries et al., 2018) via their peculiar sense of transparency. Direct observation of an object assumes spatial proximity between observer and observed. The capacity of photographs to produce "quasi-illusionistic experiences of objects" that allow us to see things "in their surfaces," has the effect of collapsing the perceptual and the spatial, producing an *experience* of intimacy with what is represented in and beyond the image. This notion of the depictive trace is relevant to the broader argument in this study, in that it appears to offer a more plausible account of photography's potency as an evidential tool particularly with reference to the role of the visual in forensic identification, convincingly accounting for the extra-evidentiary power of the images of Mengele's skull superimposed with versions of his younger and older selves which form the impetus for Keenan and Weizman's theory of forensic aesthetics (2012b). The depictive trace is considered to be a critical feature of how post-mortem forensic facial depictions operate.

With these ideas as a conceptual backdrop, *Speaking Likeness* also conceived as a direct response to a project by photographer Arne Svenson called [*Unspeaking Likeness*](#), first published as an exhibition in 2005⁴ and then as an eponymous large-format book (2016, Twin Palms), with an introduction by Svenson and an essay by William T. Vollmann.⁵ Svenson places the project's origins in 1996 whilst photographing medical specimens at the Mütter Museum in Philadelphia, when he came across

an intriguing object: a sculpture of a woman's head replete with eyeglasses and a wavy-haired brown wig... resting on its side on a storage room shelf between an ancient microscope and the dried leg of a horse... She had the look of the utterly lost and seemed an out-of-place anomaly in this storage room filled with historical medical instruments, apparatuses and bones." (Svenson, 2016; n.p.)

⁴ [*Unspeaking Likeness: Portraits*](#), Western Project, Los Angeles (Svenson, 2020, online)

⁵ The book's oversized format allows for roughly life-size reproduction of the forensic sculptures, enabling a face-to-face encounter between reader and image.

Learning that this object was a forensic facial reconstruction by the artist Frank Bender,⁶ this encounter began a process that would take Svenson across the United States and Mexico, seeking out forensic sculptures to photograph as if they were live subjects sitting for a portrait. It is hard not to transpose the ‘lostness’ Svenson identified with onto actual cases of unidentified remains stored at medico-legal services, buried without identification, or staring out at us from online databases and social media groups dedicated to cold-cases advocacy. What Svenson does not mention here is that Bender did not use naturalistic skin tones in this depiction, instead painting the face in shades of grey as he only expected the sculpture to be reproduced in black and white in police circulars and the press (see fig. 44). Seen in colour, and no longer in a controlled forensic setting, the head looks strange, almost spectral (and certainly, lying on its side on a museum storeroom shelf, not alive).



Figure 44: Arne Svenson, *Linda Keyes*, 1996. As published in *Musée Magazine*, [online](#). Accessed 11 June 2020. Courtesy of the artist



Figure 45: (Left) Reconstruction by Frank Bender, 1981, recognized by the victim’s father. (Right) antemortem photograph of Keyes. As published in *People* magazine, 18 July 2011, [online](#). Accessed 11 June 2020. Courtesy of the Estate of Frank A. Bender

Svenson’s description is a potent illustration of forensic facial depictions as objects ‘on the edge’ (so to speak) of portraiture. Even as they rely on similar artistic or illustrative skills and resemble conventional portraiture, something about these depictions innately points to a function that relies on, but is in excess of, their form. They don’t appear to have any aesthetic ambitions; their language is plain, straightforward, functional. In his accompanying essay, Vollman comments on their

⁶ The sculpture depicts Linda Keyes, who was identified from this depiction. Svenson’s portrait of Keyes’ effigy is published in Worden (2002)

patent artificiality, observing that “the sculptures are so obviously constructed (and with an eye to utility rather than ‘art’) ... If we read that they were entirely works of artistic imagination we would react to them differently. So what are we looking at? “Who am I”? “Who killed me?” “What do these faces mean?”” (Vollman in Svenson, 2016; n.p.). Given that most forms of art involve an element of craft and construction (with the exception of found objects but even this is debatable), this seems like a self-evident observation. However, it is the ‘obviousness’ of their construction coupled with their utilitarian objective which suggests something of how forensic facial depictions differ from other forms of portrayal, and brings us a step closer to what kind of art Forensic Art is, or least, how its intended function and awareness of its own limits is invested in its forms, suggesting that the potency of these forensic faces lies in the demands they make of us to act in the interests of the unknown people they ostensibly represent.

Svenson’s quest for photographic subjects revealed the vagaries of the field, crowded as it is with more artists than opportunities, and the difficulty of accessing either the agencies who commission such sculptures, and/or the sculptures themselves, which are often destroyed once photographed, especially if built on the actual skull.⁷ He also found his artistic motives questioned by agencies “naturally protective of what are, after all, representations of human remains.” Svenson had contacted at least one of this project’s participants requesting access to their work (this is a niche field, after all), but was denied; there was concern that any artistic re-interpretation of forensic casework would potentially disrupt the sculpture’s efficacy as a forensic tool.⁸

Committed to demonstrating his cognitive authority through written proposals and providing portfolios of past work, Svenson motivated that the publication of his images would further the interests of identifying the unidentified deceased, and he was eventually granted limited access to sculptural reconstructions

⁷ This process persists in the United States, as some participants in this study show, but is generally regarded as inappropriate and unethical elsewhere.

⁸ During negotiations with prospective participants to sit for a portrait in addition to being interviewed, Svenson’s project was referenced in terms of what his project communicated about his treatment of these objects, both aesthetically and forensically. *Speaking Likeness* does not feature any artists whose work features in Svenson’s project, but one participant did mention declining his request to photograph her work for these reasons. *Speaking Likeness* is intended to be an ongoing project, with the option of being scaled up as a spatial installation with video portraits on individual screens, so perhaps these two projects will move towards a more direct curatorial dialogue in future.

still extant in some agencies. His account of complex and protracted attempts to access this protective field resonate closely with personal experience of varying degrees of access and (mis)trust, as well as those of many of the artists whose stories are recorded here; a slow process of translation from out-group chancer to versions of in-group authority.

Svenson's stated objectives of humanizing these busts versus simply 'transposing them into the realm of reality' through straight photographic documentation also resonated with the general objectives of the broader research project, concerned as it is with processes of humanization via visual re-mediation and the construction of facial images. As he describes, this prompted a process of self-reflexive visual research,⁹ which revealed three principles that guided the techniques of photography and presentation he employed in these re-presentations of forensic sculptures, based in an analysis of "how I look at other people – not how the camera sees, but how I see someone staring back at me." Firstly, it was "essential for the eyes of the (inanimate) subject to be focused on the viewer so as to immediately engage him or her," and "the rest of the face must fall out of focus so as to deflect attention from the artificiality of the materials used to create the sculpture and to direct the viewer's gaze back to the eyes." Svenson achieves this through his selective focusing technique and photographing them in black and white. His final humanising device was to suggest that these heads were attached to "a whole body ... outside the frame of the image," towards which he opted to construct shoulders out of whatever was immediately to hand (if the reconstructions stopped at the neck), and dressing them in a shirt, often his own (see fig. 46). In this way, Svenson actively intervenes in the construction and re-mediation of these depictions, furthering their relatability as living people and blurring the boundaries between subjectivity, including his own, and their objectivity as investigative tools.

⁹ Svenson described studying the portraits in the Metropolitan Museum of Art and his own published collection of mugshots in his previous book *Prisoners* (1997).



Plate 41 Artist: Gloria Nusse

Unidentified

On May 27, 2000, a Water Department employee found a human skull on the shore of Crystal Springs reservoir in San Mateo County, California. The location was remote and accessible only by boat. The surrounding area was above the waterline but had most likely been submerged recently. The date of death was estimated at more than three months prior to the discovery of the skull.

Vital statistics:

Female Asian. Approximate age: 30-50 years old.

Contact: San Mateo County Coroner's Office:
650.312.5562

Figure 46: Arne Svenson, plate 41 from *Unspeaking Likeness* (2016, n.p.), with case information transcribed from the associated entry in the back of the book. Courtesy of the artist

Svenson's 'three principles' also happen to represent best-practice strategies for presenting forensic facial depictions: presenting grayscale images with selective blurring confers ambiguity to facial features and skin tone that can be less confidently predicted (Davy-Jow, 2013; Wilkinson, 2015a), and is a particular affordance of digital working methods, as shown by the experimental dPMDs produced for the SRS discussed in Chapter 3. Curious about whether Svenson was aware of this methodological and visual accord, he confirmed this was pure coincidence (pers. comm., 2016). However, given accepted best-practice, not only are his choices valid but they can also be seen as a democratising aesthetic, conferring a grace to even the most technically-lacking sculptural reconstructions, whilst also appealing to the visual authority of black and white photography as recognised by the FPO focus group described in the previous chapter. In other words, the 'depictive trace' in action, which the portraits in *Speaking Likeness* seek to emulate.

The use of selective focus to draw attention to the eyes (ostensibly as a locus of subtly animated personhood), and the connotative openness of greyscale can also be observed in the visual strategies used to document forensic sculptures produced during a recent collaborative workshop run by NCMEC at the New York Academy of Art, working with unidentified cases from the archives of the RCMP (BC

Coroner's Office) – one of which was identified a week after the image was published (see fig. 47).¹⁰



Figure 47: A reconstruction produced in a forensic sculpture workshop at the New York Academy of Arts in collaboration with NCMEC and the RCMP, identified one week later (CBC News, 2020a) Photo courtesy Cpl. Charity Sampson/RCMP

The power of visual re-mediation and photographic authority as related operations has emerged as a leitmotif in this study, a point which is amplified when Bender's depictions of Keyes and Rosalla Atkinson, also known as 'Girl with Hope' (Fig. 48), are placed side-by-side with photographs of the identified women.

Atkinson vanished in Philadelphia in 1987, and like the sculpture of Keyes, her effigy is also in the Mütter's collection. It was recognised by Atkinson's great-aunt from a newspaper photograph accompanying an article about an exhibition at the museum, in which the sculpture was displayed, leading to Atkinson's positive identification as well as the arrest of her murderer (Egan, 2011, p.74).

That these women were identified as a direct result of Bender's depictions is unusual enough given the contingencies at work in Forensic Art, but the apparent visual accord between both depictions and antemortem photographs, as P51 notes in the quote prefacing the previous chapter, startlingly uncanny, almost too much so.

¹⁰ This project is discussed in more detail in Chapter 6. Attempts to identify this man by DNA were already underway prior to the workshop, and was eventually successful without reference to the depiction, but the RCMP acknowledged the "overwhelming" positive public response to the depiction, along with images of his clothing released with it (CBC News, 2020b; a).



Figure 48: Frank Bender's reconstruction compared to an antemortem photograph of Rosalla Atkinson, as published in *People* magazine, 18 July 2011, [online](#). Accessed 11 June 2020. Courtesy of the Estate of Frank A. Bender

Given that other photographs of these depictions are in circulation, it is reasonable to assume that the depictions were rephotographed once photographs of the victims were available, providing relatively rare and powerful examples of the usefulness of Forensic Art in identifying unknown decedents, both of whom were recognised by family members. That this technique suggests a particularly strong resemblance to the target could be cynically interpreted as Bender advertising the superiority of his technique, but it is also a legitimate validation method enabling the closest possible morphological comparison between depiction and actual face to be carried out, taking head pose, dimensional translation (3D-2D) and other artefacts of photographic documentation into account. Bender's juxtapositions reinforce the important work that photography plays in the re-mediation of forensic sculptures, and which practitioners should control as far as possible, but also the ways in which forensic depictions can be made to self-authenticate post-fact.¹¹

Conditions of Participation

Speaking Likeness features the faces and stories of eighteen research participants (including the researcher) who agreed to collaborate in the making of an experimental artwork based on research interviews conducted mostly face-to-face

¹¹ A similar question is prompted by the work of Lois Gibson and corresponding mugshots used as experimental stimuli in a study by Klum et al. (2013) which sought to validate sketch-based vs computer accuracy in producing suspect sketches.

but also including online and written responses. The cohort represents diverse backgrounds, training experiences and work contexts, including law enforcement, government institutions, academia or as independent practitioners in the United States, the United Kingdom, Japan, Korea and South Africa. Some identify primarily as forensic artists; others use forensic art techniques as part of a broader suite of forensic identification practices within the context of applied science. All are committed to developing and deploying visual images in the service of human identification.

The work re-presents research data recrafted as monologues accompanying durational video portraits, narrated by a single voice. Portraits were captured via digital video, with each participant sitting alone in a room and focusing their gaze on a camera as a proxy for an interlocutor/viewer, for a minimum of five minutes.¹² In doing so, they agreed to become a version of the kind of image that they may produce or encounter in their day-to-day professional lives. And like the subjects whose faces they construct, they are unnamed, but their operational context and location is recorded.

Once in-person interviews had been transcribed, or the more staccato and constructed format of a written questionnaire had been transposed into a single narrative, the next task was ensuring the monologues were accessible to both listening and reading audiences. A close textual analysis of the data set produced a secondary set of tropes from the five focus areas of the original interview framework. These are mapped in fig. 87, the coloured lines connect the overlapping and competing interests from ‘meta’ categories into more idiosyncratic and human expressions that emerged from these conversations, which also demonstrate accord with areas of theoretical interest. These thirteen pathways thus represent broadly consistent concerns within and across the field, elucidating shared interests within a heterogenous community and suggesting possible interventions towards addressing these issues in an international relevant way (or at least where attention should be focused to ensure the future relevance of the field).

¹² The specific details of capturing the portraits and crafting the scripts are included in [Appendix 5](#).

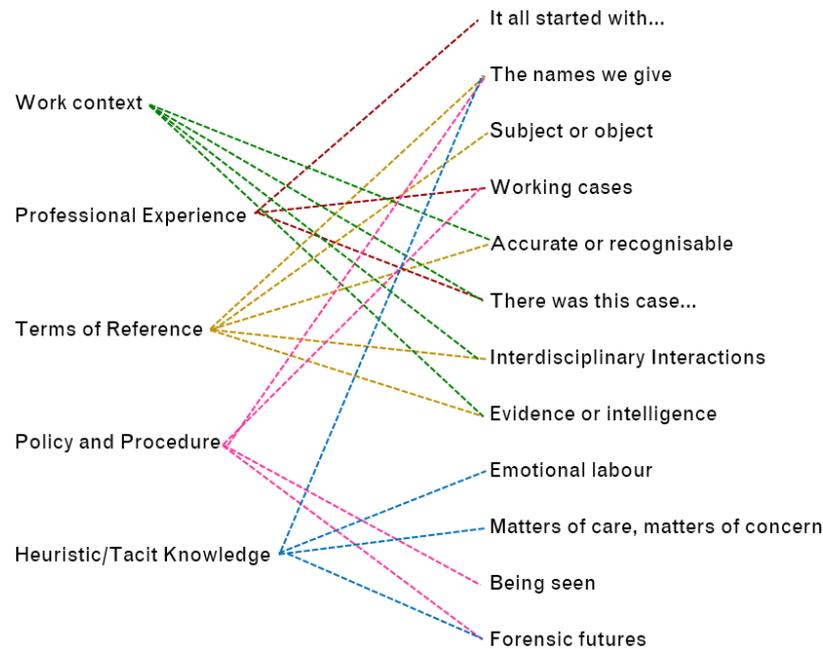


Figure 49: Mapping the connections and overlaps between the five analytical frameworks and thirteen narrative pathways that provide the organisational framework in *Speaking Likeness*

Scripts were collaboratively agreed to ensure participants were satisfied with their (re)mediated narrative representations, a move which also discloses the impossibility of a neutral, discrete researcher identity. Even in the context of formal, ethically approved research with its protocols and methods, we – researcher and participant – are still performing for each other, and ourselves.

Performing the voice

While *Speaking Likeness* prompts a number of visual associations, it is essentially an audio-driven narrative experience, the transcription and re-editing process recalling traditional radio documentary and the evolution of this form into podcasting. But the eventual form exceeds both these references with the addition of moving portraits that unlike conventional documentary films, are not actively speaking. With moments of non- or extra-verbal communication (laughter, sighing) as well as conversational tone recorded as faithfully as possible (with sensitivity to professional and ethical considerations) in the transcripts, a rich reinstatement of the context and spirit of each encounter was ensured. Extending the lens of performance and

performativity (language as a form of social action) even further, subsequent research into dramaturgical strategies with an interest in the forensic (Frieze, 2019) were considered.¹³ A theatrical precedent was found via the verbatim theatre work of writer and theatre maker Gillian Slovo (whose personal biography also happens to be deeply enmeshed with South Africa's struggle for democracy).

Verbatim theatre is a form of documentary play based on the words of interviewees, lightly edited for sense-making, and appears to be the closest formal ally to *Speaking Likeness*. Slovo's self-reflexive description of her process writing *The Riots* (2011), based on the London Riots, working with hours of recordings of accounts from those involved (Slovo and Lee, 2011) exactly mirrors the textual editing process undertaken here, down to the choices made to indicate changes between transcript and script.¹⁴ "You can't give characters words they haven't said," Slovo notes, "but you can edit their words," recalling Walter's insistence on sublimation of personality in mediator deathwork (Walter, 2005, p.406). Slovo further asserts that she tries hard to be balanced, and not 'give herself a voice, but readily admits that, "ultimately I'm the person who's conducted the interviews, chosen the questions and edited the answers, so there is a degree of editorial there."

Speaking Likeness was prompted in part by an interest in how the research process performs objectivity, amongst other things. Techniques and behaviours that enable critical distance relative to our subjects or objects of enquiry are constructively embraced in academic research, but a recognition that our own

¹³ A previous project ([Poisoned Past](#)s, 2016) provided an opportunity to work directly with forms, processes and artefacts of transitional justice as materials towards a major exhibition into unresolved humanitarian violations. The project demanded the development of novel curatorial strategies to represent contested and contradictory information, as well as a solution to representing over 200 unnamed and unknown victims of human rights abuses (Rappert et al., 2018). This retrospective reflection on the achievements and failures of the South African Truth and Reconciliation Commission, which placed value on personal testimony and enabled victims to confront and interrogate their aggressors, was a reminder of the power of the act of bearing witness through a specific type of storytelling (testimony) as a way of acknowledging an event for which no other 'evidence' might exist and as such cannot be accounted for by the usual forensic procedures. Here I am thinking of the portrait by Jillian Edelstein of Joyce Mthimkulu (alt. Mtimkulu) who unsuccessfully appealed to the South African TRC to locate the body of her son [Siphiwo](#) who was most likely poisoned by agents of the apartheid security forces. She brought clumps of his hair which had fallen out as a result of the effects of the poison (thought to be thallium), which she can be seen clutching defiantly in Edelstein's potent image of a grieving mother and the traces of her disappeared son. Despite the work of the Missing Persons Task team, no trace of his body has been found.

¹⁴ Slovo's process of adding a word "every now and then to make sense of the editing" but indicating these in square brackets, and indicating cuts with an ellipsis are precisely the techniques used here (see vol. 2 of thesis).

subjectivities and contexts of production are also critical factors in how knowledge is created and meaning made must also be acknowledged. An awareness of the conditions of possibility that enable work to be done is essential to the transformation (and future sustainability) of any practice into a more intersectional space where practitioners from various contexts and background may actively participate with a more positive sense of mutual trust.

In the transcript editing process, removing the distractions and non-sequiturs of spoken conversation whilst retaining expressive idiosyncrasies that characterise individual speech and language patterns highlights the specifics of each voice, both in terms of conversational content but also as a material which can be sculpturally shaped. As such, any extra-verbal conversational traces are shown [in square brackets] in the accompanying manuscript where appropriate (see vol. 2). Moments where participants would address the researcher directly, or refer to a visual example that is unavailable to the listener/reader were also retained which, together with the use of the second-person 'you' is encountered throughout, invoked in a specific personal sense as well as a plural, collective sense, which further amplifies the shift from a dyadic encounter to a triadic one in which the researcher/interlocutor role is implicitly replaced by the viewer/reader as the person being addressed. Yet a trace of the researcher's presence as the only consistent interlocutor persists in the voice you hear.

Revealing the face but disguising the voice works against the conventions of identity protection employed in most reportage, yet this solution was acceptable even to practitioners who requested having their names withheld as a condition of their participation. Relative anonymity is also a desirable condition for many practitioners in the field. Unlike other forms of art, the personality and 'signature' of the forensic artist should be sublimated in service to the victim (eyewitness or unidentified decedent) and the signifying status of the image as form of visual testimony. But this professional invisibility is double-edged, contributing to lack of access to, and misperceptions about, the field.

Uses of voice and relative anonymity are further veiling devices that both conceal and reveal. Replacing the various nuances of accent, age and perceived gender represented in this group with a single, disembodied (female) voice may be considered an audacious move, but it was a simple solution to a number of practical

challenges in the interviewing process (a lack of shared language, physical location and audio recording conditions) which also produced some unexpected conceptual affordances. It anonymises the speakers with the effect of being simultaneously unifying and flattening whilst also suggesting an internal monologue that involves some suspension of disbelief: we must believe that these words belong to these faces, even if the voice does not appear to ‘fit’. Depending on which face is selected, this effect may be more or less jarring. One consistent voice accompanying such a diverse collection of faces, speaking in the ‘wrong’ accent and/or presumed gender, is intended to draw obvious and absurd attention to the cognitive bias embodied by voice, where accent and articulation are vectors of assumption about gender and nationality/origins in relation to physical appearance. Yet retaining the idiosyncratic traces of individual speech in the written scripts acknowledges the power of performative language, and the close and complex relationship between voice and face as material-semiotic carriers of identity and authority that also happen to possess forensic power.

Encounter as Interface: finding a form

Speaking Likeness was initially imagined as a spatial installation on separate screens installed within a gallery or museum, in an environment controlled for light using a responsive or randomised audio design.¹⁵ However, the extensive investment in an architectural build as well as display technology this required was a practical obstacle. Given that the primary considerations were to communicate the sitedness of encounter, translation of the unfamiliar, and the intimacy of one-to-one conversation, including telematic connections which give form to the relationship between ‘index and interface described by Kris Paulsen (Paulsen, 2013), an online presentation with a simple interactive component made greater conceptual sense.¹⁶

¹⁵ This is the version described in the proof-of-concept video shared with selected research participants. It is hoped that it will be possible to produce this version for public exhibition in the future.

¹⁶ The design and beta-testing process is detailed in [Appendix 5](#).

The User Interface design refers directly to the affordances and challenges of the internet as a site for circulation and investigation of missing and unidentified decedents, and the motivation for a public-access database for such cases in the South/African context. Likewise the use of a disclaimer and password protection refers to UI features on public-access investigative databases that include restricted areas for service providers. Such sites may also make use of visual filters (blurring) for sensitive content but also serves the practical purpose of limiting public access until participants have given their full approval to include their contribution in a public iteration of the project. Many of these databases do not yet have appropriate facial depictions accompanying case records, or they require updating, and they may make use of proxies such as clothing or personal effects or publish the unmediated post-mortem photograph.

Figs. 50-56 provide a visual walk-through of the online interface via screenshots of key elements with descriptive commentary.

The face gallery/grid that introduces the site's landing page (fig. 50) and main navigational interface (and which reappears as end pages in the book iteration – see figs. 59-60) obeys the visual cues of the passport/mugshot photograph, tracing an arc through Allan Sekula's *The Body and the Archive* (1986), to his *Photography and the Limits of National Identity* (2014) – where the term 'counter-forensic' first appeared – variously referencing the material-semiotic flows that operate between the biometric interests of our contemporary forensic age and the evolution of facial compositing and recognition software; the anthropological taxonomies of ethnographic photography; the use of facial arrays in psychology experiments as well as criminal identification; and the lightbox and contact sheet as artefacts of the analogue photo studio in digital translation. Hovering over each face (or tapping on a mobile device) reveals the relevant participant code, work context and country (see fig. 51).



Figure 50: *Speaking Likeness* landing page masthead with portrait gallery



Figure 51: *Speaking Likeness* participant affiliation reveal function on iPad Pro

Below the grid, an introductory statement summarises the objectives of the work and orientates a visitor to the navigational experience of the work, below which production credits and relevant acknowledgments are provided. The introductory essay which appears in the book is downloadable here as a PDF, alongside the START button which takes a visitor into the work itself.

Clicking on the START button opens the password log-in page (fig. 52), above which a trigger-warning acknowledges the forensic nature of content of the interviews that will be encountered should the visitor proceed. Entering the correct password opens the main user interface (fig. 53), which appears dim until a pathway is selected.

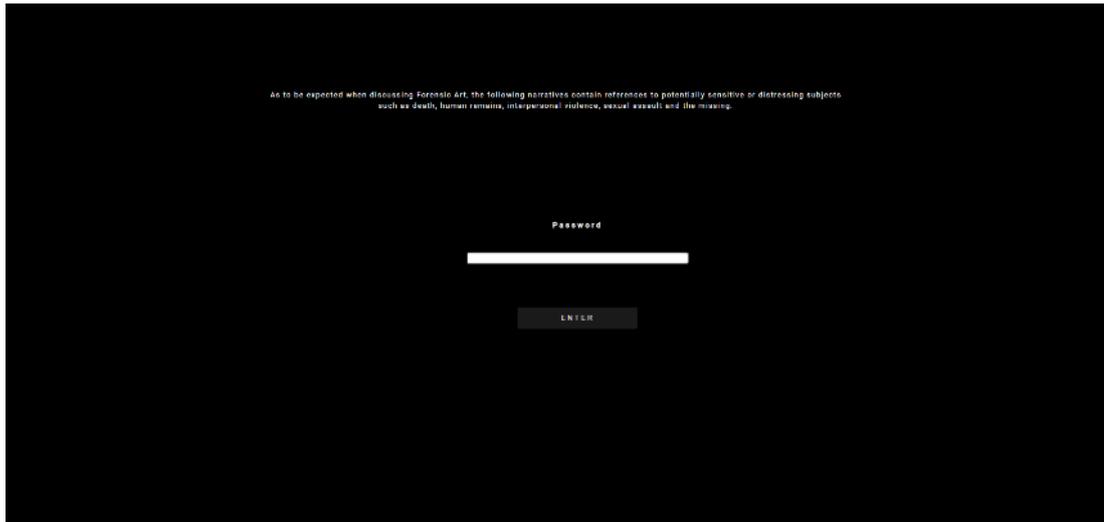


Figure 52: *Speaking Likeness* log-in page with trigger warning

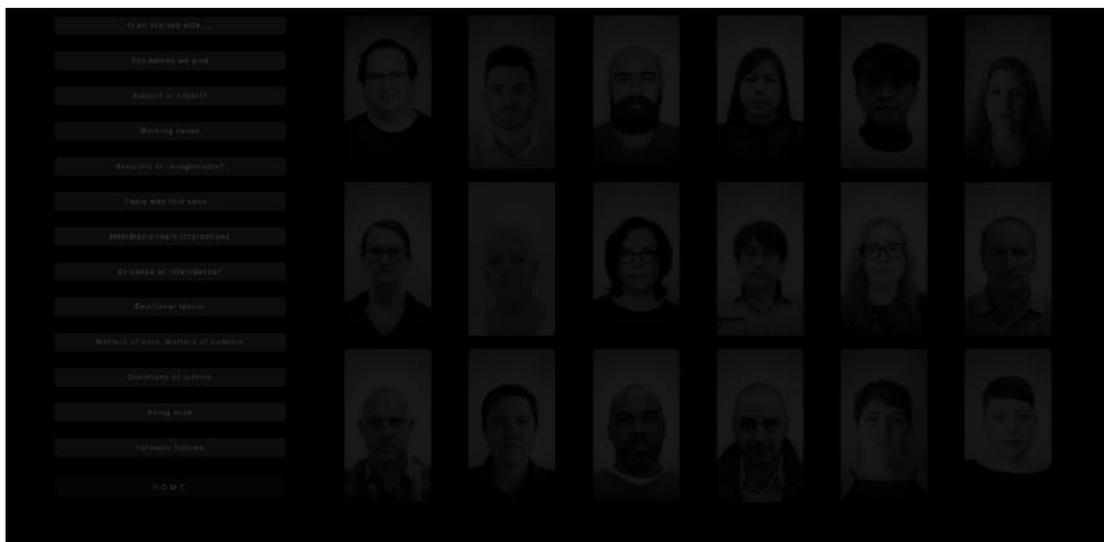


Figure 53: *Speaking Likeness* dimmed user interface prior to pathway selection

Selecting a pathway brings up a virtual light box of portraits of ‘active speakers’ for that particular theme (fig. 54). Not every portrait has content for every pathway; if this is the case, inactive portraits remain dim (fig. 55). Clicking on an active portrait then activates the full-screen version of the portrait in a new window (fig. 56), to facilitate opening multiple videos simultaneously if desired, and leaving the main interface available for further selection and navigation.



Figure 54: *Speaking Likeness* first pathway selected with all active portraits shown



Figure 55: *Speaking Likeness* selected pathway for which only fifteen of the portraits are active

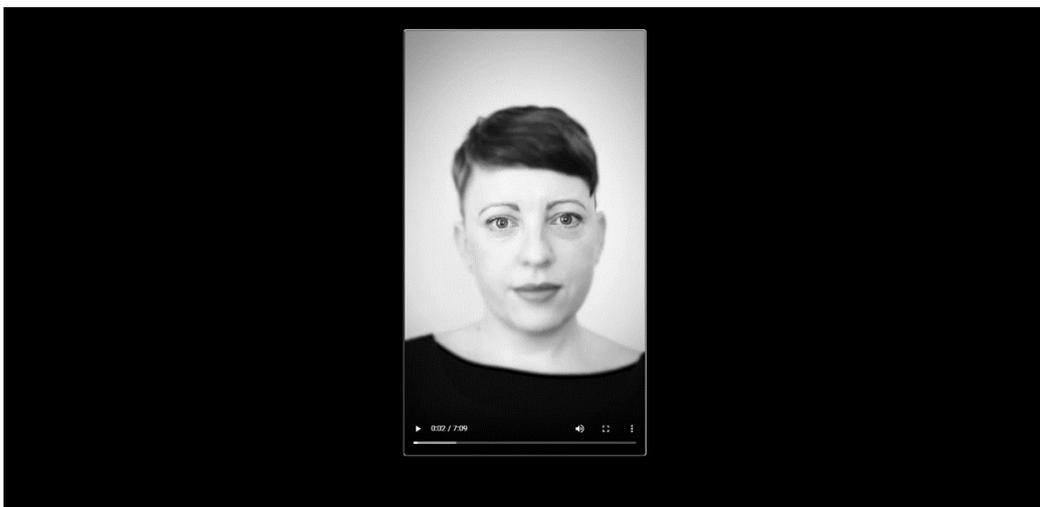


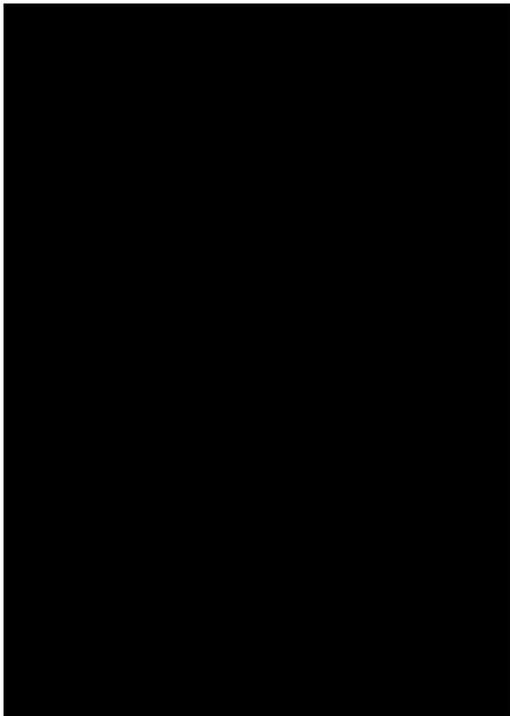
Figure 56: *Speaking Likeness* full-screen view of selected portrait with native playback controls and indicated duration

Staging Access

Working at the edges of artistic research and archivalism (Jones, 2016) and forensic identification practices, *Speaking Likeness* engages the dynamics of returning a mediated gaze through the interface of the screen. The screen itself as well as the process by which the portraits were made are both considered to possess veil-like properties (Richards, 1999), imprinted with a digital trace of real-time presence and partially drawn back to reveal perspectives on a field that is otherwise difficult to access but ultimately concealing and protecting participants from direct interaction.

A durational work that comprises 222 videos with a total viewing time of approximately six hours is unlikely to be experienced in its totality by a single viewer, and if a viewer is so committed, it is extremely unlikely that this will occur in single sitting. An accompanying manuscript featuring video-stills of the portraits and related scripts thus provides an alternative way of experiencing the work, either separately from the online piece or in tandem, enabling follow-along reading and cross-referencing between narrative pathways. Both versions may be navigated either by thematic trope or by a single narrative by following specific portraits. The online iteration foregrounds the latter, whereas the accompanying book prioritises the former. The online space prioritises navigation via thematic pathway, but it is possible to follow individual stories by clicking through pathways and selecting the same face each time.

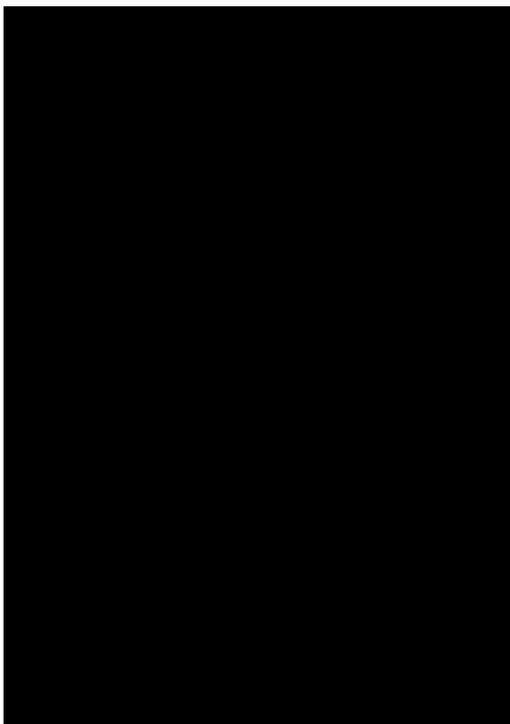
A book format conventionally engages linear reading, but this book attempts a subtle disruption of this by offering two navigation options to echo the online experience. A version of a Table of Contents upfront, 'Portraits' (fig. 57) lists content by participant referenced by their project code, work context and country; and a version of an Index in the back 'Pathways' (fig. 58) provides page numbers by theme.



PORTRAITS

01 University, Baton Rouge LA, United States	27
02 Freelance, London, United Kingdom	47
03 University, Johannesburg, South Africa/United Kingdom	69
05 University, Liverpool, United Kingdom/Hong Kong	93
07 Government Institute, Seoul, South Korea	111
08 Law Enforcement, Austin TX, United States	125
10 University, Liverpool, United Kingdom	145
11 Freelance, Edmond OK, United States	163
19 Freelance, Austin TX, United States	181
30 Government Institute, Chiba, Japan	211
24 Freelance, Austin TX, United States	227
27a Law Enforcement, Pretoria, South Africa	245
27b Law Enforcement, Pretoria, South Africa	269
38 Law Enforcement, Cape Town, South Africa	289
42 Freelance, Manchester UK	307
50 University, Dundee, United Kingdom	327
51 Freelance, Menasha WI, United States	347
00 University, Liverpool, United Kingdom/South Africa	363

Figure 57: *Speaking Likeness* book organisation by individual portraits



PATHWAYS

It all started with...	29 31; 49 50; 71 72; 95; 113; 127 128; 147 148; 165; 183 184; 213; 229 230; 247 248; 271; 291; 309 310; 329 330; 365 367
The names we give	32 51; 73 75 96; 128 130; 148; 166; 165 166; 214 231; 248; 272; 282; 311; 330; 350 366 369
Subject or object?	33; 52 76 87; 131; 150; 167; 187; 232; 250 273; 280; 312; 331; 351; 370-371
Working cases	34-35; 53-55; 77; 98; 104; 120-132; 151; 168-9; 188-189; 210; 232; 251-254; 274-276; 294; 312; 332-333; 352; 372-374
Accurate or recognisable?	36; 56-57; 78-79; 92; 113; 124; 152-8; 170; 190-192; 218; 254; 255-256; 277-278; 285-290; 314-315; 334-335; 355; 375-377
There was this GIC...	37; 58; 80 81; 100; 116; 171; 185 184; 235; 257; 278; 287; 316; 330; 354; 378 379
Interdisciplinary interactions	38; 58 82; 101; 117; 135; 154; 172; 185 190; 217; 236; 250 259; 280; 286; 317; 337; 355; 360 361
Existence or intelligence?	39 60; 83-84; 102; 118; 136-137; 155; 197-198; 218; 237; 260; 281; 299; 318-319; 338-339; 356; 382-383
Emotional labour	40 81; 85; 108; 128-129; 158; 178; 199-202; 219; 281; 282; 300; 320 340; 357; 384-385
Matters of care, matters of concern	41; 62; 88-87; 104; 119; 140; 157; 174; 205-204; 230; 258; 282; 283; 301; 327; 341; 358; 386-387
Questions of justice	42; 63 88; 108; 120; 141; 158; 175; 205; 221; 220; 263; 284; 302; 322; 342; 359; 388
Being seen	43; 64 89; 106; 127; 159; 176; 206-207; 222; 240; 264-265; 285; 303; 325; 343; 384; 389
Forensic futures	44; 65 90; 107; 142; 160; 177; 208; 223; 241; 266; 286; 304; 324; 344 350

Figure 58: *Speaking Likeness* book navigation by thematic pathway

Referencing the durational nature of the portraits, which is impossible to replicate in a printed book,¹⁷ video stills were captured for each portrait at thirty seconds, and then at four minutes thirty seconds, and used to recreate a grid layout from the website, but this time as book end pages in the front (fig. 59) and then at the back (fig. 60) that act as literal and metaphorical ‘beginning’ and ‘end’ moments. Examining these comparatively reveals the passing of time through subtle changes to facial expression and head pose.



Figure 59: *Speaking Likeness* front end-pages featuring stills taken at 00'30"

¹⁷ Although it is technically possible to create a multimedia PDF, the book is intended as an electronic and print object. Given the work's primary platform is a multimedia website, a multimedia PDF would be redundant.



Figure 60: *Speaking Likeness* back end-pages featuring stills taken at 04'30"

These same stills are then used to introduce and conclude each contribution (see figs. 61 and 63). In a printed version of the book, it would thus be possible to view them side by side, by gathering the intermediate pages together and holding them vertically, revealing the video portrait's duration.

Narrative pathways are also replicated in the book's design as orientation menus in the outer margins of facing pages, with the relevant pathway highlighted red for a particular page/entry. Not every participant has an entry for every single pathway, in which case the particular pathway remains grey. Figs. 61 to 63 illustrate book spreads at the introduction, middle and conclusion of a single entry (P00).



Figure 61: *Speaking Likeness* P00 narrative commences, with portrait still at 00'30" on left and first pathway highlighted in red in the orientation menu (right outer margin)

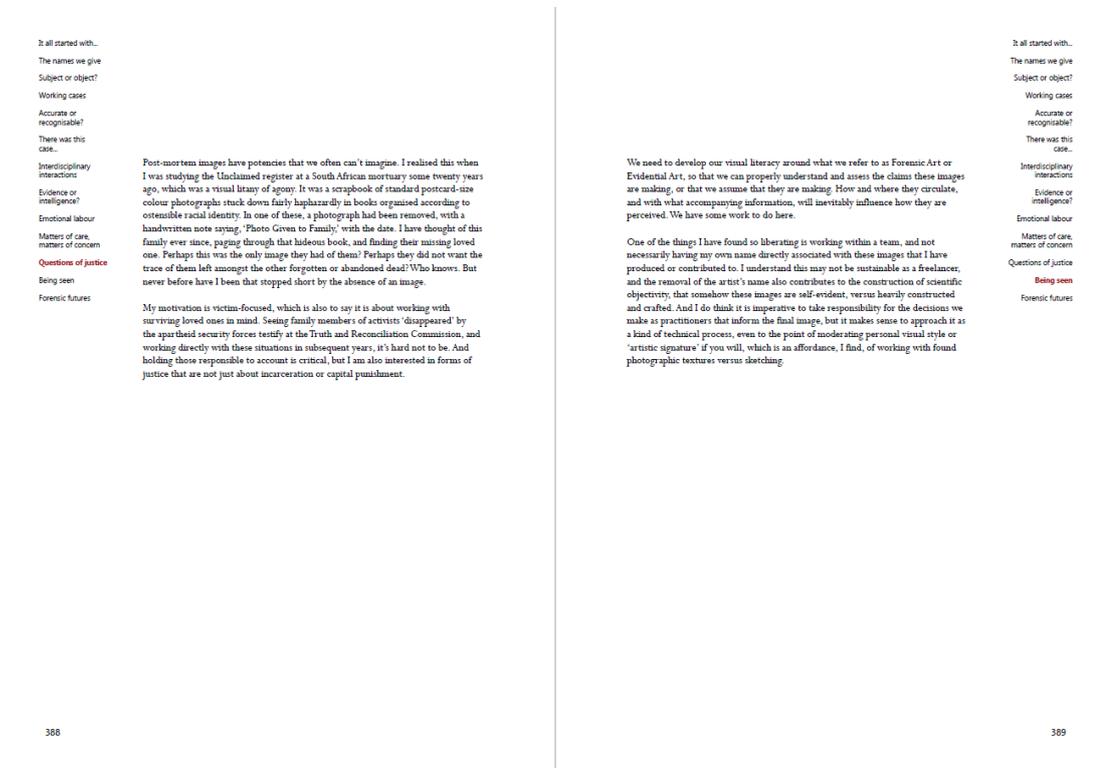


Figure 62: *Speaking Likeness* P00 narrative continues, showing two pathway entries side by side

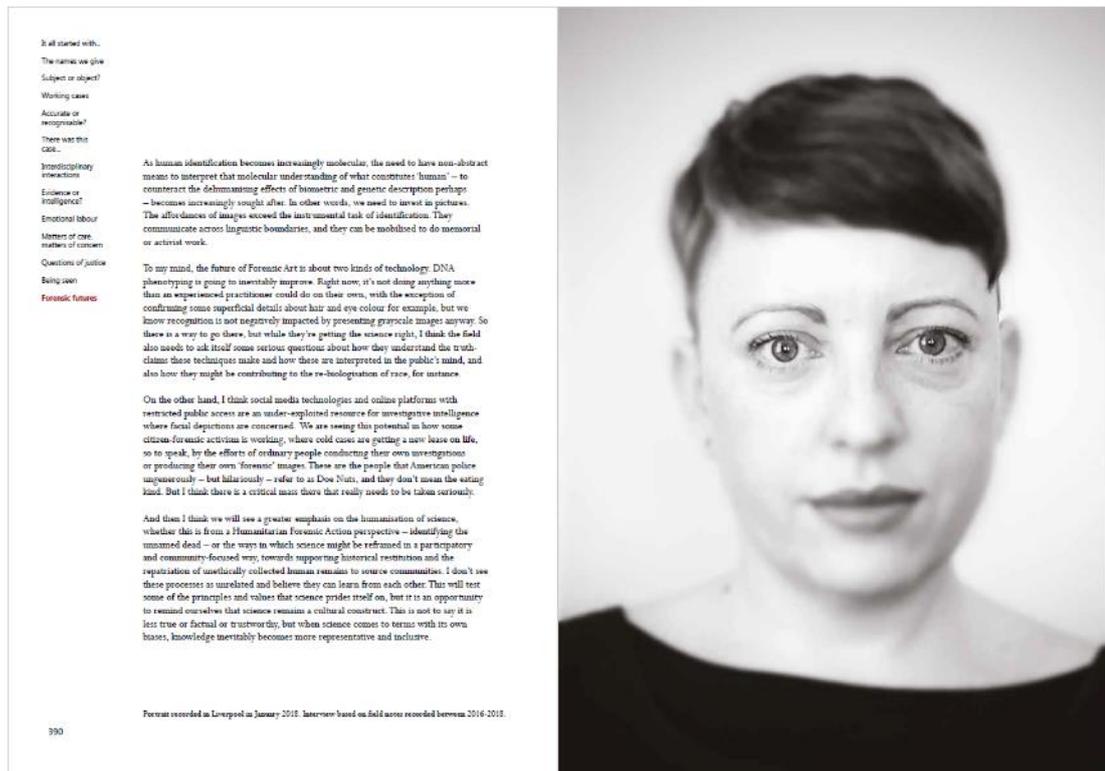


Figure 63: *Speaking Likeness* P00 narrative concludes, with final pathway highlighted in red in the orientation menu (left outer margin) and portrait still at 04'30" on right

Staging Forensic Art in *Speaking Likeness*

Speaking Likeness trades on the primacy of the facial image in constructing an identity *for* someone (a process which in itself involves no small element of cognitive bias) and simultaneously, how we present and perform our ‘selves.’ Voice and accent contribute to this bias. These processes are provoked by partly suspending them, in order to attend to the intimacy of looking at faces, and having our gaze returned in a manner that is gently confrontational, as well as tracing the reflexive aspect of a gaze turning inward over time.¹⁸ The work exploits a stark and uncompromising form of tonal portraiture, echoing the bland, anti-aesthetic of the passport photograph, but in its durational and narrated form, fosters a particular form

¹⁸ We might think of the dynamics at work in Marina Abramović’s influential performance piece *The Artist is Present* (MoMA, 2010; Marina Abramović: *The Artist Is Present*, 2012). But instead of sitting across from an actual person, the camera temporarily assumed the role of interviewer/interlocutor and becomes the first proxy ‘viewer’ in anticipation of the final presentation of these portraits as video or still images.

of engaged attention. It is a ‘doubled performance’, a re-enactment of research and practice, but paying particular attention to traces of the personal and emotional within professional practice. As such, it offers an alternative perspective on, or way into, the central questions animating this study: *What is at stake in producing, working with and circulating images of post-mortem faces?* and *What kind of art is ‘forensic art?’*

It is suggested that *Speaking Likeness* may be seen to re-enact key features of Walter’s theory of mediator deathwork (see Chapter 2), which is used here as a conceptual mirror to consider how the formal processes of this work – its design, production and presentation – reveal the structural logics and informational flows of Forensic Art as a practice, and the forensic artist as a type of medium, a task which is central to Walter’s formulation. Considered alongside the performative nature of forensic speech and how the relationship between voice and face pertains to *forensis* in the figure of the expert witness, and the ways in which forensic artists might be considered as representing a special type of mediator deathwork – what is referred here as ‘re-mediated’ deathwork – start to take shape. The particular forensic theatre of *Speaking Likeness* bears traces of these various forms and models and is a space in which a combination of academic and practitioner knowledge occupies a central role.

Artist as Medium

Forensic Art is a complex medium, its products treading twinned (thin) lines of credulity and legibility. To fulfil their objectives to present a plausible likeness that also recognises its own limits, forensic depictions must appeal to realism while acknowledging their own construction. They might be considered akin to form of witness testimony, and as such require other forms of substantiation. As investigative tools, they aim to open lines of communication between the unidentified dead, and their living family from whom have become separated, in order to complete their life stories, as one participant suggests (P08 in Smith, 2020b, p.139). As such, this work bears many parallels to mediator deathwork as described by Walter.

But it is also interesting to consider the ways in which artists self-describe as being a sort of medium themselves, not in the spiritualist sense exactly (although this

is not completely absent from the field's lore where intuition is a recognised skill.)¹⁹ Rather, they understand their role as a “conduit person” or “middleman” (P19 in Smith, 2020b, p.196), or being used “as a vessel” (P03 in Smith, 2020b, p.83). And then there is my own acknowledged role as consistent medium, shaping the conditions for these encounters which in turn shaped the thinking and processes in this research, variously confirming and challenging hypotheses and assumptions throughout this process. This thesis then acts as a further mediator, the researcher's voice conferring a certain authority to these voices, but also bearing accountability for their veracity.

Like spirit mediums, which figure in Walter's model alongside pathologists, coroners, American funeral directors, funeral celebrants, obituary writers, and museum curators (Walter, 2005, p.383), the skills of forensic artists rely on tacit (and sometimes explicit) demonstrations. They are also to some extent ‘passive receptors’ but in their creation (active construction) of new images that must function publicly, they are somewhat more ‘active’ in their work to re-mediate images or remains of the dead.²⁰

(In)visibility and Authority

Forensic artists, particularly those working within law enforcement agencies are seldom seen or named in relation to their work. Yet the images they make are critically tied to naming and visibility of other kinds: they are often the final chance in getting a victim or suspected offender identified in relation to a crime.

The products of forensic art and facial imaging tend not to be associated with the kind of individual authorship conventionally associated with the fine arts, yet this is not to say that some forensic artists are without a signature style or individual profile. Walter notes that in the UK, obituaries are the only major press articles not signed by their authors. Likewise, some argue that forensic depictions should not be overtly connected to a particular artist. Yet in reality, the practices of some forensic

¹⁹ The practitioner Frank Bender for example, who produced the sculpture that started Arne Svenson on his particular quest, is documented as giving significant credence to intuition (a particular form of tacit knowledge) for his success (Botha, 2008; Capuzzo, 2010)

²⁰ Walter questions himself on the passivity of pathologists, given their professional training (which confers status and authority) and the fact that they are the only members of the medical professional regularly interrogated in court. Yet he asserts their passive receptor role by virtue of them ‘not being in charge’ of the courtroom proceedings.

artists trouble this notion of ‘invisibility’ when their own personalities become part of the story, either by taking overt artistic ownership of the image (signing their work) or attaching themselves to it in other ways, such as releasing images independently of commissioning agencies or promoting their involvement in a case.

Participants in this study show contrasting attitudes to signing their work (some are critical of overt methods but recognise the importance of taking responsibility for the work, and putting your name on it does this) (P10, P02) and overt self-promotion. The idea of not only working in a particular medium but being a medium oneself supports this opposition to the ego or “razzle dazzle” which several practitioners regard as inappropriate (P10, P19, P00) in this field.

I also have a pet peeve about forensic artists taking credit, as if the detectives had nothing to do with it? As if the witness wasn't central to the task? It's so incredibly disrespectful. You're a part of the whole team, and you're doing your one thing. It's not about **you**. (Smith, 2020b, p.187)

This is the agreed ideal persona of the forensic artist; none interviewed for this project actively seek the spotlight. In fact, quite the opposite is true, especially those working within law enforcement (P18; P21), although success has raised the profile of some such that they do make relatively frequent, but carefully judged, media appearances, for example P19 and P43, who are also authors of key works on the subject. There are practitioners in the field who actively seek publicity and foreground their persona in doing so, including publicising cases independently of the commissioning agency, or doing cases unofficially; they were not approached to participate. It is worth noting that it is freelancers who find themselves in such a position as a matter of necessity, however those interviewed for this study find a middle ground, advancing a purely professional persona and sublimating ‘personality’. Yet regardless of work context, all participants interviewed are critical of self-circulation.

Questions of (in)visibility also obtain regarding anonymity, which was a condition of participation for some participants for personal or professional reasons. Yet the chosen techniques of visual and vocal re-mediation were considered acceptable remedies for these concerns. Interrogated privately in a formal interview session, they have been turned into public performers who now tell their stories

publicly. The remediated transcripts echo the ways in which the media might report on forensic cases, transforming their stories through “editing and re-editing... by someone with a different agenda and different values (Walter, 2005, p.396) [i.e. researcher/artist/curator] and entering them into wider circulation,” thus enacting another enfolding of law and lore.

Performing Situated Knowledge

Speaking Likeness enables a demonstration of the ways in which a data collection process may be refigured into a dramatic form that foregrounds what otherwise cannot be shown in the conventional reporting of research results, which is the value of the face-to-face, dialogical encounter as a significant mode of knowledge exchange, particularly in respect of tacit, emotional or personal experiences.²¹ As Posner (2009:23) notes, practitioner “observations, anecdotes and examples” are rich sources of such knowledge that in turn “help [them] interpret and simplify the complex welter of information and variables in organizational settings.” *Speaking Likeness* is comprised mainly of these, spanning the matter-of-fact, pragmatic, confessional, frustrated and humorous. “At least for practitioners,” Posner observes, “face-to-face interaction and communication is a more efficacious way of transferring knowledge.” (Posner, 2009, p.24)

The way knowledge transfers, or doesn't, between the academic world and the practitioner world as revealed through these accounts, is a wake-up call. How do we build better appreciation and mutual openness for our respective experiences and types of expertise, rather than engage in frustration, dismissal, and gossip? How do we innovate within environments of limited resources or lack of peer-to-peer contact, and not get stuck in bad habits or feedback loops of avoidable error? There is a clear need to engage more public-facing platforms to promote understanding, and increase the efficacy of Forensic Art. *Speaking Likeness* thus contributes to bringing this experiential knowledge to a distributed public forum as a collaborative endeavour with participants who have all, in different ways, forged a path in a field that they were never told was a recognised or viable career.

²¹ Tacit knowledge is what is transferred when we talk about the ‘hidden curriculum’ of any given discipline, and is particularly prevalent in disciplines and practices that involve the study of human remains, where professional behaviours are directed at taming emotional response or attachment to the material being studied.

Auto-portraiture and self-reflexivity

The relationship between Svenson's project and this research might be imagined as a call-and-response song, echoing the dialogical pattern of human communication and, particularly in musical traditions in southern Africa, represents a form of democratic participation that extends into civic and political engagement and religious ritual.

The relationship between the two projects may be described as dyadic, but their internal logic is implicitly triadic. In Svenson, this is between three distinct subjects: himself, the photographed object (which also represents an unidentified subject) and the hidden artist behind the forensic object. In this project, the triangulation operates between researcher and participant and artist-curator, where researcher and artist-curator are one and the same. The effect of the disembodied voiceover, it is suggested, is one of internal monologue, and involves some suspension of disbelief. We must believe that these words belong to these faces, even if the voice does not appear to 'fit'. Depending on which face is selected first, its effects may be more or less jarring.

Including myself in the cohort (as P00) was both a way to draw explicit attention to the participant-observer approach and the inevitable subjective lens a researcher will bring to ethnographic work. Far from rendering such work less scientifically valid, it is suggested that acknowledging the self within empirical work is a way to strengthen such work by recognising implicit bias. My presence as the only consistent interlocutor throughout these encounters, and their primary curator by virtue of designing the research instrument (semi-structured interview), selecting participants, and stewarding the production, cemented the decision to voice the scripts myself. They might be my voice, but they are not my words. These faces now all sound like me. A single, female voice accompanying such a diverse collection of faces speaking in the 'wrong' accent and/or obvious gender is intended to draw obvious and absurd attention to the cognitive bias embodied by voice, carried through accent and assumptions about gender and nationality/origins based on physical appearance.

Prosopopoeia and the expert witness

Thinking back to Walter's account of mediator deathwork as enacted by a pathologist in the context of an inquest, this process is triadic, operating between the deceased, the expert mediator and a public 'rite' or performance. Consider the similarities in Eyal Weizman's account of forensic speech:

Forensic speech is traditionally undertaken as a relation between three elements: an object or building "made to speak," an expert who functions as the translator from the "language of objects" to that of people, and the forum or assembly in which such claims can be made. To refute a forensic statement, it is necessary to dismantle this triangle of articulation, which alternately means to demonstrate that the object is inauthentic, that the interpreter is biased, or that the translation is unfaithful. (Weizman, 2018, pp. 67)

Informed by Keenan and Weizman's articulation of the forensic aesthetics (Keenan and Weizman, 2012b), and applying the notion of the forensic turn to theatrical performance, James Frieze rightly observes that the credibility of forensic identification rests on 'protocols of appearance and evaluation' where "gestures, techniques and turns of demonstration, whether dramatic, poetic or narrative, can make things appear' to speak for themselves... spectacularly, to a non-specialist audience." (Frieze, 2019, p.3)

The theoretical touchstone here is Keenan's deployment of the classical Greek theatre device of *prosopopoeia* (*prosōpon* 'person' + *poiein* 'to make') – a metaphorical personification, 'giving face' to inanimate objects – as a way of describing the task of the expert witness testifying as to the value of evidence. It is a version of forensic anthropologist Clyde Snow's maxim that 'the bones don't lie'. In their role as interlocutors possessing officially recognised authority, expert witnesses confer 'speaking power' to objects and things. This idea is echoed in Judith Butler's advancement of the concept of performative speech, a language act that makes something happen, such as a judge pronouncing a sentence. Considering the work as a kind of professional tribunal enables a direct reconnection with key concepts related to 'forensis', namely forensic aesthetics and the counter-forensic, and the particular relevance of 'forensic speech' and the device of prosopopoeia to this work in which 'mute' faces still speak. This would support P50's suggestion that post-mortem forensic art could form part of 'identification commission' (Smith, 2020b,

p.338) to get away from framework of ‘evidence’ and enable a fuller consideration of their value as objects of visual intelligence which also appear to have humanitarian value.

Extending the two-dimensional photographic passport or mugshot photo into a durational video portrait also consciously recalls the deposition video, or VIPER (Video Identification Parade Electronic Recording) system, while the narrative evokes the testimonial and the confessional, foregrounding the contingencies and risks of establishing trust and opening up to another. In the accounts which accompany these stark portraits, the law becomes a backdrop for trading professional lore. Breaking up narratives into fragments provided a rationale to the role each individual story component played in the arc of the whole. Being able to track multiple perspectives on a single pathway was a critical strategy to destabilise the hegemony of a single voice or story. Groebner’s suggestion that the best one might attempt in writing about the history of identification – a vast topic caught up in the structural entanglements of statehood, citizenship, legal recognition and subjectivity – is to ‘capture it in a net of narratives’ (2007, p.10) recalls Walter’s observation that the inquest too is a site characterised by a “multiple criss-crossing of stories and storytelling” in the performance of its findings (Walter, 2005, p.396). Walter is clear about separating the performativity and theatricality of mediator deathwork from acting, “in the sense of taking on another persona”: “On stage, mediators are to be themselves, yet not to project themselves; to be authoritative, yet almost invisible” (406) This embodies the logic of *Speaking Likeness* in a nutshell. Encountering this idea in the final stages of completing the work generated similar feelings of uncanniness as P51’s assessment of Bender’s reconstruction of Rosalla Atkinson. It was like looking in a mirror.

Concluding remarks

Speaking Likeness is principally a narrative project that is an affective exploration of the theoretical core of *Laws of the Face*. It embodies all the diverse threads of this enquiry, including its transgressive (counter-forensic) aspects. Simply put, it engages a range of forensic imaging practitioners in telling the story of their experience in the field and presents it as a form of online theatre. It can be described as a virtual face-

to-face archive of tacit knowledge, and a practice-led research artefact develop in direct response to the limits of conventional forms of presenting research. There is value in anthologising these stories as no other such record currently exists, and information about the realities of this work, and how to enter the field, is scattered, uneven and difficult to access, as several of the participants attest.

Speaking Likeness directly engages with the face as a technology of identity and identification as complementary but also divergent concepts. We generally agree on what constitutes a ‘normal’ face yet do so is to project a set of culturally-derived ideas onto the thing we denote as ‘the face.’ Within forensic human identification, the face is recognised and mobilised as a biometric, and visualisations of these forensic methods have found a captive audience within popular culture, from CSI procedural television shows to advertising and museum displays. Subject to the vicissitudes of aesthetic contemplation and scientific calculation, and by extension, of agency/power and discrimination/prejudice, it is suggested that the face is always ‘in formation.’ In acknowledging the intimacies of looking/staring/gazing, observational processes shared by both laboratory and field scientists, and the studio artist, *Speaking Likeness* is an act of resistance to the ‘radical effacement’ of the other as described by Judith Butler (Butler, 2006a) and echoed in the work of Jenny Edkins (Edkins, 2015). It embraces MacCormack’s reading of the Levinasian move to ‘turning towards’ the other as a political gesture (MacCormack, 2000) which is also appropriate to call a counter-forensic one; a choice to act in the face of inaction. The face therefore can be understood as a space that is capable of acting and being acted upon. The faces of *Speaking Likeness* thus represent a new form of remediated portraiture, acting as test sites onto which complex ethics and biases between subject and object are performed and projected.

The seductive lure of forensic cultures conjures potent images in the public imagination which seldom reflect the lived experience of those involved. Pulling back the veil on a largely hidden – or certainly very niche – profession, acknowledges this lure, but also offers a way into deeper understanding through the direct experiences of those working in the field, who themselves are normally hidden from view. Making the internal operations of a hidden field that are the source of both pride and frustration, and which represent its greatest weakness as well as the source of its value and potential, available for consideration and scrutiny, is a

counter-forensic act. Putting faces to these perspectives, highly individual and diverse but also revealing commonalities, *Speaking Likeness* asks what the mode of performance – staging and re-staging, enactment and re-enactment – offers in respect of accessing the hidden curriculum of Forensic Art and post-mortem identification as a practice, and the implications of rethinking it as a special form of mediator deathwork.

Chapter 6: Restaging Forensic Art in Three Acts

To respond to the face, to understand its meaning, means to be awake to what is precarious in another life or, rather, the precariousness of life itself.

(Butler, 2006b, p.134)

These are dismal sciences, but fundamental in their basic humanism, a humanism of mournful re-individuation, laying the groundwork for a collective memory of suffering.

(Sekula, 2014, p.55)¹

This concluding chapter focuses on a conceptual reframing of post-mortem Forensic Art grounded in the principles and practices of **re-mediation**, guided by the study's two main research questions (*What is at stake in producing, working with, and circulating images of the post-mortem face for the purposes of forensic identification?*, and *If we think of Forensic Art as art at all, what kind of art is it?*) through the lens of those which introduced the preface: *What is the link between the forensic identification and humanitarianism? And how might socially-engaged artistic and advocacy practices enhance the work of Forensic Art in advancing the practice of post-mortem identification?* Mediator deathwork (Walter, 2005) and forensic humanitarianism (Moon, 2020; Parra et al., 2020) are useful theoretical guides for how the philosophical objectives of post-mortem forensic facial imaging may be rearticulated, read alongside citizen-led and cross-sector initiatives and the practical actions, technical processes and new technologies which are reshaping the field.

Organised into three acts, illustrated case studies demonstrate the resonance between theoretical tropes advanced in earlier chapters; empirical fieldwork and experimental findings; and the artistic staging of the project described in the previous chapter. Act 1 considers how various theoretical frameworks and cross-sector collaborations, including online cultures, are expanding the forum of post-mortem

¹ Originally published in 1993. Republished in *Grey Room 55 Special Issue: Allan Sekula and the Traffic in Photographs* and cited in Keenan (2014a, p.71) 'Counter-forensics and Photography' in the same issue.

identification. The relationship between Forensic Art and forensic humanitarianism is explored through ‘extra-ordinary deathwork’ (Moon, 2020) and other expansive models of care, critical citizenships and knowledge-creation. Structural aspects of knowledge exchange and validation within the field are analysed via the concept of the pracademic (Posner, 2009).

Act 2 (re)turns to the face, revisiting grounding theories of facility in relation to Judith Butler’s notion of “radical effacement” (Butler, 2006b, p.147) a way to re-engage with the face as an ethics, and builds on the theme of citizen forensic action through two examples from contemporary art and online advocacy work that embody ways which forensic cultures are being necessarily queered.

Act 3 arrives at the central claim of this study: Forensic Art produces a singular, hybrid and complex type of mediating visual object with both direct and indirect representational registers. Temporal and contextual specificities may be inferred from the particular materialities of post-mortem forensic depictions which contribute to their identification as agents of **re-mediating deathwork**.

Act 1: Expanding the forum of post-mortem identification

The forum is where the rhetoric that underlies forensic aesthetics is honed. Each new object, be it an exhumed corpse or a set of data, poses a challenge to the mediator, whose efforts to meet new challenges by devising new techniques leads to the continual evolution of the forum. (Frieze, 2019, p.2)

In June 2016, just before Melilli5 began, Cristina Cattaneo, the main forensic figure in this operation, was speaking at a conference in Venice. She said: ‘we have to reinvent forensics anew. Nothing seems to work. [...] It seems that pictures on social media and the clothing are the most valuable signs to go by.’ (M’Charek and Casartelli, 2019, p.2)

One of the principal investments of this study is to consider the extent to which contemporary post-mortem forensic facial depiction practices mirror the values, objectives and processes of forensic humanitarianism, in order to rethink and reposition the epistemologically contested practice of Forensic Art as something

other than ‘not science’ or ‘not evidence’ or even ‘not professional.’ In his articulation of an expanded definition of the concept of *forensis*, expressed visually through the work of Forensic Architecture, Weizman (2014; Forensic Architecture, 2018a) has reclaimed a knowledge-producing space for citizens and experts alike, enfolding the counter-forensic into forensics proper. The public forum is asserted as a critical site where forms of citizenship are produced and performed, and where objects become more or less significant through special forms of mediation by which they are made to speak. As Walter and Weizman both demonstrate in different ways, this mediating role must be performed by an interlocutor/expert witness through whom semiotic importance to various materials is conferred by virtue of their own socially-conferred authority.

Forensic speech has the potential to both enhance and disrupt the authority of objects or bodies, a process Keenan (2014b) has analogised via the dramaturgical technique of *prosopopoeia*, the etymological origins of which supports staging the face/faciality as the critical link between the site of the forum and technologies of critical citizenship. It is clear that the concept of mediation is central to the process by which objects or images attain forensic significance, but also how they become legible in this context. So how can this be articulated with reference to the visual, and post-mortem Forensic Art specifically?

It is suggested that the personification that confers speaking power to material evidence also occurs within post-mortem Forensic Art much more directly, because this work entails literal face-making, through which the identification of an anonymous decedent is hoped to be retrieved. The social effects of this process may be described as the restoration of personhood. Post-mortem forensic facial depictions are very particular types of complex media that appeal for action in the interest of the depicted person. In this way, their terms of operation bear distinct similarities to Azoulay’s civil contract of photography. Forensic depictions thus have a great deal of work to do, in ways that other facial images (portraits, passport photographs) do not. Understanding how this **work occurs at the site of the image itself (which is intrinsically linked to the figure of the forensic artist), and then in the sites of circulation** (and by extension, its audiences), enables a closer understanding of the potential value of these objects in expanding the forum of post-mortem forensic identification through directed and inadvertent cross-sector collaborations between professionals and citizen allies. These seemingly risky interactions point to the future

of the field, where the forensic facial image is imagined meeting its forensic requirements in new and unexpected ways.

Thinking through ‘extra-ordinary deathwork’

The idea that forensic work has humanitarian effects has, arguably, not been driven by forensic science itself, but by the conjunction of forensic science with activism by the families of the dead and disappeared.
(Moon, 2020, p.41)

Claire Moon’s concept of extra-ordinary deathwork draws on Walter’s theory of mediator and barrier deathwork (Walter, 2005) to theorise the specific nature of HFA/forensic humanitarian deathwork in relation to ordinary deathwork. For Moon, HFA represents a new form of death management, mediating between the dead *and* the living, and articulated through forms of forensic *action* (Moon, 2020, p.37) thus exceeding the work of the forensic pathologist as identified by Walter as a key figure in ordinary (mediator) deathwork. Further, unlike ordinary forensic pathology which deals daily with determining the causes of sudden and unexpected deaths, Moon (2020, p.46) observes that extra-ordinary deathwork is “temporally intermittent”; it only gets involved in exceptional events, usually involving some form of mass death. It may also need to transgress conventions of ordinary barrier deathwork (which performs tactical acts of concealment driven by social and cultural norms) and reveal information about these deaths in the interests of human rights and justice that regular public rites such as funeral tributes and obituaries tend to omit.² Commitment to social justice; recognition of context; and the role of family in aspects of the deathwork (Moon, 2020, p.46) are further features of the ‘extra-ordinary’ mode.

² Thomsen (2017, p.380) makes the valuable point that appropriate ethics within forensic humanitarian contexts may appear counterintuitive and that a family’s wishes to view remains must be seriously considered: “The relatives have the right to full information of the results of the investigation. Only when the scientist has the impression that the full information, including gruesome details will do more harm than good, and the person does not want the information, will it be acceptable to withhold it. Otherwise we may see re-traumatization. [...] With reference to visual identification it must be considered carefully if a person can be confronted with a decomposed or heavily mutilated alleged relative. On the other hand it may be useful for identification purposes. It is a balance depending also on the wish of the person.” See Appendix 6, Field vignettes 7 and 8, particularly M’s story, which demonstrates how the living might encounter other forms of ‘barrier’ deathwork that can exacerbate trauma rather than allaying it.

Walter has demonstrated that the dead need ‘tellers’; they cannot speak unaided, and via Keenan and Weizman, the work of forensic speech and *prosopopoeia* in achieving this has been made clear. For Moon, the principle extra-ordinary aspect of HFA is also vested in its specific work of interpretation (Moon, 2020, p.42), but she disputes Clyde Snow’s famous assertion that the dead speak “a special, indisputable kind of truth,” reminding us instead that the *character* of the teller (their experience and practice) as well as the *objective* of the public rite (criminal trial, tribunal etc.) will determine the narrative, because “the particular *type* of expertise determines precisely what the dead disclose.” (Moon, 2020, p.43, original emphasis)

Expansive models of care, citizenship and knowledge-creation

In an HFA framework, “our shared responsibility for the dead” (Moon, 2020, p.38) is not just about their proper treatment but also in respect of alleviating family suffering.³ The shift towards humanitarianism within forensic deathwork makes way for values other than straightforward legal objectives to come to the fore (p.40), expanding the terms of citizenship and care, as discussed by M’Charek and Casartelli (2019). For Moon, HFA is ultimately linked to discourses of citizenship via bureaucratic controls which resist abjection by incorporating the dead into social life, thus ‘taming’ death.

For Moon, the “expansive” character of HFA’s extra-ordinary deathwork further distinguishes it from ordinary mediator deathwork which facilitates mourning.⁴ In Walter, the informational flow from the dead body through the authorised mediator to the performativity of the public rite is directional, recalling M’Charek & Casartelli’s highlighting of protocols embodied in process-flow diagrams designed to ‘move a body in the right direction’ (M’Charek and Casartelli,

³ HFA lays claim to “mark[ing] a new domain for forensic science,” institutionalized within a pedagogic framework and relevant academic and service-provision offerings by the world’s first International Centre for Humanitarian Forensics (ICHF) was launched in Gujarat, India (2018). The invention of a label “brings a new social reality into being, and provides a basis or rationale around which action may be organized and interventions devised...[paving] the way for a more conscious and concerted development of the field.” (Moon, 2020, p.40)

⁴ While HFA deathwork does involve intimate, focused work with relatives including collecting antemortem data, or demonstrating the findings of a visual comparison, as Moon (2020, pp.46–47) points out it “frequently has ramifications that go beyond the relationship between the dead and his or her immediate relatives”, addressing broader social and political imperatives, such as truth commissions which enable a fuller (more representational) version of history.

2019, p.4). Moon speaks instead of a ‘matrix’ of meaning where information flows in multiple directions, determined by the particular legal framework through which a dead body (and the circumstances of its particular death) is managed, creating “a new universe of meaning” (Moon, 2020, p.43) in which the decedent, stakeholders and the data that accumulates around them may be understood as actants that determine how the process plays out.⁵ This recalls M’Charek’s description of the ‘tentacular’ operations of forensic faces.

This study has shown forensic cultures are currently facing some fundamental challenges, particularly in relation to human identification in certain crisis areas. As the Mellili and OpID case studies and South African fieldwork shows, forensic science becomes unavoidably entangled with political agendas at regional and international levels, and it becomes increasingly difficult not to interpret these situations as necropolitical, testing the most fundamental principles of international human rights of all people being equal before the law, and deserving the right to identity in death. Undocumented migration and other forms of precarious existence challenge notions of citizenship as well as processes of forensic identification in quite fundamental ways, as both are pushed to extremes to meet the challenges of these conditions.⁶ As M’Charek and Casartelli have shown (2019, p.6), humanitarian initiatives involving national or international co-operation between state and other bodies (NGOs, charities) represent important attempts to restore the political subjectivity of dead persons through forensic care work, which comes to represent an ‘expanded’ definition of formal citizenship that is explicitly relational and formed through sociality, where “people become citizens through interactions in sociomaterial practices and by establishing relations with one another” (M’Charek

⁵ *Humanity after life: Respecting and Protecting the Dead* (ICRC, 2020) sets out in detail the various legal frameworks that may be applied to those “who die during armed conflict or situations of violence falling below the threshold of armed conflict – or who have perished in disasters or in the course of migration.” (n.p.) Respect, dignity and identification are core common values which translate onto how these pieces of legislation address the families of the dead/missing/disappeared.

⁶ Nation-state governance is not the only way in which people organise themselves, and certain nation-state structures may present untenable conditions for some of their citizens who are no longer guaranteed agency or protection and thus may be forced to seek alternative opportunities elsewhere in the interest of their own and their families’ survival. This is at the root of current global migration journeys, many of which are fatal, which becomes a matter of forensic concern as body recovery and identification become necessary in territories where the decedents are not recognised as citizens. Of course forensic identification of the living is also a concern and much research attention has been directed at forensic age estimation in the living for example (whether someone is legally a child or an adult confers particular rights and protections, impacting refugee/asylum and other frameworks), but this is a complex topic beyond the scope of this study.

and Casartelli, 2019, p.2). This in fact retrieves something of the core definition of citizenship as always implicitly relational, because to be a citizen, your rights/status as a political subject must be recognised by others. In the case of unidentified migrants who perish along their journeys, who have become untethered from their country of origin but who cannot be recognised as part of the context of their recovery either, forensic identification processes represent the only potential to retrieve individual identity and reconcile social connections between a decedent and their kin.⁷ This is also true of any other unidentified individual in a medico-legal facility.

The type of relational citizenship produced through forensic deathwork can also be framed as an expression of critical citizenship, a pedagogical discourse developed in response to “changing conceptions of what it means to be a good citizen” (Johnson and Morris, 2010, p.77), questioning conventional expressions of citizenship from the perspective of injustice and oppression as negative expressions of political power and privilege. The ‘critical’ work of critical citizenship therefore moves quickly beyond the legal status of being a recognized citizen of a certain country, problematising normative concepts of citizenship and asking instead what it means to inhabit, contribute to and be recognised as part of a community. Critical citizenship may thus be described as a discursive space in which the normative values of critical discourse (abstract, individualistic, context-neutral) intersect with those associated with critical pedagogies (social justice and collective ideology, praxis, context-driven), producing politically-engaged perspectives which in turn produce new kinds of knowledge better able to meet the needs and circumstances of diverse communities and stakeholders (Johnson and Morris, 2010, p.80).

Via Azoulay’s claim that photography embodies a ‘civil contract’ which holds photographer, subject and viewer in a mutual, triangulated exchange,⁸ it is

⁷ Yet as the authors point out, forensic deathwork does not attract nearly the same attention or investment as similar identification technologies used to monitor living migrants in the European Union (M’Charek and Casartelli, 2019, p.5), an observation which can be extended to the United States and its southern border politics, which are producing similar forms of relational citizenship through forensic care. This striking asymmetry has a distinctly visual quality in the way it produces the living migrant body as present (and implicitly threatening), versus the neglect (and thus implicit erasure) of the dead migrant body. They give an example which encapsulates the paradox of migrant citizenship politics, when the Italian Prime Minister at the time declared victims of a shipwreck near Lampedusa ‘Italian citizens as of today,’ but survivors were arrested and detained as illegal immigrants (M’Charek and Casartelli, 2019, p.11).

⁸ Considered via Rose, the first two nodes represent the respective sites of the image and its production, whereas the third speaks to audience, an effect of circulation.

possible to consider how forensic depictions are being deployed to engage broader publics and produce new forms of citizenship.

Post-mortem Forensic Art and forensic humanitarianism

It now becomes possible to identify specific ways in which post-mortem Forensic Art may be considered an unrecognised expression of forensic humanitarianism via its specific objectives and visual methods.

Neither ‘forensic humanitarianism’ or ‘Humanitarian Forensic Action’ explicitly includes the word ‘science’ which signals the potential for visual/artistic methods to be included in these frameworks in ways that other professional scientific structures (OSAC, professional organisations) preclude, given the predominant simplistic binary logic of the art-or-science/evidence-or-intelligence arguments that tend to characterise what type of knowledge this work is considered to produce. By contrast, HFA is a discursive, dynamic space where applied science *must* recognise the particularities of context in order to do its work effectively. As such, it productively complicates the ‘field’ vs ‘lab’ argument which has otherwise been used to undermine the cognitive authority of disciplines and expertise that are essential collaborators in this work (Adovasio, 2015) through forms of boundary policing (Gieryn, 1983). Further, thinking Forensic Art through the prism of HFA blends the science and social, the gendered and the locational, the responsive and the responsible in ways that are present in Forensic Art, but have been insufficiently recognised or articulated as such.

As a primarily depictive mode, post-mortem Forensic Art offers distinct ways of connecting abstract science with stakeholder communities through visual means, embodying HFA values in a singular way. As much as bureaucratic controls exist to incorporate the dead into social life (thus ‘taming’ death in social and political terms) these operations are largely abstract. Post-mortem depiction practices embody such controls by creating socially acceptable and perceptively useful images for identification purposes. If we accept Keenan and Weizman’s (2012a) account of the advent of forensic aesthetics, HFA and post-mortem facial imaging are inextricably linked through the emblem of Mengele’s skull.

The technical process of post-mortem depiction engages processes of care and empathy through its materials and practical actions, crafting complex intersubjectivities and intimacies between practitioner and the subject being reconstructed. These intersubjective connections may also extend between the facial depiction and its audience (as such depictions are intended to do), extending Azoulay's civil contract to media other than the photographic. Such arguments have been advanced in support of the application of post-mortem facial imaging in contemporary museological redisplay (Smith et al., 2019, 2020) and archaeological restitution projects that critically engage problematic legacies of colonialism (Smith and Wilkinson, 2019).⁹ In their work on the 'missing and the missed', Hayes and Paolo (2018) and others have begun laying critical stepping-stones between the kinds of bodies that are the focus of HFA initiatives (the dispossessed/oppressed and politically silenced) and those which animate post-colonial critiques of the legacies of bio-anthropology in respect of the indigenous body/subject.¹⁰ Like HFA, the practice of forensic facial depiction has ramifications that extend beyond its immediate context, and it shares in the problematic legacies of bio-anthropology through materially ambiguous artefacts like face casts which contribute to its edge work/edge object status.

The work of post-mortem forensic depiction generally finds close accord with Moon's definition of extra-ordinary deathwork, but in the context of sites like South Africa, this work would no longer be temporally intermittent but *routine*, even if not yet formally recognised as such, which a critical matter of protocol which this thesis seeks to address. Such sites must address the conditions of mass death, albeit

⁹ See also (Swaney and Balachandran, 2018; Smith et al., 2019). These projects engage the ethics of reconstructing/performing personhood through the material transformation/re-mediation of ancient remains. Critical consideration of the socio-cultural impact of post-mortem depiction in heritage contexts is generally not well represented in the literature with some exceptions (Hayes, 2016; Johnson, 2016; Smith et al., 2019, 2020; Wilkinson, 2020). For some scholars (Rassool and Hayes, 2002; Schramm, 2016), face casting and facial reconstruction represent material extensions/perpetuations of race science legacies of physical anthropology, further suggesting that facial reconstruction enables greater degrees of 'scopic imagination' than the face casts used to construct taxonomies of human 'types' in the past.

¹⁰ Here, the twinned bodies of concern are "the missing/missed body of apartheid-era atrocities and the racialised body of the colonial museum," which as Roussouw, Moosage and Rassool (2018: 10) point out, have previously been treated separately but which are in fact deeply entangled in their shared framing as "racialised, and as 'disappeared' and missing," and the lines of enquiry deployed to bring them into critical visibility, namely "issues of identification, redress and restoration, often framed through notions of humanisation or rehumanisation," or what the authors refer to as 'disciplines of the dead' existing both in "collaboration and contestation with each other."

differently paced.¹¹ If HFA is revealing absences and gaps in traditional forensic procedures, and developing innovative responses (identified here as counter-forensic in spirit and practice), engaging visual methods is the next frontier. The absence of visual methods in current HFA frameworks suggests post-mortem forensic imaging may be considered, for now least, an expression of visual forensic humanitarianism, or visual counter-forensic action.

Affordances and challenges of cross-sector collaborations

Mellili and OpID demonstrate the essential role of universities in assisting with forensic deathwork (Cappella et al., 2017), in the face of asymmetrical distribution of resources¹², a situation which introduces “significant political or normative tensions” (M’Charek and Casartelli, 2019, p.11) around forms of labour in forensic deathwork and how these are acknowledged and valued. In the case of the Mediterranean, a consortium of ten Italian universities provided staff and equipment to the Mellili initiative free of charge. In south Texas, OpID also provides invaluable teaching and casework experience for trainee anthropologists from their own as well as other institutions, relying principally on volunteering and extra-curricular labour. A similar model is being followed in Johannesburg at the Wits ID Unit as a cross-sector collaboration involving academic, public sector and NGO partners. These efforts exemplify forms of critical citizenship, instilling the values of a collaborative, humanitarian ethos in forensic deathwork and engaging the affordance of the counter-forensic to enhance and advance their work. Yet the sustainability of these models in relation to the messages they transmit about the value of this work raise a number of questions regarding their potential translation onto the South African context. Two key features characterise a significant parallel and a telling difference

¹¹ Moon recognises this in a note (2020, p.45, note 11), questioning the assumption that conflict situations, mass atrocity and mass disaster events are exceptional and are perhaps rather regular features of social and political life globally (as Mbembe describes). The focus here on sites of migrant fatalities and accumulation of unidentified bodies aligns with this thinking. Mbembe’s necropolitics is orientated towards “the *generalized instrumentalization of human existence and the material destruction of human bodies and populations*” (Mbembe, 2003, p.14, original emphasis) and far from being exceptional, these figures instead “constitute the nomos of the political space in which we still live.”

¹² In the face of political reticence, media reports and civil action framed the Italian Mediterranean shipwrecks as matters of insistent concern that require specific care. The Italian government eventually committed millions of euros to the recovery of the largest ship which sunk in 2015, and the 800-900 bodies it contained, but no support was provided for the identification work required.

between Mellili, OpID and SRML respectively. **In common** is the close collaboration between the public sector and academic institutions and strong female leadership and representation in these teams, driven by matters of care (Puig de la Bellacasa, 2011) that characterise the humanitarian drive that predominates in forensic deathwork. In contrast to Mellili and OpID, the narrative of South Africa's overcrowded mortuaries and thousands of unclaimed and unknown bodies has been addressed and narrated in different theoretical and political terms. It has not been framed as a 'migrant crisis', largely because it is not known who actually makes up the post-mortem population of our mortuaries, but also because the closed nature of forensic spaces and cultures had kept the problem contained.

Thinking through the 'pracademic'

The weak institutional arrangements within which forensic medicine and related sciences are practised around the world means that mainstream journals are out of reach for practitioners in less developed settings. This is a major impediment to co-development. (Cordner and Tidball-Binz, 2017, p.69)

Forensic artists within a research environment may also be privy to a lot more scientific information (scientific studies/best practices) than those working in the law enforcement environment. Unfortunately, research and best practices can take time to filter out to those who are not in the research realm. (P25, 2018)

The knowledge produced within forensic cultures circulates internally, and is reflected in popular culture through fictional or 'true crime' modes with varying degrees of accuracy, but is missing the middle-ground where the social and cultural implications of this work might be better communicated to scholars in the humanities or social sciences. The concept of the pracademic (Kuhn, 2002; Posner, 2009) has been in use since about 1990, interestingly making it of the same generation of the first use of Facial Identification in the UK (P42 in Smith, 2020b, p.309), and is proposed here as a useful model to reactivate knowledge exchange within forensic imaging and forensic deathwork as complementary practices. This portmanteau term (a contraction of practitioner and academic) emerged in relation to

public administration but has since been applied to law enforcement, the non-profit sector and higher education contexts (Caldwell and Dorling, 1995; Powell et al., 2018; Dickinson et al., 2020).¹³

By definition, pracademics are ‘boundary spanners’ (Posner, 2009, p.14); their role is to broker academic-practitioner interactions through activating the flow of knowledge between these two contexts through experience- and evidence-based teaching which supports and challenges theoretical learning. In addition, being familiar with addressing multiple audiences with different interests and communication styles pracademics are seen to have unique skills which enable communication across linguistic, social and cultural contexts. These are forms of mediation and interpretation, mirroring those required in extra-ordinary deathwork. As Posner notes: “the effective pracademic not only must straddle both worlds, but must have established sufficient legitimacy to be respected in both communities.” (Posner, 2009, p.16) The pracademic’s ability to foster trust across sectors is a fundamental skill, and trust is one of the most conspicuous issues affecting the Forensic Art community, both internally and in terms of how the work is externally perceived.

Posner suggests that academic-practitioner interaction can contribute to higher social welfare through mediating explicit and tacit knowledge via a network model informed by the work of Nonaka and colleagues, particularly their concept of *ba* (Nonaka and Konno, 1998) which describes how knowledge is produced *relative* to sites of work (in other words, context). Table 13 summarises the main patterns of knowledge relative to how such knowledge may be transferred and the sites which facilitate this. The highlighted section indicates a key finding that “knowledge transfer takes place best across the tacit-explicit divide, the arena where it is most difficult” (Posner, 2009, p.23). which also precisely describes the type of knowledges which characterise the grounding principles of Forensic Art but which have not yet been articulated as such. If this can be achieved, Forensic Art has much to contribute to pracademic discourse and much to benefit from it as a tactical strategy,

¹³ Forensic deathwork, carried out predominantly by a collaboration between the public and non-profit sector and academics, may be seen as an analogue for ‘public administration’ broadly defined, with its related politics, tensions, and motivations.

Table 13: Patterns and processes of knowledge transfer developed with reference to Posner (2009) and Nonaka and Konna (1998)

Pattern	Nature of transfer	Process/ba
Socialization	tacit to tacit	professional symposium, best practices, empathy, face-to-face interaction
Externalization	tacit to explicit	grounded theory converting practitioner assumptions and experiences into systematic and tested theory
Combination	explicit to explicit	academic forums and research
Internalization	explicit to tacit	training and education and networks of academics/ practitioners

Forensic Art is by definition interdisciplinary, which is a source of its epistemological precarity. Disciplinary conventions are responsible for reinforcing distinctions between types of knowledge, which in turn feeds into what type of research is considered academically valuable¹⁴, which has several consequences including “[failing] to address the larger questions facing practitioners and publics alike” (Posner, 2009, p.21); disincentivising practitioners from becoming involved in research or attending professional meetings¹⁵; and pressured work contexts not being amenable to the reflexivity required for successful pracademic exchange, a point which study respondents reiterated. Posner remarks that “At least for practitioners, face-to-face interaction and communication is a more efficacious way of transferring knowledge.” (Posner, 2009, p.24) This, in a nutshell, is what *Speaking Likeness* attempts, by proxy, to embody and reflect.

Forensic deathwork, and particularly Forensic Art as an extension of this work, represents a distinctly pracademic character through the broader worlds with which it interfaces. Its practitioners possess tacit as well as explicit knowledge in varying ratios, particularly through forms of training (informal and formal) and the honing of knowledge through practice and experience.

¹⁴ As Posner observes, “For the most part, case studies, qualitative research and interpretative studies that are likely to constitute the output of practitioners are often viewed as having lesser potential to advance the discipline. [...] Accordingly, practitioners find that mainstream academic research has less relevance to their issues and agendas” (Posner, 2009, pp.20–21) with the consequence that “Traditional avenues for sharing the results of academic studies – journal articles and academic conferences – will not reach practitioners who do not pay attention to these outlets” (Posner, 2009, pp.23–24), supporting the experiences about access and application of current research reflected in the responses of many study respondents.

¹⁵ This is evident in the distinction between who attends IACI versus IAI meetings, for example. See Chapter 2.

The interdisciplinary, edgework character of forensic facial imaging and its practitioners is boundary-spanning personified, with the objects it produces (images, sculptures) operating as a type of boundary object (Star, 1989). In their range of methodologies, techniques and hybrid media solutions, forensic depictions embody interdisciplinarity, combining various types of knowledge (explicit, tacit/heuristic), and addressing diverse audiences. Their intensely familiar form (a facial image) yet less familiar interpretability (blending visual authority and ambiguity), locates them within different representational registers simultaneously: illustration, technical image, proposition. They are epistemologically insecure, resembling art but not intended to function as such.¹⁶ The way forensic care work produces relational citizens also echoes this boundary-spanning work in how it performs a critical interface or knowledge-mediation between public-sector practitioner culture and academia.

As forms of knowledge ‘at the boundaries’, forensic facial imaging practices embody the ‘elastic rigour’ of Ginzburg’s model of conjectural knowledge¹⁷, a combination of everyday knowledge (based on experience and inherited, accumulated learning, told orally) and careful observation, “which allows the observer *to understand much more than can be directly seen*” (Davin in Ginzburg p. 6, my emphasis), thus enfolding formal knowledge systems with what he explicitly refers to as ‘lore.’ (Ginzburg, 1980, p.21)¹⁸ In his demonstration of the flows and

¹⁶ Chapter 5 discussed aspects of this paradox, in relation to artistic signature (a point of controversy within the practitioner community) and how this signifies.

¹⁷ “Elastic rigour” holds a general understanding of the ‘typical’ alongside the ‘exceptional’ and ‘particularistic’ (Ginzburg, 1980, p.20) The former is based in “[sacrificing] understanding of the individual element in order to achieve a more or less rigorous and more or less mathematical standard of generalisation” (which could be said to characterize Facial ID, and is the approach of the natural sciences, which “much later on” the human or social sciences would emulate) whereas the latter is invested in “[trying] to develop, however tentatively, an alternative model based on an understanding of the individual which would (in some way yet to be worked out) be scientific.... Knowledge based on making individualising distinctions is always anthropocentric, ethnocentric, and liable to other specific bias” (Ginzburg, 1980, pp.19, 20), which could be said to characterise Forensic Art. In holding these competing systems in a complementary relationship, Ginzburg demonstrates the power of semiotic traces so central to modes of identification and discrimination (in the sense of sorting similarity and difference) that for him are as common to the detective story as they are to “to history, archaeology, geology, physical astronomy and palaeontology: that is, the making of retrospective predictions... When causes cannot be repeated, there is no alternative but to infer them from their effects.” (Ginzburg, 1980, p.23)

¹⁸ As Ginzburg writes, with specific appeal to the face as an embodiment of his point: “...these kinds of knowledge - of lore - were richer than any written authority on the subject; they had been learnt not from books but from listening, from doing, from watching; their subtleties could scarcely be given formal expression - they might not even be reducible to words; they might be a particular heritage, or they might belong to men and women of any class. A fine common thread connected them: they were all born of experience, of the concrete and individual. That concrete quality was both the strength of

networks defining claims to certain types of knowledge, Ginzburg reveals the innate politics of this process, a result of which is the constant affirmation (as science) sought by the more conjectural (i.e. qualitative) disciplines, because science enjoys greater social status.¹⁹ In the application of post-mortem depiction in forensic and heritage contexts, this is reflected in what might be distinguished as a ‘criminalistic’ versus an ‘anthropological’ gaze. Facial depictions produced for forensic investigations “may allow for painfully open chapters in some lives to be closed” (Smith, 2019, p.40), whereas archaeological depictions are designed to prompt relatability with our human ancestors. The shared ethos of these different applications, which is to restore connections between the living and the dead, may be understood as an act of resistance against the reduction of recognizably human remains to scientific specimens; an insistence, in other words, that the particular subjecthood that inheres in biological remains and ‘personal effects’ is recognised, particularly for those who are anonymous in death.

Further parallels with a counter-forensic ethos can be seen. A pracademic approach is transgressive in its disregard for the ‘bright lines’ (Posner, 2009, p.19) that seek to reinforce disciplinary conventions (i.e. another expression of Gieryn’s ‘boundary policing’ in science). The monetization of knowledge and ideas which academia and the private sector represent further renders the pracademic a radical, counter-cultural figure, almost abject in their disregard for occupying a ‘proper’ place within the practitioner/academic dyad as they move between these sectors, as well as public service and charitable work. The non-normative qualities of labour in forensic deathwork (extracurricular and volunteer, yet also highly specialised, risky and demanding) obtain here.

this kind of knowledge, and its limit - it could not make use of the powerful and terrible tool of abstraction. From time to time attempts would be made to write down some part of this lore, locally-rooted but without known origin or record or history, to fit it into a straitjacket of terminological precision. This usually constricted and impoverished it. One need only think of the gulf separating the rigid and schematic treatises of physiognomy (judging character or mood from the appearance) from its perceptive and flexible practice by a lover or a horse-dealer or a card-player.” (Ginzburg, 1980, pp.21–22).

¹⁹ This is shaped by Ginzburg’s overarching interest in the relationship between “lore and science” as expressions of high versus low and formal versus informal knowledge, marked by a historical moment (European Age of Enlightenment) when the establishment of specialised disciplines began to contract the meaning of science as generalised knowledge (Davin in Ginzburg p. 5) and bright-lines were drawn between qualitative and quantitative methods (see also Gieryn, 1983).

The origins of forensic humanitarianism echo the evolving disambiguation between Forensic Art and Facial Identification – the former evolving and the latter *designed as* a discipline. As Moon points out, HFA was “inaugurated by experts” whereas forensic humanitarianism evolved from the citizen action of the grandmothers of the disappeared in Argentina beginning in the mid-1970s, formalising its relationship with scientific specialists (the founding of the EAAF) in the mid-1980s (Asociación Civil Abuelas de Plaza de Mayo, online), but thus far the active role of ordinary citizens has been largely absent from formal accounts of HFA despite its objectives addressing family interests. This is made even more explicit where families of the dead and the missing continue to push forensic work in new directions, assisted by allies in the citizen and netizen forensic communities.

Embracing pracademia is thus an inherently political act, which is emphasised in its potential to realise a ‘high social welfare’; there is a lot at stake. Seen in this way, the parallels with post-mortem Forensic Art (particularly when viewed through the lens of extraordinary deathwork) are clear.

NCMEC collaborations with USF and NYAA

Two initiatives in the USA, with NCMEC forensic artist Joe Mullins at their centre, are key examples of pracademic exchange between an NGO and institutions of higher learning, where skilled artists are given an opportunity to acquire and practice anatomical/forensic modelling skills and simultaneously contribute to unresolved cold case investigations under the guidance of an expert practitioner in a concentrated time-period. Both initiatives represent blended models where law enforcement agencies benefit from the involvement of citizen allies under controlled conditions.

In 2015 and 2016, the FL Institute of Forensic Anthropology and Applied Science at the University of South Florida (USF) hosted workshops dubbed ‘The Art of Forensics’, with forensic artists from around the world (fourteen in the 2016 workshop) working on cases from Florida and other states dating back several decades, to very recently recovered skeletal remains.²⁰ Artists work in the Manchester Method (Prag and Neave, 1997; Wilkinson, 2004b) on 3D-printed

²⁰ USF forensic anthropologist and artist Dr Erin Kimmerle, who leads the initiative, has hosted similar workshops in collaboration with NCMEC for the past ten years involving a total of about 250 international forensic artists over that period (Schreiner, 2016).

replicas of the original skulls, with whatever supporting case information is available. Publicity is a key aspect of the workshop's methodology, with a public exhibition of the sculptures accompanied by a press event. Two depictions from the 2015 and 2016 workshops were recognised (one by a visitor to the 2016 public exhibition), with positive identifications confirmed using DNA (Schreiner, 2016; Galzi et al., 2017).

In 2015, Mullins began a partnership with the New York Academy of Arts to host similar workshops with the help of advanced sculpture students from the academy. The first three focused on assisting the Office of the Chief Medical Examiner in New York with unresolved cases from its archives and resulted in the near-clearance of the OCME's unsolved case backlog (White, 2020). Mullins then turned his attention to eight cold cases from the office of the medical examiner of Pima County, Arizona in 2018, credited with being the first time an art school has been involved in assisting with the forensic identification of presumed undocumented border crossers (Holpuch, 2018).

In 2020, the Royal Canadian Mounted Police (RCMP) provided the initiative with fifteen cold cases from British Columbia and Nova Scotia, which received considerable and careful media coverage (CBC News, 2020b; Cope, 2020; Government of Canada, 2020; The Canadian Press, 2020; Walker, 2020; White, 2020; Who are they? Reconstructing faces of the dead, 2020) and resulted in one positive identification within two weeks of the workshop's conclusion (CBC News, 2020a). To date, the NYAA workshops have led to the identification of five individuals in total (CBC News, 2020b; Cope, 2020).²¹ Although it is not known whether any of these identifications resulted from direct recognition of the facial depictions as they did in Florida (in the RCMP case, it played an indirect role as a tip had been received as the workshop began which enabled DNA comparison), media attention and general interest in the process of facial depiction reactivates public imagination and can produce rapid results.

Reports from artists who took part in both the USF and NYAA workshops are very consistent with participant interviews in this study, with descriptions of their experiences closely paralleling reported motivations of altruism; the emotional impact of the work; the shift from intellectual curiosity to social responsibility; and

²¹ The successful depiction is illustrated in Chapter 5.

intersubjective transfer (object~subject; subject < > object) experienced when a plausible face begins to form over the skull and a sense of individual personhood begins to emerge.²² Perhaps the most telling remark is from a participant whose reconstruction from the 2018 NYAA workshop led to a positive identification shortly after the reconstructions were publicised: “Not only is it an artistic workout, but it’s a mental and ethical workout as well.” (White, 2020)

The presentation style of the facial depictions produced during the 2020 NYAA workshops is also noteworthy, photographed using a shallow depth of field that focuses attention on the internal facial features, and presented in grayscale, which follows accepted best-practice guidance to optimise familiar-face recognition and reduce recognition distraction (Davy-Jow, 2013; Wilkinson, 2015b), demonstrating the importance of re-mediation to optimise their function.²³ The images inspired a provocative experiment by media artist Daniel Voshart (Voshart, 2020), who used Artbreeder’s Generative Adversarial Network (GAN) to generate alternative digital textures for the clay sculptures from the published photographs (figs. 64-66).



Figure 64: Facial depiction (left) of case 2012020145 from NCMEC/RCMP/NYAA facial reconstruction workshop 2020. Photo courtesy Cpl. Charity Sampson/RCMP. AI textured version (right) by Daniel Voshart (2020), courtesy of the artist

²² One participant in the NYAA workshop credits the transmission of individual ‘personality’ to the addition of eyes and lips in particular (White, 2020), which are anatomical organs of sight and voice.

²³ The consistency of this presentation style with the portraits produced for *Speaking Likeness* is discussed in the previous chapter.



Figure 65: Facial depiction (left) of case 2012020165 from NCMEC/RCMP/NYAA facial reconstruction workshop 2020. Photo courtesy Cpl. Charity Sampson/RCMP. AI textured version (right) by Daniel Voshart (2020), courtesy of the artist



Figure 66: Facial depiction (left) of case 2012020147 from NCMEC/RCMP/NYAA facial reconstruction workshop 2020. Photo courtesy Cpl. Charity Sampson/RCMP. AI textured version (right) by Daniel Voshart (2020), courtesy of the artist

The results of Voshart's experiment are uneven, with the AI texturing at times creating significant alterations to feature shape that may be anatomically unsupported, as well as suggesting unjustifiable facial expressions (fig. 64). In fig. 65, the effect of the textures is acceptably subtle, supporting Voshart's observation that textures enable features like hair, wrinkles, and eyes to look "less uncanny" (Voshart, 2020), referencing the Uncanny Valley/Still-Face Effect problem that haunts artificial or synthetic faces (see Chapter 2). This is taken further in fig. 66, presenting a highly plausible face but also potentially introducing recognition distraction through colour and other highly specific details, but which remain a convincing interpretation of an estimated age of 50-65 years.²⁴ The question of

²⁴ It is not known to what extent the accompanying case data supported the hairstyle and beard shown in the original reconstruction which are further enhanced by the GAN textures.

overly ‘photographic’ levels of realism that digital methods afford remains controversial within the practitioner community surveyed in this study. Voshart’s experiment seems to support the view that within the contemporary media landscape, in which digital images predominate, depictions that reflect digital/photographic modes attract greater interest and thus are more likely to be given attention (P02, 2018). As Voshart comments, “My gut instinct is that the results are simply easier to look at, that each step towards realism is a step away from ground-truth skull measurements,” inferring the appeal of a depictive approach over an indexical one. Until attempts to fully computer-automate the forensic facial reconstruction process are able to achieve plausible faces that do not look like mannequins or avatars – even the faces produced through DNA phenotyping by Parabon Nanolabs require a forensic artist to render them as plausible, relatable and age-appropriate²⁵ – Voshart’s experiment evidences the affordances of hybrid methods, such as 2.5D depictions that blend sculpture with selected photographic texturing, a ‘best-of-both-worlds’ approach while demonstrating the potential of incorporating AI technologies in the future production and presentation of forensic facial depictions.

Online sites of forensic action: extending the public forum

As we have seen, one of the key contributing factors to South Africa’s crisis of unidentified decedents within the medico-legal system (FPS) is the failure to effectively cross-reference unidentified deceased cases with SAPS missing persons’ reports. Lack of digitised FPS records in all but one province is a significant obstacle to a fully integrated data storage and retrieval system for internal use in the first instance, but study respondents from FPS, SAPS and their academic collaborators report that public access to such information is an urgent need. SAPS VIC has recognised this problem, committing resources to a proposed database and smartphone application, but without co-operation from other stakeholders within that organisation and well as external stakeholders this new effort, as with similar previous attempts, is unlikely to succeed (Evert, 2011; P35a; P35b, 2018). It is hoped that the recent ratification of South Africa’s ‘DNA Act’ on 31 January 2015 (Republic of South Africa, 2014) will drive interest in realising this project,

²⁵ (Smith, 2018a) and pers.comm. (email), 2018

particularly as the history of the Act has been closely aligned with citizen advocacy, led by the non-profit organisation the DNA Project.²⁶

The online environment offers rich opportunities for analysing the limits of tolerance around post-mortem images, including state-run or state-supported databases with varying degrees of public access, to individually-run social media accounts and platforms that harvest and republish material found online in a largely unregulated manner. The online database may thus be considered as an extension of the public forum.

The United States represents the most committed effort to make information about missing and unidentified persons publicly accessible, through major national platforms like NamUs and NCMEC (which have been cited throughout this study), but some individual states and counties also maintain their own online databases, from which content may also be posted to national platforms.²⁷ The United Kingdom also has an official government site [Missing Persons UK](#) and the charity [Missing People](#) operates with its formal support.²⁸ These sites represent a range of approaches to how post-mortem photographs are displayed; the majority make use of forensic depictions where they exist, but unless a particular jurisdiction has relative ease of access to appropriate expertise, depictions may not be available for every case with an associated post-mortem photograph or skull.²⁹

²⁶ The National Forensic DNA Database of South Africa (NFDD) is governed by the Criminal Law (Forensic Procedures) Amendment Act No. 37 of 2013 (the 'DNA Act'). The NFDD comprises six indices (Crime Scene Index, Arrestee, Convicted Offender, Investigative, Elimination and Missing Persons and Unidentified Human Remains) to which different retention rules apply. See <http://dnaproject.co.za/legislation-homepage/legislation>

²⁷ See for example Cook County Illinois <https://www.cookcountyil.gov/service/unidentified-persons>; post-mortem depictions on this site are produced by P23 pro bono. (Halber, 2014, pp.100–116) gives a powerful account of the Las Vegas Medical Examiner Office's public-access website 'Las Vegas Unidentified' which launched in 2003. The Las Vegas ME's office had been the model for the fictional forensics lab in the original *CSI: Crime Scene Investigation* series, and the website was in part a conscious strategy on the part of ME management to leverage their increased public profile as a result of that show's success. The site was met with huge controversy for its publication of unmediated post-mortem photographs, yet it was also very successful and influential: it had its first hit within hours of going live and by 2011, this site had inspired agencies and services within fourteen other states to develop similar public-access platforms, including the national database NamUs (Halber 2014, p.115).

²⁸ See P03 (Smith, 2020b, p.50). Relevant charities in South Africa are mentioned in Chapter 3.

²⁹ The states of Texas and Louisiana are noteworthy in this regard, each have centralised Missing and Unidentified Persons repositories with a public-access area, supported by forensic imaging expertise. In Texas, this is managed by law enforcement agency [Texas DPS](#) (cf. participants P08 and P18) whereas in Louisiana an academic institution, Louisiana State University's [FACES Lab](#) (cf. participants P01, P13), has the mandate.

A number of published studies report on the approaches and challenges of database initiatives within the USA (Ritter, 2007; Hanzlick and Clark, 2008) and in relation to international forensic humanitarianism (Hofmeister et al., 2017) but valuable lessons may also be learned from counter-forensic actions such as a citizen-led forensic DNA database in Mexico (Schwartz Marin and Cruz-Santiago, 2018), organised to assist families of the missing, and whose cases a variously overwhelmed/ineffective/corrupt state is failing to properly investigate. But as the frustrations experienced by the Missing Migrants project and OpID have shown, even if cases are reported and databases exist, laws may restrict how data may be accessed within and across national borders, thus impeding these investigations (Reineke, 2013; Spradley et al., 2016).

The greatest impact to unidentified decedent investigations in the United States, especially for so-called ‘cold cases’ which have remained unresolved for years and sometime decades, is counter-forensic in origin and practice. It is embodied in the figure of the ‘Doe Nut,’ a pejorative yet witty term referring to an amateur and/or avocational investigator who involves themselves in unidentified decedent cases, the etymology of which is a matter of investigative lore.³⁰ The term ‘avocational’ is a particularly useful and necessary addition to the Forensic Art lexicon, referring both to something one does on the side of, or in addition to, one’s regular work, as well as to what might be one’s ‘true’ or principle passion or interest, practiced outside of however else one makes one’s living. Forensic Art is vocational in nature with participants describing the work as more than simply a job or a career, referring to it as a ‘calling’ or in terms which suggest a particularly committed course of action. Both are true in different ways for all the forensic artists who contributed to this study, with the vocational pull being such that some choose

³⁰ With reference to the predominantly American nick-naming practice where ‘Doe’ is a common moniker given to unidentified decedents (John or Jane, sometimes with an added locational signifier). See Chapter 4 and *Speaking Likeness*. It has been suggested that the phrase was in use prior to the rise in popularity of web sleuths (P19 in Smith, 2020, pp. 185–6), however a comment from pioneering avocational web sleuth Todd Matthews about the problem of vetting fellow web sleuths seems to suggest it is a play on the Doe Network itself, of which he was a co-founder: “It’s not easy. It’s actually been called ‘Doe nut-work’ before, because I guarantee you, I’ve heard from every lunatic in the world. You have to sift through these people very carefully.” (Halber, 2014, p.255; cf. p.219). I first learned this phrase during Karen T. Taylor’s post-mortem drawing workshop hosted at FACTS in February 2018. With participants representing the full spectrum of the Forensic Art community (law enforcement, academics/scientists, freelancers) including a fairly high-profile online sleuth, Taylor led a frank and beneficial discussion about the pros and cons of unsolicited post-mortem depiction, including revisions of older depictions, with due respect for all concerned.

to practice avocationally and some even voluntarily due to lack of professional opportunities in the field.

Online sleuths are regarded by members of the law enforcement community as a nuisance at best, and at worst obstructive and compromising, part of a lunatic fringe that seeks to illegitimately involve itself in police work. However, such communities are also demonstrating new and innovative investigative techniques, especially through collaborative, interdisciplinary and distributed work models that traditional law enforcement contexts are struggling to understand, acknowledge or integrate. Public-access Missing Persons and Unidentifieds databases serve as the primary resource for accessing case information for the netizen investigative community, who debate and publish their findings on social media pages or online discussion forums such as Websleuths.³¹ The briefest survey of such sites immediately communicates the centrality of visual imagery to this work. The uncontrolled circulation of post-mortem images online is reiterated by study participants across the board, but this is really a re-mediation problem: these images are being sourced from agency sites in the first instance and re-circulated, suggesting the publishing of unmediated post-mortem images should be rethought at agency level. One of the effects of the lack of sensitivity to how post-mortem images are managed on both sides of the equation is that notional desires for ‘justice’ become difficult to square with the way in which content is presented, discussed, and by whom.³² ‘Identification by any means necessary’ comes up against concerns that once images are online, ‘they are there forever’, which may negatively impact families.

The Doe Network, Project EDAN and Facebook groups representing registered charities (usually open groups) or informal online communities (either open, closed or private/secret groups) continue to operate alongside formal initiatives like NamUs. Their obsessive commitment to data consolidation has produced links

³¹ Todd Matthews first demonstrated the benefits of such avocational work with his work on the case of Barbara Ann ‘Bobbie’ (Hackmann) Taylor, aka ‘Tent Girl’, whose decomposing body was found in 1967. She was eventually legally identified in 1998 as a result of his efforts in the earliest days of online discussion boards, which led to him integrating his online networks with the nascent volunteer online organisation [The Doe Network](#) (Halber, 2014). Matthews went on to establish Project EDAN – ‘Everyone Deserves a Name’ – a volunteer network of forensic artists who would produce depictions to populate online databases (Bailey, 2008). Matthews has since also worked for NamUs, a shift into an institutional (versus maverick) context which created significant tension amongst his web sleuth colleagues (Halber, 2014).

³² See note 27, this chapter.

between cases that previous investigations have missed, and a facial depiction is very useful to this process as it provides a relatable image, a visual mnemonic and a powerful publicity tool, as well as opening leads to DNA analysis and forensic genealogical research. These sites are also invaluable research resources for Forensic Art. Comparative examples of depictions of the same subject by different artists, or post-mortem/antemortem comparisons are usually very difficult to access; the literature does not report on them; there is no centralised, formal source where this data is captured, and lack of feedback from investigators is the most common and persistent complaint from practitioners across the globe. Such resources are regarded as an essential resource for self-evaluation and technical improvement, and without any set protocols to aggregate this data (a Forensic Art research repository managed by the IAI would be one idea), the volunteer labour of interested netizens who contribute to Unidentified Wiki (@unidentifiedwiki on Instagram) provides the most comprehensive, aggregated Forensic Art archive currently available. The site provides the opportunity to compare and contrast the range of visual styles that artists employ; multiple versions of the same reconstruction by different artists over time (updated depictions); the increased use of colour and digital imaging techniques in more recent depictions, and in cases where an identification is successful and a comparative photograph is available, an opportunity to compare the depictions to the available antemortem photographs.³³

Tensions between law enforcement and this group of volunteers reflects the politics of in-group and out-group participation also observed during fieldwork, and which is also a significant finding from empirical research, centring on a lack of mutual respect and trust, which results in competitive and protectionist behaviour that erodes confidence in, and positive perceptions of, either community. The effect of these tensions appears unprofessional, graceless and selfish; and most

³³ A noteworthy case from Texas is that of 'Orange Socks', a woman founded murdered on October 31, 1979 in Georgetown. Claimed by convicted serial killer Henry Lee Lucas as one of his victims, she was the focus of at least one Facebook account dedicated to determining her identity. Thirty-nine years after her death, she was identified with the aid of the DNA Doe Project in August 2019 as Debra Jackson, from Abilene, Texas; she had never been reported missing. She had been the subject of several depictions, including an original sketch by Karen T. Taylor in her role at Texas DPS (1990); a digital colour montage/sketch by NCMEC (undate) showing frontal and lateral views; and a digital composite by Carl Koppelman (2017) set against a big Texas sky and rural vista as per his signature style. But it was the revised depiction by Natalie Murry (2019) in reduced-tone grayscale which produced a lead for DNA comparison and resulting confirmation.

importantly, does not serve the victims.³⁴ While the parallel work of online sleuths might frustrate law enforcement (this was a frequent talking point during research interviews (cf. P08 in Smith, 2020b, pp.130, 140), it is also the source of a critical affordance: it enables family members to reclaim some agency through taking direct action, an empowering process that makes the terrible limbo of waiting easier to bear (as much as it may also produce its own frustrations and false hopes). As such, online sleuthing echoes humanitarian forensic values. And despite the fractious relationship between the maverick netizen community and formalised investigative/forensic cultures, the ability to span this boundary and work effectively in both environments (as Todd Matthews has done albeit not uncontroversially), is regarded as a most valuable lesson from which the Forensic Art community can benefit.

The relational citizenship formed through forensic care is globally distributed by the work of online communities (netizens) who enable the expansion of the forum of post-mortem identification in unconventional ways.³⁵ Amateur and avocational online investigators have also anticipated the large-scale commitment to DNA technology for forensic identification in cold cases, particularly how popular interest in personal ancestry has benefitted such work. It is this intersection of scientific expertise and avocational obsession, with its attendant tensions, frustrations and mutual suspicions that suggests the future character of this work; a collapsing of the ‘bright lines’ between expert and amateur, academic and practitioner, and most importantly, has much to teach us regarding sites of circulation, as the online application, *The Lost and the Found*, demonstrates.

The Lost and the Found

The Lost and the Found was an online application that formed part of a multimedia investigation entitled *Left for Dead* (2015) produced by US-based non-profit organisations The Center for Investigative Reporting (California) and PRX (Public Radio Exchange), which interrogated the complexity and value of reinvestigating cold cases using multifactorial methods including citizen sleuthing, through the lens

³⁴ For a detailed history of the evolution of the web sleuthing community, see Halber (2014).

³⁵ The relationship between death and digital media (Arnold et al., 2018), and the concept of ‘posthumous personhood’ (Meese et al., 2015) will need to be considered as part of future research.

of a single case.³⁶ The site has since been archived, with a note indicating data is no longer being updated, and redirecting users to NamUs, the original source of its data.³⁷

The site is best understood as a counter-forensic initiative, a proof-of-concept experiment developed in response to feedback from users who work to reconcile missing and unidentified cases within NamUs, where these datasets exist as two separate lists within the database (McCartney and Corey, 2015), making cross-referencing somewhat cumbersome. One of the chief contributions of *The Lost and the Found* to place these data streams side by side in the user interface for easier comparison (fig. 68). Site developers McCartney and Corey consulted web sleuths on their working methods, in terms of process and salience of different data types. Methods were found to be diverse and idiosyncratic, but the importance of visual images was consistently reported: “Most rely to some degree on pictures, especially those of identifying features such as faces, tattoos or jewelry”, employing “detailed analysis of facial structures, focusing on cases in which the missing and unidentified dead have recognizable facial photos” (McCartney and Corey, 2015).

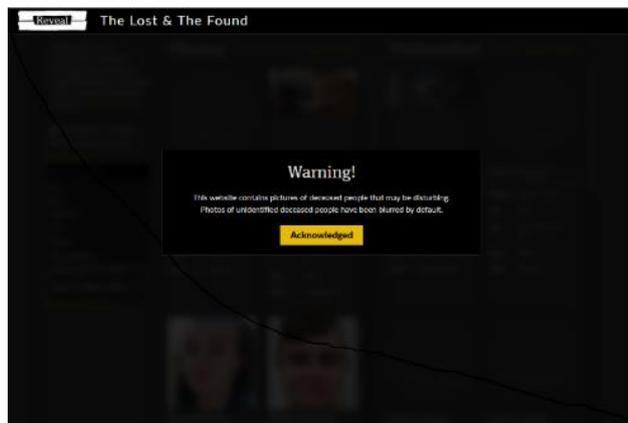


Figure 67: Landing page of *The Lost and the Found* website, with a disclaimer alerting users to the re-mediation of post-mortem images. Screenshot taken 15 June 2016.

³⁶ This suite of presentations took on various formats simultaneously, including a radio documentary ‘Inside America’s coldest cases’ (also available as a podcast); a four-part documentary film, ‘The Dead Unknown’; and a long-form journalistic story ‘Left for dead: How America fails the missing and unidentified’ (Schultz, 2015), resulting in a rich intersections of perspectives echoing the appeals for multifactorial approaches in forensic deathwork. The reinvestigation of the case of ‘Mountain Jane Doe’ who was subsequently identified as Sonja Kaye Blair-Adams forty-seven years after her death, was the primary lens for this polyphonic approach, representing one case among many requiring similar attention.

³⁷ The site was active in 2016 when it formed part of online fieldwork for this project. Later in 2019 and early 2020, the URL returned an error but of 25 August 2020, the original user interface was accessible again, but in archived form.



Figure 68: User interface of *The Lost and the Found* website, showing parallel data channels, and default visual filters activated. Screenshot taken 15 June 2016.



Figure 69: User interface of *The Lost and the Found* website, with the default visual filters deactivated. Screenshot taken 15 June 2016.

The Lost and the Found clearly benefits from developers with professional media experience and sophisticated design sensibilities, picking up on essential features that actively manages the necessarily sensitive material presented and gently mediating and controlling the user experience, including a disclaimer/trigger warning on the landing page that alerts users to the default mediation of visual material (fig.67). In the main interface all visual images are automatically heavily blurred unless a user specifically deselects a checkbox in the main interface (see figs. 68 and 69). The site also makes use of subject analogues (personal effects) to represent individuals without an appropriate facial image (e.g. the watch in fig. 69). Other official databases surveyed as part of online fieldwork for this study, including NamUs, Missing Persons UK and a range of local authority sites (see notes 27 and 29) evidence a number of strategies aimed at controlling how their content is experienced, including password-protected user areas for specialist investigators; disclaimers/trigger warnings alerting users to potentially sensitive content; different styles of post-mortem depictions from sketches to sophisticated digital retouching; the option to reveal/conceal case images with digital filters; and the substitution of objects for facial images.³⁸ These features should be taken into account by future databasing initiatives.

³⁸ As described in Chapter 5, this research also informed the user interface design for *Speaking Likeness*.

The Lost and the Found represents a different type of citizen-led response to the ‘silent mass disaster’ of the missing and unidentified in the United States, a group of media professionals committed to social justice who approached the issue using visual design solutions to address the problem of data consolidation and the management of sensitive content online, which is exceedingly difficult to control. Such content triggers the fundamental ethics question: do the benefits of sharing this material online outweigh the risks? The answer is yes, with the caveat that the material is appropriately re-mediated. Certainly, not all informal online communities operate according to optimal ethical standards. Yet a persuasive counter-argument is ‘the more eyes get on such cases, the better,’ which the NCMEC collaborations with higher education institutions, and OpID’s engagement with cross-border NGOs have clearly demonstrated, carefully managed and leveraging the essential service of the press. It is therefore hard to argue that avocational work frustrates or even jeopardises official investigations by definition, as the positive outcomes achieved cannot be dismissed, and as such represent another form of ‘extreme’ forensics which moves the field forward, and where the concept of ‘tinkering’ in respect of forensic methods (M’Charek and Casartelli, 2019, pp.2, 4; M’Charek and Schramm, 2020, p.4) emerges as a process worth attending to in respect of training (formal/informal) relative to professional status (expert/amateur).

Act 2: (Re)turning to the face

The appeal for a revised critical engagement with faces in the social sciences and humanities (M’Charek and Schramm, 2020) is long overdue and welcome; Deleuze and Guattari’s abstract machine of faciality is influential as a near-perfect analogy for techno-scientific regimes of oppression and subjection – its operations are clear and difficult to argue against. But elegant theoretical analogies, as much as they may *refer* to practice, do not necessarily suggest practical models by which forensic facial imaging practices could do things differently (which of course is not their project). How does a Deleuzian model capture the objectives of post-mortem Forensic Art in line with those of extra-ordinary deathwork?

The argument advanced here therefore departs from M'Charek and Schramm's work in two key aspects.³⁹ Firstly, instead of following a theoretical move from ethics to politics, it prioritises praxis, grounded in empirical observation and informed by critical theory. Secondly, it seeks to reintroduce a reflexive ethical engagement with the policies and values underpinning forensic identification methods and practices by drawing attention to the fluidity of the subject-object interface between practitioner and their case materials. This fluidity produces complex intersubjectivities; it is how the production of relational citizenship through forensic care work becomes possible (M'Charek and Casartelli, 2019). But where M'Charek and Schramm have attended to ways in which race is being rearticulated through the lens of genetic ancestry, ways in which concepts of sex/gender in forensic identification also requires attention in how it is being queered from within the field but also through the work of citizen allies.

The two distinct types of faces with which forensic facial imaging is concerned, namely 'suspects' and 'victims', are not politically neutral and are thus especially vulnerable to a range of implicit biases in their construction and their reception. Further, forensic depictions are not self-evident. As synthetic faces in the truest sense (a synthesis of various elements), they carry traces of everything (every idea, opinion, material or visual trace) of which they are composed. As such, Judith Butler's related concepts of 'radical effacement' and the face as a mode of address, which consider the relevance of Levinas and his ethics of the face in the contemporary, are helpful in staging the forensic face as a site where objectives and desires for the restoration of personhood and justice are projected (i.e. who deserves such considerations, who does not) and which in turn, carries these ideas back into the world.

The face as a mode of address

In *Precarious Life: The Powers of Mourning and Violence* (Butler, 2006b), Judith Butler uses the phrase 'radical effacement' to describe the negative effects of normative power operations in ways which closely echo Mbembe's necropolitics.

³⁹ Principally with reference to their co-authored *Face and Race* special journal section Introduction, but also considering related work published independently in the same issue (M'Charek, 2020; Schramm, 2020) and elsewhere (M'Charek, 2000, 2013, 2016; Schramm, 2016; Toom et al., 2016; M'charek et al., 2020)

Where one effect of normative power produces “a symbolic identification of the face with the inhuman” (where an individual’s destructive acts are construed as ‘monstrous’, for example), radical effacement works to ensure “that there never was a human, there never was a life” (Butler, 2006a, p.147) and by implication, no one can be held responsible for the fate of another. It is a form of erasure which may be enacted visually but also bureaucratically: failure to keep accurate post-mortem statistics, or detailing the circumstances of certain types of death and failing to routinely support further expert analysis all represent attempts at radical effacement, the opposite effect of HFA’s positive deployment of bureaucracy to ‘tame’ death which the initiatives discussed here are working to counter.⁴⁰

In Levinas, the ethics of the face is invested in ‘turning towards the Other’ (being open to their ‘address’) which pivots on a humanization/dehumanization dyad. As Butler points out (2006a, p.140), while Levinas provides ways of thinking through the relationship between humanization and representation, this is not straightforward because the Levinasian face is not necessarily a literal face but rather what faces represent socially.⁴¹ Faciality is thus a signifier of personhood that can also be located in other parts of the body which mirror the face as an expressive site, through an embodiment of sensation or emotion through individualistic gesture or bearing (Butler, 2006a, p.133). In its appeal to mutual humanity (recognition), this type of facialised abstraction is critically distinct from the abstract machine of faciality through its affirmation of presence, experience, existence.

For Butler, “face and discourse are tied,” linking the address of the face in Levinas explicitly to language. Being addressed by an Other, literally or metaphorically, introduces an ethical claim upon the person addressed: we are obliged to act (Butler, 2006a, p.138), echoing photography’s civil contract and the

⁴⁰ Caesar’s photographs represent an enfolding of these two operations: as official forensic photographs (documents of record of the Syrian authorities), these images support the symbolic representation of victims of torture as inhuman criminals and enemies of the Syrian state. If such records were intended to kept secret, the intention towards radical effacement of these subjects is clear. By smuggling these images out as proof of human rights abuses, Caesar’s counter-forensic action not only resisted this radical effacement but enabled anonymous victims of torture to be identified.

⁴¹ Butler’s discussion of dehumanization through the face (“personification sometimes performs its own dehumanization”) recalls M’Charek’s discussion of a composite which clearly depicted (for an aggrieved father) the “eyes of a killer” (M’Charek, 2020, p.7), exemplifying Deleuze’s concept of the ‘intensive face’ which informs her concept of the tentacular work of faces.

production of relational citizenship through forensic care.⁴² Following this logic, the Other comes to represent a condition of discourse itself, and “since language cannot survive outside of the conditions of address” (Butler, 2006a, p.139), effacement of the Other also means the obliteration of language. Our acknowledgment of the terms and conditions of this structure of address is, quite simply, about recognising a mutual right to exist. And should anything threaten this address or cause it to fail, our own existence becomes precarious (Butler, 2006a, p.130).

An ethics of the depictive versus the indexical

Ginzburg’s account of the failure of Bertillonage as a purely metric system offers another way of thinking through a humanising faciality that persists despite facial abstraction. Bertillonage represents a failure of a system of knowledge which Ginzburg refers to as “the anatomical model”, scuppered by the “semiotic”, a diagnostic system where information is inferred through denotative and connotative signs and requires interpretation (Ginzburg, 1980, p.24).⁴³ According to Ginzburg, Bertillon realised that his original system (consisting only of bodily measurements) “was purely negative”, permitting elimination but not positive matches. To paraphrase Ginzburg (1980, p.25), individuality’s elusive quality was simply not quantifiable – ‘chased out the door, it came back through the window’. Bertillon’s solution was to include facial photographs on his index cards (see Chapter 5), weakening both the premise (and the promise) of the abstract machine of faciality that his model represented in practical terms.

Post-mortem forensic facial depiction has a distinct role to play in the resistance of radical effacement. It seems reasonable to suggest that this is its core objective, even as it recognises that a ‘true’ representation of personhood or absolutely accurate physical likeness is impossible; such representations can only ever be partial, incomplete, inadequate. But there is power in its propositional quality: “The face is not ‘effaced’ in this failure of representation,” Butler suggests, “but is constituted in that very possibility.” (Butler, 2006a, p.144) The re-mediated image that post-mortem facial depiction presents operates through photography’s

⁴² This is a principle aspect of the logic and the intention of the form and structure of *Speaking Likeness*.

⁴³ This distinction underpins Ginzburg’s account of how the broad distinction between nature and culture was drawn, and which in turn is reflected in the paradigmatic disciplinary orientations of the ‘hard’ vs human sciences.

depictive trace (Pettersson, 2011) as an expression of Ginzburg's semiotic knowledge, versus indexical operations which are more akin to his anatomical knowledge system and the operations of facial analysis and recognition. In this way, it is also possible to speak of the facialising potential of clothing and other personal effects in the context of complex forensic identification contexts as seen in Mellili, OpID and the South African field sites discussed here.⁴⁴

Queering the topos of the forensic⁴⁵

On a molecular level, we are all Chelsea E. Manning.

(Dewey-Hagborg, 2017, p.11)

If facialization is characterised by “any bodily marker [having] the capacity to enact the face,” (M'Charek, 2020, p.2), the operations that producing social ideas of sameness and difference (as in Deleuze and Guattari) are also those that create the potential of rapport through difference (as in Levinas). For M'Charek, the signifying potency of the face in Western cultures is performed most conspicuously in relation to race and racism, but faces are the site of a wide range of biases determined by how otherness is defined in relation to an ideal (normative) type, of which race is one factor (cf. Todorov, 2017).⁴⁶

⁴⁴ In Levinasian terms, the ethics of faciality may be analogised as a self/other dyad, but in representational terms, “there are always more than two subjects at play in the scene” (Butler, 2006a, p.139) and so ethics is always a politics. Butler's description explicitly recalls the triangulated operations of Azoulay's civil contract of photography between the photographer, their subject and the viewer regarding the image. The images of Kurdi and Ramirez and his daughter discussed earlier embody photography's civil contract on these terms, but they also represent resistance to the radical effacement of their subjects through the iconographic transfer of these bodies as representative of the refugee/migrant crisis. They are images that operate according to a depictive (humanising) mode more than an indexical one, although features of the latter are of course present (they are photojournalism and not visual art). Images of the same subjects taken in a medio-legal environment would be unavoidably indexical and would exceed the limits of tolerance that would otherwise justify their circulation for advocacy purposes.

⁴⁵ This phrase originated with David Houston Jones (2017), who used it to describe my creative practice with reference to two projects that revisit unresolved forensic investigations in the modern era (pre-1950), namely *Jack in Johannesburg* (2004-5) and *Incident Room* (2012) in which a narratively suppressed, gendered victimology is resurfaced through modes of gendered performance which reclaim authorship and agency.

⁴⁶ Here the concept of an ‘ideal type’ is a bio-social category of the human; in the dominant Western paradigm, the White, heterosexual male body exemplifies the norm against which other bodies are measured, literally and metaphorically. However the ‘ideal type’ takes on a slightly different

The rift between biological and socio-cultural conceptions of identity, conventionally expressed through racialised language is particularly amplified within post-mortem forensic identification, where the scientific community and the public sector (law enforcement) must reach mutual understanding, and in the case of the unidentified, communicate with the public, usually through facial and other images as principle mediators. Ancestry or population classifications do not necessarily correlate with facial appearance or ethnic/cultural/social identity, and they confuse law enforcement cultures, who continue to use racialised language.⁴⁷ And while race and racialised nomenclature continue to be debated within forensic anthropology (American Association of Physical Anthropologists, 2019; Bethard and DiGangi, 2020; Nature Methods, 2020; Society of Forensic Anthropologists, 2020), the issue of gender bias is also finding expression through bio-anthropological assertions that challenge conventions of sex determination (Agarwal and Wesp, 2017; Geller, 2017; Zuckerman and Crandall, 2019; King, 2020), particularly when considered from a bio-social perspective where gender expression is a social construct that exists on a spectrum, and may not align with one's assigned birth-sex. Thus approaching both population affiliation and sex determination as a spectrum is the most scientifically and socially accurate. Using outdated naming conventions makes language a site of oppression and discrimination that enables undesirable ideologies of the past to continue to perform in the present; an expression of a hidden curriculum hiding in plain sight. As public sector mediators, the forensic anthropology community needs to give this urgent attention, and as a sub-discipline, Forensic Art has a role to play.

The following examples demonstrate critical creative positions in relation to biological and social assumptions about identity, one staged within the context of contemporary art/science practice and the other as social advocacy organised via a

inflection in sociology, where it more accurately reflects the notion of imaginary paragon. As Walter (2005) explains, 'ideal types' – of which mediator deathwork is one – don't necessarily obey their own boundaries but offer a way into assessing how behaviours or responses deviate from a contextualised 'norm'.

⁴⁷ There is general agreement within biological anthropology that 'race' cannot be biologically located (it is a social construct); there is similar, if not more, variation within population groups than across the human genetic spectrum (Witherspoon et al., 2007). However, being able to pinpoint a population group based on broad genetic affinities is forensically useful when it comes to focusing investigative attention in cases of unidentified skeletal remains, where estimating likely physical appearance, either through description or with an accompanying depiction, may provide leads in the absence of other comparative primary data (DNA, fingerprints, dental). This is amplified in the politically anxious South African context where the legacies of historical oppression and exclusion run across the surfaces and throughout the structures of contemporary life, but is not exclusive to it, as several practitioners from other countries make clear, including P42 and P24.

distributed online network. Both embody theoretical models of faciality as practical, creative action that resist radical effacement in different ways. Embracing the face as a mode of address (how faces challenge conventions of discourse and language) these new forms create new forums (*forensis*) for suppressed or marginalised bio-social identities.

Probably Chelsea

[Probably Chelsea](#) (2017) is an installation⁴⁸ by artist Heather Dewey-Hagborg in collaboration with activist Chelsea E. Manning, building on an earlier project between the two women where the artist sequenced the activist's DNA to produce a pair of 3D colour -printed 'portrait masks' representing an algorithmically neutral and female face respectively, using principles of genetic phenotyping.⁴⁹ In *Probably Chelsea* (fig. 70), , the relationship has evolved into a collaboration: Dewey-Hagborg and Manning apply Dewey-Hagborg's method for generating 3D faces from DNA to produce thirty different algorithmically-generated 'possible 3D portraits' of Manning's physical appearance, based on permutations of her mitochondrial (mtDNA) DNA profile. The portraits are output as 3D colour-printed mask-like forms installed at various heights, referencing a crowd that one could confront or stand amongst.

⁴⁸ It was the feature piece in an exhibition installation entitled *A Becoming Resemblance* (Fridman Gallery, New York, 2017).

⁴⁹ This work originated with [Radical Love: Chelsea Manning](#) (2015), originally commissioned by *Paper* magazine to accompany a profile on Manning. The 3D version was exhibited at the World Economic Forum in 2016. The artist received Manning's cheek swabs and hair samples in the mail from which she produced a pair of mask-like 3D printed faces displayed side by side, highlighting the limitations of assuming an alignment between biological sex and gender identity, and presumptions about stereotyped presentations of gender. Dewey-Hagborg's method for generating 3D faces from DNA was first exhibited via her now-iconic project [Stranger Visions](#) (2012)



Figure 70: Heather Dewey-Hagborg and Chelsea E. Manning *Probably Chelsea* (2017) 3D Prints, dimensions variable. Part of the exhibition *A Becoming Resemblance* at Fridman Gallery, New York. Photo by Paula Abreu Pita. Courtesy of the artists and Fridman Gallery

The choice of mtDNA is conceptually strategic. Being maternally inherited, it foregrounds a female genetic lineage, as well as being common in human evolutionary studies because it survives better than nuclear DNA (Merheb et al., 2019), staging it as a pathway to knowledge about immediate familial as well as ancient ancestral connections, but always only as a probability, never a surety. Here, a specific type of genomic material from a particular individual becomes the site of agile and persuasive conceptual tactics: Manning is a controversial and divisive public figure whose subjecthood – soldier, technologist, alleged traitor, activist, transgender woman, counter-culture celebrity and so on – challenges fundamental assumptions about identity and social order. In foregrounding the limitations of phenotypical data used to determine sex and ancestry as “genomic reductionism” (2017, p.11) and producing an assemblage of notional portraits, Dewey-Hagborg presents Manning as ‘potentially everyone,’ demonstrating that the only real claims one can make to identity-as-identification operate as likelihoods, possibilities and probabilities.

The work functions as a doubled expression of solidarity, the crowd of faces reperforming the mass public activism that successfully appealed for Manning’s

release from prison (her 35-year sentence for ‘espionage and theft’ handed down in 2013 for leaking classified but ‘troubling’ military documents to Wikileaks was commuted by President Barack Obama in 2017), but it is also an act of genetic solidarity reflecting Dewey-Hagborg’s deep scepticism of “viewing DNA as ‘code’ or some ultimate truth of identity” (Dewey-Hagborg, 2017, p.13). Given that the vast majority of the six-billion base pairs of the human genome are shared by us all, analysing genetic samples is an exercise in observing significantly more similarity than it is about locating difference. And as with any data, DNA requires an interpreter, a mediator, and from it, many stories can be told. *Probably Chelsea* thus embodies the resistance to the re-biologization of identity through genetic phenotyping, and by extension challenges the forensic claims for this technology, which is now offered as a costly commercial service to law enforcement by Parabon Nanolabs and others.⁵⁰

The work is also a layered object lesson in visibility, resisting the multiple attempts at effacement Manning has experienced. As an ex-US Army intelligence analyst, Manning has sophisticated knowledge of information technology and the politics of secrecy and anonymity. Her lived experience, in which her gender transition commenced whilst incarcerated, reflects political and social invisibility in relatively extreme ways. She recognises the power of images in communicating visibility, particularly for socially suppressed identities: “...prisons try very hard to make us inhuman and unreal by denying our image, and thus our existence, to the rest of the world. Imagery has become a kind of proof of existence. Just consider the online refrain ‘pics or it didn't happen’.” (Doctorow, 2016)

⁵⁰ It is interesting to note that this service became commercially available in 2014, two years after Dewey-Hagborg published her *Stranger Visions* project. Unlike Parabon Nanolabs, whose specific methods driving their DNA Snapshot service remaining a trade secret, Dewey-Hagborg made a version of her code publicly accessible on [GitHub](#). Reflecting on Parabon’s facial images, the artist comments: “These pictures, presented as objective, neutral, and certain, rely heavily on reductionist concepts of genetic sex and ancestry, and subjective renderings of how these appear. The scientific reality, however, is complex, multiple, contingent, and probabilistic. There is no certainty in reading sex and ancestry from DNA, and often the guesses that are made are little better than a coin flip.” (Dewey-Hagborg, 2017, p.13) This chimes closely with M’Charek’s reading of the same service, which she refers to as ‘data-faces’ (M’Charek, 2016): “The striking thing about the faces produced by Parabon is their portrait-like character. The lure of individuality cannot be overlooked. But the DNA evidence contributing to this portrait does not carry further than probabilistic statements about ancestry and skin, eye, and hair color [...] all detailed in dazzling probabilities found at the level of the molecules, the DNA. [...] moving from the molecular to the surface solidifies the face of the suspect.” (M’Charek, 2020, p.8)

In the age of digital image manipulation and Deepfakes, Manning's quip 'pics or it didn't happen' can only be read ironically. Manning is pointing to the paradoxical potency of online culture, which affords unprecedented visibility to anyone with the means and desire to engage it but which is simultaneously a site of visual tyranny in its endless, affective feed of images, questionable in their empirical or evidential claims, designed to persuade, influence, and incite. The next example embodies the positive affordances of online culture in respect of counter-forensic action through reclaiming public visibility for socially marginalised and forensically invisibilised bodies.

The Trans Doe Task Force

The work of the online, citizen-led [Trans Doe Task Force](#) (TDTF)⁵¹ shows how the counter-forensic is finding expression at the interface of both legitimate and unofficial investigative contexts through the use of interdisciplinary methods and avocational expertise. Based in the United States but representing a global network of volunteers who meet and engage almost entirely online, the TDTF advocates for greater awareness of gender variance within conventional investigative protocol, working to retrieve and reinvestigate cases involving missing persons or unidentified decedents who may have been misgendered by law enforcement agencies or associated services (medical examiners, forensic anthropologists). On missing persons or autopsy reports for example, sex determination categories tend to be binary (male or female), not necessarily accounting for how an individual might have presented their gender in life.⁵² Erroneous data capture at the start risks cementation as an investigation proceeds that may be difficult to review, resulting in operational as well as socio-political effacement.

The TDTF is comprised of forensic genealogists, anthropologists and artists (including the researcher) who work with online and archival sources including databases such as NamUs, Unidentified Wiki and the Doe Network, and corresponding news reports, seeking out cases evidencing conflicting data regarding

⁵¹ The TDTF was co-founded by Lee Bingham Redgrave and Anthony Redgrave in 2018

⁵² Until official data-capturing categories move beyond the male/female binary for sex and gender (as well as avoiding using the term 'gender' when they mean 'biological sex'), which will also signal a broad-based social acceptance of the reality of the gender spectrum, this is unlikely to change.

documented sex and secondary information such as clothing or personal effects, biographical data or circumstances of death/disappearance. Such cases may be highly sensitive for surviving families who may not have supported their relative's lifestyle. Families may insist a missing person's report reflect an individual's bio-sex or deadname⁵³ and such details can be seen to influence subsequent depictions, resulting in confusing communications that clearly suffer from personal politics negatively influencing public interest and policy.⁵⁴ Developing new facial depictions for such cases is a TDTF priority (Trans Doe Task Force, 2020) to ensure visual representations are both respectful and operationally optimised.⁵⁵

Strict community standards are in place to ensure research is undertaken respectfully: sensitive to the Doe Nut reputation of online sleuthing communities, TDTF does not conduct independent investigations themselves. Detailed due diligence is undertaken on each potential case, and the relevant investigating authority contacted only if new findings appear to warrant fresh analysis.⁵⁶ If such analysis proves viable, any further research into the social identity of the individual is only undertaken with the formal approval of the relevant agency so as not to inadvertently interfere with police work.⁵⁷

Thus, the TDTF might be understood to operate as a mediator between skilled (professionals and self-educated) citizens, relevant authorities and neglected

⁵³ A deadname refers to an individual's birthname versus a chosen name. The continued use of a deadname in the case of someone who has chosen another name that better reflects their chosen identity, is considered a form of erasure/effacement.

⁵⁴ The unresolved case of Mia Santiago is an example. Her listing on the [Charley Project site](#) reflects her bio-sex and deadname (she is listed as Tirrel Santiago) and the age progression by NCMEC reflects more masculine than female traits despite the 'Distinguishing Characteristics' clearly stating, "although born male, she presents as female. She goes by the name Mia and dresses in women's clothes." What is the value then of only depicting her as male-presenting?

⁵⁵ As co-founder Anthony Redgrave says, "If there's an unidentified person whose forensic art might not reflect what we already know about them—if they're not represented according to a gender they may have lived as—we want to make sure there is art that reflects that" (Zhang, 2019). Episode 3 of the TDTF's podcast on Forensic Art (Trans Doe Task Force, 2020) focuses on this issue, featuring the researcher's contributions, who also serves as Forensic Art subject expert for Redgrave Research's new [FG4LE](#) (Forensic Genealogy for Law Enforcement) training programme. Thus far, updated depictions for three suspected gender-variant cases have been produced by Kim Parkhurst ([Pillar Point Doe, 1983](#); [Live Oak Doe, 1986](#)) and Carl Koppelman ([Julie Doe, 1988](#), see fig. 72)

⁵⁶ The TDTF network uses a number of collaborative tools to do their work that support distributed work; some are public-facing (social media platforms) but casework takes place on a private server where members are under Non-Disclosure Agreements. There is a strict code of conduct in the members' space but because this work also relies on "citizen sleuth allies", TDTF also provides guidance for its non-member supporters (Kaylara, 2020).

⁵⁷ The case of Pillar Point Doe (1983) is tentatively regarded as the TDTF's first success, with a possible identification in 2019 resulting from the kind of collaborative process described here, including new facial depictions. As of 26 December 2019, the investigating authority had not publicly announced the positive identification so further TDTF work on the case is on hold (Zhang, 2019).

cases, able to offer scientific expertise to the agency responsible from within its membership or via its extended network, as well as offering social support by reaching out to an individual's chosen family or broader queer community (Michael et al., 2020) in ways which are perceived as more trustworthy/less threatening. As the OpID and Mellili initiatives have shown in the context of refugee or migrant communities, vulnerable people may avoid engaging authorities, resulting in under-reporting. The TDTF is sensitising and educating stakeholders and the broader public, because as forensic anthropologist and TDTF volunteer Dr Amy Michael observes, "Law enforcement is just not literate on this issue yet." (Zhang, 2019).

The TDTF's first case, 'Julie Doe', exemplifies the group's commitment to the affordances of cross-sector collaboration (public sector/ non-profit/ academic/ citizen volunteer) to enable antemortem knowledge about one unidentified and originally misgendered decedent to productively evolve (Redgrave and Redgrave, 2018, online), including harnessing new technologies of identification and visualisation (facial depiction and genetic analysis), as well as improved social mediation.⁵⁸

One of the more engaging aspects of the case (and most relevant to this study), is how Julie's case generated three iterations of forensic depictions (figs. 71-73) that clearly evidence a positive evolution of representational sophistication and sensitivity, as well as prompting innovative facial depiction experiments from the TDTF's broader online community.

⁵⁸ Non-profit organisation the [DNA Doe Project](#), which specialises in applying genetic genealogy to cold cases, agreed to take her case, fundraising for further DNA extraction and analysis after two rounds funded by the relevant agency were unsuccessful (a fourth round retrieved a viable sample). TDTF raised awareness in the LGBT+ community and broader public about her case (Zhang, 2019; Unidentified Person: 'Julie' Jane Doe, 2019) and promoted the DNA fundraiser, which received a surplus of funds in only 48 hours. Academic centre the FL Institute of Forensic Anthropology and Applied Science at the University of South Florida partnered on isotope analysis. Research is ongoing. Her nickname (Julie) was conferred during new analysis in 2015, a reference to the film *To Wong Foo, Thanks for Everything! Julie Newmar* (dir. Beeban Kidron, 1995)



Figure 71: Original forensic image published in the *Orlando Sentinel*, 1988. Artist unknown



Figure 72: Depiction of 'Julie Doe' by Det. Stephen Fusco of the Orange County Sheriff's Office, c. 2015



Figure 73: Depiction of 'Julie Doe' by Carl Koppelman, 2018

Images courtesy of the [Trans Doe Task Force](#)

The original image (fig. 71) published in the *Orlando Sentinel* in 1988 consists of barely anything more than internal facial features delineated with a distinctly cosmetic style, within a ghostly face shape with a barely perceptible hair- and jawline (that this may be an artefact of the poor quality of the original image having undergone multiple re-mediations through reproduction is recognised). Fig. 72 is a depiction by police forensic artist Stephen Fusco, produced after new analysis of her remains in 2015 confirmed she was transgender. It appears to be a digital drawing (probably a 2D reconstruction, based on the reported condition of the remains as skeletonised/partially mummified), executed with technical facility but the presentation is overly masculine, especially given the available circumstantial information about her.⁵⁹ In contrast, the most recent image (fig. 73) by Carl Koppelman, produced in 2018 and accompanying the [DNA Doe Project](#)'s partnership on the case, depicts a more conventionally attractive and significantly feminised face. A full-colour photographic montage, the depiction also interprets her clothing and contextualises her against a South Florida skyline, incorporating the findings from the isotope analysis which suggested the region in which she likely

⁵⁹ These data include long manicured fingernails, silicone breast implants, female clothing (including pantyhose) and pitting/ridging on her pelvic bones which the original ME interpreted as being hormone-related post-pregnancy, but which later analysis suggested resulted from taking exogenous hormones as part of her gender transition (Redgrave and Redgrave, 2018).

lived.⁶⁰ Without access to the case material on which these depictions were based, it is unknown how accurate they are, but in both Fusco's and Koppelman's depictions, some implicit bias appears to have influenced their respective depictions. This is most negatively pronounced in Fusco's image, whereas in Koppelman, the depiction may be slightly idealised.⁶¹

Followers of the TDTF's social media accounts were quick to respond to the announcement that Julie's case was being re-analysed. One follower used Fusco's depiction and the smartphone application [FaceApp](#) to generate a more feminine Julie, from which they then generated a masculine version (fig. 74), an exercise in re-mediation showing a spectrum of possible appearances including what she might have looked like pre-transition. A Reddit user conducted a similar informal experiment with Koppelman's depiction (fig. 75). As TDTF founders Lee and Anthony Redgrave note,

It has become apparent to us that going forward, it would be ideal to have artistic renderings that depict a person at different ages as well as stages of transition in cases of transgender decedents. While it may be unsettling to some to think about showing a trans woman looking like a young man, we must remember the purpose of forensic art is to reach those people who may remember the person from when they were alive, and that may be from any point in their life. (Redgrave and Redgrave, 2018, online)

⁶⁰ Carl Koppelman has established himself as an avocational forensic artist and online sleuth, producing post-mortem depictions and facial reconstructions from case documentation found online and publishing his work on social media, an action which has raised some controversy in the forensic art community (Smith, 2018a), particularly as much of his initial work was unsolicited. Placing his depictions against backgrounds which signify either where they were found or where they were last seen, is a characteristic trait of his work. The professional community suggested that this will interfere with facial recognition software systems (Smith, 2018a, 2020b, p.207) however the interest that these images have generated online, some of which have led directly to case resolutions, suggests that their visual style is highly engaging and effective, and agencies now formally seek Koppelman's services. Koppelman's work has assisted with at least eight identifications (The Graphic Designer Solving Cold Case Murders, 2019; Koppelman, 2020, pers.comm). Three cases have been resolved as a direct result of his facial depictions, whereas five others resulted from his personal clearinghouse process, linking missing persons cases to unidentified decedent reports via online databases, and using discussion forums and social media to solicit further information from the netizen sleuth community, where he will publish results once confirmation from the relevant authority is received.

⁶¹ It is unknown whether Koppelman referred to Fusco's depiction when producing his revised version. There is convincing consonance across facial features between the two depictions, with characteristic asymmetries more clearly articulated in Koppelman's image. Koppelman's image was very well-received by the TDTF community for its sensitivity.



Figure 74: Trans Doe Task Force community-generated visual experiment of gender presentation in the case of Julie Doe using FaceApp. Courtesy of the [Trans Doe Task Force](#)



Figure 75: An updated gender-variance presentation generated from Carl Koppelman's depiction of Julie Doe as posted by Reddit user 'Narrow-Sweet', 19 January 2020. [Online](#), accessed 23 August 2020

While uncontrolled, non-expert and possibly flawed in respect of forensic accuracy, the generative engagement of the online community in the case of Julie Doe (as with numerous other cases) suggest new forms of forensic care and relational citizenship through collective attention and experimental imaging which express a desire to reincorporate Julie into her in-life social networks.

As the work of the various artists and activists referenced in this thesis show, socially-engaged creative practices are engaging the face as a forensic and political object, but this work remains as hidden from forensic scholarship as it does from Forensic Art practices.⁶² These projects recognise the power and presence of the objectifying and discriminatory 'faciality machine' and its technological expressions, but in making such operations visible, these projects also demonstrate their occlusions and absences. Recognising the tentacular work of the face enables us to be more alive to how the face functions in relation to a range of interests, some of which may be intent on effacement, either tacitly or explicitly. By staging the face/body simultaneously as a forensic object *and* an embodiment of personhood via a critical artistic lens, it becomes possible to assert one's agency as a political subject within increasingly quantified populations and see how this chasm between a humanist versus 'data-subject' approach might be bridged a step further. Face therefore is voice (or at least its potential) hence the approach taken in *Speaking*

⁶² This was the subject of a paper delivered at the IACI 2017. See Appendix 1, conference abstracts.

Likeness.⁶³ Because forensic speech is performative, forensic faces too require interlocutors, translators, mediators through which their voices may be heard.

Act 3: Forensic Art as re-mediating deathwork

[I]n our society, people don't relate to an unidentified body. They relate to a face, and the facts that go with that face. So forensic artists have to just reanimate things a bit, if you will, to get people to feel compassion to do something. (P08 in Smith, 2020b, p.139)

In an online conversation (Smith and Elkins, 2016, online), art historian James Elkins suggested that “if facial reconstruction is a science, then it should no longer be possible to write it as a history of art or style.”⁶⁴ Elkins' comment requires a full and separate discussion (a worthwhile topic for future research), but it is nevertheless provocative, suggesting on the one hand that scientific imaging is atemporal, and on the other, that unless the stylistic or historical context of a visual object can be described, it cannot be included in the canon of art. This goes to the heart of the question, *What kind of 'art' is Forensic Art?* where once again, its epistemological ambiguity comes to the fore.

P27a describes facial reconstruction as a “philosophy” (Smith, 2020b, p.256) which is echoed in P38's philosophical perspective on her understanding of the interaction between art and science within forensic cultures, and how the importance of a holistic, contextually-aware approach is critical to understanding the social dynamics in this work (Smith, 2020b, p.292). Practitioner responses reflect aspects of ‘abstract machine’ operations in the technical aspects of analysis and feature estimation in facial reconstruction, but this is emphatic in composite production and

⁶³ This is intended as an inclusive statement and ethical objective, not predicated on what constitutes a normative face; making this claim in fact questions the politics of the ‘normative.’

⁶⁴ Elkins offered this observation in the form of a question during an online conversation about the digital depiction of Robert the Bruce (Smith and Elkins, 2016, online). He further commented, “I can guess when older facial reconstructions were made by looking at the style of the image. Aside from computer rendering algorithms such as texture mapping, it should not be possible to date a facial reconstruction... Right?” However, it does seem possible to ‘date’ forensic facial images very roughly, particularly where digital imaging (composite software, 3D scans, CGI) is involved, because digital images are not atemporal, reflecting the technological limits of their time and practitioner resources.

Facial Identification, and everywhere in language. In methods directed at the unidentified deceased and the missing, practitioner motivation and objectives correspond closely with a Levinasian ethics of the face.

While practitioners have their preferred media (which are likely to reflect their available resources), findings also suggest that the material-semiotic work of forensic depictions requires closer interrogation. As much as M'Charek and Schramm adopt a material-semiotic approach in their work on faces in scientific cultures – M'Charek even identifies as a “praxiographer of the face” (2020, p.2)⁶⁵ – their work does not address the actual materialities of forensic facial depictions whether produced by manual or bio-technological means, in a sustained way. Method/technique and presentation are important signifiers of empirical knowledge, practitioner bias or other hidden curricula. In other words, materiality in forensic facial imaging matters a great deal. It is a signifier of spatio-temporal relationships (cultures of practice, available resources) as well as the importance of touch in the production and transmission of knowledge (Smith et al., 2020).

Is there sufficient understanding of what is at stake in visual re-mediation where forensic depictions are concerned? In other words, how might we better understand the explicit and tacit contributions of method, technique and chosen media (e.g. clay sculpture, digital drawing) that intersect in these images, to how and what a depiction communicates about its subject, its context of production and an awareness of its audience (the arena in which it is expected to perform)? Uncontrolled documentation and publication of 3D forensic sculptures, against which practitioner lore strongly cautions, makes this point particularly well.⁶⁶

Through various processes of re-mediation which take place at the site of the image, values introduced through these processes become available to transfer beyond the image through circulation.⁶⁷ Forensic facial images can thus be said to involve **two representational registers** simultaneously: direct (explicit) and indirect (tacit). Directly, they involve conspicuous visual description, presenting a face

⁶⁵ Praxiography or ‘writing praxis’ (Bueger, 2020) is a methodology linked to practice theory, focusing on the study of practices and based in the recognition that “theory and methods form distinct packages and need to be thought together,” suggesting a consonance with aspects of the pracademic.

⁶⁶ In the words of P19, “Always get good photos and hand those out. Don’t let them [the press] take their own photos of a reconstruction that’s sitting there, because they will do a distorted, creepy image that doesn’t have much identification value.” (Smith, 2020b, p.206)

⁶⁷ The technological, social, compositional modalities as described by Rose that cut across (i.e. are embedded within) the four primary sites of critical visual analysis.

alongside accompanying contextual information (which may also include additional visual data e.g. clothing/personal effects/other distinguishing features such as tattoos.) Indirect representation is what *else* the image transmits, including **time and context**, which it achieves via its **materialities**.

The materialities of visual media

3D depictions occupy space in particular ways (think of forensic sculptures or archaeological reconstructions designed for public display), whereas 2D depictions are more straightforwardly pictorial. A 4D (animated) face (Roughley and Wilkinson, 2019) will require an appropriate publishing platform to avoid only being experienced as a partial representation (i.e. a still). The process of producing any one of these may also not be ‘material’ in the physical sense; while these depictions traditionally derive from a material source (biological remains), some may also have an immaterial data source, including a digital photograph or genetic profile, and digital methods (including digital drawing and virtual haptic technology which engage touch/sensitivity pressure) maintain an exclusively digital workflow.

Photographic Affects

The ‘facialising power’ of personal objects has been shown in fieldwork and mirror sites (Mellili, OpID, WitsID) as one way in which forensic identification protocols are being reconceptualised in a time of particularly concentrated forensic humanitarian action, looking at clues previously considered secondary or circumstantial, which in turn highlights the importance of multifactorial strategies and unconventional forms of knowledge/expertise. What these strategies have in common (in some cases more obviously than others), is an insistent link to the visual. The objects and materials that may infer individual identity/personhood are also those which may be used for memorial purposes – clothing, photographs, objects of personal significance – and attain a gravitas when they are laid out in a laboratory environment as analogues for an absent body, documented and perhaps published as part of a public appeal for information. Such objects are also central to De Leon’s (2015) appeal to shift the discursive frame from ‘forensic’ to

‘archaeological’, in order to decriminalise the narrative around migrant journeys across the Arizona desert.⁶⁸ Further, presumptive identifications based on secondary methods such as craniofacial superimposition are powerful for families, enabling acceptance in the uncertainty surrounding a missing loved one, from which necessary mourning and other socially and culturally significant post-mortem rituals may proceed (Smith, 2020b, p.263).

As we have seen, forensic truth relies on experts to mediate objects, images and data, structuring and interpellating through demonstrative means. In the television version of this work, the body is treated “as a screen, an object that has to be mediated to be real...” (Frieze, 2019, p.4) Yet even in the real-life laboratory, “it is not the real per se, but the expertise of those determining the real.”

In a forensic context, a 3D object will most likely only be encountered in 2D reproduction in print or online, and regardless of a depiction’s original medium – sketch, sculpture or digital montage – there is an expectation that these images appeal to values more closely associated with photography than any other visual medium, including immediacy, plausibility, realism, believability, as well as – paradoxically – photography’s capacity to invent, infer and abstract. In other words, forensic images must engage photography’s indexical mode, performing the role of the document, ‘a visual statement of fact’, whilst *simultaneously* engaging its depictive mode, staging an imaginative (albeit empirically informed) visual proposition.

The tactical visual re-mediation represented by forensic facial images must therefore also acknowledge the affordances (interpretability) of the image and the associated limitations and preconceptions of the visual languages they employ. This may have less to do with the method of facial depiction, but the technique employed. Rather than arguing for whether manual or digital methods are ‘better’ or worse’ – there are too many other factors impacting the potential success of a depiction

⁶⁸ This is a common curatorial device in memorial museums (Williams, 2007) as well as informal or personal memorial installations (e.g. roadside shrines). It is an affective tactic designed to foster empathy through material evidence of lives lived, but it is also a mediating strategy, enabling representation of individual bodies and lives where alternative materials (human remains or images thereof) may be insensitive or inappropriate. Of course, there are many examples of memorial efforts (Rwanda, Vietnam, certain Holocaust sites) where actual human remains are deployed to convey tragedy and atrocity directly, even as it is acknowledged that whether we contemplate the ‘thing itself’ or an analogue, both will always be an insufficient and incomplete record of the lived experience of atrocity or disaster.

making this debate largely moot – we should rather attend to contextual issues in choosing what methods to employ, including acknowledging that this may be limited by available resources.

Harries et al. (2018, p.7) refers to the conventions which govern the ethical display of photographs of human remains as “epistemic aesthetics,” operating principally through decontextualization, which allow them to be regarded as specimens by removing connection between the deceased and their kin/context. The objective of post-mortem forensic depictions is to do precisely the opposite. However, the conventional logic of isolating forensic depictions against a neutral background, while optimising their instrumentality (face recognition softwares and print reproduction which is usually black and white), echoes similar epistemic aesthetics. The work of avocational forensic artist Carl Koppelman resists this trend, and is perhaps why they are so engaging, often reproduced, reposted and ultimately successful. In his unconventional approach, we see what Harries et al. refer to as ‘the ethics of unsettlement and photographic affect,’ an idea which draws on a photograph’s depictive trace, referring to the capacity of a photograph “to solicit an experience of intimacy and proximity, to affect or move people. Such a consideration is vital to the discussion of the ethics of creating and displaying photographs of dead bodies in general and, in particular, in the art context.” This relates to photography’s civil contract, which has been used here to describe and justify the display of the dead through forensic depiction. As Harries et al. note, self-reflexive artistic practices directed at the re-mediation of human remains is itself an ethical project, where “the creation, circulation and display [...] becomes an extension of the subject’s agency,” but only if we recognise the ethical ambivalence of this work and the materials which enable it (Harries et al., 2018, p.19).

Time

Time figures in a complex way in forensic depictions, which is picked up on in more detail below, but is more obvious (albeit no less complex) in archaeological work where a literal collapse of temporalities could be argued in cases where technologically sophisticated CGI methods are used to depict ancient human remains, producing a seductive hyperrealism consistent with contemporary imaging

cultures, but not of the individual represented. How does depicting an ancient Egyptian in CGI, for example, affect how we understand her historical moment? This is not absolutely clear. Making historical figures ‘alive’ to contemporary audiences is a different project to depicting unidentified decedents (Buti et al., 2015; Nystrom, 2015), who need to appear familiar to those who would recognise them.⁶⁹

Study participants generally agree that photographic realism engages contemporary audiences more successfully than sketched images. However, advocating for a photographic ‘look’ in a depiction is not necessarily about embracing hi-definition digital textures which may be considered too specific and therefore limiting possible recognition. If employing photographic references in digital or hybrid depictions (visual sampling), attending to the materiality of the photographic source (or referencing one that is appropriate to the case) will create a more plausible and holistically-considered depiction. Other digital tools can be then be used to simulate drawn or painted textures that introduce desired levels of visual ambiguity can then be used to remediate overly specific textures.

Should post-mortem depictions bring their subjects ‘up to date’, as discussed previously in relation to archaeological depictions, or rather find ways to represent their subjects that is in keeping with the era of their disappearance? More research is necessary to answer this question, but at least the tacit information conveyed by photographic sampling should be borne in mind. For example, if someone vanished in the 1970s, would it make sense to depict them with the sleek, heavily styled hair sampled from a contemporary celebrity portrait? Celebrity images are readily available and plentiful online, making them a go-to source for many artists seeking sample textures. Outside of the ethical and copyright questions about utilising such images for forensic work (about which more research is also necessary), additional cautions present themselves. Red carpet lighting and professional digital photography produce materially different effects compared with incidental lighting

⁶⁹ Simon Schama’s dismissive comments about the reconstruction of Richard III (University of Dundee, 2013), made on the occasion of his curatorial, broadcast and publishing project *The Face of Britain* (National Portrait Gallery/BBC Two, 2015) suggests not only that historical depictions are not ‘recognisable’ (in that they may prompt comparison with similar facial ‘looks’) – he saw a resemblance with Mark Rylance or Lawrence Olivier – but that his understanding of what constitutes art must by definition avoid the mechanical: “I hate it, since you ask. It is very mechanistic and reductionist ... and it doesn’t look like a living human being, it just looks like something that has been computer-designed” (Brown, 2015); “It completely undercuts the role if [sic] the artist. Reconstructions are not a work of art, they are a work of scientific craft.” (BreakingNews.ie, 2015)

(natural or artificial) and grain of analogue snapshot photography, tacitly introducing potentially undesirable inferences into an image, including identifiable features (Shrimpton, 2018). The work of Frank Bender, most notably his depiction of John List complete with era-appropriate spectacles that were almost identical to those List was wearing when he was arrested (Capuzzo, 2010), suggests that attending to time through textural detail may carry useful visual information by association, which may lead to recognition even after decades have passed.⁷⁰

Negotiating time and cultural inference

The expression of time is most obviously a factor in age progressions, where a practitioner is asked to create an updated image of a missing person: What might this person look like *now*? A child who vanished in the 1980s should present as an adult in the 2020s, which requires close attention to age- as well as culturally-appropriate styling. It is very difficult to define these terms, but two different age progressions of missing British toddler Madeleine McCann, one produced by NCMEC in the USA (progressed to age 6) (fig. 76) and the other by British forensic artist Teri Blythe (progressed to age 9) (fig. 77), indicate the complexity of the problem of how images can infer cultural bias, particularly through photographic montage. The combination of lighting and styling, all brought into the site of the image incidentally by photographic sampling, combine to produce one very American-looking image alongside one that looks, for whatever reason, more British (or at least, less American), suggesting a relatively sophisticated level of visual literacy is necessary to assess how photographic sampling may impact the overall presentation of a forensic depiction.

⁷⁰ The caveat here is Bender's claim to intuition is well-known, so his choice of spectacles can also be considered as a very lucky guess.



Figure 76: Age progression of Madeleine McCann from age 3 to age 6 by NCMEC (USA). [Online](#), accessed 23 August 2020



Figure 77: Age progression of Madeleine McCann from age 3 to age 9 by Teri Blythe/Metropolitan Police (UK). [Online](#), accessed 22 August 2020

Context

Considering what else can represent (and notionally identify) an individual is both a necessity in forensically complex conditions but may also be an ethical and cultural imperative when it comes to mediating how these stories are shared in the public interest. Forensic facial depiction is not yet considered a routine method of mediating the experience of the post-mortem face for families and yet it is a primary site of engagement for both forensic and kinship identification. It cannot be assumed that families do not want to see their dead, but it is an ethical duty of forensic care to mitigate trauma by mediating such experiences, which is also an act of relational citizenship. This is less about forcing a conformity with Western professional models of what is ‘appropriate’ to share, but about recognising that sharing unmediated post-mortem facial images is widely considered to be insensitive, and such images require optimising for recognition.

Engaging the expanded forum

It is a truism that forensic depictions need to ‘reach the right people’, but do responsible agencies do enough to ensure this? Do they have the requisite resources?

As with any visual object, forensic depictions communicate both explicitly and tacitly; they may possess a hidden curriculum that a practitioner is unaware of (beyond more obvious traces of implicit bias) which may only reveal itself when the image moves beyond its intended audience (controlled, targeted) and begins to circulate among new, unanticipated audiences. This is something which online culture affords in unprecedented ways, but which law enforcement agencies are struggling to leverage, let alone effectively manage.

Restricting access to unmediated post-mortem images to investigators and analysts is supported by practitioners across the board, along with ensuring public-access databases include appropriate facial images.⁷¹ Digital image editing offers cost-effective and efficient ways to ‘sanitise’ such image for public exposure (P42) and there are a number of skilled professionals available to do the work, so no plausible reasons exists for not carrying this out.

Even though some respondents remain wary of circulating post-mortem depictions on social media, others point out that this is unrealistic and contrary to the objectives of these images, which are designed for public interaction (for example P50 in Smith, 2020b, p.343). Ensuring that images communicate their intentions clearly through adhering to current best-practice guidelines on presentation relative to case information, and ensuring essential information remains attached to the image by embedding it within the image itself, are ways in which forensic imaging practitioners can safeguard their professional integrity given the reality of unregulated circulation of casework once published online.

Popular cases create forensic awareness

As much as the CSI Effect creates unrealistic expectations in the mind of the public, it may also be seen as positively impacting forensic culture, driving improved standards which raises the quality of analysis and the claims forensic methods can make. P50 describes the positive impact of archaeological casework on raising awareness of post-mortem facial depictions as an investigative tool (Smith, 2020b,

⁷¹ A key concern among participants is that online circulation of unmediated mortuary photographs may contribute to an enduring emotional burden for families of knowing the image or footage is out there ‘forever,’ especially where the victim’s identity is known or easy to associate with a high-profile event, for example, even if posting such an image produced a positive result (an identification).

p.337). Notwithstanding controversies and scepticism associated with netizen forensics, it is hard to argue against this distributed community's contribution to growing public awareness and advocacy for unresolved cases, and efficacy in conducting counter-forensic investigations, including promoting the combination of forensic genealogy and updated facial images. As technology continues to challenge traditional methods, and before the genotype/phenotype code is cracked (as suggested by P43), focusing research attention on how best forensic facial imaging can collaborate with forensic genealogy at the level of scientific advancement as well as social justice should be a priority.

Counter-forensic advantages of non-standardized systems

M'Charek and Casartelli (2019, p.2) have observed that the forensic infrastructure that supports post-mortem identification work is “more flexible and fluid than the familiar infrastructures that are available within the criminal justice system, where forensic work relies on objectified and standardized procedures”⁷²; it is “an infrastructure in which unexpected actors can join ‘the chain of evidence’, provide clues about the identity of the body, and move out of it again.” The forensic artist is such an actor, although their potential contribution to flows of information and mediation within forensic deathwork is as yet unacknowledged within studies focused on forensic cultures. Further, in making the dead “members of a community of human beings”, initiatives such as OpID, Mellili, the Wits ID Unit and this study (as well as many other examples) perform critical acts of citizenship through their “counting, analysing available data, making the numbers of deaths available, and filling in the gap where states fail” (M'Charek and Casartelli, 2019, p.5), resisting regimes of self-evidence by creating powerful alternatives through a paradoxical counter-forensic ideology of care. “Forensic professionals have to go off the beaten path when engaging with migrant deaths”, they note (M'Charek and Casartelli, 2019, p.11) but this is equally true in contexts where the precise constitution of a post-mortem population is unknown (‘migrant’ vs ‘documented citizen’). The absence of

⁷² Evidencing this observation, the periods of observation at SRML in September 2016 suggests that SOPs offer a robust and essential set of guidelines, but they cannot account for insights gleaned through direct experience of human interaction and the contingency planning necessary when dealing with a diverse population that demands sophisticated cross-cultural and intersectional – and often spontaneous – responses.

standardized procedures makes way for novel approaches that are attentive to context and technically inventive which speaks to a resourcefulness and agility in applying a range of formal and common (experiential) knowledge to address challenges, often collapsing the boundary between expert and amateur.

M’Charek and Casartelli suggest that forensic care is embodied in forensic humanitarian contexts through actions and objects that recall the intimacies of the domestic sphere (M’Charek and Casartelli, 2019, pp.14, 15), such as processes of washing and organising (data, bones, personal effects), which in turn relate to the “normative tensions” this work can provoke, given how frequently expert services are offered voluntarily, and where workers are providing their own equipment, or improvising solutions on the fly, engaging everyday objects in the interests of infrastructure optimization and proper care.⁷³ During fieldwork in San Marcos for example, workshop participant Grace Rex captured instructor Karen Taylor in the process of describing the etiquette of an interaction with a homeware store assistant when needing to purchase a suitably-sized crockpot for skull maceration (fig.78).



Figure 78: Grace Rex, *There may come a time when you have to try on a crock pot like a hat.* 2018, digital drawing. [‘State of Grace’](#), vol.3 issue 14, 23 February 2018. Online. Courtesy of the artist

⁷³ In M’Charek and Casartelli’s account of Mellili5, a ricotta sieve from a lunch meal fitted perfectly in a sink drain, preventing the loss of small bones that might be caught up in clothing during washing (p.15), and a coffee cup from breakfast provided a container in which to bleach individual teeth for identification (p.14). During fieldwork, various similar instances were observed, such as empty containers used to prop open faulty lab windows for ventilation, and pathologists purchasing their own digital cameras and taking their own photographs for their reports (cf. Edirisinghe et al., 2020), as well as purchasing and installing own whiteboards for observational note-taking at their autopsy station.

The ad hoc adaption of processes and objects is referred to as ‘tinkering’ (M’Charek and Casartelli, 2019, pp.2, 4; M’Charek and Schramm, 2020, p.4)⁷⁴ which also aptly describes activities within a facial imaging lab/studio (cf. Nieves Delgado, 2020; Schramm, 2020). While ‘tinkering’ may seem somewhat desultory and anti-expert, relating to hobbyist, artisanal or DIY practices, it accurately describes the nature of forensic deathwork in complex conditions, as well as the largely self-organised, mentor-apprentice relationships in which many forensic artists are trained, similar to a ‘journeyman’ arrangement in which methods and techniques develop through small changes and improvements. It also speaks to the importance of touch as a process which generates powerful intersubjectivity and further emphasises the processes and effects of relational citizenship.⁷⁵

Concluding remarks

From the empirical findings, four points emerge as globally relevant and particularly urgent in respect of post-mortem identification and the use of images in this work. Firstly, **effective databasing and data reconciliation** between missing and unidentified cases is the most urgent global need, echoed by respondents and reflected in the literature across contexts (Cattaneo et al., 2010; Wild, 2017b; Spradley and Gocha, 2020). Secondly, there is general consensus amongst study participants that **no unmediated post-mortem images should be in public circulation** for identification purposes, supporting published best-practice (Wilkinson, 2014). Therefore, post-mortem image re-mediation should be the focus of skills and capacity development in the field. Thirdly, **post-mortem depictions** (from photographs, and utilising digital image editing) **are the most successful in**

⁷⁴ See also Latour (1987)

⁷⁵ Participant-observation with Wits ID Unit in Johannesburg communicated the work of care very powerfully through the processes described above. Touch is an affective process experienced directly through assisting with specialised fingerprinting techniques, including rehydrating fingertips to clarify ridges, and degloving decomposing fingertips to enable a clearer print by supporting the decedent’s fingertip around one’s own. Participants also speak to this in the course of their work, one describing the affective process of massaging fingers to release the effects of rigor mortis and feeling them involuntarily close again around one’s own (P41b, 2018).

soliciting leads from the public, possibly due to the affordances of time (working from an already recognisable image) & realism (digital/hybrid methods attract attention) but with the caveat that effective circulation of any forensic facial image is imperative to their success. Finally, **social media is the most effective circulation and intelligence-gathering tool**. The internet hive-mind does the work of countless press officers and journalists combined, albeit with challenges, which are not insurmountable if LEAs develop their IT capacity as an extension of digital forensic infrastructures.

Where post-mortem facial depiction is concerned, restoring a face to the unidentified dead is a tangible expression of forensic care work, shifting identification from a scientific abstraction to a tangible, familiar form which is relatable as representing another *person* versus an ‘unidentified body’ or ‘dead migrant.’ The role of the forensic artist gives form to this particular work of citizenship, rendering it visible and shareable. Re-mediating images of the dead or their remains into a publishable image is therefore an unacknowledged aspect of extra-ordinary deathwork whilst also incorporating features of barrier deathwork in a somewhat paradoxical sense, in concealing the truth of death through visual re-mediation but also rendering the dead visible. The mediation which forensic images represent therefore can be considered tactical, in the sense that it is operationally strategic but also ethically and culturally sensitive.

In summary, post-mortem forensic depiction can thus be said to engage particular objects (the face and its related objects; descriptive language), values (retrieval, reconciliation); and practices (visual and material translation and manipulation). It engages strategies of tactical visual mediation that encompass remedial objectives directed at material and visual documentation of human remains, producing edge objects that focus on the restoration of personhood and dignity aimed at action and restitution. Post-mortem forensic depiction may thus be described as re-mediating deathwork.

Conclusion: Reflecting on the Future

This study attempted to engage an international, cross-sector analysis of the role of forensic facial imaging in forensic identification, with a particular focus on the post-mortem, as a way of understanding the social and cultural work (actual as well as potential) that forensic facial images do, and develop discursive frameworks beyond the standard technical theory that dominates the field of craniofacial analysis and depiction to be able to discuss this work in new ways. The interface between post-mortem representation and forensic humanitarian action was a primary interest, especially given the calls from within the field to pay new kinds of attention to secondary and circumstantial elements – visual elements – in forensically complex conditions such as mass fatalities related to irregular migration.

This required a structural interrogation of the practice of Forensic Art, which has always occupied an inherently counter-forensic position in relation to forensic science proper but yet has remained a relatively insular and self-protecting community within (or at least adjacent to) forensic cultures. The growth of global internet culture and online sleuthing communities means that forensic depictions circulate in unprecedented ways, untethered from their original contexts and cultures of production and separated from their targeted audiences. The closed and marginal world of Forensic Art has been broken open, and a mirror held up to its future possibilities as well as its current failings. As a number of respondents suggested during our conversations, the lack of oversight in Forensic Art may be asset of future opportunity, even as it produces frustrations and antagonises the practice's epistemological precariousness. This demanded particular attention.

During the period of study, the primary disciplinary field that underpins Forensic Art (biological anthropology) began to feel the impact of a groundswell of a socio-cultural reckoning with its historical legacies emerging from within the academy as well as through social activism. As an action-reflection orientated study invested in the tacit dynamics of its objects of enquiry as expressions of their broader conditions of production, every effort was made to keep alert to these developments and incorporate them (as far as possible) into the general data assemblage, as professionally contrarian yet productive forces which suggested Forensic Art's overlooked affordances. In other words, instead of regarding these developments as a

negatively destabilising force (even as many were unfolding in real-time during the period of this work and forcing constant critical reflection), their potentialities were embraced as complementary and inclusive frameworks through which a range of intersecting phenomena could be critically assessed, in the interests of motivating for a viable future for forensic facial depiction, rather than watching it eventually become relegated to a quaint craft that is occupying an increasingly precarious place within forensic cultures.

Challenges to the anthropology field are vested in dominant discourses by which this work is conducted and communicated i.e. its languages (verbal, visual) as sites of knowledge as well as potential signifiers of discrimination and oppression, confronting the need for polyvocality in the field to challenge existing professional and institutional conventions. How *forensic* anthropology specifically will engage these criticisms is yet to be seen, but there is no doubt that this process will inevitably impact some of ‘common knowledges’ (to use Ginzburg’s phrase) in Forensic Art practice as a sub-speciality. Previously unrecognised or excluded skillsets or actors require incorporation and nurturing and must be urgently integrated into training programmes so practitioners have the necessary skills to critically interrogate methodological ground-truths, and use descriptive language more self-consciously. The recently launched digital journal [Forensic Science International: Synergy](#) is a very promising development, clearly stating interdisciplinary, collaborative and policy-focused interests “to promote and support *open discourse across diverse areas of interest, avocation, and geography*,” (FSI Synergy, online, my emphasis) on a fully open-access platform, which practitioners in any work context may access.¹

The dynamics between the various stakeholders in forensic deathwork interviewed for this study reveal the broader political imperatives of engaging

¹ *FSI: Synergy* is the self-proclaimed “first ever gold open access” journal in forensic science specifically “dedicated to the forensic sciences and their cross-disciplinary effects on the administration of justice” soliciting papers from “forensic science and influencing disciplines, including but not limited to the humanities, biomedical sciences, life sciences, social sciences, and the law.” (*FSI Synergy*, online) The journal’s editorial board is suitably international, representing a range of forensic disciplines and professional contexts. Open access is worth noting here, as the agencies that are responsible for forensic investigation work, either part of, or adjacent to government structures (or contracted to them) may not have the kinds of institutional access to scholarly journals that researchers within academic institutions do, a point made in the pracademic discussion earlier in this chapter. As a case in point, the publication promotes itself as the ‘preferred journal of the American Society of Crime Laboratory Directors’ (accessed 7 April 2020).

exclusionary aspects of law enforcement and academic cultures. These exist at the level of diversity (or lack of it) but more generally in **the lack of meaningful and sustained pracademic exchange** between law enforcement agencies and research institutions. Empirical observation suggests that in contexts with weak pracademic links, practitioners are significantly disadvantaged, and research may not meet local needs, either because it is not focusing on relevant issues, or it is not easily translatable into practice (i.e. the relevance of its application is unclear). Artists working in digital media, supported by established pracademic engagement regardless of their primary work context, are better placed to engage the broader conversation about the future of forensic facial imaging. Within the contexts examined, this is most pronounced in the USA and South Africa, which also represent the greatest number of practitioners and work contexts available to this study. Both contexts provide no shortage of forensic facial imaging needs but differ in many other critical aspects, which makes a once-size-fits-all conclusion impossible to draw.

The United States is operationally and legislatively decentralized, and Forensic Art remains a largely manual skill. The greatest number of practicing forensic artists are concentrated here, along with the only professional certification opportunity in the field. Other scientific and professional bodies in that country hold considerable international influence in scientific and forensic standards. As such, the practitioner community in that country is well-resourced relative to professional infrastructure yet remains generally fragmented. With some exceptions, the digital evolution has been slow (or at least slow to reach law enforcement) and the pracademic gap remains fairly distinct: since roughly the 1990s, the bulk of influential academic research in craniofacial analysis and depiction has been centred elsewhere (UK, Europe, Australia, South Africa) and the only academic qualification in the field is UK-based (Erolin, 2015).

By comparison, undertaking a KAP-style analysis of the South African context towards constructive intervention is somewhat more straightforward due to its operational and legislative centralisation, with a single police service and a single Forensic Pathology Service for the entire country (as much as services are unevenly distributed and overstretched within it). It also has an extremely limited forensic facial imaging community, the vast majority of whom work in suspect composites and facial image analysis, despite its massive case load. South Africa has also

embraced digital methods for both composite construction and post-mortem facial reconstruction and depiction (supported by manual methods), placing it ahead of many other law enforcement services elsewhere in the world.

For a practice involved in human identification, the rather ironic observation emerges that Forensic Art is undergoing an identity crisis. It is suggested that unless practitioners begin to direct their attention at this challenge from within the field, its future identity (and validity) will be decided by those external to the field. The recent move by the AAFS to define guidelines for facial approximation [*sic*] is one example. Or it may happen by simple exclusion, for which the OSAC structure may set a precedent if such structures are mirrored in other bodies, as is the case with the newly-established SAAFS in South Africa. Being a niche field, and needing to respond to local conditions, forensic facial imaging is likely to continue developing independently within professional and practitioner contexts internationally, and the notion of a homogenous Forensic Art community is unrealistic.

In respect of Forensic Art praxis, the following are considered ground-truths and areas requiring critical attention for the future health of the field:

Acknowledging the limits and affordances of ‘art’

Art as a descriptor is a relic of a very traditional understanding of artistic practice. Forensic facial depiction is not art; it certainly requires both technical and artistic skills, but its objects cannot (and should not) make any claims to art. As artistic practice has evolved to embrace methods, forms and strategies familiar to philosophy, politics and social science, ‘forensic art’ has become a more accurate descriptor of work that critically reflects on forensic cultures or attempts independent re-investigations of events for which prevailing narratives are unsatisfactory, embracing counter-forensic action, which the work of Forensic Architecture has come to exemplify, almost a new form of forensic authority.

This thesis has worked to suggest that what we currently call Forensic Art may benefit from re-examining its own operations through a counter-forensic lens. The word ‘art’ in Forensic Art limits an engagement with images produced by forensic imaging practices, which most commonly (but not exclusively) relate to the face. Referring to forensic facial images as ‘art’ is a source of their epistemological

precarity within forensic cultures, but they also present ontological challenges.² As much as the word ‘art’ carries a range of possible meanings, continuing to refer to forensic ‘art’ presents a limited impression of what this work involves, while also enabling the practice to be easily dismissed as unscientific, despite the concepts of art and science not being mutually exclusive. An expanded definition of art in the forensic context no longer exclusively infers a ‘technical or illustrative rendering’ although this is the nature of the artefact produced. Instead, the process of interpreting and analysing of a diverse range of data and then synthesising this data into a plausible and relatable facial image that bears traces of its own limitations in its technique and presentation, perfectly encapsulates the art of Ginzburg’s elastic rigour and the blending of formal and common knowledge which destabilises conventional distinctions between ‘expert’ and ‘amateur.’

Forensic facial images are information-generating tools. They should not be considered declarative statements, and they cannot claim evidentiary status. They embrace a range of methods and media, and combine formal knowledge developed within various disciplinary fields, with common knowledge developed heuristically, which supports their definition as edge objects. Forensic imaging specialists attempt to maintain a visual homeostasis between detailed specificity and interpretable *gestalt*. There is a deep investment in technical accuracy relative to anatomy and facial appearance relative to individual biography, and emotional investment on the part of the practitioner can never be fully sublimated. A number of respondents in this study, including forensic anthropologists, are keenly aware of how engaging with post-mortem representations (including material remains and artefacts as well as visual documentation) engenders complex intersubjectivities between practitioner and subject being analysed, or even families conducting visual identification, which is amplified in reconstruction/depiction processes. Further, practitioners care deeply about the visual quality of their work insofar as aesthetics renders technical information interpretable and knowing that images should attract attention in order to

² I owe a debt of gratitude to online conversations with James Elkins for sharpening my thinking on this point (Smith and Elkins, 2016, online). With reference to Jean-Luc Nancy, Elkins observed, “what’s needed is a meditation that asks What kind of images are these? The sort of meditation that would be open to the contradictory qualities and impulses people feel when they’re asked to comment, a meditation on the unclassifiable nature of these images, how they pull viewers toward familiar landmarks (realism, art) and how they can illuminate ordinary portraiture by contrast.” This thesis, and a related book chapter (Smith, 2018b) represent initial attempts to answer this challenge.

prompt an active response, but also constantly wanting to improve accuracy relative to reliability.

Regardless of the technique employed forensic facial depiction requires foundational artistic training grounded in anatomical knowledge, a strong understanding of dimensional volumetric translation (3D shape to 2D shape and vice versa) and the ability to interpret and render this in relation to facial appearance. In addition, an appreciation of and ability to work with photographic affects will enable the production of plausible and reliable images that are also sensitive to the ethical ambivalence of representing the dead, and alert to implicit bias. Understanding visual ambiguity and how to render this is essential. The skills required to do this plausibly in drawing, producing a naturalistic result, are significant. Digital image manipulation methods are more open to introducing these features to a depiction and may also attract more attention from members of the public. Even though compositing refers to a specific type of Forensic Art, all forensic depictions are in some way composited in principle, but where digital or hybrid techniques are employed, the desired result is best described as a montage, where visual fragments and samples produce a visual ‘whole.’³ Hybrid practices which blend the manual and the digital are able to take advantage of the artistic interpretability of a sketched image and the contemporary media language of digital montage.

Standards of practice

Any epistemological claims Forensic Art might make are grounded in its fact constructions which are undermined in the first instance by unresolved internal disagreements regarding basic terms of reference (reconstruction versus approximation) for one of the most public expressions of this practice, as discussed in Chapter 2. Clear definitions of various techniques exist, along with professional representation, however low levels of in-group trust eschew attempts at consolidated leadership in which diverse stakeholder interests from different professional contexts (public sector, academia, private sector, volunteer) find mutual agreement. As much as there is general agreement that the lack of standards presents a risk to the already

³ The ‘whole’ is what differentiates it from collage, where cuts/joins are an asset of the final piece, embodying rupture, fragmentation and conjoining.

precarious cognitive authority of Forensic Art as a practice, there is an equal lack of willingness to commit to such standards. In addition to its lack of active management of practitioner standards, Forensic Art practice is characterised by a large number of avocational practitioners which contributes to its epistemological insecurity as a scientific-adjacent method.

Internal disambiguation

Now with Facial Identification recognised as a discrete discipline, some practitioners suggest that perhaps Forensic Art needs clearer delineation of specialist expertise *within* the practice itself (cf. Smith, 2020b, p.281) which touches on a number of recurring tropes including the ambivalent authority of forensic depictions as visual statements representing expert analysis or eye-witness testimony, and software systems gaining ground over traditional representation methods, contributing to advancing technocracy in social governance. The proposal to identify internal specialisms within Forensic Art in the way the Fingerprinting discipline has done (as suggested by some participants) is somewhat ironic considering that the fingerprint replaced Bertillon's *portrait parlé* as a more efficient and reliable way of discriminating between two individual bodies (a role which is now being subsumed by DNA)⁴ but in relation to the faciality argument presented here, also has theoretical and historical resonance⁵ and within the IAI structure, this is already underway.⁶ Effective and productive disambiguation requires critically re-evaluating the fact constructions of the various modalities (composites, post-mortems etc.) This study anticipated this somewhat, by foregrounding post-mortem methods as

⁴ Ginzburg (1980, pp.25–26) gives an illuminating account of this process which locates it as another stratigraphic layer in the history of racialised science and technologies of oppression. In short, the uniqueness of the fingerprint was part of indigenous common knowledge (lore) in India, but was appropriated by the British colonial bureaucratic administration to serve the interests of Empire (effectively used against the population from whom this technology originated), and has since become the foundation of biometric forensic identification globally.

⁵ From the perspective of critical discourses of faciality, fingerprints possess highly particular facialising potential: they are believed to point not only to whole bodies/faces, but *very specific* ones. Further, the history of the development of data format standardization relative to fingerprint (or more technically 'friction ridge') analysis includes 'facial, scar mark and tattoo information' (National Research Council, 2009, p.205) – all identifying features which would of value to any forensic depiction, which is echoed in SAPS Management of fingerprints, body-prints and photographic images (SAPS Forensic Services, 2013), suggesting a closer disciplinary entanglement, at least in forensic historical terms, that would ordinarily appear.

⁶ Separate certification is already offered in Latent or Ten Print fingerprint analysis and now within Forensic Art, specific certification is already offered for composite art and facial reconstruction, with post-mortem depiction to follow.

representing very specific demands and challenges and offering new theoretical possibilities aligned with Humanitarianism Forensic Action.

Engaging productive pracademic exchange as routine

If disciplinary strength may be fostered through interdisciplinary/pracademic collaboration, creating more sub-specialities may be counter-productive, driving practitioners to further inhabit silos of activity. Conversely, it opens up other opportunities to engage on particular topics regarding grounding theory, methods and technique, and social impact that may not be equally relevant across forensic imaging practices, for example composite construction and post-mortem methods.⁷ Lack of feedback is a key concern identified across the board, but feedback is two-way mechanism, also involving more standardised reporting, which accounts for methods used to arrive at conclusions. Reporting on methods is essential for external validation to build capacity and cognitive authority for the work, which links back to practitioner standards. Probe the issue of effective circulation and it quickly becomes difficult see issues of feedback, success ('hit rate') and assessment of practitioner skill (self- and perceived) as discrete problems. The success of facial depictions is intrinsically tied to feedback – it is otherwise impossible to measure the real-world efficacy as one can never fully replicate within the lab the contingencies of how these images function 'in the wild', which also raises ethical issues, of who is being unwittingly exposed to potentially traumatizing images, and that internet culture makes it exceedingly difficult to restrict circulation or remove content. Accuracy is frequently linked to success but with the number of factors that may conspire to have an image seen by the right person, this should not be correlated. Instead, greater effort is required to ensure feedback, and more strategic means of circulation should be embraced. This means engaging with wider audiences, including social media, ensuring images and associated information is appropriately targeted and presented to mitigate any negative effects should an image – inevitably – be shared or reposted online. Developing a visual manual based on successful cases to study the robusticity of anatomical standards when it comes to actual casework is called for,

⁷ *Speaking Likeness* includes a number of these observations including P02 (p. 56, p. 59); P08 (p.135); P19 (p.195).

which may in turn reveal the need for additional research, relative to local conditions, in certain areas.

Addressing non-normative labour conditions as a problem of valuing expertise

The question of asymmetrical distribution of labour, skills and resources is particularly pronounced in Forensic Art with its oversupply of artists (and willing students) and undersupply of full-time roles, and lack of investment in the field despite its recognised cost-effectiveness. If senior management structures who are responsible for the distribution of resources within its primary context (law enforcement) do not value Forensic Art (i.e. invest in it and promote it), the perception of its value will not trickle down to officers on the ground. The same structures are also slow to implement new research findings. Given these two factors alone perpetuate claims from within law enforcement culture that forensic depiction methods are unreliable and unproven. The more likely scenario is that some methods are more called for in certain contexts than others. It makes operational and financial sense in the UK, for example, with its culture of CCTV surveillance, [VIPER](#) identification parades, sophisticated facial compositing software and low rate of unidentified decedents that law enforcement agencies do not keep full-time forensic artists on staff but instead invest in facial identification officers/technicians and outsource post-mortem work. That this context also provides the only academic training in the field globally, is a distinct asymmetry in the supply of skills versus demand for those skills. In contrast, South Africa's crime rate and itinerant population suggests all forms of forensic facial imaging should be a priority, with case frequency determining what analyses (methods) are considered routine versus non-routine.

Engaging citizen allies

The lack of investment (support/visibility/funding) in forensic art skills and an over-provision of skilled practitioners and interested citizens is a contributing factor to the up-take in citizen-led interest groups online, and unofficial production of forensic images. P02 suggests law enforcement agencies need to take responsibility for this, noting "If this is how crimes are being solved, I think it highlights the issue with police funding more than anything else." (Smith, 2020b, p.65) Complaints from within agencies about being unable to effectively track leads generating from online

discussion forums such as [WebSleuths](#) or social media community pages also reflects poorly on their ability to move with the times and recognise the power of the humanitarian drive among citizen allies (no doubt spurred by the CSI Effect which has rendered forensic cultures visible in unprecedented ways) who are internet-literate and time-rich. While the so-called Doe Nut community might include those with questionable intentions, others have proved to be undeniably effective at performing the role of a clearinghouse as individuals operating as part of a distributed community network. Forensic genealogy & forensic artists must collaborate. The story of contemporary forensic identification is that of the evolution of DNA technology and its limits, so how can this field respond accordingly? The answer is by engaging strategies associated with counter-forensic action and the questions this raises in relation to forensic practice as a performance of broad-based public interest.

The imperative to reclaim the cultural and political potential of the forensic is about reclaiming spaces of public accountability. Sometimes these are literal spaces – the field, the lab or studio, the courtroom – but of course these spaces are also conceptual – the ‘sites’ of critical engagement where visual, ethnographic or other work is produced, circulated and shared. In this way, the relationship between the three elements of the forensic – object, mediator and forum – is demonstrated. Through “eroding the differences between the domains of field, lab, and forum” (Weizman, 2018, p.66) by engaging the affordances of pracademic exchange and citizen-led initiatives, as well as attending to neglected standards of professional practice that will inevitably build confidence in its methods, Forensic Art will better able to articulate its social value to forensic endeavours and foster a more informed public, whose attention this work urgently requires.

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Appendix 1: Publications deriving from research

1. **Smith, K. 2016. 'Under the Influence of ... Paul Stopforth's Biko Painting Called Elegy.'** *The Conversation*, August 17, 2016.

Online: <http://theconversation.com/under-the-influence-of-paul-stopforths-biko-painting-called-elegy-64031>. Accessed 20 July 2020.

2. **Smith, K. 2017. Tracing the Post-Mortem Face (research film)**

Presented at the 2017 LJMU PGR Conference

<https://vimeo.com/262814434> (password LOTF2017)

3. **Smith, K. 2018. 'Portraits? Likenesses? Composites? Facial Difference in Forensic Art.'**

In Skinner, P. and Cock, E. (eds) *Approaching Facial Difference*. London: Bloomsbury, pp. 84-111 (PDF)

4. **Rappert, B., Smith, K. and Gould, C. 2018. 'Opening Spaces through Exhibiting Absences: Representing Secretive Pasts.'**

In Mankoo, A. and Rappert, B (eds) *Chemical Bodies: The Techno-Politics of Control*. Lanham: Rowman & Littlefield, pp. 77-102 (PDF)

THE CONVERSATION

Academic rigour, journalistic flair

Under the Influence of ... Paul Stopforth's Biko painting called 'Elegy'

August 17, 2016 8.00pm BST



Paul Stopforth (b. 1946) 'Elegy' (1980). Graphite and wax on paper on board: 149 x 240 cm.

Courtesy Durban Art Gallery

Author



Kathryn Smith

Visual/forensic artist, PhD researcher,
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In our weekly series, "Under the influence", we ask experts to share what they believe are the most influential works of art in their field. Here, artist/academic/forensic practitioner Kathryn Smith explains why she believes Paul Stopforth's "Elegy" (1980) is hugely influential.

"Elegy" is a postmortem portrait of South African Black Consciousness activist Stephen Bantu Biko (1946-1977) by Paul Stopforth (b. Johannesburg, 1945). It is executed in graphite powder painstakingly polished into layers of Cobra floor wax from which countless hair-fine excisions then excavate the figure from its ground.

Measuring 149 x 240 cm – near life-size – it hovers between drawing, photography, sculpture and painting, demonstrating kinship with all these media and yet claiming a singular materiality.

My relationship with the work

The work was completed in 1980, three years after Biko's violent death in police custody. It was purchased by the Durban Art Gallery in 1981, where I first encountered it as a young child.

I have a distinct recollection of being drawn towards the surface of this phantom image. Of it filling my child-self's visual field from above as I tried to make sense not of what, but how it was: it was obvious to me that whoever this man was, he was not asleep. And why did the light in the picture seem so off, seeping out from this body's darkest parts like a photograph gone wrong?

As with the series of smaller, more fugitive drawings of Biko's hands and feet that preceded this monumental study, "Elegy" was made with direct reference to the forensic photographs of his postmortem examination, given to Stopforth by the Biko family's lawyer. There can be no doubt that it borrows from religious iconography, presenting Biko as a secular martyr (the clue is in the title).

Why it is/was influential

Art historian Shannen Hill suggested in her 2005 article "Iconic autopsy: postmortem portraits of Bantu Stephen Biko" (published in a special edition of the journal *African Arts*) that Stopforth's graphic techniques "disrupt detached viewing". Our experience is a kind of looking that is tactile, penetrative, what I would call a forensic gaze.

Forensic photographs embody a beguiling paradox: they perform as evidence, yet they are not self-evident. We demand that they act as arbiters of empirical data, while knowing they are technological constructions that require expert interlocation to reveal their truths.

"Elegy's" impact on my childhood idea of what art could be – do even – was utterly formative, not least because it was through an embodied connection with an image that I later learned of the existence and significance of its subject.

"Elegy" could be said to represent the critical coordinates of my creative and intellectual life, which has been consistently involved with ideas of the body as image and as experience, evidence and affect, absence and presence.

My praxis is now bifurcated between my experimental (and perhaps even impolitic) interests as an artist, and my professional responsibilities as a forensic practitioner. It requires of me, among other things, to recreate convincing facial images for deceased or disappeared individuals who cannot be otherwise legally identified, in the hope that they might be.

This work feeds the tensions I perceive between conceptions of identity and technologies of identification, the revelatory and obfuscatory powers of archives, and the capacity of objects to be simultaneously loquacious and mute. So it is productive to think through "Elegy" as a sort of conceptual and ethical compass.

Did this image subconsciously navigate my earliest tussles with school teachers who insisted that my mutual inclination towards both visual art and forensic pathology was at worst impossible and at best, deeply conflicted? Did it silently guide me, many years later, from Durban to Johannesburg, and to the Wits Fine Arts department, where I would encounter an influential tutor who insisted the opposite, and who showed me how it could be so?

That tutor was Colin Richards (1954-2012). I would later discover that he'd had his own powerful encounters with images of Biko's body, twice. The first was while working as a medical illustrator at Wits in the late 1970s. The second was as a deliberate confrontation with his perceived complicity in the administration of Biko's death. The outcome he presented as the multi-part work, "Veils" (1996).



Colin Richards (1954-2012) - 'Veils' (1996). Mixed media. Courtesy of the author

Here Richards employs a representation of the Biblical "veil of Veronica", a piece of cloth onto which the face of a suffering Christ was reportedly imprinted. As an analogue "print" made directly from a source, it is considered to be the first photograph. On his recreated veils, Richards instead imprinted facsimiles of images of the cell in which Biko was tortured, and two macroscopic pathology photographs which do not identifiably belong to a specific body (yet they are Biko).

In an interview with Richards in 2004, he suggested to me that "Illustration is a hinge between the linguistic and the visual, and it can turn many ways". This is particularly true of forensic images. Their simultaneous ability to be authoritative and obtuse is the source of their potency and fallibility.

Public memorialisation of the dead pivots on a core ethical decision: whether to respect personal privacy through maintaining anonymity, or to name. The dead cannot give informed consent. Publishing images of corpses is regarded as something which requires very careful management, lest such dissemination is seen to either objectify or profit from the deceased. Like public shaming, such exposure can turn many ways. And that line is thin indeed.

The figure in "Elegy" is not visually identifiable as Stephen Bantu Biko. This has two possible effects, neither of which are easy: sublimating his identity counts as yet another violation of the historical

specificity of Biko as an individual. Protecting his identity could be considered a sensitive choice – a tactical dehumanisation, if you will.

Why it is still relevant

In many ways, “Elegy” tests the very limits of representational politics. After all, it’s yet another instance of a violated black man represented by his social and political opposite, an artist who embodies Apartheid’s privileged classes, specifically the white, patriarchal subject position it worked to strengthen and maintain.

Should this difficulty make us avert our gaze or even more seriously, reject the image? I cannot, because its effect on me now is as potent as it was three decades ago: the sharp, sour shock of touching your tongue on a battery.

Significant events are unlikely to rise to public consciousness without a visual record, and recent events in South Africa - such as the Marikana massacre where police killed 34 striking mineworkers - have demonstrated the extraordinary productive and destructive power of images. A direct response to the atrocities of its moment, “Elegy” reflects on political oppression, those tasked with propagating the abuse of state power and those set up to bear such abuse. It represents processes of concealment and revelation with very real social and political consequences.

Yet images like this are not stable; their significance is neither continuous nor equivalent. They are ciphers for what it means to be human and vulnerable within a social and political regime in which not all bodies are considered equal, and where a state under threat resorts to covert and fatal tactics.

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Portraits, Likenesses, Composites? Facial Difference in Forensic Art

Kathryn Smith

Introduction

Reflecting on recognition, Ludwig Wittgenstein commented:

It is easy to have a false picture of the process called ‘recognizing’; as if recognizing always consisted in comparing two impressions with one another. It is as if I carried a picture of an object with me and used it to perform an identification of an object as the one represented by the picture And it is not so much as if I were comparing the object with the picture beside it, but as if the object coincided with the picture. I see only one thing not two.¹

A crime is witnessed, a suspect is sought. A witness is interviewed, ideally within forty-eight hours but usually much longer after the event. They may be traumatized. The structured conversation between witness and forensic artist produces an image, usually rendered as a greyscale image of limited tonal range that has a loose association with photo-realism. Sometimes these images are very detailed, demonstrating skilled draughtsmanship and embodying a distinct affect. More often they resemble a barely believable character from an early-generation video game, their facial parts floating on a basic head shape, sometimes without a neck but perhaps wearing a hat or glasses; whatever the witness regarded as salient and specific details that distinguished the individual. These are the images that you might see flashed up on the evening news, or pinned to the wall of your neighbourhood convenience store or police station.

The police composite sketch is arguably the most fundamental example of forensic art, with its origins in the most primary method of visual representation: drawing. Even though contemporary composites are digital images, produced using computer software, the ‘sketch’ descriptor often persists. These images possess considerable cultural cachet, an iconic visual shorthand for ‘criminal investigation’. Based on verbal descriptions drawn from memory deriving from highly contingent events, composites are by definition unique and precarious forensic objects, representing an epistemological paradox in their definition as simultaneous ‘artistic impression’ and

'pictorial statement.' As artefacts of an eyewitness account, they lend support to an investigation yet should not be considered hard evidence, although the eyewitness account itself carries significant evidentiary weight. Contingent, contested and controversial, despite decades of operational use only in recent years has the field of cognitive psychology begun to fully understand and address the conditions that affect recognition rates both positively and negatively.²

This chapter advances an interpretation of 'facial difference' by transposing this idea onto the theory and practice of forensic art, in order to explore variation in facial depictions produced by and for the forensic context, with specific reference to the police composite. Forensic art describes a range of practices which produce facial images to aid processes of human identification. The quantification and reproducibility of facial likeness has indisputable forensic value. A core practice within human identification – police have long employed artists or officers with artistic ability to assist with aspects of criminal investigations. This forensic value is produced via its claims to scientific truth, created via scientific experimentation and validation in which repeatability is a core principle. Intended to produce a positive identification of a specific individual, forensic facial depictions are a form of visual intelligence and in theory, should not be considered evidence that 'proves' identification. This makes sense, given the often apparent difference between the published facial image and the person eventually identified. Others exhibit uncanny similarities to their intended target.

As an interdisciplinary practitioner working across both contemporary art and forensic contexts, I have an enduring interest in how contemporary art (and culture at large) is increasingly informed by forensic practices. This chapter represents some first steps in the context of a broader project that develops a theory of forensic art written from an interdisciplinary, practitioner perspective, in which I attend to ways in which knowledge transfers from one area of praxis to the other, and how these respective concerns are shaped in turn. In this transdisciplinary space, methods and ideals conventionally associated with laboratory research (empiricism, quantitative assessment, objectivity) are always in conversation with the subjective contingencies and desires, as well as critical rigour (formal analysis, aesthetic evaluation and interpretation) of the visual arts studio.

The human face is a highly complex organ, the anatomy, function and appearance of which are the domain of a host of individual disciplinary or specialist fields, from human identification and biometrics; maxillofacial, reconstructive and aesthetic surgery; neuroscience and cognitive psychology; computer vision, machine learning and artificial intelligence engineers; animators, game designers and of course, visual artists. Representations of the face exist as some of the oldest examples of visual material culture (consider the Jericho skulls or Fayyum portraits), and the portrait remains an enduring genre in figurative art forms, especially photography. Yet manual and mechanical techniques still embody equivocal attitudes to mimetic truth, with painting and sculpture considered inherently subjective forms of visual representation, and mechanical processes continuing to enjoy a more intimate relationship to scientific objectivity and of course, reproductive efficiency. As a 'visual record', photography became the dominant mode of truthful and accurate visual representation, from bureaucratic structures to creative endeavours, clinical imaging and the domestic

realm, theorized with reference to its 'indexicality' in the semiotic sense. That which it depicts once existed in the world, in front of a camera's lens.³ It is widely accepted that a portrait is not simply an indexical or analogical likeness of a real face, but gathers into its representational ambit a host of conceptual ideas – social status, for example – that attach to the face to create a persona. Entering the virtual and AI realm, robotics and gaming practitioners contend with the 'uncanny valley', the perceptual–psychological interstice first described as *Bukimi no Tani Genshō* by Masahiro Mori (1970) as the almost abject process by which we elect whether to suspend our disbelief in the face of humanoid entities (automaton, dolls and social robots).⁴

When presented with the problem of reproducing likeness or similarity, which is by extension a question of understanding difference, the scientific imperative is to quantify. Knowledge is synonymous with particular kinds of measurement. Where faces are concerned, the scientific tendency is to act like a land surveyor, plotting facial landmarks and measuring the distances between them, comparing spatial configurations with the shape of individual features, interpolating missing data, noting deviations and ultimately producing geometrically elaborate 2D and 3D topographies of the face. Appearance becomes a technology of individuality and difference.

But what of the less tangible data that faces give us? Assuming the face is visible (and not covered for religious or other reasons), and we are able to see it (blindness and prosopagnosia excepted), its complex topography is what we attempt to read, albeit in different ways, when we are meeting someone for the first time. Following Levinas, the face as a space of empathetic encounter echoes the focus of our attention in our early infancy as we learnt the fundamentals of reciprocal communication. Recognition, Michael Podro reminds us, is 'the most basic relation we have to the world'.⁵

The innumerable permutations of the face's mechanical and expressive movements etch their effects on our appearance over time. We can probably recognize someone we know well even if they completely change their hairstyle, or grow or shave their facial hair, or gain or lose a great deal of weight, but perhaps not? Making decisions about these factors, individually and in relation to one another, in terms of featural specificity as well as the holistic gestalt of a face, is what is required when we are forced to rely on a facial image to identify or locate someone in the absence of the accepted scientific methods – fingerprinting or DNA. (It may not be possible to extract a DNA sample from a set of human remains due to their condition. A DNA sample is only useful if there is a matching sample recorded and stored on a database for comparison, or if leads produce a family member who agrees to their DNA being taken for comparative purposes.)

The range of recognized forensic facial depiction methods used to promote identification of the living, missing or the unidentified dead are, at their most basic, either two- or three-dimensional representations of a particular human face, produced with direct or indirect reference to either material (skeletal) remains and related written/visual case documentation, or visual documentation of the person concerned. In the case of eyewitness composites, the primary reference material is at least one memory-derived verbal description. Techniques range from the hand-drawn or sculpted to hybrid manual-digital techniques, digital compositing and fully computer-automated systems.

The other most 'visible' expression of forensic art outside of the police sketch are faces produced from skulls, a method for which the most robust scientific techniques exist.⁶ Less visible techniques are post-mortem depiction and age progression, which rely on a combination of skills required by both skull-based reconstruction and memory-derived composites. Post-mortem depiction uses either drawing or digital photo-based compositing techniques (or a combination thereof) to sanitize photographic images of the unidentified dead to create publishable images, informed by a knowledge of post-mortem facial changes as a result of trauma or decomposition. Likewise, age progressions may be produced as sketches or more commonly, as digital photographic composites to produce impressions of what a missing child or adult (victim or fugitive) might look like years after their original disappearance. With the latter, the question of whether the individual is alive or dead must also remain open. Such images may be a lifeline for confused or bereaved families who have lost loved ones; we invest them with an enormous responsibility which they may fulfil if they are seen by the right person, even if they do not appear to achieve perfect verisimilitude with the target face.

Despite established data for predicting and depicting faces from skulls, marked differences in results are often seen in reconstructions of the same individual. Why does this happen? Is it an artefact of poorly applied scientific method or inadequate artistic skills, or both? Suspect composites show similar (even amplified) effects, but being derived from verbal description and memory, we should anticipate a far more fluid set of variables to be present.

It could be argued that reconstructions from the skull and composites are distinct processes, requiring different skill sets, so why would it make sense to draw this comparison at the outset? Because of their operational function to track down active criminals, and the fact that eyewitness identification holds significant legal weight, composites have been given the lion's share of research attention in the area of face perception/cognition. These processes are embedded in their construction via eyewitness recall, in both linguistic and visual terms. Seen differently, considering the composite allows us to spend time with the face as both an imaginative and a recollected object. The composite is a specific kind of image, one produced from language, and one which language may further mobilize as an evidentiary object. Composites tend to depict suspects, which signify an immediacy that depictions of victims do not possess in quite the same way. An urgency is certainly present in victim images – it is a legal imperative to identify the dead and certainly an ethical one to locate the missing – but such depictions denote a vulnerable subject (loss of agency) whereas suspect images connote potential threat.

We could set out their differences according to simple differences: reconstructions from the skull are intended to identify victims and composites, perpetrators; in other words, the former serves the dead and the latter targets the (presumed) living. The former uses material things – human remains and associated objects – and the latter relies on more immaterial traces and expressions of memory and language. They are informed by different research areas, with anatomy and pathology informing facial reconstruction methodology and cognitive psychology driving eyewitness interviewing and identification techniques and their products. Operationally, these

identification tasks are usually undertaken by different units within law enforcement agencies, although different countries adopt different approaches.

Both areas of practice certainly benefit from specific consideration of their respective functions, techniques and challenges. But imagined as a Venn diagram, the space in which they intersect is a central, core function of both endeavours: an understanding of how such images may be received by the communities that will ultimately allow them to do the work of depiction. How facially literate are we? Do we understand how these images are read and interpreted; in other words, how they are likely to be processed both cognitively and culturally? Are we, broadly speaking, visually literate when it comes to forensic facial depictions?

The paradox between resemblance and recognition – that accuracy and likeness may not correlate as closely as we imagine they should – is *the* enduring conundrum of this work, and describes what animates my interest at a primary level. What might represent an artistic and aesthetic failure – poor anatomical accuracy or clumsy sketching, weak sculptural or Photoshop skills – may still be a forensic success *if* the depiction possesses sufficient gestalt to spark recognition. Visually different faces can be recognized as sufficiently similar to – if not precisely the same as – a missing loved one. Notwithstanding the practical fact of the image needing to be seen by the right person, the depiction may still be recognized, producing leads and – hopefully – a scientifically acceptable positive confirmation of biological identity (DNA and fingerprinting).

Structure

With reference to an interdisciplinary body of literature and practice-based experience (lab and field studies, criminal cases and recent contemporary art), this chapter explores the visual intelligence of forensic facial depictions, and the ways in which ideas about the face vary across the (often reluctantly) complementary practices of science and art. I consider these questions in relation to forensic art more broadly, its relationship to portraiture and concepts of accuracy and likeness by considering how the forensic composite is influencing the work of contemporary artists. Looking at forensic art 'awry' in this way (to borrow Slavoj Žižek's phrase) foregrounds the related but distinct ideas of 'identity' and 'identification', which inevitably entails a mention of the future of facial composites as bio-data models, and what the social, political and cultural implications of these new technologies and practices might be.⁷

I begin with a discussion of concepts of the face within forensic and visual art, exploring the languages we use to mobilize the face as a cultural and philosophical object and agent, from its ontology to its representational vocabulary. The discussion then moves to focus in on the composite, its functions and limits, and how this visual object has been used within cognitive psychology and computer vision research to develop knowledge about face perception.

Finally, the point about 'accuracy' is most clearly made where more than one reconstruction exists of a single, known individual. This principle guides my selection of examples, all of which explore correlations between multiple depictions, but also encompass the 'difference' in my title. The logic of the permutation is embedded in

the ways in which composites are produced, and in turn how they have been studied within cognitive psychology, from the question of what to do with multiple witnesses to a single event, to the fact that caricatures in different visual styles can still be recognized as a certain person. The paradox animating the relationship between resemblance and recognition is extended by the idea that 'sketchy', 'incomplete' or cursorily drawn details, as well as distortion, can correct perceptual errors, and deliver a more convincing likeness than an image that attempts to slavishly mimic every detail of a face.

I conclude with a consideration of how concepts within visual art pertain to the (forensic) facial image, and in turn, how composites construct particular kinds of subjects. Considering time and language as significant contributing factors to their particular materiality, I understand composites as embodying the 'fugitive', in both literal and figurative terms. The uncanny spectres of faces created from pure data, including DNA, provide a further opportunity to consider whether, in the near future (or perhaps it is a moment we are already inhabiting?) notions of identification will float free of the facial image, and when, if ever, safety and security agencies and industries will liberate the face from their biometric-orientated, technophilic desires.

Thinking through forensic art

The very phrase 'forensic art' links two words with very different implications, intentions and practices, appearing to embody a paradoxical conjoining of applied science, on the one hand, and creative interpretation and invention, on the other.⁸ The scientific literature, particularly that focusing on accuracy studies (the relationship between likeness and repeatability) in facial reconstruction from the skull, for example,⁹ has attracted a range of critique from so-called hard scientists, with one even going so far as to dismiss the very notion of 'scientific art' as 'bizarre'.¹⁰ Of course, this is historically and practically nonsensical. One only needs to cast the briefest glance at the rich and documented history of Western visual culture, from the Renaissance onwards, to find numerous examples of visual depiction – illustration, art, design, call it what you will – in the service of science, and artistic techniques that have scientific principles at their base, such as mathematical equations to achieve perspectival illusionism. A dismissive attitude towards the knowledge-producing potential of art also betrays a dangerously narrow view of what constitutes the 'scientific', which cannot be reduced to the purely quantitative. Art and science have more in common than not: both are informed by theory, driven by method, prompted by concept (innovative or not), executed by technique (skilled or not) and influenced by technology.¹¹

Conventionally speaking, 'forensic art' is closely associated with facial images, reproduced with reference to human remains, testimony or visual documentation, although nomenclature within law enforcement may be confusing. The term 'forensic reconstruction' might be an operational term referring to spatial, rather than facial, visualization, as well as the production of demonstrative visual material for use in legal proceedings, such as sanitized injury depiction via CGI ('body mapping'), motivated by a regard for the dignity of the victim, and the emotional burden of those present. It may also include the work of the court sketch artist who visually documents legal

proceedings where cameras are forbidden; a special genre of visual reportage. In the interests of disambiguation, the capitalized phrase 'Forensic Art' is generally used to refer to expert facial analysis and depiction, including methods of producing or comparing images of the human face and/or skull, according to scientifically assessed methods and standards. Such a proper compound noun suggests a discipline with agreed standards, principles and professional qualifications, which the practice cannot claim. I prefer the lowercase 'forensic art', which acknowledges the applied status of the 'forensic'; avoids any claims to 'Art' proper, and implicitly embodies an expanded field that includes spatial reconstructions and other forms of visual presentation used in court. Known as 'exhibits', these may also include material evidence, or visualizations of trace evidence interpreted through expert analysis and opinion.

Forensic art is usually practised by individuals working with law enforcement agencies, or those working alongside law enforcement in a freelance or consultative capacity. Over more than a century, the methodologies that have informed contemporary forensic facial depiction – which draws on studies in anatomy, facial growth and development, reconstructive surgery, dentistry, pathology, psychology and portraiture – have been developed and refined, but training and techniques are varied, so it stands to reason that the quality of forensic facial depictions can be described as wildly uneven. Practitioner experience may also be very varied; training within an academic environment may provide lab-based practice on historical remains but actual forensic field experience is limited, whereas working for law enforcement is entirely casework focused. Research and consultancy work might attract a range of face-based work, whereas law enforcement may separate the work of facial identification (composites and comparisons) and victim identification (reconstruction and superimposition). The South African Police Service, for example, is structured in this way, with little communication between the two units. Practitioners work across a range of media, including drawing, sculpture and digital montage, often in combination. Likewise, techniques may be traditional (manual), digital (or a combination thereof) or fully automated. It is understandable, given the range of techniques and available technology, that the accuracy and quality of depictions reflects these variables.

A visage by any other name

The ontology of images, particularly in disciplines which do not regard themselves as having visual cultures – science, law, geography and so on – has been given considerable attention by art historian James Elkins.¹² The deployment of facial images within those disciplines arguably serve a more instrumental purpose than in visual art, where conceptual and symbolic attachments and inferences of the facial image are central. But it is the paradoxical universality and elusiveness of the face as a known – visible, legible – object that is of particular interest:

As adults, we are usually complacent and secure enough to define faces as we see them – I see you, and I know which part of you is your face. But of course that is not defining a face; it is identifying one. It's an odd situation we find ourselves

in, not being able to say for sure what faces are, because faces must be among the most important objects that can be seen. They are indispensable for relations of any kind, and our own faces (and people's reactions to them) tell us what kind of people we are.¹³

Our ideas about faces tend to be normative and anthropocentric. This is significant because of the way in which we understand the face as functioning as both an icon and index of human interaction. We perform our identities through our faces and ideas about ourselves are projected onto us by others. We can construct and enhance our facial appearance (make-up or masks, surgery), or disease or trauma may alter our appearance temporarily or more permanently. As a biometric, it is a technology of identification. Deviations from the 'normal' face, the inability to make facial expressions (Moebius syndrome) or inability to recognize faces (prosopagnosia) operates as an injunction to 'normal' communication. Through the face, we relate to or reject one another.

Our assumptions about the co-ordinates of the human face are also reflected in our seemingly limitless capacity to project this idea of a face onto pretty much anything, animate or otherwise, even punctuation. Facial pareidolia describes the irresistible compulsion most of us have to project or read faces (and then expressive character), into all manner of inanimate objects from automobile design (headlights and front grills) to architectural structure to everyday objects.¹⁴ Our use of emoticons in short-form text messaging and social media platforms might seem terribly contemporary but as Jon Calame (2013) reminds us, satirical US magazine *Puck* published set of sophisticated 'proto-emoticons' in 1881, demonstrating complex emotions – Joy, Melancholy, Indifference, Astonishment – with the simplest visual notation possible.¹⁵

We might be able to talk confidently about the shapes of faces from the perspective of anatomy, based on an understanding of the relationships between hard tissue (bone) and the soft tissues (muscles, skin and fat) of the face, and their particular structures and functions.¹⁶ From the perspective of cognitive psychology, the relationship between resemblance and recognition, and the role that representational styles play in either encouraging or discouraging us to recognize similarities and differences between facial depictions, throws up a different, but related set of questions suggesting that the concept of 'likeness' is fairly fugitive or at least contingent. A mannerism or a 'look' can remind us of someone as much as a slavish reproduction of features. This throws into confusion assumptions we have about concepts of 'realism', 'naturalism' and 'verisimilitude' relative to the facial image.

Designations such as 'portrait', 'likeness' and 'composite' all suggest particular conceptual and technical parameters regarding depictions of the human face. Of these, 'portrait' is the most complex as it designates not just an object, but a genre that is historically and ideologically determined, and which has generated a vast raft of scholarship, predominantly in the fields of art history and visual culture.¹⁷ It is after all a portrait, Leonardo Da Vinci's *Mona Lisa* (c. 1503–06), that is possibly the most famous (and most parodied) work of art in the world.

Within the field of human identification, questions of accuracy are played out in the terms of reference themselves. Accepted wisdom within the field is that forensic facial depictions do not (and should not) claim to function as a form of portraiture because

of the inherent limits of what can either be predicted from the skull or depicted from memory.¹⁸ The most common designation for building faces from skulls is ‘facial reconstruction’, which is also the term most commonly used in popular media. But related epistemological impasses have provoked objections to the claims implicit in the term ‘reconstruction’ – that an ‘accurate’ face can be reproduced from the skull. The term ‘facial approximation’ has therefore been proposed as a more precise reflection of process and result.¹⁹ However, ‘approximation’ is more accurately used to describe fully computerized facial models that use fitting algorithms to match or ‘wrap’ a database-derived skin ‘mask’ to the target skull. Relying on statistical probability, and so eliminating highly characteristic features that we may associate with a specific individual face, such automated face models inevitably produce a facial ‘type’. But forensic identification is specifically interested in unique features that identify a *particular* individual, and ideally aims to avoid misidentification wherever possible. As it is never possible to ‘prove’ identification with 100 per cent categorical accuracy (despite claims made about DNA), the principle of exclusion should predominate, as misidentification has significant consequences.

‘Facial reconstruction’ is often – reasonably – confused with reparative, corrective or cosmetic facial surgery. While forensic depiction owes a debt to maxillofacial and craniofacial surgical research, it is a different project. The alternative ‘facial restoration’ invokes the embalmer and their mortuary cosmetics which too, is a different project (although results can look uncomfortably similar). Further considerations concerning evidential weight (evidence vs. intelligence); circulation (among the appropriate community for recognition); and lack of widely agreed standards are more accurately represented by the relatively neutral term, ‘depiction’. Hence my preference for the phrase ‘forensic facial depiction’, as it embraces the full range of facial images produced from human remains or from eyewitness memory, in the case of suspect composites. It acknowledges the anthropological, anatomical and representational (pictorial or sculptural) skills required to produce an individual or ‘characteristic’ face from information obtained either through analysis of the skull or verbal description. Pictorial and sculptural methods both involve attention to the qualitative and quantitative aspects of individual features within the holistic face ‘complex’. Creative interpretation by the artist must remain sensitive to the limits of this knowledge. We are not reproducing a face, but producing a ‘new face’ with little, limited or corrupted visual reference material for the target face.

‘Depiction’ therefore cautiously acknowledges the possibilities and the limits inherent to this work, echoing what Michael Podro recognizes from within visual art: ‘Depiction has two main conditions: first our capacity to recognize through difference, and second, the intention to use the object that is materially present – the painting or drawing – to imagine what we recognize within it.’²⁰

Faces from memory

In 2009, a story about the unlikely success of an eyewitness sketch went viral. The image, the most notional of drawings depicting the alleged murderer of a Bolivian taxi driver, has since developed the anecdotal reputation of one of the worst suspect

images ever produced, and as such, makes for enduring 'listicle' fodder on websites like Buzzfeed.²¹ It is necessary to stress that this image was not made by a professional police artist, but by the eyewitness themselves.²² Nonetheless, a suspect was identified, arrested and convicted with little else to go on other than a thatch of thick, straight hair parted down the middle, which I am hazarding was sufficiently characteristic to pick him out from a crowd. So how and by whom should these facial images be produced? How are they expected to work? What forensic authority do they possess and how is this constructed?

Police composites (or 'artist's impressions') are facial depictions of criminal suspects, based on interviews with the relevant witness(es). There is variation in both composite and interviewing techniques; practitioners may use pencils or computer software, relying more or less on photographic reference catalogues or databases of features to compile a likeness. Recommended best practice is the cognitive interview, designed to retrieve stored memories via holistic context reinstatement, versus the brusque, 'just the facts, ma'am' investigative approach.²³

Identikit and Photofit are two of the earliest manual, feature-based systems that enjoyed widespread use on both sides of the Atlantic since their introduction some four decades ago. The images produced by these systems possess a cultural endurance that is visual shorthand for phrases like 'suspect', 'fugitive' and 'person of interest'. Photofit replaced Identikit's catalogue of drawn features printed on acetate strips with photographic samples printed on rigid card, presumably to enhance the realism and by implication the accuracy, of the resulting representation. A witness would select features and assemble them like a Dada collage. Both systems offered the possibility of customizing the final image (manually adding facial marks or other characteristic features not offered by the stock images), but it remained difficult, if not impossible, to remove the demarcation lines that exposed the piecemeal, feature-based construction of the image. And the catalogue of available features was limited.

The problem is that with feature-based systems a fundamental error is introduced right from the start: it is a broadly accepted view that we do not encode faces feature for feature, and external features – hairstyle, facial hair – dominate our recall of unfamiliar faces (see Jane Draycott's chapter in this book for the inseparability of hair from the face as a whole). Rather, we encode faces holistically, as a gestalt or organized whole.²⁴ Only through the process of learning faces and becoming familiar with them, do internal features begin to dominate what we remember about a face. This is why when a friend or relative changes their hairstyle or shaves their beard, we will most likely be able to pick them out from a crowd.²⁵

Subjected to controlled experiments, facial images produced using feature-based systems did not produce a good match with the target face, 'even under the favourable (and unrealistic) condition where the target's face was visible during construction.'²⁶ Cognitive psychologists have made a strong case for the wholesale replacement of feature-based systems with a sophisticated, 'holistic face' approach, which has effected policy changes in the UK as to how such images are produced and forensically understood: according to Association of Chief Police Officers guidelines (2009), developed in line with the evidence base produced by laboratory research, initial composites are regarded as 'primary' exhibits, with any further modifications (morphed, animated) as 'secondary' exhibits.²⁷ Technology has responded accordingly with computerized compositing systems such as

EvoFIT using evolutionary algorithms to ‘breed’ increasingly individualistic faces based on user selections from sets of similar faces that all conform, more or less, to a basic physical description. They can also be animated.²⁸

Holistic composite systems enfold mathematical shape models with biological principles of sexual selection, described in terms of ‘genetic algorithms’. As EvoFIT developer Charlie Frowd explains, variations on a set of reference faces can be generated by applying random coefficient values, conceptualized as ‘face genes’, to the reference face data, with the result being ‘a search of the space of possible faces and, ideally, evolution towards the relevant identity’:

Genetic mutation can also be applied, an operation that replaces genes with a random value, the aim of which is to maintain variability in the population of faces. The resulting face has characteristic of both parents, with some variation. ... The breeding process is iterated using faces that witness have selected from the (evolved) array. Note that this approach inherently involved chance due to the random nature of selecting (a) breeding pairs and (b) individual genes taken from each parent. The consequence is that sometimes a good likeness emerges early on, but at other times the evolution takes longer.

The final face can be further refined using a set of in-built ‘holistic scales’, which in addition to adjusting for age-related facial changes (slackening the jawline, for example), also allow for more qualitative value-based judgements such as ‘health’ and ‘honesty’: ‘The accumulated effect of these 14 or so holistic scales can substantially improve the likeness of an evolved face.’²⁹

Holistic composite systems are designed to address what artists have known for long: we don’t encode faces according to individual features, but we read them as a whole. Certainly, some people may have a single feature that is highly distinctive, which a skilled caricaturist would make function as emblematic of that individual, but we essentially read faces as a complex spatial topography, with features occupying the area in relative proportions to each other.

Given their conditions of production, composites are heavily contingent things, subject to the vagaries of eyewitness recall, the skill and experience of the officer conducting the interview and producing the image, the technology and the *time* s/he has available to do the job. Time figures as a feature from event through to artefact: the speed of the event witnessed; the time of day possibly affecting visibility; how soon after the event the witness provides a description; the length of time available for an interview; the time available to the forensic artist to produce an image; how soon (and where) the image is circulated and whether there is any media investment in keeping the story alive will all have an influence on the resulting facial image(s).

Suspect Renderings: The conviction of Norman Simons

The functions and limits under which composites operate are relevant for any facial depiction (reconstruction from the skull, age progression) produced as part of a forensic investigation. They are a specific kind of image, a pictorial statement designed

to aid identification though generating leads and keeping an event alive in public memory. They are commonly referred to as secondary methods which may indeed *lend support* to primary methods, which in human identification terms is currently limited to scientifically supported methods like DNA and fingerprinting. Since 1993, the Daubert standards, a set of principles that determine whether evidence is based on scientifically valid reasoning appropriate to the matter at hand, have governed the admissibility of any evidence presented in court.³⁰ As expert practitioners, these standards apply equally to the forensic artist or facial identification officer.

The troublesome case of Norman Avzal (Sarfaraaz) Simons, convicted in Cape Town in 1995 of being the notorious Station Strangler, has the dubious reputation of flouting these fundamental principles. It is one example where a police composite – and visual identification methods in general – carried specious evidential weight in a case that was already deeply fraught in sociopolitical terms, and remains controversial. The process that identified Simons as a suspect, and then the ways in which he was ‘made into an image’ remains doubly suspect, in both senses of the word.

The hunt for the Station Strangler – ‘the largest hunt for a serial killer in South African criminal history’ – began at the height of Apartheid South Africa’s State of Emergency in 1986, spanned the release of Nelson Mandela from prison in 1990 and culminated in an arrest in April 1994, only days before that country’s first democratic national election.³¹ Over this period the decomposing bodies of twenty-two pre-teen and teenage boys who had gone missing from in and around the sprawling settlement of Mitchell’s Plain, a visually bleak, impoverished and crime-ridden area known as the Cape Flats, had been found dumped, some in shallow graves, in the surrounding dunes. The stress this case placed on the communities directly affected by it was considerably amplified by the acutely febrile political situation in South Africa at that time. Traumatized, disenfranchised and angry people were pushed to breaking point, and there was intense pressure to make an arrest. The hunt gained real momentum when a young boy, Ryno van Rooyen, reported his brother, ten-year-old Elroy van Rooyen, missing after they’d helped a man carry boxes from a local shopping centre towards a nearby train station on 11 March, 1994. Van Rooyen’s remains were found shortly thereafter in similar circumstances. An eyewitness, Fouzia Hercules, was found who corroborated Ryno’s account, which allowed police to identify a viable suspect: ex-Mitchell’s Plain schoolteacher Norman Simons.

Although twenty-two boys were thought to be victims of a single serial predator, Simons would only be convicted of Elroy’s abduction and murder. He had eventually confessed to this murder during questioning, but later retracted. The case against Simons otherwise rested on visual identification, a composite construction to which both witnesses contributed, and an identification line-up, where Ryno was unable to positively identify Simons, but Fouzia did. Simons received a 25-year sentence for murder and a further 10 years for kidnapping, effectively sentenced to life in prison. His 2015 parole application was unsuccessful.

Three different composites were produced with the participation of both witnesses, which according to Hercules’ evidence took place eleven days after Elroy’s abduction, on 22 March. The trial judge recounts Ryno’s testimony in his judgement: ‘The police showed them a lot of pictures of ears, noses, mouths and so on. She and he looked at

them together because they had to say how the man's eyes, his nose and his mouth looked. The police officer then showed them a picture that looked like the man who took Elroy away.³² From this account, we learn that the facial identification officer produced three 'drawings', which were entered into evidence as Exhibits J, K and H. At the judge's request, these were shown to Ryno during his testimony, and 'he immediately pointed out Exhibit K as that of the man who took Elroy away'.³³

Exhibit K received special mention in the trial judgement, with more than a full page's worth of commentary relating to the 'clear similarities in facial features, eyes, nose and mouth between the face on the identikit ... and the accused's face', an unprecedented move that confers undue evidentiary weight to what is, at best, an average composite produced under questionable circumstances, but ultimately confers responsibility onto the defence to take issue with admissibility or by extension, any prejudice that may have arisen as a result thereof:

Exhibit K is largely in line with the accused's face, has not been contested by the defense or refuted by any other evidence [or witness].

viz. Exhibit K and the accused's face, where similarities are apparent from a comparison of the accused's photograph (Exhibit L) with Exhibit K, except for the scar, which is prominent on the identikit and *looks like a cut*. However, the accused has visible dark-coloured scars or other lesions [marks] under his right eye, as can be seen clearly on the pictures Exhibits L and D1 and D2. As can be seen in the photograph, Evidence CCl, the accused's hair may be 'combed up' higher than it was when Evidence L was taken.

It is also common cause that no photo or identikit of the accused – or the suspect – was published before Fouzia Hercules made a statement to the police on 22 March and the identikit, Evidence K, was drafted.³⁴

Three years later, the judgement in Simons' unsuccessful appeal against his guilty verdict also makes reference to the 'striking resemblance' the Identikit bears with 'the face of the appellant':

The only material difference is the style in which the appellant's hair is combed, but [the fact] that he combed it like that on occasion emerged via another witness. ... And as far as the reliability of her identification is concerned, *it is substantiated by the identikit*, and the confession to which I will shortly refer.³⁵

Both judgements make reference to both a distinctive facial mark – a large, permanent and pigmented scar on Simons' right cheek which is referred to by one judge as a 'cut' (quite a different thing) and an easily alterable external feature (Simons' hairstyle) as key points of comparison. Simons in fact objected to being the only person included in the identification parade with a facial scar. Recalling the salience of external versus internal features in the context of unfamiliar faces, Frowd points out that external features are important in the naming process: it is difficult to *identify* faces with only internal feature information, but including external features at the early stages of *producing a composite* can be a distraction.³⁶

Judicial verdicts in the Simons case are written in Afrikaans, the administrative language of the Apartheid Nationalist government which understood the power of language as a tool of exclusion and control. The quotes are my own translations, and in doing this work, I was reminded of the difficulty of the word *getuienis*, which means both ‘testimony’ and ‘evidence’, in the sense of the act of providing it. ‘Evidence’ as an object is *bewysstuk*; *bewys* can also be translated as ‘proof’, to demonstrate something to be truthful. It is in this act of translation that the difficulty of imposing forensic responsibilities on an object of intelligence might gain a dark import, and demonstrates how open objects are to mobilization.

Inhabiting the eye of a perfect storm of social and political upheaval, the legal outcome of the case is regarded as having severely limited integrity. A facial identification research group in the Department of Psychology at the University of Cape Town has reconstructed the visual identification practices used by the police in two experiments in a controlled, laboratory context.³⁷ The first experiment set out to test whether the line-up was obviously biased against Simons. It asked participants to identify the guilty suspect from the (admittedly poor quality) video. Played silently, participants only had low-resolution visuals to work with, making judgements based on behaviour and body language; out of eighty participants, not one picked Simons. A second experiment tested resemblance between the composite and fifty randomly chosen faces matching Simons’ ethnic appearance (one photograph in the array was of Simons). To prevent participants from choosing Simons merely because of the distinct scar (or ‘cut’) visible on the composite, researchers placed a plaster in the same position on all faces in the array. Simons was the third most frequently chosen face, but he was more likely to be selected out of a larger group of faces than an array including fewer choices.

However likely Simons is as the perpetrator, there has been sufficient post-conviction revision to suggest that his guilt was not proven beyond a reasonable doubt in the terms of hard evidence.³⁸ In lieu of this, we are left with the disturbing precedent that a high court judge, as well as a team of three appeals court judges, considered a composite image to have adequate authority to act in lieu of any physical evidence linking Simons to the case, and use this to support a murder conviction and life imprisonment.

AQ: Please provide the missing text in the text “Simons is as the perpetrator” in the sentence “However likely Simons is...”

Quantifying likeness: Questions of materiality

An ideal accuracy study should set out to measure the range of variables that determine facial appearance – morphology, proportion, textural resemblance – in relation to method and technique. This is frequently a challenge: forensic cases based on skeletal remains may never be identified, and if they are, the quality of an available ante-mortem photograph is often poor, and only lends itself to two-dimensional visual (proportional and morphological) comparison. Medical imaging technology now permits in vivo 3D analysis of facial reconstruction methods, where morphological deviation between subject and model can be mapped.³⁹ Reliable photographic images will not, however, exist for historical individuals prior to the mid-nineteenth century. Other visual

depictions, such as portraits, etchings, honorific sculpture and possibly a life/death mask, may exist for notable individuals post-seventeenth century. The Manchester method, so-called because it was developed within the now-closed Unit of Art in Medicine at the University of Manchester, combines facial anatomy and mean tissue depths, developed by Richard Neave after the Russian (Gerasimov) and American (Gatliff) methods. Photographic superimposition was then used to compare reconstruction with portrait, demonstrating a range from extreme accuracy to identifying an instance of the wrong portrait being associated with a particular mummy. This method was first introduced in the Buck Ruxton case and more recently given credit for producing the 'forensic aesthetics' of popular culture via the images produced by Richard Helmer in support of the forensic identification of Joseph Mengele.⁴⁰

Where no reliable comparison image exists to assess accuracy and likeness, suspect composites may offer at least an image-to-image comparison if the target individual is eventually arrested. In 2013, a group of researchers led by Scott Klum published a study that set out to test two different modalities – 'sketches' (drawn) versus 'composites' (using software) based on eyewitness accounts – to mugshots of the perpetrators. The team gathered seventy-five forensic sketches, fifty of which were drawn by 'the world's most successful forensic artist' Lois Gibson,⁴¹ who serves the Houston Police Department, with the balance produced by forensic artists employed by the Michigan State Police. Arrest photos (mugshots), presumably resulting from the arrest of these individuals based on the sketches, were then used as experimental stimuli, and shown to a group of volunteers. Two days after viewing the mugshot, the group of volunteers used a facial composite software to produce images of these 'suspects' from memory. Memory of the *photograph*, that is, not a memory made in a real-life scenario. The research team then subjected the forensic sketches and the computer composites to a 'recognition accuracy' analysis using two different automated face recognition systems.⁴²

This the only study I have found that attempts a quantified comparison of different representational registers. However, inherent problems may render the findings not very useful; for example, it is questionable whether the role of the volunteers within the controlled study really did '[mimic] a witness of an actual crime scene' as the researchers claim; and some of the composite drawings by Gibson contain details – angle of head, lighting across the facial surface – that are uncannily similar to the mugshot taken at arrest. This visual similarity prompts the question of whether she adjusts the published versions of her sketches after having had sight of the mugshots, or whether she has developed a drawing style that deliberately mimics the unforgiving frontal view of the mugshot, in which case an argument could be made for introducing implicit prejudice at the stage of the composite.

Two years prior to Klum et al.'s study, Susan Hayes and Nick Milne, representing an interdisciplinary collaboration across visual art and human biology, published the results of a study which attempted to quantify the differences between a photographic reference image and a portrait drawing of the same subject, across a cohort of thirty individuals. Their specific contribution was the novel application of geometric morphometrics (GM) to facial depictions, in addition to the more conventional methods of visual assessment and anthropometry. Of the three analytical methods used, they express confidence in GM's ability to quantify tendencies within an

individual artist's style, and suggest that the method has wider application across a range of facial depictions.⁴³

In simple terms, GM offers a set of analytical tools to talk about the differences between shapes in mathematical space in statistical terms. It is typically applied to the study of variation in biological forms; here the authors treat portrait drawings as biological forms in themselves, 'to find out how an individual artist changes the shapes of a sitter's face' expressing an interest in what they call intended versus 'unintentional' distortions that may be present in the drawn portraits. Intended distortions are those choices we make about highlighting characteristic features. As they observe,

While both exaggeration and generalization do not constitute a mimetic rendering of an individual's facial appearance, they are not entirely inaccurate either. The more tangible transformations that occur in the translation of a living person into a traditional 2D portrait tend to be somewhat less than desirable; that is, largely unintentional manipulations of the sitter's facial shapes which more often than not are unintended side-effects of the processes involved in visual perception.⁴⁴

In their experimental design, all the drawings were made by one artist (Hayes), and were initiated in the presence of the volunteer subject. In other words, there was a 'life drawing' session of varying length that allowed for direct observation at first. At the session's conclusion, a reference photograph of the sitter was taken from which the drawing was later completed. Of course, this also means that multiple processes of translation are taking place here – from direct observation, to photographic representation, and then the drawing being a further (hybrid) translation of both.

Calling on canonical figures in art history and theory – Richard Brilliant, Ernst Gombrich and Roger Fry among others – to address issues of accuracy and likeness in portraiture, Hayes and Milne frame a position that prioritizes portraiture's mimetic function. They work to separate the genre from its aesthetic values, stressing its artisanal and mechanical aspects. Their findings are, in their words, 'at best partial': the drawings were not 'pure outlines', and GM cannot measure degrees of texture and shading that we *translate* into shape information. The portraits that did demonstrate better shape accuracy according to GM principles were judged better likenesses, 'but not significantly so'.⁴⁵

Hayes and Milne acknowledge that absolute mimesis (whatever this might be) cannot be achieved, acknowledging Gombrich on the inevitable influence of factors extrinsic to pure optical recording that will affect representational 'translation' of a real human face into an image of one on a page: the choice of medium (conté crayon in this case); the sociopolitical and cultural contexts of the production and reception of images; and that qualitative factors such as time, and the nature of interaction between artist and subject, are complex to quantify.

Artists are well versed in the paradox that slavish pictorial mimesis can in fact work against the effect of likeness. Podro notes that providing too much detail – representing each facial detail with equal attention – is less convincing than a depiction which balances salient details well described with more open or 'provisional' areas and allowing our imaginations to interpolate between these to 'produce' the face (or

whatever object we are contemplating).⁴⁶ This finds a parallel in studies which suggest that photo-realism may be operationally detrimental in a forensic context; facial depictions produced with a photographic level of 'accuracy' may in fact *reduce* the possibility of the individual being recognized. Theoretically, any mimetic slip may cause us to reject the image, even if it mostly resembles the target face. 'A good likeness, therefore, is not an accurate likeness, but one that has an *illusion of accuracy*.'⁴⁷

Criticisms levelled against artistic subjectivity usually attend to repeatability. However, the significant difference in context between controlled studies undertaken in laboratory contexts and the contingencies of field operations should be taken seriously. A 'gold-standard protocol' for testing composite systems in the lab suggests that the issue of subjectivity and error is less an artistic problem and more fundamentally a human one:

As constructors typically produce rather different-looking images for a given target ... the protocol also recommends that at least eight constructors be recruited per system. Similarly, evaluators vary in recognition ability and so at least eight evaluators should attempt to name each composite.⁴⁸

Distorting the image corrects perceptual errors

Within visual arts practice, it is a basic rule of thumb that considering an image from different angles, whether in the studio or in a gallery, is essential to assessing formal strengths and weaknesses, and overall compositional integrity. It is as true for non-figurative (abstract) work as it is for figurative representations. It is necessary to shift one's perspective in relation to the object, by stepping away and regarding it from a distance and from different angles, masking sections to view areas in isolation and then in relation to the whole. Details may look convincing close up and in isolation, but may get lost in the composition as a whole. I have always found it useful to photograph work in progress, and assess it via a single-generation mediation. This process reintroduces an objective perspective that can get lost in the haptic intimacy of making. Uncannily, criminalistics pioneer Hans Gross described something very similar in the late nineteenth century:

The photograph is the image reflected by a mirror but it is a fixed image; this definition itself proves that photography, however paradoxical the assertion may appear, shows us more than the eye, even when it shows us no more than the eye can see. ... A painter, ... after having worked for a certain time, places his portrait before a mirror and considers the image which the latter reflects; he often discovers great faults which he was incapable of seeing upon the portrait itself. The reason is that when one looks for a long time at an object, ... one always sees it under the same aspect, which prevents certain defects being noticed; but when the image is reflected by the mirror one sees the object under lateral inversion and in consequence under another aspect; details may then perhaps be discovered which have formerly escaped notice. In photography exactly the same may be

said; an object has been observed with great minuteness and application; a whole series of observations have been made regarding it; nothing striking has been noticed about it because one has become accustomed to its appearance; but if it be photographed, the new colour, the new situation, and the new aspect enable us to see it from another point of view and reveal fresh details which have not yet been discovered.⁴⁹

The knowledge gained by 'looking awry', is well-known within visual arts practice. That it now has an evidence base via cognitive psychology is very encouraging. Recognition studies have shown that subjecting a facial image to a 'physical linear stretch' (doubling its height or width) has been found to 'substantially' improve correct naming, despite a concession that 'stretched images look distorted and inappropriate for the serious application for which they are used'.⁵⁰ This can be mitigated, they suggest, by looking at an image side-on, which creates a similar effect that is perceptual rather than physical. The future of improved composites performance therefore appears to be with multiple viewpoints, if not full three-dimensional composites: 'A multi-view model should be able to accurately render differences in perspective, so that the image at construction is a better match to the image seen at the crime scene The same principle may be applicable to other factors such as lighting and facial expression.'⁵¹

Looking Awry: *Super Noi* and *Portrait Machine*

While research aimed at understanding visual cognitive processing can be instructive, looking at how professional contemporary artists co-opt facial recall techniques offers another way of 'looking awry'. In the hands of those with both technical and conceptual expertise, and an unwillingness to accept given forms, committed instead to literal and figurative acts of deconstruction, the deadening effect of metric evaluation opens up to often tongue-in-cheek poetics of chance and intention, presenting parallel enquiries that thicken and enrich our understanding of the complexities of depicting the face.

In the 1990s, Italian artist Maurizio Cattelan, a conceptual artist who perpetually claims to 'have no ideas', embarked on a project he dubbed *Super Noi* ('Super Us'), collections of composite drawings of the artist constructed by police artists in different cities based on verbal descriptions provided by close friends and acquaintances, which capitalize on Cattelan's distinctive physiognomy. The various iterations of the work – sometimes referred to as *Il Super Noi* or suffixed with a specific city name like Bologna, Torino, New York – comprise fifty drawings per set on A4-size sheets of acetate.⁵² They are wall-mounted, cloud-like arrangements, which sidestep the temptation to foreground the modernist-bureaucratic associations of such images by displaying them in a rationalist grid. Representing 'a network of other people's appraisals', the effect is 'a kaleidoscopic representation of an individual', playfully calling into question the fundamentally contingent nature of a profession intended to be forensically precise.⁵³ The title itself is suggestive of a conceptual portmanteau, linking the psychoanalytic theory of the Super Ego, by which we internalize social rules and behavioural norms, with the personality 'disorders' of schizophrenia or multiple personality disorder.

Performing the paradox of identity as simultaneously that which defines the 'self' and which one seeks to escape, Cattelan's fragmentary and serial rogue's gallery is a humorous but ultimately complex mediation on perception, representation and judgement. He entertains his criminal fantasies in the visual language of suspect apprehension. He has said of the work: 'That piece was really about how people around you perceive you in different ways than how you really are. So I was thinking about visualizing the idea of the self. The drawings really looked like me, but at the same time they were like cartoons. They were terrific. I don't know if it was a fluke.'⁵⁴

The 'composite-Cattelan' advanced by this work clearly demonstrates what the artist recognizes about the simultaneous likeness and caricaturish 'un-likeness' that emerges when a facial image is produced from verbal description. UK-based South African artist Trasi Henen's *Portrait Machine* (2011–ongoing), takes this even further.⁵⁵

Henen describes *Portrait Machine* as 'an ongoing, participatory drawing project that is concerned with interpersonal exchange, subjectivity, perception, collaboration and conversation'. An experiment in perception, practice and pedagogy, the project triangulates the relationship between sitter (subject), describer and artist, performed as a one-to-one reciprocal exchange, with Henen acting as describer and artist and sitter switching roles after the first drawing is completed, and then one-to-many, performed with groups of art students in real time but not necessarily in real space – some sessions were conducted with Henen describing a subject via Skype. While spatial arrangements have been varied, all participants have consistently comprised either artists, designer/illustrators or art students; in other words, all have a measure of visual training.

Portrait Machine anticipated cosmetic brand Dove's 2013 US campaign film, *Real Beauty Sketches (You're More Beautiful Than You Think)* featuring forensic artist Gil Zamora. Here forensic art skills are harnessed to demonstrate the difference in self-perception (generally heavily self-critical) and perception by others (more generous) among a diverse group of female participants. Waiting-room-style encounters were set up between women who were strangers to one another. Entering Zamora's studio individually and with the artist screened from view, Zamora asks each woman to describe herself. In a separate session, he asks them to describe the woman they had just met. The resulting finely detailed pencil sketches were exhibited side-by-side, with emotional commentary by the participating women.⁵⁶

With Henen's consent, I staged *Portrait Machine* with a group of undergraduate (second year) Fine Art students at the University of Stellenbosch in 2014. I had been on sabbatical from the university for the previous eighteen months, so this group of students would not yet have encountered me within their teaching context. Hidden from view behind a screen, I listened as a teaching assistant, who would also act as 'witness-constructor', and introduced the exercise to the class. The assistant proceeded to describe my appearance, avoiding words which might prematurely reveal my identity (gender pronouns, for example), and the class attempted to translate her words into a facial image. The class had an opportunity to request any further salient information before completing their drawings. I stepped out from behind the screen to a mixture of laughs, cries of dismay, and 'Oh, I thought it was you!'

Having had rigorous cognitive interview and compositing training myself, it was this experience which really brought home the significance of descriptive language,

the effects, as Henen writes of ‘the speaker [acting] as the scribe’s eyes’. What words and analogies are shared or missed between witness and artist? The possibilities and failure of language is ultimately what *Portrait Machine* foregrounds: hearing yourself described, and the unspoken self-censorship that might very well be occurring if the describer doesn’t want to offend is an uncanny and acutely self-conscious scenario, which is amplified by then being faced with multiple versions of oneself, produced simultaneously and in real time, by a diverse group of people many of whom are equally self-conscious about ‘getting it wrong’ (despite there being no way of getting it right, although I think one got very close indeed).

Constructing fugitive subjects: *prosopopoeia* and the counter-forensic

Translating the living face to facial image with incontrovertible fidelity eludes human ability. An essential factor, some fundamental animating spirit, escapes synthetic reconstruction. Paradoxically, this is amplified when we strive for mimetic realism without the necessary exceptional technical skill, and more tolerated when our depictions attend only to salient or characteristic details, or when our abilities can only manage the most rudimentary of sketches. As the various case studies discussed here show, representational style and technique, along with technical facility and dimensional translation, have a material effect on how the image does its work. As for the rest, it is a question that continues to vex and exercise those invested in understanding the social, cultural and legal authority of the facial image. Considering time and language as significant contributing factors to their particular materiality, composites are presented as embodying the ‘fugitive’, in both literal and figurative terms, exploring the limits of portraiture, the relationship between verisimilitude and the ‘real’, the image as record and performing the self. Subjecting the ineffable qualities of portraiture to various metric analyses may get us some way, but it feels a little too much like Narcissus staring at his own reflection in a pond, an exercise in hubris.

In our current climate, where the relationship between identity and identification is increasingly contested and constructed (via selfies and other online avatars), the facial image and the self are related yet discrete conceptual entities. Within the humanities, interest in the face as an object of study can be understood as an extension of identity and body politics into ‘critical subjectivities’ that coalesce in different periods, aligning with various disciplines and discourses that frequently overlap (cultural studies, anthropology and philosophy, or psychoanalysis and criminology, for example). Yet despite inhabiting a world made of faces – or certainly, pictorial representations of faces – only a limited number of contemporary scholars in the humanities and social sciences – have begun to focus closely on the face itself.⁵⁷ Within an expanded art history, the work of Hans Belting is instructive.⁵⁸ This wave of recent scholarship suggests that the fugitive nature of the face (temporary and surgical cosmetic procedures being a rather literal case in point) is being recognized in newly complex ways. Deleuze and Guattari’s complex and rather abstracted notion of ‘faciality’, which offers a machinic counterpoint to Emmanuel Levinas’ empathic concept of ‘the face of the other’, seems

to resonate with the politics of 'facelessness', as well as our current digital culture where images are being made by and for machines, which means that a large part of what we understand as 'visual culture' is in fact invisible to humans.⁵⁹

So, in the spirit of looking awry, I conclude with an introduction to two concepts I will be taking forward in my future work that considers forensic art in an expanded sense, reproducing the faces of the vulnerable or the violent in the pursuit of justice, while also attending to the more fugitive aspects of the roles faces play in our contemporary lives. The arguments advanced here pivot on a central idea about the function of forensic art in the context of wider practices of scientific methods of human identification: their basic function is to facilitate and enact the translation of object to subject, which they achieve in inherently narrative and metaphorical ways. They need stories to be told about them, stories that are most often told in reverse, reconstructed from debris and data collated post hoc.

The Forensic Architecture group's advancement of the concept of 'forensis' retrieves the public, and by extension political, imperatives of the term 'forensic' as embodied in the etymology of the word, the *forum*, a public space that foregrounds courageous critique and challenge, not simply immutable authority.⁶⁰ The language and forms of *forensis* are performative. The objects that bear the responsibility of truth telling are mute witnesses until someone demonstrates their significance to us. In other words, they require interpretation and translation. These objects have to be made to speak, or rather, conditions have to be designed to enable them to do so.

Thomas Keenan has identified and transposed the concept of prosopopoeia – a concept innately tied to the face – as a way of understanding how objects function within a forensic context, where absent, imagined or dead persons or things are represented as 'speaking'.⁶¹ As performative technology, collected evidence and court exhibits are mobilized to do the work of testimony, made to speak via the interpretative skills of an expert witness, making representations on behalf of those who cannot, and giving a face and voice to inanimate things including abstract concepts like 'city' and 'state', 'enabling claims to be made, positions to be taken, justice to be pursued'.⁶² Here, material and immaterial things are crafted as objects of authority and truth.

The Simons' case demonstrates the challenge to individual liberty than can result when a number of intensely contingent factors come together to differentiate someone as exceptional, based not only on their facial appearance but also how this notionally translates into an image produced under stressful circumstances. Here, investigators and legal representatives chose to ignore a basic ground truth, which led to a person's conviction and imprisonment: composites should not be used in isolation. They can be very valuable, but their contingent nature requires us to be alert to their very real limits, both at the point of their construction and then how they might be understood later. As Frowd reminds us, their legibility is not stable:

Human observers make errors when constructing composites and making judgments based on identity ... the likeness of a composite to a defendant is related to whether (participants acting as) jurors *believe the defendant to be guilty or not*, suggesting that composites may not provide independent evidence and that their use in court is questionable.⁶³

Where the safety and security industries are concerned (global conflict providing a justifiable if double-edged cause for real concern), the project to tame and control the fugitive face has extended to producing faces from DNA trace evidence, an endeavour in fact anticipated by artist Heather Dewey-Hagborg with her project *Stranger Visions*.⁶⁴ More recently, scientists have reported success in deriving almost-identical facial images from the brain activity of macaque monkeys from those previously shown to the monkeys. As researcher Doris Tsao commented, 'A face is impossible to describe in words One can imagine applications in forensics where one could reconstruct the face of a criminal by analysing a witness's brain activity ... you could imagine reading out what face a person is imagining.'⁶⁵

Forensic art, I suggest, produces prosopopoeial objects in a very literal sense, and in the hands of visual artists, we see how these methods may perform counter-forensic roles.⁶⁶ Attending to the human face in all its complexity, not just as an indexical likeness, which is expected to do particular kinds of work, but also as an icon or emblem of individual personhood onto which we project various fears and desires, forensic art produces culturally complex objects that are in excess of its forensic imperative, crafting 'subjects' in very particular ways that are, in turn, embodied in images which possess a certain performative agency. Acting as our focalizing lens, the composite sketch also serves to illustrate that all forensic art represents a compositing process: we create faces from a range of data that is observed, heard, read and gathered through material interaction and touch. It represents a similar hybrid practice of producing knowledge through both haptic- and optic-based observation that Joanna Sofaer describes in her bioarchaeological work.⁶⁷ Further, these visual depictions open up conversations between artist, witness and community. In facilitating the transfer of valuable information from one context to another in the interests of social cohesion and justice, they arguably represent a particular genre of community art.

Critical interdisciplinary practices question received knowledge – how it is made and how it is used – in very particular ways. Any considering of the applications of science entails a consideration of its dual-use potential and by extension, its political implications. As such, it represents a specific intersection of art, science and legal agency, placing specific demands on how we understand – and practise – the relationship between ethics and aesthetics. In its work with the living and the dead, attending to vulnerable people subjected to the worst aspects of human behaviour – neglect, exploitation, violence and death – forensic art troubles, in critical and productive ways, the illusion of empirical distance that is so much part of the construction of the scientific gaze.

Notes

- 1 Wittgenstein cited in M. Podro, *Depiction* (New Haven: Yale University Press, 1998), 180, note 1.
- 2 See The Innocence Project (<https://www.innocenceproject.org/>) which is committed to overturning wrongful convictions based on eyewitness identification.

- 3 I am particularly interested in recent projects aimed at recuperating the analog rather than indexical nature of photography's verisimilitude or those which make a powerful case for the indexicality of the digital photographic image: Roland Barthes, *Camera Lucida: Reflections on Photography* (New York: Hill and Wang, 1981); Susan Sontag, *Regarding the Pain of Others* (London: Hamish Hamilton, 2003); K. Silverman, *The Miracle of Analogy: Or the History of Photography, Part 1* (Palo Alto, CA: Stanford University Press, 2015); Kris Paulsen, 'The Index and the Interface', *Representations* 122.1 (Spring 2013): 83–109; Errol Morris, *Believing is Seeing* (New York: Penguin, 2014) and see Jason Bate's chapter in this book for the telescoping of past with present.
- 4 M. Mori, 'The Uncanny Valley (trans. K. F. MacDorman and Norri Kageki)', *IEEE Robotics and Automation* 19.2 (2012): 98–100 (Original work published in 1970). doi:10.1109/MRA.2012.2192811. Online: <http://spectrum.ieee.org/automaton/robotics/humanoids/the-uncanny-valley> (accessed 7 September 2016). A. Tinwell, *The Uncanny Valley In Games and Animation* (Boca Raton: CRC Press, 2015), extends this into the sophisticated CGI creations of gaming and animation, and interrogates that affective quality of such bodies and faces, offering a productive application of developmental psychologist Edward Tronick's Still-Face Effect: E. Z. Tronick, 'Things Still To Be Done on the Still-Face Effect', *Infancy* 4.4 (2003): 475–82.
- 5 Podro, *Depiction*, Preface, n.p.; E. Levinas, 'Exteriority and The Face', in *id.*, *Totality and Infinity* (The Hague, Boston and London: Martinus Nijhoff Publishers, 1979); *id.*, 'The Face' in *Ethics and Infinity: Conversations with Philippe Nemo* (Pittsburgh: Duquesne University Press, 1985).
- 6 Due in large part to media exposure via television shows like BBC's 'History Cold Case' (2010–11) and any number of forensic procedural dramas. For an illustrated history of how this method has developed scientifically and artistically, see the virtual exhibition 'The Evolution of Facial Depiction from Human Remains', curated by Face Lab (LJMU) for the Arts & Humanities Research Council (UK) website. Online at <http://www.ahrc.ac.uk/research/readwatchlisten/imagegallery/facialdepiction/> (accessed 19 September 2017).
- 7 Slavoj Žižek, *Looking Awry: An Introduction to Jacques Lacan through Popular Culture* (Cambridge, MA: MIT Press, 1991); H. Aldersley-Williams, K. Arnold, M. Gordon, N. Kotsopoulos, J. Peto and C. Wilkinson, eds, *Identity and Identification* (London: Black Dog Publishing, 2009).
- 8 C. M. Wilkinson, 'A Review of Forensic Art', *Research and Reports in Forensic Medical Science* 5 (2015): 17–24.
- 9 For example, W. D. Haglund and D. T. Reay, 'Use of Facial Approximation Techniques in Identification of Green River Serial Murder Victims', *The American Journal of Forensic Medicine and Pathology* 12.2 (1991): 132; Richard P. Helmer, S. Rohricht, D. Petersen and F. Mohr, 'Assessment of the Reliability of Facial Reconstruction', in *Forensic Analysis of the Skull*, ed. M. Y. Iscan and R. P. Helmer (New York: Wiley-Liss, 1993); C. N. Stephan and M. Henneberg, 'Building Faces from Dry Skulls: Are They Recognized above Chance Rates?' *Journal of Forensic Sciences* 46.3 (2001): 432–40.
- 10 C. N. Stephan, 'Facial Approximation – From Facial Reconstruction Synonym to Face Prediction Paradigm', *Journal of Forensic Sciences* 60.3 (2015): 566–71.
- 11 The current interest in so-called SciArt and STEAM (as an extension of STEM, adding Art to the acronym) suggests that there is committed interest in recuperating aspects of this historical relationship from an educational perspective, despite a lack of clarity about the broadness of the terms of reference and power dynamics that may inform

- interdisciplinary collaborative work, which is rich in breadth, depth and international presence.
- 12 J. Elkins, 'What is a Face?' in *id.*, *The Object Stares Back* (San Diego, New York and London: Simon and Schuster, 1996, repr. Harvest, 1997); *id.*, *Picturing the Body: Pain and Metamorphosis* (Stanford: Stanford University Press, 1999); *id.*, *Visual Practices Across the University* (Paderborn: Wilhelm Fink, 2007); see also W. J. T. Mitchell, *Image Science: Iconology, Visual Culture, and Media Aesthetics* (Chicago: University of Chicago Press, 2015).
 - 13 Elkins, 'What is a Face?' 161.
 - 14 Facial pareidolia even enjoys its own Twitter account *Faces In Things @FacesPics*.
 - 15 J. Calame, 'Saving Face', *Cabinet*, 49 (2013): 28–31. This nascent 'typographical art' would find its digital maturity decades later with ASCII art, but what is really noteworthy is the correspondence between the emotional expression depicted here and those of the Facial Action Coding System, based on the work of Carl-Herman Hjoritzsjo, *Man's Face and Mimic Language*, trans. W. F. Salisbury (Lund: Studentlitteratur, 1969/70) <http://diglib.uibk.ac.at/download/pdf/782346?name=Man's%20face%20and%20mimic%20language> (accessed 30 March 2017) and adapted by Paul Ekman and Wallace V. Friesen, with a significant updated published in 2002: P. Ekman and W. C. Friesen, *Facial Action Coding System: A Technique for the Measurement of Facial Movement* (Palo Alto: Consulting Psychologists Press, 1978); *id.* and J. C. Hager, *Facial Action Coding System: The Manual on CD ROM* (Salt Lake City: A Human Face, 2002). FACS is used in psychology and animation to quantify and analyse the mechanics and affects of facial expression.
 - 16 B. A. Fedosyutkin and J. V. Nainys, 'The Relationship of Skull Morphology to Facial Features', in *Forensic Analysis of the Skull*, ed. Iscan and Helmer, 199–214.
 - 17 Podro, *Depiction*; Richard Brilliant, *Portraiture* (London: Reaktion, 1991); Marcia Pointon, *Portrayal and the Search for Identity* (London: Reaktion, 2013).
 - 18 C. Wilkinson, 'Facial Reconstruction – Anatomical Art or Artistic Anatomy?' *Journal of Anatomy* 216 (2010): 235–50. Increasing attention is being paid to best-practice methods to optimize the possibility of identification (an already highly contingent process) and minimize the introduction of error into the depiction itself: S. Davy-Jow, 'The Devil is in the Details: A Synthesis of Psychology of Facial Perception and its Applications in Forensic Facial Reconstruction', *Science & Justice* 53 (2013): 230–5; C. M. Wilkinson, 'A Review of Forensic Art', *Research and Reports in Forensic Medical Science* 5 (2015): 17–24.
 - 19 J. S. Rhine, 'Coming to Terms with Facial Reproduction', *Journal of Forensic Sciences* 35.4 (1990): 960–63; Stephan, 'Facial Approximation'; *id.* and M. Henneberg, 'Recognition by Forensic Facial Approximation: Case Specific Examples and Empirical Tests', *Forensic Science International* 156 (2006): 182–91; Alan G. Morris, *Missing and Murdered: A Personal Adventure in Forensic Anthropology* (Cape Town: Zebra Press, 2011), 87.
 - 20 Podro, *Depiction*, 5.
 - 21 Patrick Smith, 'The 21 Worst Police Sketches Of All Time', *BuzzFeed* <https://www.buzzfeed.com/patricksmith/the-27-worst-police-sketches-of-all-time> (accessed 21 May 2017).
 - 22 Rory Carroll and Latin America correspondent, 'Childlike Photo-Fit Leads Bolivian Police to Murderer', *The Guardian*, 24 November 2009, section World news <https://www.theguardian.com/world/2009/nov/24/bolivia-photo-fit-murderer> (accessed 21 May 2017).

- 23 On composite techniques, see S. Mancusi. *The Police Composite Sketch* (New York: Humana Press, 2010); D. P. Hinckle. *Mug Shots: A Police Artist's Guide to Remembering Faces* (Colorado: Paladin Press, 1990); L. Gibson *Forensic Art Essentials: A Manual for Law Enforcement Artists* (Cambridge, MA: Academic Press, 2007); K. T. Taylor, *Forensic Art and Illustration* (Boca Raton: CRC, 2001). On the cognitive interview, see R. P. Fisher and R. E. Geiselman *Memory Enhancing Techniques for Investigative Interviewing: The Cognitive Interview* (Springfield, IL: Charles C. Thomas, 1992).
- 24 J. W. Tanaka and M. J. Farah, 'Parts and Wholes in Face Recognition', *The Quarterly Journal of Experimental Psychology* 46.2 (1993): 225–45; G. M. Davies, J. W. Shepherd and H. D. Ellis. 'Remembering Faces: Acknowledging Our Limitations', *Journal of the Forensic Science Society* 18.1–2 (1978): 19–24.
- 25 C. Frowd. 'Facial Composites and Techniques to Improve Image Recognizability', in *Forensic Facial Identification: Theory and Practice of Identification from Eyewitnesses, Composites and CCTV*, ed. T. Valentine and J. P. Davis (West Sussex: Wiley Blackwell, 2015), 48. Of course, a significant point about the limitations of doing facial recognition research in laboratory environments versus 'in the wild', is that different cognitive processes are at work in processing still facial images versus faces in motion, within a specific context where a host of other distractors may be present. Having contextual information improves recognition rates.
- 26 *Ibid.*, 46–7. The interview process, in which a facial description is elicited, plays a formative role in producing an image. Asking witnesses to make seven whole-face judgements regarding health, masculinity, pleasantness, honesty, distinctiveness, intelligence and likeability showed a striking improvement in accurate naming for composites produced using a feature-based system (a leap from 9 per cent to 41 per cent, tested with PRO-Fit) as well as a holistic system (24 per cent became 39 per cent, testing EvoFIT): *ibid.*, 56. The marked improvement reported for the feature-based system seems to demonstrate the double effectiveness, and therefore necessity, of applying a holistic approach in both processes of descriptive recall and visual construction.
- 27 *Ibid.*, 58–9, 63–4.
- 28 The three commercial systems currently in existence are South Africa's ID, EFIT-V and EvoFIT: C. Tredoux, D. Nunez, O. Oxtoby and B. Prag, 'An Evaluation of ID: An Eigenface Based Construction System', *South African Computer Journal* 37 (2006): 90–7; 2006 (37): 90–7; C. J. Solomon, S. J. Gibson and J. J. Mist, 'Interactive Evolutionary Generation of Facial Composites for Locating Suspects in Criminal Investigations', *Applied Soft Computing* 13.7 (2013): 3298–306; C. D. Frowd, P. J. Hancock and D. Carson, 'EvoFIT: A Holistic, Evolutionary Facial Imaging Technique for Creating Composites', *ACM Transactions on Applied Perception (TAP)* 1.1 (2004): 19–39; C. D. Frowd, P. J. Hancock, V. Bruce, F. C. Skelton, C. J. Atherton, L. Nelson, A. H. McIntyre, M. Pitchford, R. Atkins, D. C. I. Webster and J. Pollard, 'Catching more Offenders with EvoFIT Facial Composites: Lab Research and Police Field Trials', *Global Journal of Human-Social Science* 11.3 (2011): 35–46. EvoFIT's website offers comprehensive information about the system, including links to published research. See <http://www.evofit.co.uk/> (accessed 15 May 2017).
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- 32 *The State versus Norman Sarfaraaz Simons* (High Court of South Africa, Good Hope Provincial Division, 1995), SS.104/94: 1404–5.
- 33 *Ibid.*
- 34 *State v. Simons* 1995: 1407, my emphasis.
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- 36 Frowd 'Facial Composites', 54.
- 37 A. Nortje, C. G. Tredoux, K. Kempen and A. Vredeveltdt, 'Applying Laboratory Techniques to a Real-Life Case: What Insight can we Provide about the Station Strangler Case?' Poster presentation at the American Psychology-Law Society Annual Conference, Portland, United States, March 2013.
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- 47 Hayes and Milne, 'What's Wrong?', 151, my emphasis.
- 48 Frowd 'Facial Composites', 49. 'Constructors' are shown faces with which they are unfamiliar, and after a specific delay, recall the face within an interview context with a trained professional. 'Evaluators' are those familiar with the target face who are asked to perform a recognition task with very basic contextual information.
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- 52 Maurizio Cattelan *Il Super Noi*, <http://www.laboralcentrodearte.org/en/recursos/obras/super-noi-torino-1996>.
- 53 Guggenheim Education Teacher Resource Unit, 'Maurizio Cattelan *All*', 2011 Online: <https://www.guggenheim.org/arts-curriculum/resource-unit/maurizio-cattelan-all> (accessed 24 May 2017).
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Chapter 5

Opening Spaces through Exhibiting Absences: Representing Secretive Pasts

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Many chapters of *Chemical Bodies* illustrate how the history of the use of chemical agents as methods of control and coercion has been intimately tied to the rendering of harm as (in)visible. While suffering has been foregrounded to make the case for brutality and exceptionality on some occasions, on other occasions, suffering has been downplayed, denied or backgrounded to make the case for benevolence and normality. This suggests the need for caution about what is and is not included in any accounts of chemical agents.

Another source for caution is the way the development and use of chemical agents is often undertaken in conditions of secrecy. As a result, scholars, journalists, activists and others investigating such capabilities often take their task as one of exposing hidden truths or unappreciated events. The promise of revealing or unmasking offers a fetching allure for investigators and audiences alike: an invitation to become complicit in a shared but still exclusive understanding.

Against the aforementioned points, this chapter takes the chemical and biological warfare (CBW) programme established under Apartheid South Africa (code named 'Project Coast') as a topic for attending to our commitments in representing the past. This secret military programme used an elaborate array of front companies to camouflage its activities to those both outside and inside of it. Through the endeavours of the Truth and Reconciliation Commission (TRC) and other investigations, Project Coast has come to symbolize the perversities of Apartheid. And yet, each attempt to determine what took place has been delimited by the very terms of the investigations setup to establish the truth. Thus, any attempt to present this programme needs to find ways of acknowledging the partiality of what accounts can be fashioned.¹

As part of the transition away from Apartheid, over the last two decades, South Africa has figured as a prominent, if not exemplar, case of how regard for the past might encourage reconciliation. By the time of the writing of this chapter, however, the fraught experiences with transitional justice in this nation suggest that pinning down more details about yesterday or providing social meta-narratives through a time-bound truth commission are not sufficient to ensure a just tomorrow. Nor may they satisfy a new generation.

Minding such considerations, our chapter asks: What kind of histories should be told of Project Coast today?

We consider this question in relation to two material forms of storytelling undertaken by the authors: a monograph titled *Dis-eases of Secrecy: Tracing History, Memory and Justice* and an exhibition titled *Poisoned Past: Legacies of South Africa's Chemical and Biowarfare Program*.²

In this chapter, we consider how these stories of the past sought engagement with what remains outside of them. We seek to move beyond simply orientating to the restrictions on what can be told as information barriers that lead to 'knowledge gaps' resulting in more or less flawed histories. Taking our inspiration from (i) work in geography which understands space not as some fixed terrain but instead as an entanglement constructed from acts of connection and separation,³ (ii) the 'spectral turn' in the humanities and (iii) 'difficult heritage' practices more specifically, we ask how notions of presence and absence can be intertwined to offer novel possibilities for representing secretive pasts. Our engagement with the relation between presence and absences in these mediums is offered to promote consideration of the purposes of histories, the techniques of rendering bodies (in)visible, the demands of investigating the past and the commitments of unearthing.

CONCEALMENT AND DISCLOSURE

Since its official closure in 1995, Project Coast has been the subject of a number of inquiries and publications.⁴ Notably the TRC examined it through public hearing in the late 1990s. The TRC hearing was the first large-scale public exposure of a national chemical and biological weapons programme.⁵ Also, between October 1999 and April 2002, Dr Wouter Basson faced sixty-seven fraud, murder and drug charges directly or indirectly related to his activities as the long-time head of Project Coast. This was one of the longest trials in South Africa's history. Basson was not found guilty in relation to any of the charges. This trial was the subject of a book titled *Secrets and Lies* co-written by Chandré Gould. In addition, in 2002, Gould co-authored a 300-page report for the United Nations Institute for Disarmament Research and Centre for Conflict Resolution titled *Project Coast: Apartheid's Chemical and Biological Warfare Program*.⁶ In

2013, the Health Professionals Council of South Africa (HPCSA) concluded a fraught and lengthy disciplinary hearing and found Basson guilty of unethical conduct for activities while he was head of Project Coast. As of late 2017, a sentence had yet to be passed. Basson is the only person associated with the programme to have been legally charged or professionally sanctioned. Through these investigations and others, much has been publicly disclosed about Project Coast. And yet, with this disclosure, it has also become plain that much is not understood, and may never be so.

In this section, we indicate some of the ways in which concealment and disclosure have characterized *both* the activities in the programme and the investigations into it to determine what took place.

To begin, concealment was a sought capability within the activities of Project Coast; particularly the development of undetectable ways of chemically killing and injuring. Among the weapons that did not look like weapons included spring-loaded screwdrivers, bicycle pumps and umbrellas that released chemicals of choice. Finger rings with hidden poison compartments were manufactured. In combining the right-looking ‘applicators’ with the desired acting substances, many variations were possible: chocolates with botulinum toxin, anthrax-contaminated envelope glue and so on.

When understood as assassination weapons, such applicators disguised purpose in appearance. Upon accusatorial questioning and TRC hearings in 1998, however, individuals such as Wouter Basson repeatedly defended their production, suggesting the devices’ real purpose was not what it seemed. What conceivable reason could there be in putting cyanide in peppermint chocolate then if not to poison? To demonstrate to members of South African security forces what Russian trained African National Congress (ANC) operatives could do with simple chemical substances, Basson retorted. Why lace cigarettes with anthrax? To test if this delivery system could harm people (tests showed it could not). Why produce bottles with cholera? To test inoculation processes and advise about how to deal with potential outbreaks in Namibia.⁷

Investigations into this programme were also characterized by a dynamic interrelation between disclosure and concealment. Particularly in the initial years after Apartheid, technical, scientific and operational documentation associated with Project Coast was scarce. Records of this closely guarded and officially secret programme were not available to the public or even some official investigators during Apartheid and in the immediate years thereafter. Even those who may have had a right to know – such as TRC investigators – were effectively barred from military archives, not least through the requirement that they had to make specific requests for particular documents despite not having any knowledge of what records were kept or how the South African Defence Force (SADF) archival system operated.

Instead of deriving from a general opening up of the security state, the large majority of the documents that proved central to later investigations came indirectly and serendipitously. To detail one chief set of eventualities, on 29 January 1997, South African Narcotics Bureau detectives set up a sting operation in a parking lot near the home of Dr Basson. He turned over a black plastic bag with 1,040 capsules of the street drug Ecstasy to a business acquaintance who then placed 60,000 rand on Basson's car seat. The operation eventually led the police to the home of an associate of Basson. There, two blue sealed steel trunks were located and subsequently two others were discovered. They contained more drugs, as well as hundreds of sensitive and classified documents that would become central to constructing accounts of what took place.⁸

Furthermore, while eleven witnesses associated with the programme testified in the TRC public hearing, three senior figures did so reluctantly. TRC panel members sought to question witnesses about complicated financial, managerial and technical matters but with only the limited documentary evidence in their possession. For their part, witnesses often struggled with remembering events of years past but also making sense of documents and activities they reported not knowing about.

Likewise, the criminal case against Basson was plagued by difficulties about the limitations of evidence.⁹ For many murders or chemical interrogations in which Basson was alleged to have played an active role, the only witnesses present were those that had carried them out. As such, their testimony before the court was open to question about their motivation. In general, these witnesses were regarded as flawed by the trial judge. Many of those associated with the SADF could not have been called by the prosecution because they would have been hostile, more likely to harm than help the state's case. Moreover, Basson's trial was not set up to hear – let alone resolve – disputes about activities raised in previous investigations but that were not connected to the specific fraud, murder or drug charges. As a result, activities such as the authorization and development of anti-fertility vaccine to be used against black women discussed at the TRC were not examined at the trial, nor in the HPCSA professional hearing. Indeed, the HPCSA pursued charges based only on what Basson himself had admitted and testified to in the trial, such as the production of drugs and tear gas, in an attempt to prevent lengthy legal contestation.

Reluctance to air evidence openly was not just evident by those individuals and organizations cast as wrongdoers. At the TRC, and subsequently, officials in the South African ANC-led government would warn about the dangers of publicly detailing Project Coast. Why would the post-Apartheid government not want to publicly reveal details of a chemical and biological weapons programme that targeted its own members? Besides the proliferation dangers

of airing information, it is likely that the newly elected ANC government would have feared that something 'unknown', and potentially embarrassing or harmful, would be revealed. Particularly in the early years after Apartheid, the information the new state had about the programme was only that which they had been given by Basson and others associated with Project Coast. The extent to which that picture was complete could only be guessed at by ANC government officials. In other words, what 'the state' itself was 'allowed' to know was limited to what it was officially told. As such, the fledging ANC government needed to protect the secret that it did *not* know.

The investments made into believing that highly dangerous secrets existed and that they needed extraordinary protection measures was evident in relation to the notional method for retaining technical documentation. As part of the winding down phase, the management committee for Project Coast decided certain documentation should be saved electronically on CD-ROM discs while the physical versions would be destroyed. Especially given the sealed steel trunks found in 1997 at the home of an associate of Basson, what had happened to the electronic versions of Project Coast documentation took on some importance subsequently. Surgeon General Niel Knobel (head of Coast's Management Committee) spoke in detail about the elaborate provisions made to keep this information secure at the 1998 hearings:

After the technical information was transferred from documents onto the discs, the discs were brought to me by Colonel Ben Steyn [the last Project Officer of Project Coast] in a safe. I established that the discs were inside the safe, and as far as I remember there's also an additional floppy along with it, which is the access mechanism, access coding that you require to be able to access the information on the discs.

It was then put into a very large wall safe attached to my office and my headquarters and only Colonel Steyn and I had control, joint control over the small safe, smaller safe, the portable safe. After the demarche and particularly after the Americans and the British expressed concern about the safety of the information on the discs, I went to see [South African President] de Klerk and I followed it up with a letter and that letter I can give you a copy of. It was in April 1994.

At that stage we changed the joint control in such a way that all three of us, the President, Mr de Klerk, Colonel Steyn and myself had to be present in order to access or to be able to open the small safe. The position was then changed, it was then changed to a safe in a different part of my headquarters, a huge safe with two keys and a combination and the small safe with its two keys was put into the bigger safe.

And in that joint control we gave the President one of the keys of the big safe as well as the combination of the big safe. I kept the key of the big safe and one of the keys of the small safe. Colonel Steyn had the combination of the big safe and the other key of the small safe, and that was how that situation was maintained.¹⁰

As subsequently recounted by Surgeon General Knobel, when the new government came to power in 1994, the key and combination given to President de Klerk was passed over to Deputy President Thabo Mbeki. Yet what was actually on the discs, and why it was retained was not clear, even to those who held the keys.

In openly discussing the existence and whereabouts of the discs, the media and the TRC posited that there was something on the discs that needed to be hidden because of its profound importance.¹¹ As Burger and Gould noted in *Secrets and Lies*, the 2002 book about Basson's criminal trial, a later review undertaken of the 'CD-ROMs stored as a "national asset" under the most stringent security concluded that, far from being the repository of Coast's deepest, darkest secrets, the discs contained little more than published literature on [chemical and biological warfare] in general'.¹² While the existence of the discs was discussed during the TRC hearing, and in *Secrets and Lies*, the power of the push to retain secrets was made evident in a 2013 interview between two of the authors (Gould and Rappert) and a senior member of the military. He did not wish even to mention the existence of the discs on record because he felt they were still too sensitive.¹³

In a similar vein, the light cast by investigations might well be judged as not always illuminating. Because the Basson trial was an undertaking to consider criminal charges against him as the only accused, possible wrongdoing by others in Project Coast was sidelined. As head of the programme for most of the secret military programme's existence, this is unsurprising at one level. However, the focus on the individual, and thus the personification of the programme both during and subsequent to the trial, arguably has served to distract attention away from the many others who held leadership positions in the military, or even in the companies that made up Project Coast, and those who performed the more mundane tasks that allowed the programme to function. To this day, the focus on Basson alone allows, even encourages, a perception that the criminal trial and the HPCSA's hearing were 'witch hunts' that unfairly targeted the most visible, most exposed person.¹⁴

A SENSE FOR ABSENCE

The previous section gave a flavour of the ways in which what has and can be said about Project Coast implicates a sense of what remains unsaid. Such considerations undercut the belief that some definite and definitive account can be given. We propose that one sensibility that follows from the analysis earlier is that rather than being sharply divided, disclosure and concealment should be understood as subtly interrelated.

The need to recognize this is evident in how histories to date have been positioned. For instance, in 2002, some commenters drew the lesson in

the report *Project Coast: Apartheid's Chemical and Biological Warfare Program* that 'having come clean on its experience during the Apartheid years lends real credibility to South Africa's ethical and practical stance on international disarmament. South Africa went to the edge and beyond and then – under a new, enlightened regime – came back. Others can do the same'.¹⁵ Whether such optimistic appraisals can be justified today is open to doubt.

Or, at least, that is the way the authors of this chapter would regard the situation. The sensitivities surrounding what histories can and have been told, in turn, signal the importance of minding wider cautions about what can be expected from history. Having undertaken significant efforts to detail the Apartheid past, we would regard the aspiration to 'set the record straight' as problematic. These are some of the reasons why:

(1) Experience to date with Project Coast has indicated the ways in which disclosures provide the very basis for yet further questioning. One example would be the revelation by a former SADF soldier, Johan Theron, during the Basson trial that hundreds of sedated South West African People's Organization (SWAPO) prisoners of war had been thrown from an aircraft into the sea off the Skeleton Coast. To date, all attempts to verify this information, or seek further information that could reveal the identity of those killed, in this way have failed, including attempts to engage the assistance of the Namibian authorities. This raises questions about the veracity of Theron's claims, and about the reluctance of the Namibians to resolve the mystery.¹⁶

(2) Despite the often held belief that revelation leads to lessons that can work to prevent future abuses, this is not necessarily the case. A 2015 study by the Academy of Sciences of South Africa found that 'education and/or training on research ethics, including issues such as scientific misconduct . . . is not routine for life scientists' and 'there was a low level of awareness among life scientists about national and international conventions, laws and regulations related to their research; and that information about these instruments is not readily available'.¹⁷ This was so despite many years of work, after the TRC hearing, to raise awareness about chemical and biological weapon programmes among scientists, academics and professional associations and draw lessons about the importance of ensuring that the training of scientists includes reference to the international norms (as enshrined in the Biological Weapons Convention (BWC) and the Chemical Weapons Convention (CWC)) as well as national legislation.

(3) In South Africa, in particular, the bargain of truth in exchange for amnesty from prosecution within the TRC did not work quite as well as hoped. As discussed in Lentzos's *Biological Threats in the 21st Century*, 'there was little or no motivation for amnesty to be sought in cases where the perpetrators were fairly certain their deeds would remain hidden, such as information about the details of military involvement in human rights violations. Indeed, the military closed ranks, effectively boycotting the TRC process, with only a handful of amnesty applications being received from soldiers'.¹⁸ This suggests a need to rethink investments placed in 'truth'.

(4) Also, as became clear in recent dialogues hosted by the Nelson Mandela Foundation with memory workers from around the world, formal transitional justice processes and efforts at ‘truth telling’ do not necessarily lead to healing as may have been presumed.¹⁹ Indeed, the way in which such processes reinforce a binary between ‘victim’ and ‘perpetrator’ may well create the conditions for the reoccurrence of violations by ‘righteous victims’.²⁰

(5) Processes of revelation based on investigation necessarily excluded much of the information that is gathered. Not only is it simply not possible, or in some instances unethical, to include all information gathered during an investigation; it also is necessary to create narratives that are understandable and useful to intended audiences. As such, investigators have to exercise discretion and caution in deciding what is put into the public domain, at least if the intention is to minimize further harm.

(6) Finally, one of the difficulties of investigating Project Coast relates to the overabundance and familiarity of stories and evidence. Such a situation of surfeit presents its own potential to render some matters obscure. The question then for representing Project Coast now is ‘How can we effectively open space for something new?’.

As a result of these considerations, what remains unknown is not simply this or that remaining piece of the puzzle, the placement of which can complete the picture of the past if only we could unearth it. Instead, varying suggestions about what still needs to be established and who possesses such information helps constitute radically alternative understandings of the outline, morals and lessons to be derived from the past.

Rather than seeking to pry open the secrets hidden away, our experiences to date with the production and reception of accounts of Project Coast suggest adopting a sense of alertness to the expectations from history. To put it in other terms, what is called for is more aligned with inquiry rather than resolution, receptiveness to possibilities rather than detailing particulars. In the remainder of this chapter, we elaborate ways sought to realize such an orientation. We consider possibilities for negotiating presence-absence in relation to two different types of interventions: a co-authored book *Dis-eases of Secrecy* by Rappert and Gould as well as an exhibition curated by all the authors titled *Poisoned Pasts*. These were not efforts to ‘set the record straight’ about Project Coast, but instead efforts to attend to the manner in which histories are made and remade by using connections and separations to create alternative spaces.

DIS-EASES OF SECRECY: SEWN THREADS

A basic intent of the 2017 book *Dis-eases of Secrecy: Tracing History, Memory and Justice* was to cultivate an awareness of the conditions for knowing; this by writing in a format whereby we as authors sought to develop a sense of

the fractured and fraught process of assembling a history of secreted events – secreted in the both senses of the term: released and concealed.²¹

This was done through an explicit two-part organization. The entire main text is broken up into 548 numbered entries that are given in roughly chronological order. Each entry provides its own fragment account of the past. The entries can be read from front to back in the conventional fashion, though with some effort. In addition, the entries are organized into eleven themes. Entries one to eleven in *Dis-eases of Secrecy* provide the first entry for each of the eleven themes. At the end of these starting entries, readers then are given the number of another entry that continues that theme. They carry on reading until directed to another numbered entry, and so on moving back and forth in the book between different time periods. As the reader progresses through the text, they find themselves circling back on entries they have encountered before but situated in a different sequential context. The circularity of the thematic organization itself points to the lack of resolution or a clear end. The intent was to mirror the process of inquiry and investigation into troubled pasts. In other words, the flipping back and forth between pages to read the entries is a physical embodiment of how the assembling of histories takes place, with connections being made between some events and not others.

The intellectual inspiration for this organization was Sven Lindqvist's *A History of Bombing*. This entry-to-entry technique enabled Lindqvist to produce an absorbing, detailed, yet accessible overview of the fantasies, expectations, terrors, fascinations and duplicities of aerial bombing. Through the thread-based entry into the 'labyrinth' of past, he encouraged readers to sense that they are only taking 'one of many possible paths through the chaos of history'.²²

We too were interested in opening options that enable a tracing of the past. Our orientation in relation to the entangled past of Project Coast differed somewhat from *A History of Bombing* in that we were often not sure about how to characterize what took place – whether that be a labyrinth, scheme, network, circus or cycle. Our themes were not single-track lines for getting through a complex labyrinth. Instead, by offering discourses that intersect, branch off, get read in reverse order and so on, we sought to stimulate imagination for ways of diagnosing situations anew. We also sought to place the reader amid the sometimes contradictory and confusing interpretations from multiple sources to enable them to experience the choices associated with writing about contested events. For instance, an entry positioned as part of the sequence of one theme can take on a rather different meaning when positioned elsewhere.

The goal, in short, was to turn a technique for reading into a method for inquiry. We wrote with absences and secrecy to alert readers to the processes of producing knowledge of the past. Through an argument in which what was

missing was intended to be as much a feature of what was given, we sought to encourage readers to partake in a process of investigation – with the lures, dissatisfactions and affects that this can entail. It is between the traces and fragmentations of our accounts that we hoped readers would be able to ask questions of themselves and others about the purposes of history and the potential of memory. In doing so, we hoped to engender sensitivities with the investments in the telling of history.²³

POISONED PASTS: MATERIAL LACUNAE

In 2015, the authors partnered with the Nelson Mandela Foundation in the development of an exhibition titled *Poisoned Pasts* that took as its central theme the Apartheid-era chemical and biological warfare programme. It initially ran at the Nelson Mandela Foundation Centre of Memory between October 2016 and July 2017 and at the time of writing was housed at the Steve Biko Centre (Ginsberg Township, Eastern Cape).

Poisoned Pasts sought to stimulate questions and discussion about the responsibilities of scientists to prevent the malign application of science, to consider how easily scientists might be drawn to similar work in the future and to question the closure promised by justice and transitional justice related to South Africa. The exhibition was offered as a response to the frustrations of transitional justice to deliver accountability and sanction of those involved in human rights abuses, with a particular goal to engage (younger) audiences in questions about the relevance of the past to the present.

As in the case of *Dis-eases of Secrecy*, as the curators of *Poisoned Pasts*, we sought to do this in part by using the interplay between what was displayed and what was not (or could not be). As a physical space, an exhibition can make use of a far greater range of modalities of expression than a written manuscript. Extending the idea of turning a technique for reading into a method for inquiry, we sought to design an exhibition that would encourage visitors to assume an active investigative role. While this intention was conveyed in the written exhibition guide (a text that may or may not have been read by exhibition goers), it was achieved through the design choices made.

In the remainder of this chapter, we attend to how we attempted to realize our intentions and motivations, first in relation to the question of materiality, covering both artefacts and the construction of exhibition elements, and then in relation to how the spatial design of *Poisoned Pasts* extended these decisions, allowing the play of presence and absence to find both explicit and implicit expression. This leads finally to a consideration of the representation

of those affected by Project Coast, and how these visual solutions reflect our desire to acknowledge both those potentially lost to the project and the challenges of accounting for unresolved deaths and disappearances.

Material Objects: Three Registers

The primary (but by no means exclusive) mode of engagement within exhibitions is an aesthetic one. The *raison d'être* of exhibitions presupposes visual content, including objects that demonstrate and authenticate the events being described. In this respect, designing *Poisoned Past*s presented a particular challenge. Whether due to wilful destruction, standard procedures, or shoddy bureaucratic management, very few material artefacts survive that can be taken as 'proof' of Project Coast's existence or activities. Only one 'true' artefact of the programme could be located and made available for inclusion in the exhibition: a collection of modified screwdrivers and other fragments from covert devices that were entered into evidence at Basson's criminal trial. What also remains of the project are several thousand pages of archival documents, mainly facsimiles. With this documentation, we are still left with the issue of authenticity, but the more pressing concern is how to render these many pages of (partial, redacted, questionable) data accessible, useful and productive, especially as our primary intention in designing the exhibition was to position visitors as active investigators that could open up new possibilities for received histories.

One way we dealt with this poverty of objects was to fashion proxy objects. These included a 1:1 scale reproduction of a personal safe in which CD-ROMs containing the records of Coast were allegedly stored by Surgeon General Niel Knobel (see above), as well as a custom-designed restraint chair for animal experimentation (probably baboons), used by the project at Roodeplaat Research Laboratories. The chair was reconstructed after an original design by biomedical engineer Jan Lourens; its form and functions were detailed during Lourens's TRC testimony and later interviews with Gould and the exhibition design team. Constructed in thick Perspex, the original unit (current location unknown) consisted of a chair with straps to restrain an experimental animal in a transparent housing that would allow scientists to visually observe the effects of various gases on the animals. For *Poisoned Past*s, both the safe and the chair were rendered in corrugated cardboard – functionless and impotent. Other proxies included an array of everyday groceries and toiletries that Project Coast scientists sought to modify with various poisons.

We regarded the deployment of proxies as enabling but also tension-ridden. Displaying objects of violence may well invite criticism that the exhibition makers are, wittingly or unwittingly, participating in the extension of trauma through choreographing violence-as-spectacle. Artefacts of real or intended

crimes gain an undeniable ‘thing power’ (to use Jane Bennett’s phrase²⁴) that in turn invests them with a potency – their lure is hard to resist (the record-breaking attendance at the Museum of London’s 2016 exhibition ‘Crime Museum Uncovered’ bears this out). Too, we cannot avoid another kind of fetishization that comes with an indexical object, the bearer of a forensic ‘I was there’ performance of authenticity. The benefits of exhibiting such objects should be tested against following questions : What might be gained from doing so? Could exhibiting the objects be harmful? To whom?

Besides the aforementioned strategies, the fictions and absences of Project Coast were communicated by engaging with different modalities of visual representation, from the photographic to the illustrative. For example, *Poisoned Pasts*’s visual language was graphically bold, making extensive use of South Africa’s rich legacy of photojournalism. Acid yellow, deep red and ultraviolet blues dominate the colour palette, along with visual filters such as the half-tone screen (the dot-matrix of traditional reproduction technology) and negative inversion created textures from photographic images. These were used as visual cues as they have become inscribed in Western visual culture as semiotic shorthand for mass-media appropriation while also signifying a deconstructionist position in relation to it. Such deliberate (re)mediations make implicit and explicit statements about the limits and constructions of archival practices, and in turn, how the exhibition confronted the challenge of truth-telling and truth-construction through ‘real’ and simulated objects.

In sum, the objects (including images and documents) in *Poisoned Pasts* therefore operated across three registers: (a) *indexical*: those which bear a direct relationship or connection to the programme or related processes of social/legal justice or professional standards; (b) *indicative*: reconstructed or ‘proxy’ objects that stand in for objects either lost, destroyed or only available via documented description; and (c) *imaginary*: content that attempts to give visual form to events that cannot be proven or verified but which figure strongly in the public narratives surrounding Coast. These were designed as necessarily ambiguous coordinates that might allow visitors to recall, contest, connect or discover additional perspectives on the programme.

Interrupted Sightlines

Exhibitions are spatialized experiences as much as they present collections of objects, media and interpretive materials. They are spaces we move through bodily, using multiple senses to receive and process what they offer to us, which in turn cannot be completely divorced from what we bring into exhibitions – our personal stories. Successful exhibitions generally present their content – objects, audiovisual media, interpretive material, in other words everything that is explicitly visually available to us as visitors – in close integration with

the space in which the exhibition will be experienced. In much the same way that typography can be used to reflect tone of speech (e.g. capitalized words in emails or short message services [SMSs] inferring heightened emotion), an exhibition's spatial design is a potent carrier of implicit communication about how its makers intend its content to be interpreted.

Whether an exhibition of contemporary art or social history, both exhibition makers and visitors agree that the 'book-on-a-wall' approach makes for a pretty fatal exhibition experience, particularly in an age of heavily abbreviated digital communication where our attention spans are largely being trained out of durational, closely focused concentration. Thus, objects available to make an exhibition must be considered in relation to their spatial interpretation. In fact, spatial arrangements such as juxtaposition, vertical hierarchy and order of encounter grant additional affordances to an exhibition's objects. How will they be placed in the exhibition space? What will support them – literally, conceptually and thematically? What, in turn, will they support?

With *Poisoned Pasts*, we actively sought to create spatial conditions whereby details of the Project Coast story may be happened upon, through a non-linear/non-chronological organization of material and multiple pathways through the space.

Figure 5.1 provides the floor layout for *Poisoned Pasts* when it was at Nelson Mandela Foundation Centre of Memory. The design of exhibition was conceptualized in the image-composition terms of 'Foreground' (the bottom area near the entrance), 'Middle-ground' and 'Background' zones, which reflects something about the content positioned within each, which was arranged in terms of three broadly thematic clusters of intersecting panels that should be considered 'in the round'.

The visual inventory of the exhibition consisted of panels of researched commentary with supporting visuals, predominantly visual reportage (photojournalism), historical documents and original artefacts interspersed with proxy objects.

The 'Foreground' included the title/contributors panel alongside a short (five minutes) introductory film *What Was Project Coast*, which offered visitors a core set of facts about the programme while explicitly acknowledging that the narrative relayed was only one of many possible narratives. The rear of this arrangement – 'Declarations and Silences' and 'Hostile Uses of Chemistry and Biology' – asked visitors to consider the current (as of mid-2016) climate of CBW policy and application internationally, and South Africa's declared position: which is that it never had an offensive programme. If visitors decided to look at both sides of the panel first, this statement acted as a position against which to test what was discovered within the exhibition. If visitors proceeded into the space and circled back around and read this last, it may have prompted a reconsideration of the honesty of South Africa's historical position and what this implied for the future.

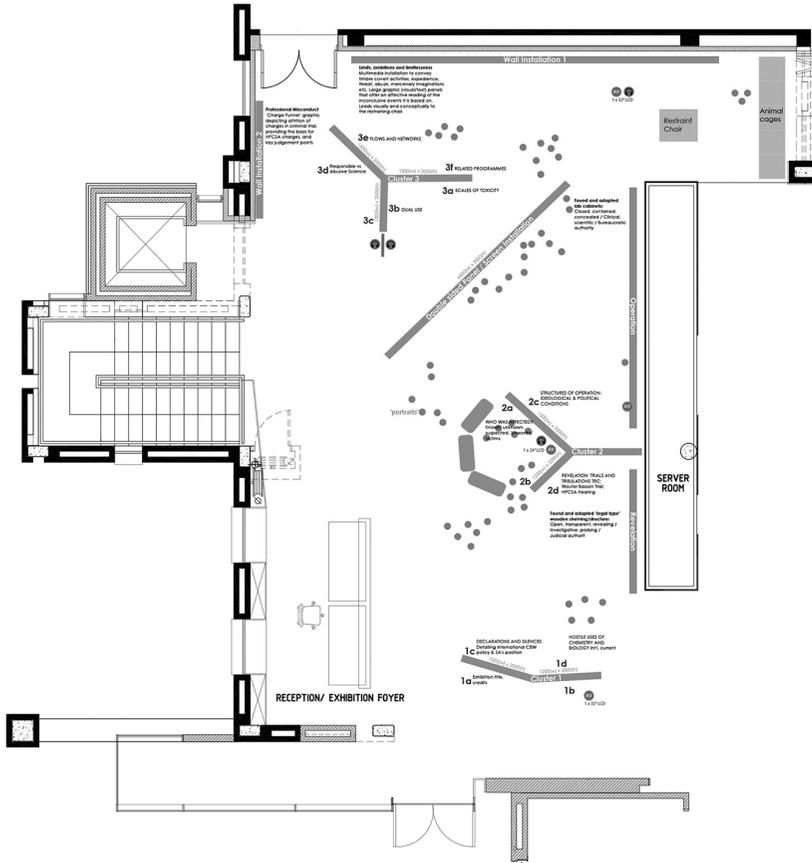


Figure 5.1 *Poisoned Past* exhibition design: floorplan for installation at Nelson Mandela Foundation, Johannesburg (Courtesy of TRACE).

The ‘Middle-ground’ zone was set against a wall. An alcove created by two intersecting screens created an intimate space in which to consider accounts of ‘Who Was Affected?’. A comprehensive narrative list of known, unknown, suspected and ‘unworthy’ victims was presented, and a small audiovisual station features archive footage of multiple narratives – Sarah da Fonseca telling the story of the suspicious death of her husband, Special Forces soldier Victor da Fonseca; Rev. Frank Chikane recounting his own poisoning; Maria Ntuli, mother of Jeremiah, one of the Nietverdiend 10 who were lured away together and killed when the van they were travelling in exploded; and Rev. Peter Kalangula describing various attempts on his life by South African security agents in Namibia.

Facing this alcove, two sets of shelves were visible against the back wall. These demarcated the thematic spaces of 'Operation' and 'Revelation' on the left and right sides, respectively, with supporting illustrated panels covering 'Structures of Operation: Ideological and Political Conditions' and 'Revelations: Trials and Tribulations', including the criminal and professional ethics trials of Dr Wouter Basson.

Allowing for necessary blurring of distinctions between the various zones of foreground/mid-ground/background, 'Operation' and 'Revelation' represented events and documentation in the public record, the public-facing aspects of what was known about Project Coast and chemical and biological warfare within the contemporary international context. These two spaces were physically separated but remain visually connected by a PVC strip-curtain of the kind found in hospitals or slaughterhouses. In addition to its dual connotations of being associated with the preservation and ending of life, the semi-transparent, semi-permeable membrane of the PVC strip-curtain was used because it enabled mediated transparency and movement. Diligent visitors trying to see (and move between) the displays could do so but only with effort. The displays were intended to indicate how concealment and disclosure blended together in the activities of Project Coast and the investigations into them. The texts, objects and audiovisual material for both areas was organized according to headings such as 'Hidden in Plain Sight', 'Locking Away' and 'Silences'.

A large screen on a near-architectural scale divided the rear part of the exhibition in two, on the diagonal, forcing a spatial closing-down of the 'Operation' space and masking what lay beyond. This 4.5-metre panel acted as the boundary between the conceptual 'Middle-ground' and 'Background' zones of the exhibition's spatial design. Entering this area was to travel further back into recent history, where things get slightly less sure-footed in terms of the official record, and perpetrators engage in a selective accounting of their activities. The side facing into the Operations space was boldly visual, depicting the shadow of a light aircraft cast onto a coastline as it flies above, beyond the camera's frame. Striations in the visual reproduction – making an asset of the media artefact known as 'interlacing' – denoted a video source for this image, captioned with testimony given in Basson's criminal trial in which witness Johan Theron (see above) described being involved in the clandestine dumping of sedated bodies of Angolan soldiers into the sea off the Namibian coast.

The reverse of this panel was a graphic visualization of the infamous 'Verkope Lys' ('Sales List') in which descriptions of the poisons on the list are set against various human protagonists and experimental animals, extending the trope of 'agents' through the figures of human, animal and chemical bodies. Here a visitor entered the 'Background' zone, in which Coast is placed within

an international and historical context of similar programmes and science's dual uses. 'Background' here has both contextual and covert connotations.

Set against a large-scale relief mural (*Limits and Limitlessness*) designed by Smith and rendered in a palette of (ultra)violets, blues and blacks that references some of the most violent and controversial actions of the programme, the third and final zone was arranged as a set of three intersecting panels and a related stand-alone wall panel to one side, and the reconstructed restraint chair, and a set of cages that once housed experimental animals to the other. The cages were loaned from one of the Project's former lab facilities, which was subsequently purchased by the South African government. Visitors could also listen to 'Science and Society', an audio montage by Smith featuring different perspectives on the roles, responsibilities and culpabilities of scientists associated with the programme, and consider an indicative reconstruction of an abandoned experiment in which scientists attempted to invest maize meal – a staple food – with cyanide. Three bowls of maize meal, tinted varying shades of blue, were presented in yellow enamel bowls of the kind associated with low-income households.²⁵

Hung opposite the restraint chair and animal cages, the stand-alone wall panel detailed the outcome of Basson's criminal trial, highlighting key points within the judgement, as well as the attrition of criminal charges that provided the basis for later charges brought by the Health Professions Council of South Africa. Within this zone, an animated film detailed Coast's exchanges and trades with international partners carried out under the auspices of numerous front companies which broke many of the economic sanctions imposed on Apartheid-era South Africa.

One notable feature evident from the layout schematic is the lack of clear sightlines. Within exhibition design, working with sightlines affords curators the opportunity to infer relationships between objects within and across the exhibition environment. Sightlines may be employed as active design elements, or incidental ones. Being alert to them affords the observant visitor an extra, implicit level of interpretation that is open to individual, subjective experience, and which may not reveal itself in the same way twice.

Within *Poisoned Past*s, however, we worked with sightlines as a way to *disrupt* an easy visual experience. This approach was informed by 'exploded view' drawings:

An exploded view drawing is a diagram, picture, schematic or technical drawing of an object, that shows the relationship or order of assembly of various parts. It shows the components of an object slightly separated by distance, or suspended in surrounding space in the case of a three-dimensional exploded diagram.²⁶

Common to engineering instruction manuals, the exploded-view schema will be familiar to students of anatomy albeit in object-form: 'exploded skull'

models show the various bones of the human head separated from each other on rods.²⁷ This principle of a complex object consists of interlocking parts was an appropriate metaphor for the relationship between content, space and active visitor we wished *Poisoned Past*s might embody. Yet more than just a pulling apart of objects to reveal their constitutive parts, we sought to reveal both what was given (explicit) and what was not (implicit) to engender a set of possibilities for the exhibition space.

The space of the Nelson Mandela Foundation was configured such that a visitor was unable to take in an overall view of the exhibition at once. As investigations into Project Coast has produced blind alleys, dead-ends and blank walls that occasionally open up into revelation and understanding, only partial views are possible. Thus, in order to see the ‘totality’ of what is on display, one must assume a willingness to explore, inspect. This placed a particular demand on a visitor; they needed to intentionally manoeuvre through objects, visuals and recordings, instead of following a linear thematic or chronological path. This demand was additionally one of time, a particular commitment to an exhibition experience that exceeds the purely visual. The questioning we wished to prompt was one of ‘What’s around the corner?’.

Depending on the choices made on the path through the exhibition, some matters would come into view but others will be occulted away. Individual

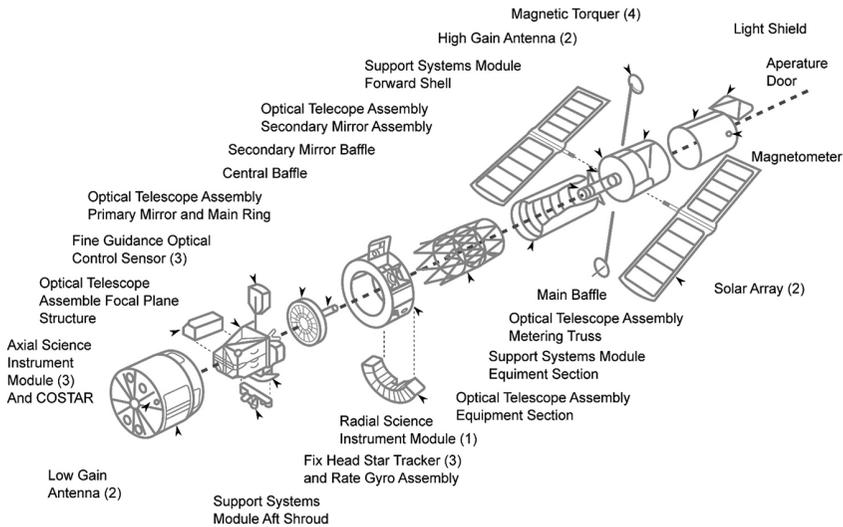


Figure 5.2 ‘Exploded view’ schematic diagram of the Hubble Space telescope by Andrew Buck, 2009. Licensed under the Creative Commons Attribution-Share Alike 3.0 Unported license. <https://commons.wikimedia.org/wiki/File:HubbleExploded.svg>

journeys through the displays necessarily entailed circling back on material visitors may have already seen, but with an altered background of knowledge. This is an embodiment of how investigations of troubled pasts lack a simple vantage point from which events can be reconstructed.

Form was matched by content because *Poisoned Past*s did not provide a structured storyline for meaning-making. Other than the introductory video that audiences may or may not have watched, no overview narration was provided. The clusters provide information on particular topics, but without the displays being linked together by any meta-arcs. By this, we encouraged connections to be made across thematic clusters without choreographing connections through forced or overstated juxtaposition.

Material Representations

Narratives that bear witness to previously unrecorded or otherwise-suppressed political violence are a critical feature of transitional justice processes. A preferred tactic for heritage exhibitions is to focus on narratives of those affected by events, perhaps because it mirrors the processes of transitional justice. But what if stories of victimhood are not available, or the nature of such stories cannot be adequately verified, or the boundaries between victim and perpetrator are fluid, subverting our conventional ethics?

Witnessing, as Eamonn Carrabine reminds us, has both a juridical connotation – ‘seeing with one’s own eyes’ – and a religious one – ‘testifying to that which cannot be seen . . . bearing witness’.²⁸ A seemingly endless torrent of powerful victim testimonies enfolded with acts of forgiveness and absolution – and rejections of such conciliatory gestures – characterized the TRC process overall in South Africa. This was so, not least, in the figure of Joyce Mtimkhulu, whose son Sphiwo was poisoned, most likely from thallium. Although this did not kill him, his later disappearance and murder resulted in his body never being found. This lack of material evidence of a life lived was at the core of his mother’s demands before the TRC. She appeared before the commission in 1996 with a handful of his hair which she had collected as it fell out, a direct effect of the poisoning. Without bones to bury, she asked, how could she resign herself to his death and do the work of grieving?

In the case of Project Coast, considered responses to the questions ‘Who were the victims of the programme?’ and ‘How did they suffer?’ need to be told, at least in part, in the negative. That is, what has not been told, what cannot be told or what will not be told would need to figure prominently. This is so because records were not made, many were destroyed, few witnesses have spoken up, appropriate questions were not posed, a ‘need-to-know’ principle was deliberately applied to ensure plausible deniability and so on. But the

problems at stake go further than a lack of information. Not all those killed or injured as part of Project Coast would likely be regarded as meriting the label of victim for the purpose of memorial histories.

One classification for who was affected by the programme would be as follows:

Identified – There are few identified victims who can be linked directly to the programme. The most prominent individual identified as a victim of poisons produced by Project Coast has been the anti-Apartheid campaigner and former Secretary General of the South Africa Council of Churches, Reverend Frank Chikane.

Nameless – For a variety of reasons, those who were determined to have been assassinated have been largely unidentified. Who would be the target for the concealed weapons like the laced chocolates or envelope glue was something senior scientists could often rarely more than vaguely speculate about because under Project Coast, they were deliberately kept in the dark. For field operatives, at times, targeted individuals less prominent than Frank Chikane were not remembered in name during post-Apartheid investigations. They might be referred to loosely as something like ‘friend of black dissident’,²⁹ an ‘ANC member’ or a ‘foreign operative’.

Unpursued – Many of the soldiers claimed to be killed have not had the circumstance of their deaths investigated in detail, and most remain unnamed. A 1989 proclamation (only revealed because of the High Court trial of Wouter Basson) had granted amnesty to all SADF and others for crimes committed in Namibia prior to its first democratic elections in 1989. Citing this amnesty, the judge in the trial threw out charges against Basson related to the murder of some 200 SWAPO fighters, plans to poison the water supply of a SWAPO refugee camp with cholera and the murder of an official. The other charges were related to conspiracy to murder in Swaziland and Mozambique through the supply of poisons. As these had taken place outside of South Africa, even if they were planned within it, the trial judge ruled they could not be prosecuted in the country.

Numberless – Surviving documentation indicates an extensive range of animals were tested on as part of the programme. To name but some instances, beagle dogs and baboons were administered the pesticide paraoxen in varying mixtures. Rats were given poisons, baboons were given rat poisons. Tests on one species led to confirmation tests being done on another – pigs, rabbits, horses and primates were all studied as models for the effects of chemical on humans. It is not known, though, how many non-human animals died to find out how humans die.

Flawed – Many of those who suffered were not strangers to the South African security apparatus. Whether soldiers from neighbouring countries,

members of the SADF who were seen to pose a security threat, or dissidents working abroad, not all were in a direct oppositional relation to the Apartheid South Africa and thus not all stories easily fit in common post-Apartheid narratives.

Unfamiliar – Others who might be considered as victims did not suffer directly from the operations of the programme, but rather from the fallout from its revelation – for instance, the children and other relations of Project Coast staff.

Against this classification, we can further note that with few named victims or established voices post-TRC to assert the needs or interests of victims, the narrative about Project Coast (staccato and broken as it has been) has become a narrative of ‘perpetrators’ – and exclusively white perpetrators at that. It has been a story of their motives, intentions and capabilities, all of which have been contested. Basson as head of Project Coast has been identified as the secret keeper (and in this maintains tremendous power over those who believe they or their family members might have fallen victim to the programme). He has also garnered nearly all the attention. The reconciliation narrative of Project Coast is thus a partial story, a story of contested perpetration, revelation and reconciliation where the victims have had little voice, little identity and thus in which there could be little footing for securing forgiveness – if and when it was sought.

In the exhibition space of *Poisoned Pasts*, our response to these considerations resulted in a number of design choices. Instead of limiting ourselves to specific individuals that could be documented as having been poisoned with products proved as deriving from Project Coast, the exhibition sought to honour all those individuals who were verified, suspected or intended targets of poisoning by the agencies of the Apartheid state. In the main, the stories of those affected with this wide-ranging criterion were told in a central panel in Cluster 2 that incorporated video interviews of two affected individuals, as described earlier.

More was done though than these conventional forms of representation. Scattered throughout the exhibition were 257 small portrait panels suspended from the ceiling portraying those affected. Some of the panels take the form of a graphic silhouette, some have names, others are blank and only offer a vague description of an individual, such as ‘POW’ (prisoner of war). See figure 5.3.

Our decision to suspend these icono/graphic representations throughout the space was intended to work against the relegation of victimhood by framing these individuals, both known and unknown, as a vital form of absent-presence. Repeatedly encountering them within the space of the exhibition was intended to point to the viral quality of collective trauma, asserting that if such experiences are insufficiently acknowledged or understood, they will continue to produce ghosts.



Figure 5.3 Installation view of *Poisoned Pasts* at the Nelson Mandela Foundation, depicting portrait panels representing those affected by the programme, suspended in front of the ‘Operations’ display. They partially obscure the sightline to the ‘Background’ zone, the animal cages and the reconstruction of the restraint chair. (Copyright: Nelson Mandela Foundation).

The fugitive figure of the ghost entered the critical humanities with the ‘spectral turn’, ushered in by Jacques Derrida’s *Spectres of Marx* (1993, trans. 1994).³⁰ Following Derrida, Peeren and del Pilar Blanco (2013) suggest that ‘rather than being expelled, the ghost should remain, be lived *with*, as a conceptual metaphor signaling the ultimate disjointedness of ontology, history, inheritance, materiality and ideology. . . . As related to “the deconstructive thinking of the trace, of iterability, of prosthetic synthesis, of supplementarity, and so forth,” the ghost ceases to be seen as obscurantist and becomes, instead, a figure of clarification with a specifically ethical and political potential’ (emphasis in the original).³¹ They further propose that the technique of ‘spectrography’, the writing of *and with* the spectral, offers revisionist history and geography a particular ethics that asserts relationality between people and places; it locates events and protagonists and speaks to the intersectional and transformational effects of bodies acting upon on another (2009: 483). These were values that we hoped would be communicated through our representations of those that suffered. We also intended our treatment of victims as fronting the agency (and responsibility) of those who represent or author contested pasts.

Practically, these dispersed and suspended placeholders for the absent and the missing were also intended to encourage a connection between events

and people within the exhibition's narrative clusters. Wherever appropriate, affected persons were displayed in proximity to displays that describe particular circumstances. For instance, the cluster of SWAPO soldiers is installed near the image of the Namibian coastline.

Displaying those affected in this way also added a dimension to the 'sightlines' points mentioned earlier that informed the overall spatial layout. These suspended panels interrupted (and therefore animated) a focused set of thematic zones that would ordinarily be approached and read in a relatively straightforward – horizontal – way. Suspending images from the ceiling, versus displaying them on surfaces that are anchored to the floor, drew attention to spatial features such as mass (elements clustered together or widely spaced), as well as height and volume; they redirected the gaze away from a primarily horizontal reading experience and created a differentiated focal range that includes the 'surrounding' space that constituted the overall space of the exhibition.

CONCLUSION

A major source of challenge in giving accounts of the past is that the process of telling previously hidden stories will be many things to many people: resisted, traumatic, celebratory, cathartic, even banal. Some may choose to draw a line under what has passed in order to move on. For others, the past will continue to push into the present, often in discomfiting ways that cannot be put aside. As Paul Williams argued in *Memorial Museums: The Global Rush to Commemorate Atrocities*, at least two critical questions arise in commemorating troubling events: 'What is the primary story to be told? Who should be authorized to tell it?'³²

Williams identifies two popular approaches employed by those (usually institutions) with atrocity-commemoration mandates: to 'offer lessons' and to 'stage an intervention'. Conventionally, this is done by establishing the facts and visibility of the event in question, while acknowledging that current conditions represent 'a decisive break from the conditions of the [original] event'.³³ Williams suggests that a key appeal of memorial heritage projects is their dual offer of 'a concrete instance for thinking about extreme conditions and moral choices' that have defined recent history while also satisfying the lures of secrecy and danger and the enduring effects of mortality and loss. Through a layering of factual telling, emotional resonance and imaginative conjecture, memorial heritage projects allow us to 'experiment mentally with the furthest boundaries of what life can involve'.³⁴

Minding such considerations, during the development of *Dis-eases of Secrecy* and *Poisoned Pasts*, a question loomed large for us: What is the (*our*)

intention behind recounting the past? In other words, what do we hope histories (particularly histories of harm) can help *do*? Instruct, inform, educate? Or bear witness, honour, remember or advocate for justice? Or all or none of these?

Needless to say our individual motives, along with our respective disciplinary expertise, were somewhat different, yet complementary. They may have even changed with time; certainly the scope of initial ambitions is checked through the practicalities of exhibition making. Presenting 'old' information in new ways to new audiences – families of those affected, young scientists, the 'born-frees' for whom the TRC exists purely as a historical fact – was a common goal. Gathering visitor feedback is really the only way to construct a sense of how far we succeeded in encouraging active engagement and meaning-making among those who have visited the exhibition to date.

Dis-eases of Secrecy and *Poisoned Past*s were not intended simply to document what took place under Project Coast. Rather we set out ways to work with what is absent, missing or contested in part to provoke questioning about the limitations of existing means to deal with oppressive pasts. Absences were not been treated as holes to be filled in, sources of frustrations or deficiencies in analysis, but rather as defining features of what was offered. Embracing the limits and recognizing the potentialities of this, we strove to promote a reconsideration of stable understandings, to free spaces for additional relevances to be brought to bear and to engage audiences in becoming curious about the relevance of the past for the future. In addition, we sought to explore ways in which the printed page and the site of an exhibition provide alternative possibilities for working with and against material forms and conventions. This was done, for instance, by presenting 'authentic' and fashioned objects together; layered and competing voices of victims, perpetrators and investigators; and non-linear narrative constructions that questioned a singular understanding.

Such strategies open themselves up to risk, including the risks of illegibility, obfuscation and frustration. But they also hold the potential for productive reconsideration of past traumas and injustice. As Maggie Nelson reminds us, with reference to critical cultural practices broadly referred to as 'tactical media', risky creative strategies are necessary to

force the spinners and suppressors of certain facts out of the woodwork. The brutality of those facts must then hang anew, in open air, for all to see. This is not an exposure, precisely; the facts have typically been there all along. It is a means of re-attending to that which is already visible, of reconsidering that we may already know. It is, in short, a recalibration of the function of knowledge itself.³⁵

Indeed, she insists, recalling Eve Kosofsky Sedgwick, such strategies may be the only way to move beyond 'the rather fixated question: Is a particular

piece of knowledge true, and how can we know? to the further questions: What does knowledge *do* – the pursuit of it, the having and exposing of it, the receiving again of knowledge one already knows?'.³⁶

In our contemporary moment where notions of 'truth' and the (f)actual are being increasingly destabilized, among their other aims, *Poisoned Past*s and *The Dis-eases of Secrecy* sought to re-attend to the factual aspects of dissonant historical events that are, in Nelson's words, 'already visible' post-TRC, but which, through various processes, both willful and circumstantial, despite great civic efforts, have been re-buried, re-secreted and re-concealed. That we continue to struggle with learning lessons from history demands that the conversation be re-opened anew, in the hope that a new generation may receive it, and use it, differently.

NOTES

- 1 Brian Rappert and Chandre Gould, *Dis-eases of Secrecy: Tracing History, Memory and Justice* (Johannesburg: Jacana, 2017).
- 2 Work underpinning aspects of *The Dis-eases of Secrecy* was supported by Economic and Social Research Council (ESRC), Defence Science and Technology Laboratory (DSTL) and Arts and Humanities Research Council (AHRC) award, 'The Formation and Non-formation of Security Concerns' (ES/K011308/1), as well as a British Academy Newton Advanced Fellowship, 'Cataloguing Secrets, Transforming Justice' (SL-06825). A dataset for empirical research associated with the ESRC, DSTL and AHRC is available at <https://discover.ukdataservice.ac.uk/catalogue/?sn=851599&type=Data%20catalogue>. *Poisoned Past*s: *Legacies of South Africa's Chemical and Biowarfare Programme* was also supported by the British Academy, an ESRC Impact Accelerator Award and the Nelson Mandela Foundation.
- 3 Mike Crang and Nigel Thrift, 'Introduction', in *Thinking Space*, eds. Mike Crang and Nigel Thrift (London: Routledge, 2000); Martin Jones, 'Phase Space: Geography, Relational Thinking, and Beyond', *Progress in Human Geography*, 33, no. 4 (2009), 487–506.
- 4 C. Gould and A. W. M. Hay, 'A Decade of Deceit: The South African Biological Weapons Programme', in *Deadly Cultures: Biological Weapons since 1945*, eds. M. Wheelis, M. Dando and L. Rosza (Cambridge, MA: Harvard University Press, 2005); C. Gould and P. Folb, 'The South African Chemical and Biological Warfare Program: An Overview', *Nonproliferation Review*, 7, no. 3 (2000), i–297.
- 5 Truth and Reconciliation Commission, 'Volume Two – Truth and Reconciliation Commission of South Africa Report' (Cape Town: TRC, 1998).
- 6 C. Gould and Peter Folb, *Project Coast: Apartheid's Chemical and Biological Warfare Programme* (Geneva: UNIDIR and Centre for Conflict Resolution, 2003).
- 7 W. Basson, 'Testimony at the TRC Hearing into Chemical and Biological Warfare' (Cape Town: TRC, 31 July 1998).

- 8 Marlène Burger and Chandré Gould, *Secret and Lies* (Cape Town: Zebra, 2002).
- 9 For instance, for those who did not speak or read Afrikaans, the vast majority of the testimony and documentary evidence presented in the trial was inaccessible because the trial was conducted in Afrikaans. Even for those fluent in the language, the extent and duration of the trial would be testing. Lasting over thirty months, involving 153 witnesses and relying on thousands of pages of documents that dealt with financial and drug charges beyond those associated with chemical and biological weapons, the sheer amount of information and number of contradictory claims produced created major impediments to determining what had happened. And in a bizarre twist, it became clear in 2015 after attempts by one of the authors (CG) to access the court record that the official transcript of the trial had gone missing from the court records frustrating later attempts to access it. All that remains is the judgement and daily notes taken by a Marlene Burger (a skilled court reporter) and Gould that were published on the Internet during the trial.
- 10 N. Knobel, 'Testimony to the Truth and Reconciliation Commission Chemical and Biological Warfare Hearings' (Cape Town: TRC, 8 July 1998).
- 11 Citizen, 'Chemical Warfare Papers Not Destroyed – Witness', *The Citizen*, 9 July 1998; Cape Argus. "'Wouter's Disk" Key to Germ Warfare', *Cape Argus*, 8 July 1998.
- 12 Burger and Gould, *Secret and Lies*, 26.
- 13 Interview Project Coast scientist (requested anonymity) 20 August 2013.
- 14 See, for instance, O. Olwagen, 'Witch-Hunt against Basson Should End Now', *The Star*, 19 July 2012, available at <https://www.iol.co.za/the-star/witch-hunt-against-basson-should-end-now-1344597>
- 15 Laurie Nathan and Patricia Lewis, 'Preface', in *Project Coast: Apartheid's Chemical and Biological Warfare Programme*. UNIDIR/2002/12 (Geneva: UNIDIR, 2002), ix.
- 16 For more on this, see B. Rappert and Chandre Gould, *Dis-eases of Secrecy: Tracing History Memory and Justice* (Johannesburg: Jacana, 2017).
- 17 Academy of Sciences of South Africa, *The State of Biosafety and Biosecurity in South Africa* (Pretoria: ASSAf, 2015), 103–107.
- 18 Filippa Lentzos, ed., *Biological Threats in the 21st Century* (London: Imperial College Press, 2016), 162.
- 19 Reports from this dialogue series are available at <https://www.nelsonmandela.org/content/page/nelson-mandela-international-dialogues1>.
- 20 Chandre Gould, 'The Trouble with Memory Work: Reflections on the Mandela Dialogues', 27 February 2017, available at <https://www.nelsonmandela.org/news/entry/reflections-from-the-2016-mandela-dialogues>.
- 21 Following the spirit of M. Taussig, 'Viscerality, Faith, and Skepticism', in *Magic and Modernity*, eds. B. Meyer and P. Pels (Stanford, CA: Stanford University Press, 2003).
- 22 S. Lindqvist, *A History of Bombing* (London: Granta, 2003), i.
- 23 Beyond the points already made, additional intellectual origins for *Dis-eases of Secrecy* include previous efforts by Rappert to produce experimental forms of

writing intended to not only speak to how concealment and disclosure interplay within diplomatic communities but also how this necessarily affects the writing of social researchers about these communities. See B. Rappert, *Experimental Secrets: International Security, Codes, and the Future of Research* (New York: University Press of America, 2009); B. Rappert, 'Revealing and Concealing Secrets in Research: The Potential for the Absent', *Qualitative Research*, 10, no. 5 (2010), 571–588; B. Rappert 'Present Absences: Hauntings and Whirlwinds in – Graphy', *Social Epistemology*, 28, no. 1 (2014), 41–55.

- 24 Bennett, *op.cit.*
- 25 The experiment was abandoned when it proved impossible to prevent the cyanide turning the maize meal blue.
- 26 Wikipedia, 'Entry for Exploded-view Drawing', available at https://en.wikipedia.org/wiki/Exploded-view_drawing.
- 27 Ostensibly to demonstrate that despite appearing to be made of two parts (cranium and mandible), a human skull is generally accepted to consist of twenty-two separate bones (excluding ear ossicles).
- 28 E. Carrabine, 'Just Images: Aesthetics, Ethics and Visual Criminology', *British Journal of Criminology*, 52, no. 3 (2012), 467.
- 29 S. Van Rensburg, 'Testimony of at the TRC Hearing into Chemical and Biological Warfare' (Cape Town: TRC 9 June 1998).
- 30 J. Derrida, *Spectres of Marx: The State of the Debt, the Work of Mourning, and the New International* (New York: Routledge, 1994). See also U. Baer, *Spectral Evidence: The Photography of Trauma* (London: MIT Press, 2002) and A. F. Gordon, *Ghostly Matters: Haunting and the Sociological Imagination* (London: University of Minnesota Press, 2008).
- 31 E. Peeren and M. del Pilar Blanco, *The Spectralities Reader: Ghosts and Haunting in Contemporary Cultural Theory* (London: Bloomsbury, 2013), 7.
- 32 P. Williams, *Memorial Museums: The Global Rush to Commemorate Atrocities* (Oxford: Berg, 2007), 106.
- 33 *Ibid.*, 121.
- 34 *Ibid.*, 142–143.
- 35 M. Nelson, *The Art of Cruelty: A Reckoning* (New York: WW Norton, 2012), 161. Tactical media are associated with 'ad-busting' or 'copy-left' practices, a form of visual/media hacking that has its historical origins in the *detournement* practices of the Situationist International. Actions by the Yes Men, for example, whom Nelson is directly referencing here, have gained considerable visibility, not least because they have confronted multi-national structures and organizations that represent considerable economic power coupled with absolute ethical failure.
- 36 *Ibid.*

Conference Abstracts

'Extreme forensics' in South Africa: exploring new post-mortem visual identification protocols

Kathryn Smith¹, Lorna J. Martin², Wayne Mitten³ and Caroline Wilkinson⁴

18th International Association for Craniofacial Identification 2019

Facing the Future of Craniofacial Identification

Louisiana State University, Baton Rouge LA

July 13-17

Being identified in death is recognized as a basic human right, and has significant legal, social and cultural implications. Yet increasingly, narratives about unidentified deaths are reaching us via the media, either the result of a single-event mass fatality, or undocumented border-crossings occurring over time.

In September 2016, a South African Police Service (SAPS) National Order placed new focus on South Africa's crisis of unidentified and unclaimed dead 'buried without proper investigation' (est. 10,000 pa). In South Africa, the mandate for the Forensic Pathology Service (FPS) lies with the Provincial Departments of Health, and legal identification is the mandate of the South African Police Service (SAPS). Forensic Art (craniofacial reconstruction, post-mortem depiction, craniofacial superimposition and age progression) is a service provided by the SAPS Victim Identification Centre (VIC). Bodies may only be released from FPS facilities when proof of legal identification is met. After 30 days, they may be legally disposed of. 'Proper investigation' therefore requires co-operation between these services.

Informed by the growing field of Forensic Humanitarian Action (FHA), and adopting a multimodal, participant-observer methodology, this presentation reports on one aspect of a broader PhD study which anticipated, and paralleled, the events described above.

In partnership with FPS Salt River, central Cape Town's busiest medico-legal mortuary (> 4000 cases pa), a records review of unidentified cases over a 7.5-year period (n = 1010) was carried out to assess the quality of the facility's post-mortem facial photography and its suitability for post-mortem depiction (image sanitization). A focus group (n = 15 FPS forensic officers) generated qualitative data to assess cross-cultural responses to an array of post-mortem depictions by a selection of recognised forensic artists working in various styles and media. Semi-

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structured interviews (n = 15) were carried out with Salt River senior management, SAPS VIC members, and consulting forensic anthropologists and pathologists at three academic institutions, providing context and history for post-mortem identification procedures in the South African context.

Findings indicate that the crisis is a result of complex and intersecting factors. Where the National Order reiterated existing protocols for post-mortem identification, this study goes significantly further, suggesting that an improved status quo will demand fundamental changes to standard operating procedures and infrastructure within and between both services, focused on a significant investment in secondary methods of identification, namely the expansion of forensic facial depiction services, supported by a managed, public-access database.

KEYWORDS: forensic identification; post-mortem depiction; operational policy

This research was supported by a National Research Foundation (South Africa) Freestanding Doctoral Award.

Ethical approval references: LJMU 17/LSA/012; UCT HREC 772/2017; SAPS 2018/06/26

One of Us? Navigating ‘rehumanisation’ questions in the depiction and display of two ancient Egyptians from the Johns Hopkins Archaeological Museum

Kathryn Smith^{1a}, Caroline Wilkinson^{1b}, Mark Roughley^{1b}, Sanchita Balachandran², Meg Swaney² and Juan R. Garcia²

18th International Association for Craniofacial Identification 2019
Facing the Future of Craniofacial Identification
Louisiana State University, Baton Rouge LA
July 13-17

This poster presents how innovative scientific and curatorial approaches have figured in attempts to 'rehumanise' two ancient Egyptian individuals for display at Johns Hopkins Archaeological Museum, whilst encouraging critical interrogation of how knowledge is constructed and disseminated at the interface of art and science.

Responsible and respectful stewardship of human remains held in museum collections (particularly archaeological and ‘natural history’ institutions) has demanded close attention in recent years, particularly in the context of repatriation claims. But what of human remains for which there is little or no demand for repatriation, and which lend themselves to highly aesthetic treatment, as in the case with Ancient Egyptian material culture, including mummies? Conventions of trading, collecting and displaying such material undoubtedly contributes to their conceptual transformation from ‘human subject’ to ‘museum object’, crafting a critical distance between the body as individual, and cultural commodity.

Seeking to reverse this distinction, we focus on the process of producing facial depictions of two ancient Egyptian individuals who have been closely associated with the history of Johns Hopkins University since the early twentieth century. Carried out by LJMU’s Face Lab in close consultation with an interdisciplinary team at Johns Hopkins, the depictions were based on CT scan data, with 3D craniofacial reconstructions produced in Geomagic Freeform, and finally presented as 2D images textured in Adobe Photoshop. The depictions contributed to an extensive multimodal and conservation-driven study of these two individuals and their associated objects, the results of which include a reassessment of biological sex for one individual as well as a probable name, which now replaces the previous catalogue reference to the collector-patron who gifted her remains to the museum.

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Reflecting on how curatorial decisions shape the visitor experience present an opportunity to critically assess the presentation of craniofacial reconstructions in museums. Specifically, we consider the presumptions of ‘non-invasive’ scientific technology and digital imaging, asking what might be at stake, for exhibition makers and visitors alike, in projecting contemporary ideas, including cognitive biases, onto past people?

KEYWORDS: craniofacial reconstruction; rehumanization; museums

Shape Accuracy versus Recognition in Forensic Facial Depiction: an inter-practitioner, blind comparative study using in vivo data

Kathryn Smith^{1a}, Christopher Rynn² and Caroline Wilkinson^{1b}

International Association for Identification Educational Conference
San Antonio TX
July 29 - August 4, 2018

Advances in 3D computerized systems have enabled sophisticated accuracy studies in facial reconstruction using CT data of living subjects. Working with a CT-derived skull model prepared with a set of soft tissue markers relevant to the skull's biological profile, and with no specific method or technique specified, n=14 depictions of the same subject were produced by an international cohort of 13 practitioners representing a wide range of expertise and training. Three analyses were carried out to test the depiction against the target face: surface deviation mapping tested shape accuracy of the 3D depictions, and resemblance/recognition was tested for the full set via facial recognition software and human examiner. Results point to some important considerations regarding the relationship between shape/model accuracy and applied detail/texture in prompting recognition, which should inform presentation guidelines for forensic depictions.

KEYWORDS: forensic art; facial identification; craniofacial reconstruction; anatomical patterning; virtual sculpture; 3D scanning; computed tomography; surface mapping; face recognition; resemblance; cognitive bias

***Overall winner of the student poster section**

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² University of Dundee

^{1b} Face Lab, Liverpool John Moores University, United Kingdom

Doenuts and Databases: Counter-Forensics Online

International Death Online Research Network
University of Hull, UK
15-17 August 2018
(withdrawn)

This paper presents a small aspect of my ongoing doctoral research into current forensic investigative protocols for the unidentified dead considered from a cross-cultural perspective, with specific reference to forensic art.

Forensic art describes a range of facial depiction techniques applied within legal investigations to promote leads towards identifying unknown persons. It is a highly specialized yet unregulated field that demands interdisciplinary agility; its products are cognitively provocative and media-friendly yet poorly understood, and often misconstrued.

The online environment provides any number of opportunities to encounter representations of the dead, but I am particularly interested in websites and social media pages that publish unsolved case information about unidentified/unclaimed deceased or missing persons. Informed by Gillian Rose's 4 'sites' of a critical visual methodology – production, image, circulation, audience – and STS literatures that attend to 'boundary work', 'absence' and 'matters of concern/care', I analyse selected examples across a range of UK and US-related internet sites, from state-run or state-supported databases with varying degrees of public access, to individually-run social media accounts that harvest and republish material found online in a largely unregulated manner.

Guided by the question, 'Do such sites complement or frustrate – or even jeopardise – official investigations?' I consider the 'spectrum of authority' they represent in relation to current policy and practice informing forensic facial identification, the politics of in-group and out-group participation, and how notional desires for 'justice' become difficult to square with the way in which content is presented and, where relevant, discussed, and by whom. I further consider how these online sites contribute to the growing terrain of interest in 'counter-' or 'citizen-led' forensics, particularly the 'extreme' forensic methods that the current crises of mass unidentified deaths are producing, in the face of political apathy, pushing disciplinary boundaries.

When science fails: ‘extreme forensics’ and the politics of postmortem identification

Centre for the Study of Death and Society (CDAS) Conference 2018*

The Politics of Death

University of Bath

8-9 June 2018

Being identified in death is recognized as a basic human right, and has significant legal, social and cultural implications. Yet increasingly, narratives about unidentified deaths are reaching us via the media, usually a result of a single-event mass fatality, and less frequently as a result of concentrated, clandestine attempts to cross national borders.

Adopting a participant-observer perspective, this paper examines the politics of what it means to enter the medico-legal system in South Africa as an unidentified individual, and how the system – and those tasked with carrying out its policies and practices – copes with its enormous case load.

Ultimately this raises two questions: ‘Who forms part of the large post-mortem population residing in the country’s mortuaries?’ and ‘What practices might be introduced to address the crisis?’

This paper takes the view that the numbers of unidentified dead in South Africa are akin to a mass fatality event (and should therefore be addressed according to Disaster Victim Identification protocol) yet the situation does not attract the same attention, despite the fact that many of the country’s forensically-trained specialists are on the national response team register. I consider two contexts that offer useful parallels (and possibly lessons) for the South African context: the campaign to identify those who perish attempting to cross the Mediterranean led by Dr Cristina Cattaneo (LABANOF, Milan) and Operation ID at Texas State University, supporting the investigation of unidentified deaths in the US/Mexican border zone, led by Dr Kate Spradley. Both represent initiatives set up in the face of political apathy, with barely minimal resources, but which may end up innovating practices of forensic human identification more broadly.

* Updated version presented at [IACI 2019](#)

One of Us? Navigating ‘rehumanisation’ questions in the depiction and display of ancient Egyptians from the Johns Hopkins Archaeological Museum

Kathryn Smith^{1a}, Caroline Wilkinson^{1b}, Sanchita Balachandran², Meg Swaney², Juan R. Garcia² and Mark Roughley^{1b}

Royal Anthropological Institute Conference 2018
Art, Materiality and Representation
British Museum and SOAS
1-3 Jun 2018

For professionals engaging with collections holding human remains, responsible and respectful stewardship has demanded close attention in recent years, particularly in the context of repatriation claims. But what of human remains for which there is little or no demand for repatriation, and which lend themselves to highly aesthetic treatment? In the context of recent major stand-alone exhibitions and reinvestment in ancient Egyptian galleries in local/regional museums in the UK, it appears that exhibiting such artefacts continues to capture the popular imagination, and lend cultural cachet to the institutions concerned. What many of these new initiatives have in common is the utilisation of sophisticated imaging technologies to create digital representations of human remains and related artefacts. Claims made for these technologies centre on their non-invasive – and therefore ostensibly more ethically acceptable – affordances: they permit the exploration, analysis and reconstruction of artefacts, particularly mummies, in ways that not only conserve the material integrity of these artefacts, but also allow for new display considerations and public engagement opportunities.

This paper focuses on the facial depictions of two ancient Egyptian individuals who have been closely associated with the history of Johns Hopkins University since the early twentieth century. Carried out by LJMU’s Face Lab in close consultation with an interdisciplinary team at Johns Hopkins, we consider how scientific technology, digital imaging and critically-engaged exhibition design complicate attempts to render human remains more ‘recognizably human’, and what might be at stake, for exhibition makers and visitors alike, in projecting contemporary ideas onto past people.

*** updated version presented as a poster at the [IACI 2019](#), with an article currently in preparation**

*Part of panel convened by Caroline Wilkinson and Kathryn Smith

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From Ta-Kesh to Ta-Kush: the affordances of digital and haptic visualisation for heritage accessibility

Kathryn Smith*, Mark Roughley*, Samantha Harris**, Evelyn Palmer** and Caroline Wilkinson*

Extraordinary World Congress on Mummy Studies 2018
Santa Cruz de Tenerife, Canary Islands, Spain
21-25 May 25, 2018

This paper describes the facial depiction of a 2,500-year-old mummy in the collection of the Maidstone Museum (Kent, United Kingdom) that formed part of a multimodal reconsideration of the museum's Ancient Lives displays, launched in September 2017. Scientific and visual analysis of the remains required a complete re-evaluation of the received history and identity of the mummy: the purportedly adolescent Ta-Kesh had to be reimagined as a post-menopausal Ta-Kush, which presented both challenges and opportunities for the various collaborative partners.

Considering this context, we focus on the facial depiction of Ta-Kush, based on a skull model derived from computed tomography. Seeking a solution beyond a 2D image, traditional sculptural depiction or 'realistically' textured mannequin, the haptically-enabled 3D virtual modelling software used to reconstruct her facial morphology finds a logical conclusion in the curatorial choice to present the depiction as a translucent, clinical-grade 3D print aimed at optimising the museum experience for visually-impaired visitors.

The museum display also includes full-colour digital animation. We reflect on the affordances and potential challenges of these haptic and digital solutions in heritage practices, through a description of the methods and techniques of the facial depiction process, and how these influenced presentation considerations in conversation with the museum staff, with particular reference to the ethical display of human remains, museum accessibility (including digital 'unshelving') and the engagement of younger audiences. The combination of limited budget and high level of inter-institutional collaboration is noteworthy in this project, but more so the willingness to consider creative and innovative responses to displaying human remains in a public museum context, including involving a museum youth group in the research for the new gallery design and artefact presentation.

***Paper submitted to Digital Applications in Archaeology & Heritage Studies, 2019 (under review)**

*Face Lab, Liverpool John Moores University

**Maidstone Museum, Kent

In-Formation: Biometrics and the changing face of portraiture

17th meeting of the International Association for Craniofacial Identification 2017
Science Supercharged Methods
University of Queensland (Brisbane AU)
15-19 July 2017

The human face is a complex technology of expression, communication and interaction. Subject to the vicissitudes of aesthetic contemplation and scientific calculation, and by extension, of power and prejudice, the face is always ‘in formation’. The face therefore can be understood as a space that is capable of acting and being acted upon. In other words, identity and identification are complementary but also divergent concepts.

Within forensic human identification, the face is recognised and mobilised as a biometric, and visualisations of these forensic methods have found a captive audience within popular culture, from CSI-procedural television shows to advertising to museum displays. But how might these ideas be shaping concepts of portraiture within contemporary visual art?

Taking an interdisciplinary practice-based approach, this presentation looks at the impact of quantitative approaches to human identification on recent contemporary art, with reference to recent projects by three visual artists (Adam Harvey, Zach Blas and Broomberg & Chanarin) who adopt different biometric strategies – algorithmic spoofing, graphic materialization and 3D mimicry – to reflect on the social and cultural impact of scientific methods of facial identification and the images such methods produce.

The presentation proposes that such critical methodological mimicry presents real challenges to empirical notions of objective truth from the realm of culture, and demonstrates the dual-use potential of biometric methods by highlighting their ethical, cultural, and ultimately political, effects on individual agency and contemporary society at large.

'Between Subject and Object': Anatomy of an exhibition

Death, Art & Anatomy
University of Winchester
3-6 June 2016

Between Subject and Object: human remains at the interface of art and science was an exhibition presented at Michaelis Galleries (University of Cape Town) in August 2014, curated by Kathryn Smith, Josephine Higgins and Penny Siopis. This was the first time a considered, curatorial effort was made to link anatomical specimens and creative visual practice in the same exhibition environment and as such, it signalled the nascent field of medical humanities as a focus of interdisciplinary research in that country.

This paper presents a critical reflection of the project towards a proposed publication. It focuses on the central pivot of the show, prompted by a consideration of contemporary post-mortem photography after two studies by Smith (1999) and Higgins (2013), that representations of the dead exist on a spectrum between an emphasis on the subject-ness of the deceased individual and the object-ness of the corpse. The collected works and artefacts (including performance and film) extended the conventional relationships that photography is understood to have with 'the real' – as index, representation or copy – towards a broader notion of 'the photographic', through ideas of trace and analogy (material, ontological, experiential, evidential, affective).

This analysis frames the project as an exploratory, self-reflexive, and dialogical attempt to challenge conventional post-mortem representations. The ethical imperatives of working with human remains (and representations thereof) are framed as primary considerations within a highly specific complex cultural context that lacks a robust scholarly focus on the visual and material cultures of death.

ID/Inventory: Lives of the (unidentified) dead within South African mortuary records

Corpses, Cadavers and Catalogues: The Mobilities of Dead Bodies and Body Parts, Past and Present

Barts Pathology Museum and the Hunterian Museum at the Royal College of Surgeons, London
May 17-18, 2016

South Africa's pre-democratic history is a story of racial segregation that found expression in all facets of human life. This segregation was most keenly experienced spatially, in spaces and structures of everyday life but also in death; racial segregation was applied in the planning of South African cemeteries before its application in other environments. In the post-democracy period, the traces of racial categorisation regarding the dead persist in explicit and implicit ways.

This paper presents critical and creative reflections on the lives of the anonymous and unidentified dead in South African medico-legal archives and anatomical/anthropological collections via two artworks: *ID/Inventory* (1999) and *The Studio Familiar: X0198/1669* (2014), and their installation in the context of the exhibition *Between Subject and Object: Human Remains at the Interface of Art and Science* (Cape Town, 2014).

Produced more than 15 years apart, in direct response to working with/in forensic pathology and anthropology facilities in different cities in South Africa as a trained visual and forensic artist, these works echo issues raised in recent scholarship (Hook 2013, Sey 2015) that consider the effects (and affects) of visual representations of the dead in the context of South Africa's history of violent political conflict. As such, this paper explores the role of the anonymous post-mortem body in processes of both physical identification and constructions of socio-cultural identity, in a highly complex and ideologically fraught contemporary context.

Portrait? Likeness? Composite? Facial Difference in Forensic Art

Effaced from History? Facial Difference and its Representation from Antiquity to the Present Day

University of Winchester

31 March - 2 April 2016

<https://effacedblog.wordpress.com/the-effaced-conference-1-2-april-2016/>

This paper offers an alternative interpretation of ‘facial difference’, approaching it from the perspective of craniofacial identification and depiction, which is more commonly referred to as forensic art. Despite rigorous scientific techniques for predicting and depicting faces from skulls, marked differences in results have been seen in attempted reconstructions of the same individual. Why does this happen? Is it an artefact of poorly applied scientific method or a result of inadequate artistic skills, or both? And how does this variation in quality of facial images impact on the science of facial identification and the practice of portraiture?

Using forensic facial depiction case studies (including depictions of historical individuals), this paper will consider and compare ideas about the face drawn from the literature of scientific standards, practitioner-derived data and critical visual studies to present some speculative ideas about the ‘laws of the face’. That is to say, the legal demands of evidence, and the socio-cultural enactments of the law (as lore) in the context of a conspicuous lack of theoretical consideration of the visual cultures of forensic work, and how aesthetic choices made by forensic artists may impact on the success or efficacy of facial depictions.

<https://effacedblog.wordpress.com/2017/08/23/portraits-likenesses-composites-facial-difference-in-forensic-art/>

Invited seminars & panels

Depiction of the Dead: ethical challenges and cognitive bias

Panel 080, SOAS Senate House - S116

3 June 2018 at 13:30 (2 sessions)

Royal Anthropological Institute Conference 2018

Art, Materiality and Representation

British Museum and SOAS, 1-3 Jun 2018

The depiction of faces of the deceased can be controversial and challenging, both in production and presentation. How do we balance the aims of public exhibition with the complexities of facial perception and appreciation, and do contemporary digital technologies present new and multifaceted challenges? This panel welcomes papers discussing the ethical challenges of presentation of faces of the dead. In addition, cognitive bias may affect the decisions we make relating to facial appearance and public exhibition, and this applies to both forensic and archaeological applications. Facial depictions utilised in forensic identifications and archaeological investigations are not portraits and cannot wholly represent the appearance of the subject. Yet in forensic cases there is a fundamental struggle between the objective of recognition/identification and the desire to produce a realistic and accurate image, and in archaeological cases there is a similar balance necessary between evidence-based and subjective interpretation. How do we make the decisions relating to skin colour, eye colour, hair colour/style, clothing, signs of ageing, BMI, pathology, trauma and ethnic group, and how do we know that these decisions do not reflect the cognitive bias associated with our understanding of ancient or contemporary populations? This panel also welcomes papers that debate the challenges associated with the depiction of people from the past and/or contemporary forensic casework, especially in relation to cognitive bias and interpretation.

Accepted papers with short abstracts

[Introduction to cognitive bias in relation to facial depiction from human remains](#)

Caroline Wilkinson (Liverpool John Moores University)

This paper explores how cognitive bias affect facial depiction from human remains, using examples from forensic identification and archaeological investigation. The ethical challenges associated with facial images of the deceased and their presentation are discussed, along with the effects of historical fame and judgements of personality and character.

Typological archives: incarcerated flesh, untold histories and modern dilemmas

Tobias Houlton (University of the Witwatersrand)

The University of the Witwatersrand (South Africa) houses 1110 typology masks and one full body cast, taken of African persons. Born from an antiquated science and Eurocentric chauvinism, this historic collection demands a renewed enquiry to their purpose, meaning and value in modern times.

Exploring cognitive bias when texturing a facial depiction of King Robert the Bruce

Mark Roughley, Caroline Wilkinson, Sarah Shrimpton (Liverpool John Moores University); Ralph Moffat (Glasgow Museums)

This paper explores the decisions made during the process of adding photorealistic textures to a facial reconstruction of Robert the Bruce, 1st King of Scotland that would depict his most likely facial appearance, based upon interpretation of a skull cast and historical data.

Facing up to facelessness: constructing virtual humans in archaeological visualisations

Ellen Finn (Trinity College Dublin)

Faceless avatars haunt our everyday. Whether on Twitter, Facebook or otherwise, we are constantly confronted with human-like figures that lack any discernible facial characteristics. But what challenges arise when these faceless 'grey agents' come to populate digital archaeological visualisations?

One of Us? Navigating 'rehumanisation' questions in the depiction and display of ancient Egyptians from the Johns Hopkins Archaeological Museum

Kathryn Smith, Caroline Wilkinson, Mark Roughley (Liverpool John Moores University); Sanchita Balachandran (Johns Hopkins Archaeological Museum); Meg Swaney, Juan Garcia (Johns Hopkins University)

This paper considers how innovative scientific and curatorial approaches have figured in attempts to 'rehumanise' two ancient Egyptian individuals for display at Johns Hopkins University, whilst encouraging critical interrogation of how we construct knowledge at the interface of art and science.

Object Lessons: locating curatorial ethics

MLitt Curatorial Practice, University of Glasgow/Glasgow School of Art
3 October 2017

Over the last decade, the definition of ‘curator’ has expanded to cover such a broad range of activities that a job description traditionally associated with expert scholarship & conservation within a museological context, but which also embodies a form of authorship within the field of contemporary art, may now be applied to restaurant menus and playlists. What is common to all these applications are tasks of selection and care.

The conjoined demands of protective attention and potential violence, in the way it must excise, elide and exclude, makes curatorship a useful practice through which to focus a discussion on ethics, particularly as such work often demands – or is directed towards – public display.

This seminar offers a transdisciplinary perspective on working with objects, ideas and collections, using past projects as case studies that are offered up as propositions for critical discussion in the context of recent global events. The role of the curator prompts three questions: Should curators act responsively or responsibly? What is at stake in making objects ‘speak’? And what might a return to the material & affective afford us in a telematic, hyper-mediated ‘post-truth’ world?

The counter-forensic archive: thinking through forensic art practice

Centre for Translating Cultures, University of Exeter
8 February 2017

Song Ci (alt. Sung Tz'u)'s 13thC Song Dynasty text 'Collected Cases of Injustice Rectified: the Washing Away of Wrongs' is widely regarded as the first forensic science treatise. Its demonstration of procedure and evidence have remained an enduring influence on how claims are made on behalf of objects and locations presented within the various fora we mandate to do the work of justice.

The forum, from which the word 'forensic' is derived, is not only a space of immutable authority, but also of courageous critique and challenge. Archival practices resonate here in relation to the dynamic character of evidence: records can be revisited, judgments overturned and alternative truths retrieved many years after an event has taken place. Such processes might be termed 'counter-forensic', particularly if they are citizen-led.

With reference to my own practice, which traverses both forensic and counter-forensic terrains, and the work of others that offer ways to think about the discourses of the 'forensic', this seminar offers a practice-based consideration of what it might mean to operate at the interface of the artistic and the forensic. Questions like, Are 'forensic' and 'artistic' competing or complementary ideas? And, Can we think of the studio – the artist's laboratory – as a critical site for counter-forensic action? are considered in the broader context of contemporary currencies of 'sci-art' collaboration, biometric surveillance and pronouncements about our 'post-truth'/'post-fact' media realities.

Object Relations: the case of DR1191-86

Sculpture Department, Royal College of Art London
15 February 2016

Invited as part of the RCA's Sculpture seminar series, 'Everything is Sculpture: Immaterial Constructions/Material Realities', in collaboration with the Henry Moore Institute.

Considering sculpture's continual engagement with the body as a point of departure, I will begin by presenting documentation of an object in the collection of the University of Cape Town's Pathology Learning Centre. This 'specimen' is somewhat unclassifiable within this collection, as it both is, and is not, of the body. A woven textile thought to be a sock or kitchen rag, it is associated with a medico-legal investigation into a woman found dead in her bed in 1986. During the post-mortem examination, it was discovered lodged deep in her oral cavity. Forces of trauma and rigor mortis have transformed the banal into the extraordinary: the object has become a perfect impression of the interior of a mouth - her mouth - clearly delineating the hard palate and upper and lower teeth. The exact circumstances of the case are unknown and to date, and no documentation has been recovered (many police archives and other official documents were lost or destroyed during the unravelling of public institutions in the late Apartheid/democratic transition period in South Africa). Resembling a tongue that cannot enunciate, this object is part trace, sample, analogy, artefact, evidence, craft and prosthetic, and suggests ways to think through ideas related to subject/object relationships, 'things' that talk, material/immaterial bodies, and the ways that objects might embody the photographic.

***An extended version of this presentation is published in De Beer, S. (ed) 2020. *Risk in Writing*. A4 Arts Foundation: Cape Town**

Technologies of the post-mortem face

For the inaugural event of the *Bodily Matters* project convened by Dr Gemma Angel at the Institute for Advanced Studies, University College London.

Post-mortem Portraits: Technology, Likeness & Ethics

Institute for Advanced Studies, University College London

27 January 2016

Chaired by Subhadra Das, curator of UCL Teaching & Research Collections (Pathology and Galton collections)

The basic principles of craniofacial identification and depiction - otherwise known as forensic art - focus on predictions of living appearance of individuals generated from post-mortem remains in both forensic and historical cases.

This paper considers the research that supports the practical application of scientific standards in facial prediction/depiction, including current research in facial recognition, in relation to some ideas and expectations we have about portraiture, in the context of a conspicuous lack of theoretical consideration of the visual cultures of forensic work, and how aesthetic choices made by forensic artists may impact on the success or efficacy of facial depictions and vice versa.

The notion of 'technology' is considered here in its literal sense, with reference to the tools used in facial depiction (including both manual and computer-assisted methods), as well as its connotation within cultural anthropology, as the sum of a group's practical knowledge expressed through material culture.

Appendix 2: Participant Information

- 1. PI sheet (PDF)**
- 2. PI Gatekeeper form (PDF)**
- 3. Consent forms (PDFs)**
- 4. Interview framework (PDF copies)**

LIVERPOOL JOHN MOORES UNIVERSITY PARTICIPANT INFORMATION SHEET

Title of Project

Laws of the Face: contemporary post-mortem depiction in art and science

Name of Researcher and School/Faculty

Kathryn Smith

Face Lab, School of Art & Design

Faculty of Arts, Professional and Social Sciences

You are being invited to take part in a research study. Before you decide, it is important that you understand why the research is being done and what it involves. Please take time to read the following information. Ask us if there is anything that is not clear or if you would like more information. Take time to decide if you want to take part or not.

1. What is the purpose of the study?

This study is a critical analysis of contemporary transcultural attitudes, both professional and public, towards images and depictions of the dead, and the places – real or virtual – where such images may be encountered. It is aimed at a better understanding of the forensic and cultural work such depictions have done – and continue to do – in our contemporary experience. It adopts a mixed methods approach (theory and practice-led research) and seeks to address three different audiences: forensic researchers and practitioners, critical visual studies, and an informed public interested in the face as a technology of identity and identification.

In so doing, this study will explore dominant professional and social attitudes towards images of the dead and the conditions, including legislation/policies/professional standards, religious or cultural beliefs and practices, that might cause such attitudes to shift. It will explore whether certain cultural or political contexts, and representational styles, influence how we relate to images of the post-mortem human face.

The study involves reviewing visual methods of identifying and depicting the dead, specifically via facial images, and interviewing people involved in processes and practices of identifying and depicting the dead, including forensic pathologists and anthropologists; forensic, pathology or anatomical technicians or support officers; forensic artists and facial identification specialists working within and in partnership with law enforcement; funeral directors and embalmers; museum curators and visual artists who have explored such methods and images in their practice.

This will be done with a view to improve the visual literacies of forensic art practitioners; build upon accepted 'best practice' techniques for forensic artists; and propose a critical vocabulary for forensic art in relation to discourses of contemporary art practices.

2. Do I have to take part?

No. It is up to you to decide whether or not to take part. If you do, you will be given this information sheet and asked to sign a consent form. You are still free to withdraw at any time and without giving a reason. A decision to withdraw will not affect your rights in any way.

3. What will happen to me if I take part?

- You will participate in a semi-structured interview, either in person, telephonically or over Skype (or a similar online platform). You will have two weeks from receipt of invitation in which to accept, refuse or request more information.
- If no response is received within 30 days of the letter of invitation being sent, it will be assumed that you do not wish to take part. However, if you do choose to respond after this period, your participation will be welcomed.
- The interview consists of approximately 30 questions, covering four broad areas
- It is anticipated that the interview will take an average of 1-2 hours to complete
- You may request an interview framework containing sample questions to review in advance of agreeing to schedule your interview. As the interview is semi-structured, the framework represents a guideline; as interview, you may wish to contribute additional points of discussion to the conversation
- If you are a forensic artist, visual artist or photographer, and have produced images relevant to this study, you will be invited to make relevant images (for which you hold copyright) available to the study, to support your interview and any resulting analysis or discussion.
- You may decline to answer certain questions without providing a reason for doing so
- The interview will be recorded (including written notes) and transcribed for reference purposes
- If you agree to the interview being recorded by audio and/or video, the researcher will discuss with you the possibility of using selected clips within a multimedia, art-based presentation of the research, and seek your consent for this
- You may review the interview transcript and make fact-based changes
- If you agree to your material being used towards the production of an artwork, you may review the clips from your interview identified for use for this purpose. A separate consent/permission form will be provided.
- You may request a follow-up interview to correct or amend your responses before 31 December 2018
- All interviews must be completed by 31 December 2018
- Your data, including interview recordings and transcripts, will be securely stored according to European Economic Area/United Kingdom data protection and privacy policies. You may choose whether your data is stored indefinitely, or for up to 5 years.

4. Are there any risks / benefits involved?

It is accepted that the topic of post-mortem identification and depiction is sensitive, but given your professional training and expertise, you have a privileged understanding and insight into an area of work and life that is not well understood. The study seeks to address this, both in terms of a transcultural understanding of how and why this work is done in different contexts, but also to improve/augment current methods used to visually identify unidentified bodies. This is why you have been approached to participate in this study.

You will be asked about your professional practice in relation to identifying and depicting the dead. This is an opportunity to reflect on professional practices, and share experiences that will be used to assess current post-mortem identification policy and methods towards better operational efficacy, and sensitivity to technical, practical and ethical challenges.

It is assumed that if you are employed by an organisation or institution, you will need permission from your manager or employer in order to participate. You will be provided with the necessary documentation to inform your employer about the project, in order to support your participation.

You will be given information about counselling services in your workplace/area should you wish to receive post-interview counselling or debriefing. You will not receive any remuneration or compensation for your participation.

5. Will my taking part in the study be kept confidential?

Yes, although it will be necessary to record a description of your professional/creative role as it is relevant to the study.

You are not required to include your name or contact details, but you may do so if you wish to be identified in association with the views you express. This will be recorded on a consent form, alongside any other personal information that you feel is relevant to accurately represent yourself and your role that you wish to include, which will be recorded as part of the interview process.

The information gained during the study may be published. Unless you request for your identity to be made known on the consent form, your contribution will be anonymised.

This study has received ethical approval from LJMU's Research Ethics Committee (LJMU REC reference 17/LSA/012, approved on 2 January 2018).

Should you have any comments or questions regarding this research, you may contact the researchers:

Contact Details of Researcher	Contact Details of Academic Supervisor
<p>Kathryn Smith K.A.Smith@2015.ljmu.ac.uk</p>	<p>Prof. Caroline Wilkinson C.M.Wilkinson@ljmu.ac.uk</p>
<p>Face Lab Liverpool Science Park IC1 131 Mount Pleasant L3 5TF Tel: 0151 482 9605</p>	<p>Director Liverpool School of Art & Design John Lennon Building 2 Duckinfield Street L3 5RD Tel: 01519041188</p>

If you have any concerns regarding your involvement in this research, please discuss these with the researcher in the first instance. If you wish to make a complaint, please contact researchethics@ljmu.ac.uk and your communication will be re-directed to an independent person as appropriate.



LIVERPOOL JOHN MOORES UNIVERSITY

GATEKEEPER INFORMATION SHEET

Title of Project *Laws of the Face: contemporary post-mortem depiction in art and science*

Name of Researcher and School/Faculty Kathryn Smith, Face Lab, School of Art & Design
Faculty of Arts, Professional and Social Sciences

1. What is the reason for this letter?

Representatives of your organisation/ department/ facility/ service/ company are being invited to take part in a research study. Before you decide to do so, it is important that you understand why the research is being done and what it involves. Ask us if there is anything that is not clear or if you would like more information. After reading the following information, take time to decide if you want to take part or not.

2. What is the purpose of the study/rationale for the project?

The research aims to develop a detailed understanding of the role of visual images in the work of human identification, specifically of the unidentified dead, and the methods and the techniques used to undertake this work, including images made for documentation, identification and analysis. This includes forensic art, which refers to facial depictions produced with reference to documentation of the deceased, towards promoting identification.

We are increasingly being presented with real challenges when it comes to identifying the victims of single-event mass disasters, and accumulative mass death, to which a number of factors contribute, including undocumented migration. Our intention is to improve and advance forensic art techniques used in the identification of the unidentified dead.

No comparative studies exist which describe contemporary transcultural attitudes, both professional and public, towards images and depictions of the dead. There are no studies which explore the intersection of legislation/policies/professional standards; cultural or political contexts; religious or ethnic beliefs and practices, and representational styles that shape our diverse professional and social attitudes towards images of the post-mortem human face.

Our intention therefore is to ultimately present a detailed analysis of the forensic, cultural and social work that such depictions have done – and continue to do – in our contemporary experience, by describing and analysing policy and ‘best practice’ in different circumstances; by focusing on the people who are involved in such work; and the places, both real or virtual (newspapers, police records/appeals/archives, textbooks, memorials, the internet, art galleries and so on) where images of the dead may be encountered.

The research hopes to reach a broad range of people involved in processes and practices of identifying and depicting the dead, including forensic pathologists and anthropologists; relevant technicians or support officers; forensic artists and facial identification specialists working within and in partnership with law enforcement; funeral directors and embalmers; and museum curators, visual artists and photographers. Students being trained in any of the above specialisms are also welcome to participate.

3. What we are asking you to do?

We are asking you to introduce this research study to the members of your organisation/department/facility/service/company, to promote awareness of the study and encourage their participation *without prejudice*.

Members of your organisation/ department/ facility/ service/ company are being invited to participate in semi-structured interviews, as described in an individual Participant Information sheet.

Individual participation is voluntary. Data can be anonymised if a participant so wishes, and participants may choose to withdraw at any time.

4. Why do we need access to your facilities/staff/students?

It is accepted that the topic of post-mortem identification and depiction is sensitive, but given the professional training and expertise of members of your organisation/ department/ facility/ service/ company, you have a privileged understanding and insight into an area of work and life that is not well understood.

For example, forensic practitioners and support officers, and those being trained in the field of human identification, as well as those working in the funerals sector, operate in close proximity to the deceased, their remains (including personal possessions) and their next-of-kin. Exposure to these circumstances produces tacit (implied, embodied) knowledge that cannot be readily gained from books and reports.

Academic pathologists who have been consulted on this issue have stressed the value of consulting support officers as they are at the coalface of the visual identification process, facilitating viewing the deceased by next-of-kin, assessing and collecting copies of identification documents. Invaluable insights emerged from this informal consultation process, including points of agreement and potential innovation that should be considered by policy-makers.

Direct experience of this work provides a unique understanding of appropriate professional behaviours; the emotional labour involved in this work; and the challenges that everyday situations offer to formal policy and procedure.

This research offers a space for members of your organisation/ department/ facility/ service/ company to reflect on their work and training, to share views and observations without prejudice, and in so doing, contribute to new perspectives about how we understand the role of images in documenting and identifying the dead, and we might develop context-sensitive and responsive best practice in visual techniques for forensic human identification.

5. If you are willing to assist in the study what happens next?

Arrangements will be made to set up a visit to your organisation/ department/ facility/ service/ company. If it is not possible to visit your organisation in person, opportunities for remote interviewing can be organised. This could happen via Skype, telephone or email, for example. If members of your organisation wish to conduct a group discussion (roundtable interview), this can also be facilitated.

6. How we will use the Information/questionnaire?

Information gathered during interviews will be used to construct and inform case study analyses for a doctoral research study (PhD). Interviews will be recorded and transcribed, and kept in secure (digitally encrypted) storage in Face Lab, a research group at LJMU for the duration of the research and for some time thereafter (more details on the PI sheet).

7. Will the name of my organisation taking part in the study be kept confidential?

Because the study is looking at the intersection of context (place/environment) and practice (how the work is carried out), it makes sense to name the participating organisations that are public services. This gives is in the public interest, and lends authority and integrity to the information being shared. Where forensic services are concerned, it is likely that your organisation may be indirectly identifiable even if it is not named, due to the highly specialised nature of this work.

Where commercial entities are concerned, you may elect to remain anonymous.

Individual participants may choose whether or not they wish to be identified in association with the views they express, but they will be made aware that it will be necessary to record a description of their professional role as it is relevant to the study (please see comment in 3)

8. What will taking part involve? What should I do now?

Sign and return the **Gatekeeper Consent Form** provided here, to Kathryn Smith (email address below)

This study has received ethical approval from LJMU's Research Ethics Committee (LJMU REC reference 17/LSA/012, approved on 2 January 2018).

Should you have any comments or questions regarding this research, you may contact the researchers:

Contact Details of Researcher	Contact Details of Academic Supervisor
Kathryn Smith K.A.Smith@2015.ljmu.ac.uk	Prof. Caroline Wilkinson C.M.Wilkinson@ljmu.ac.uk
Face Lab Liverpool Science Park IC1 131 Mount Pleasant L3 5TF Tel: 0151 482 9605	Director Liverpool School of Art & Design John Lennon Building 2 Duckinfield Street L3 5RD Tel: 01519041188

If you have any concerns regarding your involvement in this research, please discuss these with the researcher in the first instance. If you wish to make a complaint, please contact researchethics@ljmu.ac.uk and your communication will be re-directed to an independent person as appropriate.



LIVERPOOL JOHN MOORES UNIVERSITY
GATEKEEPER CONSENT FORM

Title of Project Laws of the Face: contemporary post-mortem depiction in art and science

Name of Researchers Kathryn Smith Face Lab, School of Art & Design
Prof. Caroline Wilkinson (Director of Studies)
Director, School of Art and Design/Face Lab
Faculty of Arts, Professional and Social Sciences

Please tick to confirm your understanding of the study and that you are happy for your organisation to take part and your facilities to be used to host parts of the project.

Laws of the Face is a doctoral research study that seeks to develop a granular understanding of the role of visual images in the work of human identification, specifically of the unidentified dead, and the methods and the techniques used to undertake this work, including images made for documentation, identification and analysis. As gatekeeper of an organisation/ department/ facility/ service/ company who undertakes work relevant to this study, we are asking you to introduce this research study to the members of your organisation, to promote awareness of the study and encourage their participation (without prejudice).

- 1. I confirm that I have read and understand the information provided for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. []
2. I understand that participation of our organisation and students/members in the research is voluntary and that they are free to withdraw at any time, without giving a reason and that this will not affect legal rights. []
3. I understand that any personal information collected during the study will be anonymised and remain confidential. []
4. I agree for our organisation and students/members to take part in the above study. []
5. I agree to conform to the data protection act []

Table with 3 columns: Name of Gatekeeper, Date, Signature; Name of Researcher, Date, Signature; Name of Person taking consent (if different from researcher), Date, Signature.

CONSENT FORM

Laws of the Face *contemporary post-mortem depiction in art and science*

Name of Researcher and School/Faculty

Kathryn Smith, Face Lab
School of Art & Design, Faculty of Arts, Professional and Social Sciences

I understand the aim of this research study is to collect and analyse professional and transcultural attitudes and practices towards depicting the dead, towards a better understanding of the forensic and cultural work such depictions have done – and continue to do – in our contemporary experience.

I consent to participate in this project, the details of which have been explained to me, and I have been provided with a written information sheet to keep.

I understand that

- My consent to participate in this research includes participating in a semi-structured interview and that I may decline to answer certain questions without providing a reason for doing so
- the interview will be recorded (including written notes) and transcribed for reference purposes, and will be referenced in various academic literatures, lectures and presentations, including artistic interpretations produced in within the framework of practice-based research
- My professional affiliation will be recorded and that I may include any other personal information that I feel is relevant to accurately represent myself. If I do so, I accept that indirect identification may be possible, particularly if I occupy or practice a niche/specialized role
- I understand my involvement is confidential and that the information gained during the study may be published but no information about me will be used in any way that reveals my identity, unless I request otherwise
- I may review my interview transcript and make fact-based changes
- I may request a follow-up interview to correct or amend my responses before 31 July 2019
- I will be given the opportunity to review any audio and/or video clips from my interview prior to publication
- I understand that my explicit consent will be sought for each audio and/or video clip used from my interview
- I may withdraw from this study at any time without explanation or prejudice
- This data, including interview recordings and transcripts will be securely stored according to European Economic Area/United Kingdom data protection and privacy policies

CONTINUED ON FOLLOWING PAGE... /2

CONSENT FORM/p2

Laws of the Face *contemporary post-mortem depiction in art and science*

Name of Researcher and School/Faculty

Kathryn Smith, Face Lab

School of Art & Design, Faculty of Arts, Professional and Social Sciences

<i>Please tick to indicate consent</i>				
With the exception of a description of my professional/creative role, I would like to be anonymised	YES		NO	
I consent to the content of my interview being transferred in or out of the European Economic Area	YES		NO	
I consent to my interview being audio recorded	YES		NO	
I consent to statements made during this interview to be published verbatim in various academic literatures and used during lectures and presentations.	YES		NO	
For forensic artists/visual artists/photographers: I consent to any relevant images I have produced, and for which I hold copyright, to be published in various academic literatures and used during lectures and presentations to support any discussion or analysis of my work.	YES		NO	
I consent to my data, namely the content of my interview and related images (if appropriate), being held in secure digital storage for up to 5 years / indefinitely <i>delete which is not applicable</i>	YES		NO	

NAME (please print)		DATE
SIGNATURE		PLACE

AV CONSENT FORM

Laws of the Face *contemporary post-mortem depiction in art and science*

Name of Researcher and School/Faculty

Kathryn Smith, Face Lab
School of Art & Design, Faculty of Arts, Professional and Social Sciences

I understand that this study adopts a theoretically-informed, practice-based approach, and some research findings may be presented as artworks within an exhibition context, which must be documented and published in accordance with the requirements of creative work produced in partial fulfilment of a doctoral study.

I understand that

- I have participated in a recorded interview and noted my preferences for the inclusion or exclusion of personal information in relation to how I wish to be represented within the study
- I have read, understood and signed the general Consent Form (2 pages) to this end.
- The researcher has identified which audio/video clips deriving from this interview that she wishes to use within the construction of a multimedia artwork and has provided these to me to review.
- I am happy for these clips to be used within the production of this work, which will be published in the form of an exhibition, and may feature in any documentation that arises from this or future presentations.

Please tick to indicate consent			
I consent to the selected audio/video* clips from my research interview being used towards the production of research-related artworks as described by the researcher	YES		NO
<i>*delete whichever is not applicable. If no choice is indicated, consent to record on both media will be assumed.</i>			
I consent to the resulting artwork being publicly exhibited and documentation arising from said exhibition may be published in various media, and that I have no claim or control over where the researcher-artist chooses to exhibit or publish the work, or to any remuneration should the work be acquired by a collector or institution.	YES		NO

NAME (please print)	DATE
SIGNATURE	PLACE

SEMI-STRUCTURED INTERVIEW FRAMEWORK

Title of Project

Laws of the Face: contemporary post-mortem depiction in art and science

Name of Researcher and School/Faculty

Kathryn Smith

Face Lab, School of Art & Design, Faculty of Arts, Professional and Social Sciences

BACKGROUND & CONTEXT

This interview framework is informed by my experience of being a qualified forensic artist (MSc, Dundee 2013) with prior training in critical visual art (MAFA, Witwatersrand 1999), coupled with extensive practical curatorial experience and over ten years working in higher education.

I currently work in an environment that blends academic research with consultancy/service provision to law enforcement and museums/heritage agencies. I have observed that post-mortem identification and depiction, whether in forensic, archaeological, artistic, memorial or journalistic contexts, presents a range of professional, personal and legal demands and challenges. Some are shared, some differ, for various reasons, and between contexts and individual experience.

The framework is further shaped by informal conversations with a range of staff – pathologists, support officers and facility managers – at the Salt River Medico-legal mortuary (SRM) in Cape Town, South Africa during observational site visits. This facility is hosting the forensic component of my research (UCT HREC ref 772/2017), a retrospective records review of unidentified cases over the past decade. Here, we have discussed experiences of post-mortem identification (biometric and visual), the ethics of conducting research with post-mortem material in their specific working context, how political legacies have affected facility design which impacts on service delivery, and the contemporary conditions and demands of Cape Town's culturally diverse population. These conversations confirmed that identification processes can be frustrated (rather than assisted) by the number of stakeholders involved.

Speaking with the technical support officers at this facility was particularly useful. They are often overlooked as voices of authority as they seldom have any academic training. Yet they perform a range of essential tasks associated with post-mortem identification and representation, including visiting scenes, assisting at autopsies, and liaising with families, police and funeral industry representatives. They are the public-facing representatives of the day-to-day work of medico-legal investigation. Their roles require them to enact legislation and protocol, yet the conditions of their facility (caseload, infrastructure, training, experience, beliefs etc.,) might affect how required standards of practice are met.

Although this specific experience may not be shared by others working with identifying and depicting the deceased, similar challenges may be experienced between personal and the professional demands, and between practical experience and the requirements of protocol.

This framework is therefore designed to capture the wide diversity and complexity of experience of anyone who works to identify, represent and restore personhood to the unidentified dead.

ABOUT THE FRAMEWORK

The framework is divided into 5 categories of knowledge/experience, which also describe the analytical frameworks that will be used to organise and find links between the data gathered from the interview. It is recognised that there will be cross-over between them. The categories are:

1. **Work Context**
2. **Professional Experience**
3. **Terms of Reference**
4. **Policy and Procedure**
5. **Heuristic/Tacit Knowledge**

**Heuristic* is defined as ‘discovered through process, application or trial-and-error, or by loosely defined parameters/rules’

Tacit is defined as ‘understood or implied without being explicitly stated or articulated’

- Not all questions will be relevant to each participant, but you may recognise or relate to those who work in similar areas. **Please feel free to offer anecdotal opinion and observation**
- Your responses may generate further questions or ideas/issues/details I have not included here. **Please mention these as they may direct me towards unanticipated findings.**

BEFORE THE INTERVIEW

If consent forms are not returned **in advance** of the interview proceeding, please send these **with your completed interview document**.

BIOGRAPHICAL INFORMATION

Name	
Title	Choose an item.
Current role	
Professional Qualifications / Other training	
Gender	
Date & place of birth	
Country/city/institution where you are currently working	
How you wish to be identified? <i>Please note the following as stated on the PI sheet: [I understand that] My professional affiliation will be recorded and that I may include any other personal information that I feel is relevant to accurately represent myself.</i>	<input type="checkbox"/> Full anonymity <input type="checkbox"/> Full disclosure <input type="checkbox"/> Pseudonym
	Pseudonym: <i>please write your choice of name</i>

INTERVIEW PART A

This section of the interview, **PART A**, is designed to be completed by the participant in their own time, ahead of a follow-up interview. It is a combination of structured and open responses. It is designed to gather as much information about your work context and experience that I will use to inform our follow-up conversation.

LOOK OUT FOR CHECK-BOXES AND DROP-DOWN MENUS WITHIN THE TABLES.

PLEASE SELECT AS MANY OPTIONS FROM AS MANY SECTIONS THAT ARE RELEVANT TO YOU.

PLEASE COMPLETE AS MUCH INFORMATION AS YOU CAN AND SKIP THOSE SECTIONS THAT ARE NOT RELEVANT TO YOU

PART B (see p.9 onwards) contains examples of the kinds of questions the follow-up interview may cover. They are included here for you to think about in advance, and add any relevant talking points you feel are NOT covered by this framework. **If you would like to offer responses to these ahead of the follow-up, that would be very helpful, so please feel free to do so.**

1. WORK CONTEXT

What environments best describe your work environment or primary training/skills?

<input type="checkbox"/> FORENSIC ART	<input type="checkbox"/> FACIAL ID	<input type="checkbox"/> HUMAN ID
<input type="checkbox"/> MEDICO-LEGAL	<input type="checkbox"/> TECHNICIAN	<input type="checkbox"/> SUPPORT OFFICER
<input type="checkbox"/> FUNERAL INDUSTRY	<input type="checkbox"/> VOLUNTEER <i>please describe below</i>	<input type="checkbox"/> OTHER <i>please describe below</i>
<i>Further details specific to yourself</i>		

1.1 LAW ENFORCEMENT

Sworn officer Choose an item.	<input type="checkbox"/> Full-time artist	<input type="checkbox"/> Part-time artist
<i>please enter rank/role, and if your current role is different to past roles as a member of a law enforcement agency</i>		
<i>If forensic identification/art duties only take up part of your time, please describe your other duties/work and how you came to do forensic identification/art work in this context?</i>		
<i>Has your work environment/supervisors been supportive of this work? Please give details.</i>		

1.2 RESEARCH

<input type="checkbox"/> Full-time academic	<input type="checkbox"/> Part-time academic	<input type="checkbox"/> Postgrad Student
<input type="checkbox"/> Postdoc Researcher	<input type="checkbox"/> Research Fellow	<input type="checkbox"/> Research Associate
<p><i>Please describe your other duties/work and how you came to do forensic identification work in this context?</i></p>		
<p><i>Has your work environment/supervisors been supportive of this work? Please give details.</i></p>		

1.2.1 PRIMARY RESEARCH AREA/DISCIPLINE

<input type="checkbox"/> ANTHROPOLOGY <input type="checkbox"/> Bio/physical <input type="checkbox"/> Cultural/Social/Visual <input type="checkbox"/> Other <i>please describe below</i>	<input type="checkbox"/> ANATOMY <input type="checkbox"/> Pathology <input type="checkbox"/> Odontology <input type="checkbox"/> Other <i>please describe below</i>	<input type="checkbox"/> ARCHAEOLOGY <input type="checkbox"/> BIOMETRICS <input type="checkbox"/> PSYCHOLOGY <input type="checkbox"/> OTHER <i>please describe below</i>
<p><i>Please describe any other research interests or skills (whether or not they seem relevant to forensic identification work).</i></p>		
<p><i>Has your work environment/supervisors been supportive of your forensic work? Please give details (positive and negative).</i></p>		

1.3 VISUAL ART & DESIGN

<input type="checkbox"/> 2D media	<input type="checkbox"/> 3D media	<input type="checkbox"/> Digital media
<input type="checkbox"/> Photography	<input type="checkbox"/> Curatorial/archival	
<p><i>Please describe your training, preferred media and any other relevant information, and if you work in collaboration with a scientist when doing forensic identification work?</i></p>		

1.4 CIVIL SOCIETY

<input type="checkbox"/> Government	<input type="checkbox"/> NGO / other charity	<input type="checkbox"/> Other
<p><i>Please describe how you came to do forensic identification work in this context?</i></p>		

Has your work environment/supervisors been supportive of this work? Please give details.

1.5 OTHER

If your circumstances are not adequately represented by the above categories, please add details here

2. PROFESSIONAL EXPERIENCE IN FORENSIC IDENTIFICATION

PLEASE SELECT AS MANY OPTIONS AS ARE RELEVANT TO YOUR SITUATION/EXPERIENCE.

2.1 Professional Engagement in Forensic Facial Depiction/Identification

Please select which description best represents your particular situation and add any additional information that might be relevant to help me understand your engagement in forensic identification.

<input type="checkbox"/> Full-time	<input type="checkbox"/> Part-time	<input type="checkbox"/> Freelance / consulting
<input type="checkbox"/> Student	<input type="checkbox"/> Independent	<input type="checkbox"/> Other
<i>Any additional details</i>		

2.1.1 Forensic Art and Facial Identification Skills

<input type="checkbox"/> COMPOSITE SKETCH <i>a.k.a. suspect sketch; witness-memory drawing...</i>	<input type="checkbox"/> 2D drawn <input type="checkbox"/> 2D digital	<input type="checkbox"/> eFit <input type="checkbox"/> EVOFit/eFit-V <input type="checkbox"/> Other system	Preferred term: <i>If your personal preferred term differs to that used in your working environment, please specify and explain your preferred term</i>
<i>Additional information Method, technique/software/system; use of cognitive interview etc</i>			
<input type="checkbox"/> FACIAL RECONSTRUCTION <i>a.k.a. anatomical reconstruction; facial approximation ...</i>	<input type="checkbox"/> 2D drawn <input type="checkbox"/> 2D digital	<input type="checkbox"/> 3D clay sculpture <input type="checkbox"/> 3D computer <input type="checkbox"/> Automated system	Preferred term: <i>If your personal preferred term differs to that used in your working environment, please specify and explain your preferred term</i>

Are you provided with visual documentation or do you document the individual yourself?	<i>Provide details</i>	On-scene or in a laboratory setting?	<i>Provide details</i>
Additional information <i>Method, technique/software/system</i>			
Do you work directly on the skull?	Choose an item.	<input type="checkbox"/> Mould/cast	<input type="checkbox"/> 3D print
Additional information <i>Method, technique/software/system, use of tissue-depth data etc</i>			
<input type="checkbox"/> POST-MORTEM DEPICTION a.k.a image sanitisation; image 'clean-up'; image enhancement...	<input type="checkbox"/> 2D drawn <input type="checkbox"/> 2D digital	Preferred term: <i>If your personal preferred term differs to that used in your working environment, please specify and explain your preferred term</i>	
Additional information <i>Method, technique/software/system etc</i>			
<input type="checkbox"/> AGE PROGRESSION	<input type="checkbox"/> 2D drawn <input type="checkbox"/> 2D digital	<input type="checkbox"/> 3D clay sculpture	<input type="checkbox"/> 3D computer <input type="checkbox"/> Automated system
Additional information <i>Method, technique/software/system etc</i>			

<input type="checkbox"/> CRANIOFACIAL (skull-face) SUPERIMPOSITION	<i>Method; technique/software/system</i>
<input type="checkbox"/> FACIAL ANALYSIS	<i>Method; technique/software/system</i>
<input type="checkbox"/> FACIAL COMPARISON	<i>Method; technique/software/system</i>
<input type="checkbox"/> INJURY DEPICTION / 'BODY MAPPING'	<i>Method; technique/software/system</i>
<input type="checkbox"/> SCENE RECONSTRUCTION	<i>Method; technique/software/system</i>
ADDITIONAL INFORMATION <i>Any other methods or techniques of demonstrative evidence you produce/have contributed to?</i>	

2.1.2 Casework Experience

a. Have you kept a record of how many cases you have done? Choose an item.

Technique	Total #	Training situation	In the field	Comments
Suspect composite				
Facial reconstruction				
Post-mortem depiction				
Age progression				
Craniofacial Superimposition				

b. On average, how long does it take you to complete a particular case?

Technique	Total #	Training situation	In the field	Comments
Suspect composite				
Facial reconstruction				
Post-mortem depiction				
Age progression				

Craniofacial Superimposition				
-------------------------------------	--	--	--	--

c.	How many depictions have produced recognitions and led to positive identifications?
d.	Do you get regular feedback from investigators about progress/resolution on cases you have contributed to? <i>Please give details</i>

2.2 Engagement in related fields

2.2.1. Forensic Anthropology

Please describe your role, areas of expertise/experience and if you have engaged a forensic artist or related skills in your work

2.2.2 Forensic Pathology

Please describe your role, areas of expertise/experience and if you have engaged a forensic artist or related skills in your work

2.2.3 Forensic Odontology

Please describe your role, areas of expertise/experience and if you have engaged a forensic artist or related skills in your work

2.2.4 Technician/Support Officer/Volunteer/Civil Society

Please describe your role, areas of expertise/experience and if you have engaged a forensic artist or related skills in your work

2.2.6 Funeral industry

embalmer, post-mortem facial reconstruction for funeral purposes

Please describe your role, areas of expertise/experience and if you have engaged a forensic artist or related skills in your work

2.2.7 Visual artist or journalist

with the experience of directly observing/recording forensic processes, methods or environments

Please describe your role, areas of expertise/experience and if you have engaged a forensic artist or related skills in your work

2.8 OTHER

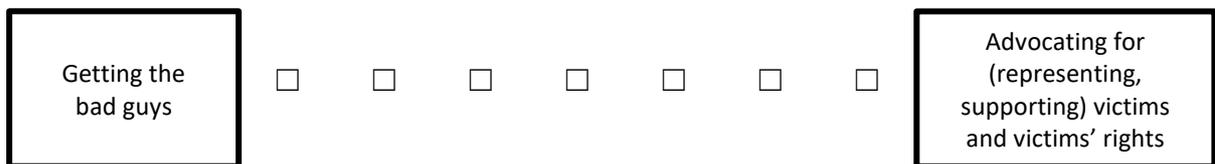
If the above roles do not adequately describe your experience, please give details

2.9 MOTIVATIONS

What is the main reason why you work in forensic human identification?

A common answer is 'justice', but justice can take many forms.

Please select a node on the spectrum below that best represents your primary motivations:



Please feel free add any additional comments about your answer:

INTERVIEW PART B: OPEN RESPONSE

THE QUESTIONS LISTED HERE ARE EXAMPLES AND WILL BE TAILORED TO YOUR EXPERIENCE BASED ON YOUR RESPONSES TO PART A

If you would like to offer responses to these ahead of our conversation, please feel free to do so.

2.10 PROFESSIONAL EXPERIENCE continued

a.	What is your experience of unidentified or unknown individuals? <i>Have you experienced working with the dead directly, or is your experience only with images and related documentation?</i>
<i>Enter your response here</i>	
b.	Have you worked in the same or different role elsewhere to your current position? <i>Do you have comparative or useful experience from previous work?</i>
<i>Enter your response here</i>	
c.	How did you get involved in this work? <i>Was a past personal experience a factor? Please provide details if you are comfortable doing so.</i>
<i>Enter your response here</i>	
d.	What is your experience of working with related/partner services (for example, police, medical examiners, colleagues in the same field from other contexts)?
<i>Enter your response here</i>	
e.	Are you involved in any other research using post-mortem material? <i>Have you experienced any particular ethical challenges in this regard?</i>
<i>Enter your response here</i>	
f.	Does the experience of conducting visual identifications/producing forensic depictions match your training?
<i>Enter your response here</i>	
g.	Do you feel confident you have all the skills necessary to do your job?
<i>Enter your response here</i>	
h.	Have you been personally affected by the unresolved death or disappearance of someone close to you? <i>Please provide details if you are comfortable doing so.</i>
<i>Enter your response here</i>	
i.	Do you have capital punishment (death penalty) in your state or country? <input type="checkbox"/> YES <input type="checkbox"/> NO

3 TERMS OF REFERENCE

a.	How do you refer to deceased persons in your professional and everyday language? <i>e.g. 'body', 'patient', 'individual' etc.</i>
Enter your response here	
b.	Do you/your agency use any specific terms for unidentified individuals? <i>e.g. John/Jane Doe, nicknames?</i>
Enter your response here	
c.	Do you define a difference between a 'corpse', a 'cadaver', a 'body', 'remains'? <i>Please give details</i>
Enter your response here	
d.	How do you experience or understand the concept of race in relation to human identification? <i>Do you use words that describe people in terms of their race? What terminology do you use?</i>
Enter your response here	
e.	Do you consider the dead body an object or a subject?
Enter your response here	
f.	What do you regard as 'key' cases? <i>These could be your own or casework you are aware of that is noteworthy/instructional – for positive or negative reasons? Please give details</i>
Enter your response here	
g.	Have you had any particularly noteworthy experiences in your work, whether positive or negative? <i>Please give details</i>
Enter your response here	
h.	Have there been any instances where you have seen post-mortem published in the media that you regarded as inappropriate, unethical, unnecessary or in poor taste? <i>Please give details</i>
Enter your response here	
i.	How do you understand the relationship between forensic/evidential art and facial identification? <i>Do you regard them as two completely separate fields, or related areas of work? Please give details</i>
Enter your response here	

4 POLICY AND PROCEDURE

a.	In your experience, does the handling of unnatural deaths as a result of interpersonal violence differ in any way from deaths as a result of other circumstances (e.g. accidents, mass fatality, suicide?)
<i>Enter your response here</i>	
b.	Does your agency engage in any sort of triage system in respect of investigation and identification processes? <i>In other words, are cases or projects prioritised, and if so, what informs those decisions?</i>
<i>Enter your response here</i>	
c.	Under what circumstances might you attend a crime/recovery scene?
<i>Enter your response here</i>	
d.	How is the deceased prepared for visual identification by next-of-kin in your medico-legal context? <i>e.g. In cases of facial trauma, is some form of facial restoration or partial covering attempted to ameliorate the experience? Please provide details</i>
<i>Enter your response here</i>	
e.	Does it make a difference to your work if visual identification takes place before or after autopsy? <i>Please provide details</i>
<i>Enter your response here</i>	
f.	Do you think any restrictions should be placed on publishing or circulating images of the dead? <i>Please provide details</i>
<i>Enter your response here</i>	

4.1 Standards, Reporting & Peer-Review

a.	Do you reference any professional or scientific standards or guidelines in your work? <i>Please give details</i>
<i>Enter your response here</i>	
b.	Do you follow any particular personal rules or guidelines in your work specifically regarding post-mortem representations? <i>Please give details</i>
<i>Enter your response here</i>	
c.	Do you write reports on your casework? Choose an item.

d.	Do you have a standard format for your reports? Can you provide an example? (redacted if necessary) <i>If an example is not available, can you describe what kind of information would you include in a casework report?</i>
<i>Enter your response here</i>	
e.	Under what circumstances would you not write a report?
<i>Enter your response here</i>	
f.	Do you use a peer-review system for your casework and/or reports? Choose an item.
<i>Enter your response here</i>	
g.	When do you engage in peer-review? Choose an item.
Who serves in this role? <i>Please give details</i>	
h.	Are you a member of any professional organisations? <i>Please give details</i>
<i>Enter your response here</i>	
i.	Do you have professional accreditation or certification? <i>Please give details</i>
<i>Enter your response here</i>	
j.	Have you experienced any particular ethical or professional challenges regarding access, publication, or commercial aspects of your work? <i>Please give details</i>
<i>Enter your response here</i>	

5 HEURISTIC/TACIT KNOWLEDGES

a.	How frequently do you have contact with family members in the process of death investigation or identification?
<i>Enter your response here</i>	
b.	What is your experience of encountering families at a scene versus at a mortuary, or at an agency (or during cold case investigations, for example)?
<i>Enter your response here</i>	
c.	What role do you think the visual identification process represents for the families or next of kin? <i>Is it part of a process of mourning or bereavement, for example? Something else?</i>
<i>Enter your response here</i>	

d.	Have you experienced any challenges or insights regarding the role of cultural/religious beliefs in how families approach the identification process?
Enter your response here	
e.	What are some noteworthy or memorable things families have requested regarding the visual identification/representation process?
Enter your response here	
f.	Do you experience an emotional burden associated with your work? <i>If so, do you have ways to manage it?</i>
Enter your response here	
g.	What importance do you think the visual style of a post-mortem depiction has on how effective it is? <i>Please offer your own examples, either images you have produced, or those you have seen or admire, or regard as problematic, for whatever reason.</i>
Enter your response here	
h.	What effects, if any, do you think depictions of the dead as 'alive' (for forensic ID purposes or historical education, such as PMDs or reconstructions from the skull) might have on relatives or descendants? <i>Do you see any ethical issues in producing such images? Do you think such depictions should express emotion?</i>
Enter your response here	
i.	What is the biggest challenge for you in your work environment?
Enter your response here	

5.1 The Impact of the Digital

a.	What is your experience of how digital technology has impacted your work? Do you embrace or resist new technologies?
Enter your response here	
b.	Do you share casework on social media or elsewhere online? <i>Please give details</i>
Enter your response here	
c.	Do you follow any forensic art/cold case social media groups or pages? <i>Please give details</i>
Enter your response here	
d.	In your opinion, what are the benefits and the cautions of the digital in relation to post-mortem representation? <i>This might be the availability of new technologies and data storage/sharing between colleagues and environments, but also the internet, online culture and social media?</i>
Enter your response here	

5.2 For forensic artists (suspect composites or post-mortem reconstructions/representations)

a.	What is your opinion of the statement ‘Forensic Art is a complex and fragmented field?’
<i>Enter your response here</i>	
b.	How do you think the experience of forensic artists working within law enforcement (civilian support or sworn officers) differs from those working as freelancers or within a research environment?
<i>Enter your response here</i>	
c.	What are your views on redoing a facial depiction case done by another artist/officer?
<i>Enter your response here</i>	
d.	What are benefits and challenges to the lack of regulation around forensic art methods and standards?
<i>Enter your response here</i>	
e.	What do you hope to achieve with your work? <i>What response would you hope it elicits?</i>
<i>Enter your response here</i>	
f.	Do you have work you are permitted to/would be happy to share to be included in the study? <i>Please give details</i>
<i>Enter your response here</i>	

6 AND FINALLY...

What other questions should I be asking?
<i>Enter your response here</i>
<p>Do you wish to make any further comments regarding how you see the future of visual identification of the dead?</p> <p><i>Here you may wish to comment on personal beliefs (moral, ethical, religious) about how the dead should be treated, whether identified in death, or not.</i></p> <p><i>Should families respect their wishes (if known) regarding burial/cremation/organ or whole-body donation? What ideally should happen to unclaimed or unidentified persons (burial/cremation/body donation etc)?</i></p>
<i>Enter your response here</i>

SEMI-STRUCTURED INTERVIEW FRAMEWORK

Title of Project

Laws of the Face: contemporary post-mortem depiction in art and science

Name of Researcher and School/Faculty

Kathryn Smith

Face Lab, School of Art & Design, Faculty of Arts, Professional and Social Sciences

BACKGROUND & CONTEXT

This interview framework is informed by my experience of being a qualified forensic artist (MSc, Dundee 2013) with prior training in critical visual art (MAFA, Witwatersrand 1999), coupled with extensive practical curatorial experience and over ten years working in higher education.

I currently work in an environment that blends academic research with consultancy/service provision to law enforcement and museums/heritage agencies. I have observed that post-mortem identification and depiction, whether in forensic, archaeological, artistic, memorial or journalistic contexts, presents a range of professional, personal and legal demands and challenges. Some are shared, some differ, for various reasons, and between contexts and individual experience.

The framework is further shaped by informal conversations with a range of staff – pathologists, support officers and facility managers – at the Salt River Medico-legal mortuary (SRM) in Cape Town, South Africa during observational site visits. This facility is hosting the forensic component of my research (UCT HREC ref 772/2017), a retrospective records review of unidentified cases over the past decade. Here, we have discussed experiences of post-mortem identification (biometric and visual), the ethics of conducting research with post-mortem material in their specific working context, how political legacies have affected facility design which impacts on service delivery, and the contemporary conditions and demands of Cape Town's culturally diverse population. These conversations confirmed that identification processes can be frustrated (rather than assisted) by the number of stakeholders involved.

Speaking with the technical support officers at this facility was particularly useful. They are often overlooked as voices of authority as they seldom have any academic training. Yet they perform a range of essential tasks associated with post-mortem identification and representation, including visiting scenes, assisting at autopsies, and liaising with families, police and funeral industry representatives. They are the public-facing representatives of the day-to-day work of medico-legal investigation. Their roles require them to enact legislation and protocol, yet the conditions of their facility (caseload, infrastructure, training, experience, beliefs etc.,) might affect how required standards of practice are met.

Although this specific experience may not be shared by others working with identifying and depicting the deceased, similar challenges may be experienced between personal and the professional demands, and between practical experience and the requirements of protocol.

This framework is therefore designed to capture the wide diversity and complexity of experience of anyone who works to identify, represent and restore personhood to the unidentified dead.

ABOUT THE FRAMEWORK

The framework is divided into 5 categories of knowledge/experience, which also describe the analytical frameworks that will be used to organise and find links between the data gathered from the interview. It is recognised that there will be cross-over between them. The categories are:

1. **Work Context**
2. **Professional Experience**
3. **Terms of Reference**
4. **Policy and Procedure**
5. **Heuristic/Tacit Knowledge**

***Heuristic** is defined as ‘discovered through process, application or trial-and-error, or by loosely defined parameters/rules’

Tacit is defined as ‘understood or implied without being explicitly stated or articulated’

- Not all questions will be relevant to each participant, but you may recognise or relate to those who work in similar areas. **Please feel free to offer anecdotal opinion and observation**
- Your responses may generate further questions or ideas/issues/details I have not included here. **Please mention these as they may direct me towards unanticipated findings.**

BEFORE THE INTERVIEW

If consent forms are not returned **in advance** of the interview proceeding, please send these **with your completed interview document**. Email is fine: either digital signature in PDF or printed/signed/scanned and converted to PDF. Thank you!

BIOGRAPHICAL INFORMATION

Name	
Title	Choose an item.
Current role	
Professional Qualifications / Other training	
Gender	
Date & place of birth	
Country/city/institution where you are currently working	
How you wish to be identified? Please note the following as stated on the PI sheet: [I understand that] <i>My professional affiliation will be recorded and that I may include any other personal information that I feel is relevant to accurately represent myself.</i>	<input type="checkbox"/> Full anonymity <input type="checkbox"/> Full disclosure <input type="checkbox"/> Pseudonym
	Pseudonym: please write your choice of name

INTERVIEW

This version of the interview, designed to be completed by the participant in their own time where circumstances do not permit a face-to-face-interview, is a combination of structured questions (checkboxes, drop-down lists) and open responses.

PLEASE SELECT AS MANY OPTIONS FROM AS MANY SECTIONS THAT ARE RELEVANT TO YOUR SITUATION.

PLEASE COMPLETE AS MUCH INFORMATION AS YOU CAN AND SKIP THOSE SECTIONS THAT ARE NOT RELEVANT TO YOU

1. WORK CONTEXT

What environments best describe your work environment or primary training/skills?

<input type="checkbox"/> FORENSIC ART	<input type="checkbox"/> FACIAL ID	<input type="checkbox"/> HUMAN ID
<input type="checkbox"/> MEDICO-LEGAL	<input type="checkbox"/> TECHNICIAN	<input type="checkbox"/> SUPPORT OFFICER
<input type="checkbox"/> FUNERAL INDUSTRY	<input type="checkbox"/> VOLUNTEER <i>please describe below</i>	<input type="checkbox"/> OTHER <i>please describe below</i>
<i>Further details specific to yourself</i>		

1.1 LAW ENFORCEMENT

Sworn officer Choose an item.	<input type="checkbox"/> Full-time artist	<input type="checkbox"/> Part-time artist
<i>please enter rank/role, and if your current role is different to past roles as a member of a law enforcement agency</i>		
<i>If forensic identification/art duties only take up part of your time, please describe your other duties/work and how you came to do forensic identification/art work in this context?</i>		
<i>Has your work environment/supervisors been supportive of this work? Please give details.</i>		

1.2 RESEARCH

<input type="checkbox"/> Full-time academic	<input type="checkbox"/> Part-time academic	<input type="checkbox"/> Postgrad Student
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<input type="checkbox"/> Postdoc Researcher	<input type="checkbox"/> Research Fellow	<input type="checkbox"/> Research Associate
<i>Please describe your other duties/work and how you came to do forensic identification work in this context?</i>		
<i>Has your work environment/supervisors been supportive of this work? Please give details.</i>		

1.2.1 PRIMARY RESEARCH AREA/DISCIPLINE

<input type="checkbox"/> ANTHROPOLOGY <input type="checkbox"/> Bio/physical <input type="checkbox"/> Cultural/Social/Visual <input type="checkbox"/> Other <i>please describe below</i>	<input type="checkbox"/> ANATOMY <input type="checkbox"/> Pathology <input type="checkbox"/> Odontology <input type="checkbox"/> Other <i>please describe below</i>	<input type="checkbox"/> ARCHAEOLOGY <input type="checkbox"/> BIOMETRICS <input type="checkbox"/> PSYCHOLOGY <input type="checkbox"/> OTHER <i>please describe below</i>
<i>Please describe any other research interests or skills (whether or not they seem relevant to forensic identification work).</i>		
<i>Has your work environment/supervisors been supportive of your forensic work? Please give details (positive and negative).</i>		

1.3 VISUAL ART & DESIGN

<input type="checkbox"/> 2D media	<input type="checkbox"/> 3D media	<input type="checkbox"/> Digital media
<input type="checkbox"/> Photography	<input type="checkbox"/> Curatorial/archival	
<i>Please describe your training, preferred media and any other relevant information, and if you work in collaboration with a scientist when doing forensic identification work?</i>		

1.4 CIVIL SOCIETY

<input type="checkbox"/> Government	<input type="checkbox"/> NGO / other charity	<input type="checkbox"/> Other
<i>Please describe how you came to do forensic identification work in this context?</i>		
<i>Has your work environment/supervisors been supportive of this work? Please give details.</i>		

1.5 OTHER

If your circumstances are not adequately represented by the above categories, please add details here

2. PROFESSIONAL EXPERIENCE IN FORENSIC IDENTIFICATION

PLEASE SELECT AS MANY OPTIONS AS ARE RELEVANT TO YOUR SITUATION.

2.1 Professional Engagement in Forensic Facial Depiction/Identification

Please select which description best represents your particular situation and add any additional information that might be relevant to help me understand your engagement in forensic identification.

<input type="checkbox"/> Full-time	<input type="checkbox"/> Part-time	<input type="checkbox"/> Freelance / consulting
<input type="checkbox"/> Student	<input type="checkbox"/> Independent	<input type="checkbox"/> Other
Any additional details		

2.1.1 Forensic Art and Facial Identification Skills

<input type="checkbox"/> COMPOSITE SKETCH <i>a.k.a. suspect sketch; witness-memory drawing...</i>	<input type="checkbox"/> 2D drawn <input type="checkbox"/> 2D digital	<input type="checkbox"/> eFit <input type="checkbox"/> EVOFit/eFit-V <input type="checkbox"/> Other system	Preferred term: <i>If your personal preferred term differs to that used in your working environment, please specify and explain your preferred term</i>
Additional information Method, technique/software/system; use of cognitive interview etc			
<input type="checkbox"/> FACIAL RECONSTRUCTION <i>a.k.a. anatomical reconstruction; facial approximation ...</i>	<input type="checkbox"/> 2D drawn <input type="checkbox"/> 2D digital	<input type="checkbox"/> 3D clay sculpture <input type="checkbox"/> 3D computer <input type="checkbox"/> Automated system	Preferred term: <i>If your personal preferred term differs to that used in your working environment, please specify and explain your preferred term</i>
Are you provided with visual documentation or do you document the individual yourself?	<i>Provide details</i>	On-scene or in a laboratory setting?	<i>Provide details</i>
Additional information Method, technique/software/system			
Do you work directly on the skull?	Choose an item.	<input type="checkbox"/> Mould/cast	<input type="checkbox"/> 3D print
Additional information Method, technique/software/system, use of tissue-depth data etc			

<input type="checkbox"/> POST-MORTEM DEPICTION a.k.a image sanitisation; image 'clean-up'; image enhancement...	<input type="checkbox"/> 2D drawn <input type="checkbox"/> 2D digital	Preferred term: <i>If your personal preferred term differs to that used in your working environment, please specify and explain your preferred term</i>
<i>Additional information Method, technique/software/system etc</i>		
<input type="checkbox"/> AGE PROGRESSION	<input type="checkbox"/> 2D drawn <input type="checkbox"/> 2D digital	<input type="checkbox"/> 3D clay sculpture <input type="checkbox"/> 3D computer <input type="checkbox"/> Automated system
<i>Additional information Method, technique/software/system etc</i>		

<input type="checkbox"/> CRANIOFACIAL (skull-face) SUPERIMPOSITION	<i>Method; technique/software/system</i>
<input type="checkbox"/> FACIAL ANALYSIS	<i>Method; technique/software/system</i>
<input type="checkbox"/> FACIAL COMPARISON	<i>Method; technique/software/system</i>
<input type="checkbox"/> INJURY DEPICTION / 'BODY MAPPING'	<i>Method; technique/software/system</i>
<input type="checkbox"/> SCENE RECONSTRUCTION	<i>Method; technique/software/system</i>
ADDITIONAL INFORMATION <i>Any other methods or techniques of demonstrative evidence you produce/have contributed to?</i>	

2.1.2 Casework Experience

a. **Have you kept a record of how many cases you have done?** Choose an item.

Technique	Total #	Training situation	In the field	Comments
Suspect composite				
Facial reconstruction				
Post-mortem depiction				
Age progression				
Craniofacial Superimposition				

b. **On average, how long does it take you to complete a particular case?**

Technique	Total #	Training situation	In the field	Comments
Suspect composite				
Facial reconstruction				
Post-mortem depiction				
Age progression				
Craniofacial Superimposition				

c.	How many depictions have produced recognitions and led to positive identifications?

d.	Do you get regular feedback from investigators about progress/resolution on cases you have contributed to? Please give details

2.2 Engagement in related fields

2.2.1. Forensic Anthropology

Please describe your role, areas of expertise/experience and if you have engaged a forensic artist or related skills in your work

2.2.2 Forensic Pathology

Please describe your role, areas of expertise/experience and if you have engaged a forensic artist or related skills in your work

2.2.3 Forensic Odontology

Please describe your role, areas of expertise/experience and if you have engaged a forensic artist or related skills in your work

2.2.4 Technician/Support Officer/Volunteer/Civil Society

Please describe your role, areas of expertise/experience and if you have engaged a forensic artist or related skills in your work

2.2.6 Funeral industry

embalmer, post-mortem facial reconstruction for funeral purposes

Please describe your role, areas of expertise/experience and if you have engaged a forensic artist or related skills in your work

2.2.7 Visual artist or journalist

with the experience of directly observing/recording forensic processes, methods or environments

Please describe your role, areas of expertise/experience and if you have engaged a forensic artist or related skills in your work

2.8 OTHER

If the above roles do not adequately describe your experience, please give details

2.9 OPEN RESPONSE

*Please indicate whatever is not relevant to your experience with **N/A***

a.	What is your experience of unidentified or unknown individuals? <i>Have you experienced working with the dead directly, or is your experience only with images and related documentation?</i>
b.	Have you worked in the same or different role elsewhere to your current position? <i>Do you have comparative or useful experience from previous work?</i>
c.	How did you get involved in this work? <i>Was a past personal experience a factor? Please provide details if you are comfortable doing so.</i>
d.	What is your experience of working with related/partner services (for example, police, medical examiners, colleagues in the same field from other contexts)?
e.	Are you involved in any other research using post-mortem material? <i>Have you experienced any particular ethical challenges in this regard?</i>
f.	Does the experience of conducting visual identifications/producing forensic depictions match your training?
g.	Do you feel confident you have all the skills necessary to do your job?
h.	Have you been personally affected by the unresolved death or disappearance of someone close to you? <i>Please provide details if you are comfortable doing so.</i>

3 TERMS OF REFERENCE

a.	How do you refer to deceased persons in your professional and everyday language? <i>e.g. 'body', 'patient', 'individual' etc.</i>
b.	Do you/your agency use any specific terms for unidentified individuals? <i>e.g. John/Jane Doe, nicknames?</i>
c.	Do you define a difference between a 'corpse', a 'cadaver', a 'body', 'remains'? <i>Please give details</i>
d.	How do you experience or understand the concept of race in relation to human identification? <i>Do you use words that describe people in terms of their race? What terminology do you use?</i>
e.	Do you consider the dead body an object or a subject?
f.	What do you regard as 'key' cases? <i>These could be your own or casework you are aware of that is noteworthy/instructional – for positive or negative reasons? Please give details</i>
g.	Have you had any particularly noteworthy experiences in your work, whether positive or negative? <i>Please give details</i>
h.	Have there been any instances where you have seen post-mortem published in the media that you regarded as inappropriate, unethical, unnecessary or in poor taste? <i>Please give details</i>
i.	How do you understand the relationship between forensic/evidential art and facial identification? <i>Do you regard them as two completely separate fields, or related areas of work? Please give details</i>

4 POLICY AND PROCEDURE

a.	In your experience, does the handling of unnatural deaths as a result of interpersonal violence differ in any way from deaths as a result of other circumstances (e.g. accidents, mass fatality, suicide?)
b.	Does your agency engage in any sort of triage system in respect of investigation and identification processes? <i>In other words, are cases or projects prioritised, and if so, what informs those decisions?</i>
c.	Under what circumstances might you attend a crime/recovery scene?
d.	How is the deceased prepared for visual identification by next-of-kin in your medico-legal context? <i>e.g. In cases of facial trauma, is some form of facial restoration or partial covering attempted to ameliorate the experience? Please provide details</i>
e.	Does it make a difference to your work if visual identification takes place before or after autopsy? <i>Please provide details</i>
f.	Do you think any restrictions should be placed on publishing or circulating images of the dead? <i>Please provide details</i>

4.1 Standards, Reporting & Peer-Review

a.	Do you reference any professional or scientific standards or guidelines in your work? <i>Please give details</i>
b.	Do you follow any particular personal rules or guidelines in your work specifically regarding post-mortem representations? <i>Please give details</i>

c.	Do you write reports on your casework? Choose an item.
d.	Do you have a standard format for your reports? Can you provide an example? (redacted if necessary) <i>If an example is not available, can you describe what kind of information would you include in a casework report?</i>
e.	Under what circumstances would you not write a report?
f.	Do you use a peer-review system for your casework and/or reports? Choose an item.
g.	When do you engage in peer-review? Choose an item.
Who serves in this role? <i>Please give details</i>	
h.	Are you a member of any professional organisations? <i>Please give details</i>
i.	Do you have professional accreditation or certification? <i>Please give details</i>
j.	Have you experienced any particular ethical or professional challenges regarding access, publication, or commercial aspects of your work? <i>Please give details</i>

5 HEURISTIC/TACIT KNOWLEDGES

a.	How frequently do you have contact with family members in the process of death investigation or identification?
b.	What is your experience of encountering families at a scene versus at a mortuary, or at an agency (or during cold case investigations, for example)?
c.	What role do you think the visual identification process represents for the families or next of kin? <i>Is it part of a process of mourning or bereavement, for example? Something else?</i>

d.	Have you experienced any challenges or insights regarding the role of cultural/religious beliefs in how families approach the identification process?
e.	What are some noteworthy or memorable things families have requested regarding the visual identification/representation process?
f.	Do you experience an emotional burden associated with your work? <i>If so, do you have ways to manage it?</i>
g.	What importance do you think the visual style of a post-mortem depiction has on how effective it is? <i>Please offer your own examples, either images you have produced, or those you have seen or admire, or regard as problematic, for whatever reason.</i>
h.	What effects, if any, do you think depictions of the dead as 'alive' (for forensic ID purposes or historical education, such as PMDs or reconstructions from the skull) might have on relatives or descendants? <i>Do you see any ethical issues in producing such images? Do you think such depictions should express emotion?</i>
i.	For forensic artists, do you have work you are permitted to/would be happy to share to be included in the study? <i>Please give details</i>
j.	What do you hope to achieve with your work? <i>What response would you hope it elicits?</i>

5.1 The Impact of the Digital

a.	What is your experience of how digital technology has impacted your work? <i>This might be the availability of new technologies and data storage/sharing between colleagues and environments, but also the internet, online culture and social media?</i>
b.	Do you share casework on social media or elsewhere online? <i>Please give details</i>

c.	Do you follow any forensic art/cold case social media groups or pages? Please give details
d.	In your opinion, what are the benefits and the cautions of the digital in relation to post-mortem representation?

AND FINALLY...

What other questions should I be asking?
Do you wish to make any further comments regarding how you see the future of visual identification of the dead?
<i>Here you may wish to comment on personal beliefs (moral, ethical, religious) about how the dead should be treated, whether identified in death, or not.</i>
<i>Should families respect their wishes (if known) regarding burial/cremation/organ or whole-body donation</i>
<i>What ideally should happen to unclaimed or unidentified persons (burial/cremation/body donation etc)?</i>

Thank you for your participation in my PhD research project 'Laws of the Face', exploring post-mortem human identification and representations.

This question was developed for a revised version of the research questionnaire to which you had already offered responses (thank you). In the interests of capturing and analysing all responses equally, I am hoping you will agree to offer a response to this final question.

It is a Likert scale which captures a numerical score between 1 and 7, from left to right, based on your affinity to the respective statements. Checking box 1 indicates your closest affinity to the statement 'getting the bad guys' and checking box 7 indicates your closest affinity to the statement 'Advocating for victims and victims' rights', and so on.

You simply need to hover your cursor over the box, click it, and an X will appear in the box of your choice.

You may also add additional comments qualifying/explaining your choice below the scale.

You may not feel this question adequately captures your primary motivations for working in this field. You are free not to check a box, but please do add comments about your choice.

Any questions, please contact me at K.A.Smith@2015.ljmu.ac.uk

Kathryn Smith

Question 2.9 Motivations

What is the main reason why you work in forensic human identification?

A common answer is 'justice', but justice can take many forms.

Please select a node on the spectrum below that best represents your primary motivations:

Getting the bad guys	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Advocating for (representing, supporting) victims and victims' rights
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Please feel free add any additional comments about your answer:

Appendix 3: Additional Materials for Chapter 3

An Entangled Legacy: medico-legal services and forensic identification in South Africa

The system and structures of medicolegal investigation of death in South Africa have developed over many decades as a function of the complex political, constitutional and geographic dispensations that have prevailed in this country over the last century or more. The lack of efficiency, competence and justness of the system is indeed reflected in numerous instances of dispute, disciplinary hearings and lack of faith and confidence often expressed by the community. (n.a., 2000: 1)

During 1994, the year in which South African made the formal transition from the apartheid regime to democracy via the first democratic elections, the forensic pathology community requested mortuaries be transferred from SAPS to the Department of Health.¹ On 29 April 1998, Cabinet resolved to investigate the matter and a task team was duly appointed. Their findings are detailed in the document *Report on the Investigation into the Transfer of Medicolegal Mortuaries* (n.a., 2000). Its opening lines are quoted above.

The report wastes no time outlining the reasons why medico-legal services were “in need of radical change” towards a service that is “transparent and uniform”, “more competent, easily accessible, user-friendly, independent and cost-effective.” The desired transformation of the service, acknowledged with “no question” as protecting the rights of the individual and the community and thus is the responsibility of the State, is explicitly framed in the context of South Africa turning towards a culture of human rights. Indeed the “lack of efficiency, competence and justness” of the previous system had been performed on a global public stage as we watched the Truth and Reconciliation Commission (TRC) conduct hearings in apartheid’s atrocities across the country. It was impossible to separate the state-sanctioned violence recounted in these sessions – political disappearances, police torture and corrupted reports about deaths in detention – from the agents who carried out these missions, very often members of the South African Police.

¹ 1994 also saw the dissolution of the South African Police, referred to previously as a ‘force’, and its reorganisation as a ‘service’, hence SAPS – South African Police Service.

Further, the report recognises the services rendered by medico-legal assistants in mortuaries as a health function, and sees this as distinct from police work. Changes to police salary structures in 1996 had made it “almost impossible” to attract and maintain members in medico-legal assistant roles due to the loss of additional compensation they previously received for carrying out this “repugnant” work (n.a., 2000: 1) But a paragraph from section 1.1 (n.a., 2000: 2) is worth quoting in full as it speaks directly to matters of care in forensic deathwork that are seen here to be in excess of police training and function (although one would hope members possess some basic sensitivity in these matters given South Africa’s conditions):

A function that cannot be overemphasised is the interaction with grief-stricken members of the public. The environment and circumstances in this regard are very unsatisfactory. Everyone knows the harsh and sordid conditions that prevail at most State mortuaries. It is certainly no place to find solace when confronted by the death of a loved one and it is indeed, during the interviewing for identification purposes, often the last place the latter is seen. Police are not trained in these functions, and these are indeed not the reasons for a person choosing to become a member of the police. Special efforts should be made to enhance and maintain the aesthetic appeal of these institutions and in providing at least in some degree for the needs of the bereaved.

The report sets out eight reasons that “the police should therefore cease to provide medicolegal mortuary services and of being the custodians of the dead,” describing *inter alia* past abuses of power that would be mitigated by a civilian agency; conflict of interest in the simultaneous custodianship of criminal evidence and the dead (citing the “huge workload” of the Independent Complaints Directorate as evidence of this) and the disciplinary authority of medico-legal death investigation as a science, and its attendant forensic responsibilities (giving evidence in court) requiring standardised and monitored protocols. Working with the bereaved and “looking after the dead” is framed as a “socio-medical function,” recognising the skills required to gather sensitive information from next-of-kin without compromising the death investigation. The last reason cites the TRC’s independent recommendation that the health sector assume control of this work, acknowledging similar injunctions received from Amnesty International, Human Rights Watch and the World Health Organisation (n.a., 2000: 3), leaving no doubt as to the powerful humanitarian interests motivating the transfer.

Policies, Procedures and Legislation

A new policy framework for the restructuring of medico-legal services was adopted in October 1997, its aims encapsulated in its mission statement (n.a., 2000: 3):

The mission of medicolegal services is **to ensure the development of a just South African society**; endeavor to **protect the rights** of persons; **establish the independence** of medical and related scientists; ensure **participation of society** in the service; ensure that the service is rendered within a **uniform** system; ensure that the service is **equitable, efficient and cost-effective**; ensure the promotion of relevant **education, training and research**; rectify the deprived state of the service; provide for the specific needs of those persons rendering the service and establish **adequate data collection and processing**. [my emphasis]

In 2005, the Forensic Pathology Services Strategic Plan was finalised (Departments of Health/Public Works/SAPS/Treasuries, 2005), and the staggered transfer process formally began in 2006. This Plan mentions the word ‘humane’ five times, with reference to public and criminal justice service (p.8; p.16); the identification room (p.16); body transportation (p. 18) and general refurbishment or alteration of existing facilities (p. 27).

The primary pieces of legislation that govern medico-legal services (*Inquest Act, 1959* (No 58 of 1959) and subsequent amendments; and the *Births and Deaths Registration Act, 1992* (No 51 of 1992) and the *Health Professions Act, 1974* (Act No. 56 of 1974), were joined by the National Health Act 61 of 2003 (chapter 8). Since the formal transition, Forensic Pathology practice has been governed by its own *National Code of Guidelines* (NFPSC Academic Subcommittee, 2007) and South Africa’s medico-legal services are now governed by a *Memorandum of Understanding* between the NDoH and SAPS, updated annually (Department of Health and South African Police Service, 2018). This MoU defines and agrees their respective roles in what is intended to be a “fully integrated” medico-legal investigation of death service “To ensure the full cooperation between the SAPS and the NDOH in the management of all stages of the unnatural death investigation process to promote the development of a just society”, but in practice this relationship frequently breaks down, with FPS and partner services picking up the slack.

Various other documents guide service provision at provincial level. These include a joint *Procedure Manual* (City of Cape Town/Western Cape Metro et al.,

n.d.) describing the mutual responsibilities of the South African Police Service, Forensic Pathology Service, Emergency Medical Service and Fire and Rescue Service of City of Cape Town/Western Cape Metro in death scene response, body transportation and other rescue and recovery operations. The province's *Major Incident Management Plan* (Forensic Pathology Service Western Cape Province, 2015) details co-ordination arrangements in the event of a mass fatality, and specifically describes exceptional circumstances when the normal ethics of transporting and storing the dead (never touching each other, never directly on the floor) may be temporarily waived. Under no circumstances may bodies be stacked or piled. Although this was never observed at SRM, other facilities visited in the course of this study are deploying this 'exceptional circumstances' provision when alternatives should be possible.

Where death investigation and identification are concerned, the SAPS *National Instruction 2 of 2013: The Management of Fingerprints, Body-Prints and Photographic Images* (SAPS Forensic Services, 2013) describes the legal gathering, storing and comparison of biometric and other images for the purposes of evidence or identification, including running fingerprints of unidentified decedents against AFIS, a move which it could be argued implicitly criminalises these individuals.² With the FPS environment, the *Standard Operating Procedure: Identification Procedure, Management of Unidentified Bodies and pauper burials* (Victim Identification Board, 2016), *LiveLink Checklist* (see fig. 86, this section) and VIB process flow documents³ are of particular relevance to the research activities reported on here. These various policies, acts and procedural guidelines have been closely consulted with specific reference to the sub-study undertaken, in order to make sense of the procedures and accompanying documentation encountered in the records review, and what was being observed and recounted during fieldwork.

² Similar arguments are being made surrounding the use of the databases of commercial DNA services for the purposes of forensic genealogy.

³ Internal documents provided to the researcher for reference purposes.

Materials and Methods

Ethical approvals process

Acquiring ethical clearance was a project within a project, requiring approval from three separate institutions and presenting a number of challenges over more than a year. On the advice of LJMU, approval to conduct research in the sub-study context was first sought in late 2016 from the University of Cape Town's Health Science Research Ethics Committee (UCT HREC), which returned the application, requiring approval for the study as a whole. This was then sought from LJMU's Research Ethics Committee, and granted on 25 September, 2017, and fully approved in January 2018, once the forensic sub-study had been successfully resubmitted to the UCT HREC, informed by findings from exploratory fieldwork conducted in September 2016.⁴

Access to forensic facial imaging units within the South African Police Service was continually frustrated by an inability to access information about the correct procedures to request permission to conduct research within the service. Once this was established, communication with the internal research office was poor and subject to considerable delay. The detailed study protocol needed to include specific names/ranks of individual members to be interviewed. This information is not publicly available, and members are reluctant to engage outsiders without permission or approval. It is reasonable to assume SAPS is deliberately attempting to discourage (if not directly obstruct) research, but established professional relationships with section heads and some individual members in the service kindly acted as turnkeys by assisting with relevant information, a clear example of the advantage of a measure of 'in-group' status. Permission was finally granted on 20 June 2018, and relevant interviews were conducted during fieldwork in September/October 2018. Given that not all individual members are provided with an individual email address or personal computer/internet access within their operational environments raised consent and confidentiality issues. It was essential that members participated voluntarily and freely, on the basis of *individual* consent, without explicit or implicit pressure from their supervisors to do so. Communicating

⁴ This was granted on 18 December 2017, with access to case files provided from February 2018, which enabled the records review and case selection for post-mortem depictions to proceed.

with individual members via supervisors was perceived as a violation of ethics and trust, so in many cases, communication with members occurred via personal phone and email accounts by their own choice, which also safeguarded their interests.

Data Capture Values

FPS and SAPS forms record population affinity according to South African racial descriptors most prevalent in the Western Cape – white, black, coloured – and variations, such as ‘African’ instead of ‘black’. ‘Unknown’ will be used when it is impossible to determine (burning, skeletonised, advanced decomposition).⁵ These categorisations are given by the officer attending the scene or the pathologist conducting the autopsy. In a single case, the deceased may be described differently by different people. The effects of cognitive bias render these descriptors extremely unreliable, and arguably irrelevant. They are only meaningful relative to how someone self-identifies culturally and socially, but it could be argued that they serve a practical purpose in refining a search enquiry in the first instance. It was therefore decided not to include racial categories in the analysis, due to the impossibility of verifying this information.

Excluding racial classification in records review has several motivations:

1. not to perpetuate this insufficient and potentially damaging language
2. not salient to identification
3. skin-tone is more descriptive of facial appearance although not completely reliable (reference images vary)
4. Frequently the same individual will be classified differently by FPO in Scene Script and by SAPS member on SAP180, demonstrating cognitive bias and ultimately, the forensic meaninglessness of these categorisations. This is not to deny their social and cultural power, both positive and negative. These instances were not formally counted as this was not the objective of this analysis, but were noticed often enough to be remarkable. It may be a further avenue of study in the cognitive bias of

⁵ LAB27 forms gives checkbox options: White, Coloured, African, Asiatic. Sex/gender is only Male/Female. SRML uses a pink form for female-identified cases, an immediately conspicuous intervention that is a response to the prevalence of gender-based violence in this context, enabling rapid visual identification of relevant paperwork.

those working within the field. Table 14 summarises the Data Capture Values and their interpretations as utilised in this analysis to draw out data trends within this cohort, and the associated source documents for the data.

Table 14: Records Review data capture values, relevant interpretation, and data source

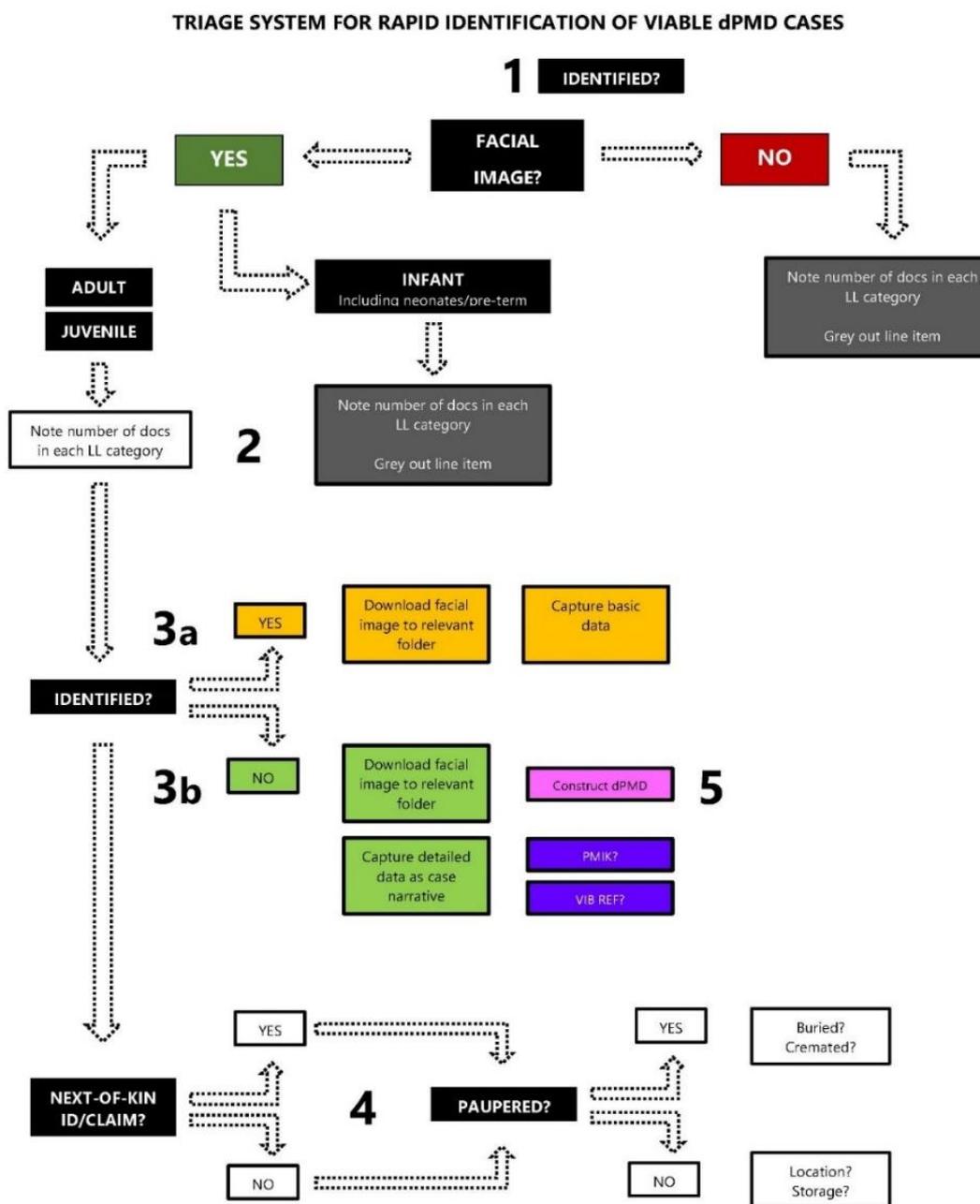
Data Capture Value	Interpretation/s	Evidence/Data Source
Case status	Released Retained/On hold Unknown	FPS 012 FPS 102(b) CoCT
ID on admission	Known/Unknown/aka	
Locality	Police station where case opened	LAB27/SAP180
Date discovered	Month determines season	FPS005a
Context	Recovery environment	FPS005a
Bio Profile	age, sex, height, weight	LAB27; admission photo?
Cause & Manner of Death	Provisional (pre-PM exam)	LAB27 (not included in 2010 records)
ID Attempts Fingerprints DNA Other (teeth)	Taken Y/N Result +/-	
VIC referral?	Y; N; N/R	PMIK
Associated Evidence	clothing, personal effects	FPS 002; LAB27; SAP180

Broad-based acronyms used within the FPS system are SUDA and SUDI (Sudden Unexpected Death of Adult/Infant) from which more specific determinations are made by post-mortem examination.⁶ Cause and manner of death may have particular bearing on post-mortem facial depiction relative to trauma and taphonomic change. Current FPS photography protocol requires facial photography on admission only. This is important for establishing continuity (chain of evidence) between scene recovery, transport and admission, but the face may be obscured in various ways. As dPMD seeks to retain as much of the real facial textures as possible, which is impossible if the face is covered in blood or dirt, it was soon very apparent that many examples in this cohort support photographing decedents in a controlled environment, post-autopsy, once any obstructions have been removed and the face has been cleaned, may greatly benefit the visual identification process.⁷

⁶ Lodox is used to conduct non-invasive visual autopsies in suspected TB/natural death/infant cases, the principle being to avoid unnecessarily invasive procedures where possible.

⁷ Including intubation, bandaging and ligatures, but as P03 observed, death by hanging/strangulation can grossly distort facial appearance, contributing to swelling, protruding tongue etc., but once the ligature is released during autopsy, a more normal facial appearance can return (P03, 2018).

Figure 79: Records Review Process Flow



Exemplar Public Appeal posters for Unidentifieds in sample cohort

A low-cost template for publishing dPMDs in the South African context environment was developed for standard A4 paper format, informed by current SAPS practice, visual research into international practices and fieldwork that engaged cultural beliefs and context. The proposed poster places the depiction as the compositional focus between key pieces of information. Above the image, the objective of the poster is announced by the bold headline ‘Unidentified Person’, which avoids any presumptions about gender presentation, whilst also asserting the personhood of the decedent. Below this, one line indicates context and date of death, and below this, a narrative description provides basic biographical details and a description of the decedent’s clothing.

Below the image is the standard disclaimer that should accompany every forensic facial depiction, so that journalists and the public are in no doubt as to the objective and limitations of such images. Practitioners may use different versions of this disclaimer, but this wording was recently accepted by the American Academy of Forensic Sciences Standards Board as part of public comments submitted by the author.⁸ Below this, a statement indicates which SAPS branch is investigating the case, with relevant telephone numbers for the branch as well as FPS Salt River.

It is suggested that a white background should be used for cost-effective reproduction, with the image placed in an oval frame to visually assert a memorial context and to avoid an association with Wanted posters, which implicitly criminalises the Unidentified decedent. As a basic internet search will confirm, this format remains a dominant feature within modern-day funerary art, with its origins in historical honorific portraiture, including silhouettes and cameos (a genre of personal wearable portraiture in the form of a brooch or locket). It is particularly associated with Victorian visual and material culture, which saw the rise of post-mortem photography (Ruby, 1995; Barger and Mord, 2014) which was often presented as an oval vignette (the edges of the image fading softly or abruptly into

⁸ These comments were submitted by a consortium of respondents from the forensic art and anthropology communities, led by the author, as part of the process of public consultation towards ratification of ‘Best Practice Recommendation 089, *Best Practice Recommendation for Facial Approximation in Forensic Anthropology*.’ See Chapter 2.

the background. A frame edge was used here to avoid the image appearing too much like a ‘funeral pamphlet’ (FPO transcript, 2018).

All design elements for this template are native to Microsoft Word 2019, which was the standard software application used in the FPS Salt River environment at the time of writing. Provided with the template format, such posters could be produced by the facility without relying on specialist skills or resources. The template should be available in all eleven official South African languages.

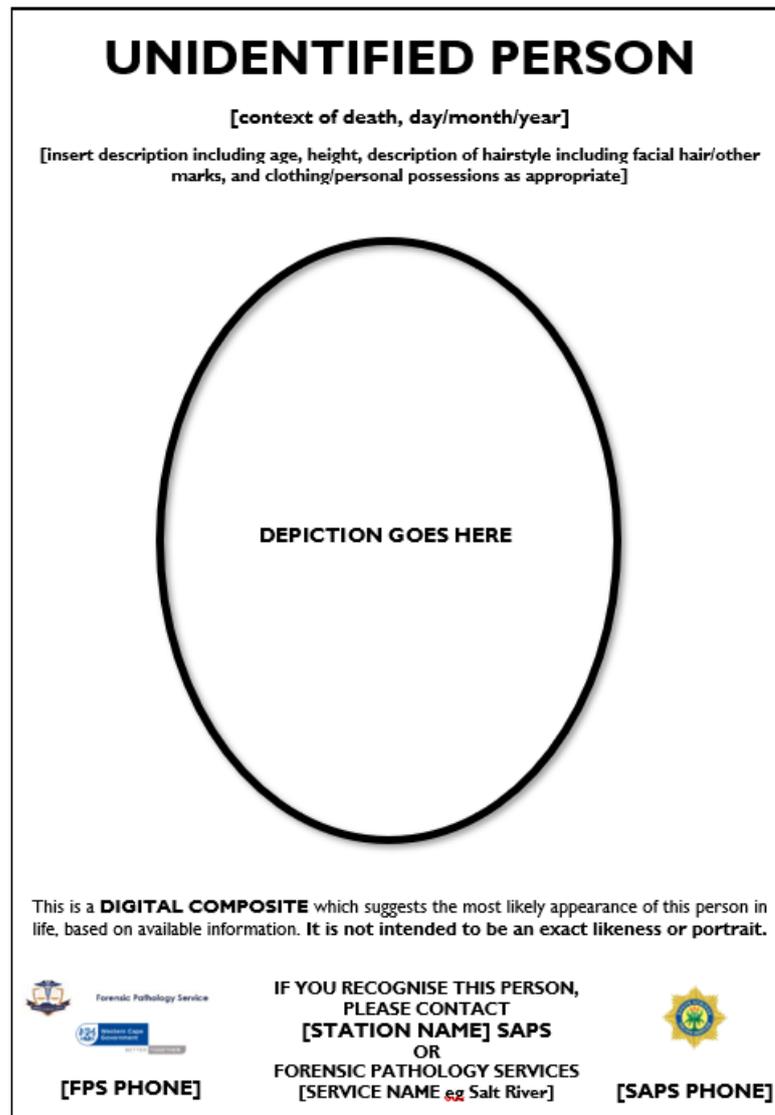


Figure 80: English-language version of Unidentified Decedent Public Appeal presentation format

Poster 1

Figure 81: Public Appeal Poster 1

UNIDENTIFIED PERSON

Pedestrian casualty, 7 February 2018

About 50 years old, 1.6 m tall with close-shaved greying hair. Found on the M5 wearing pink/blue patterned t-shirt and black zip-up jacket.



This is a **DIGITAL COMPOSITE** which suggests the most likely appearance of this person in life, based on available information. **It is not intended to be an exact likeness or portrait.**



Forensic Pathology Service



Western Cape Government
BETTER TOGETHER

+27 21 448 4456

**IF YOU RECOGNISE THIS PERSON,
PLEASE CONTACT
MOWBRAY SAPS
OR
FORENSIC PATHOLOGY SERVICES
SALT RIVER**



+27 21 680 9580

Poster 2

Figure 82: Public Appeal Poster 2

UNIDENTIFIED PERSON

27 February 2018

About 45 years old, 1.45m tall, found on open ground in Woodstock wearing a grey knitted jersey and green headscarf with tropical fish pattern. May have been known as Maria Pose.



This is a **DIGITAL COMPOSITE** which suggests the most likely appearance of this person in life, based on available information. **It is not intended to be an exact likeness or portrait.**

 Forensic Pathology Service	IF YOU RECOGNISE THIS PERSON, PLEASE CONTACT WOODSTOCK SAPS OR FORENSIC PATHOLOGY SERVICES SALT RIVER	
 Western Cape Government <small>BETTER TOGETHER</small>		
+27 21 448 4456		+27 21 442 3117

Figure 83: Public Appeal Poster 3

UNIDENTIFIED PERSON

3 March 2018

About 30 years old, 1.7m tall, found in suburban area wearing black sneakers, beige trousers, white/blue underwear, green t-shirt, black fleece zip-up vest and yellow high-visibility vest with orange trim



This is a **DIGITAL COMPOSITE** which suggests the most likely appearance of this person in life, based on available information. **It is not intended to be an exact likeness or portrait.**

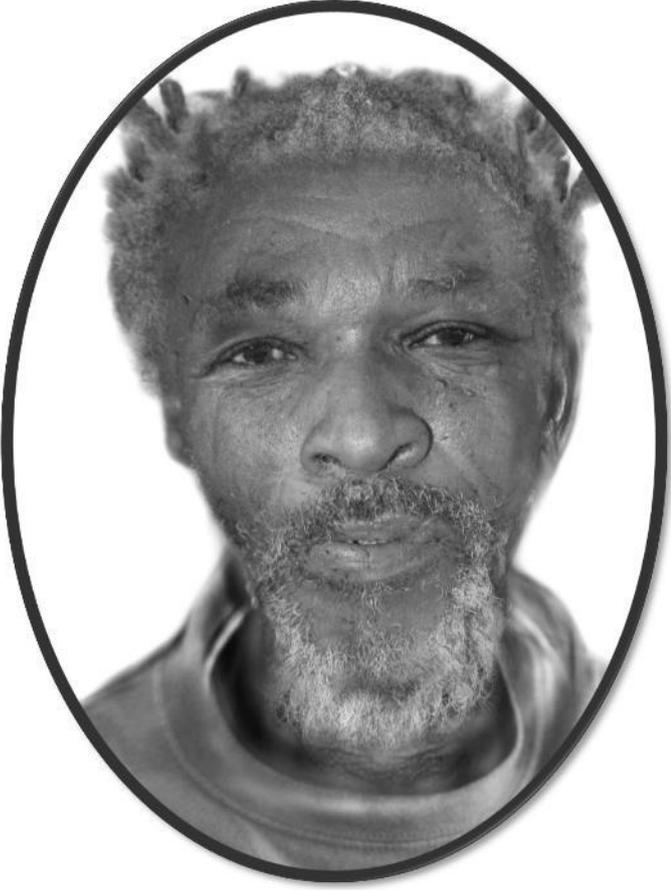
 Forensic Pathology Service	IF YOU RECOGNISE THIS PERSON, PLEASE CONTACT CLAREMONT SAPS OR FORENSIC PATHOLOGY SERVICES SALT RIVER	
 Western Cape Government SAFETY SOCIETY		
+27 21 448 4456		+27 21 657 2250

Figure 84: Public Appeal Poster 4

UNIDENTIFIED PERSON

14 March 2018

About 55 years old, 1.7m tall with greying hair and beard/moustache worn fairly long, found on open ground wearing white long-sleeve t-shirt, blue jeans and belt and brown boots.



This is a **DIGITAL COMPOSITE** which suggests the most likely appearance of this person in life, based on available information. **It is not intended to be an exact likeness or portrait.**

 Forensic Pathology Service

 Western Cape Government
GETTING TOGETHER

**IF YOU RECOGNISE THIS PERSON,
PLEASE CONTACT
CAPE TOWN CENTRAL SAPS
OR
FORENSIC PATHOLOGY SERVICES
SALT RIVER**



+27 21 448 4456 **+27 21 528 3800**

Figure 85: Public Appeal Poster 5

UNIDENTIFIED PERSON

26 June 2018

About 60 years old, 1.68m tall, wearing brown shoes, khaki trousers, green string belt, white Adidas t-shirt with blue/black details, a black jacket and woollen beanie.



This is a **DIGITAL COMPOSITE** which suggests the most likely appearance of this person in life, based on available information. **It is not intended to be an exact likeness or portrait.**



Forensic Pathology Service



Western Cape Government
BETTER TOGETHER

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OR
FORENSIC PATHOLOGY SERVICES
SALT RIVER**



+27 21 430 3700

FPS Documentation

Table 15: List of Forms/Folders consulted in Records Review

Folder	Form Code	Description
Body Receipt		
	LL	LiveLink checklist
	DOD	Declaration of Death
	FPS 001	Log Incident
	FPS 002	Scene Script
	Lab 27	Contemporaneous Note
	FDSS	Female Death Scene Script [pink form]
	SAP180	Police Report Accompanying Body to Mortuary
	SAP A1	Statement from Family/Known Person to Deceased
	Photos	
	GPS	
Identification / Unknown		
	FPS 005 (a)	Affidavit - Transport Statement
	FPS 005 (b)	
	FPS 005 (c)	Affidavit – Identification to Authorise Person <i>FPO to pathologist for PM exam</i>
	DNA [PMIK]	Postmortem Identification Kit
	FP	Fingerprint report [SAPS]
PM / Doctors Reports		
	FPS 007	PM report incl. Lodox and additional photos
	FPS 009	Property/Exhibit Collection
	FPS 012	Notification to claim and remove body
Property / Specimen / Exhibit Management		
Body Release / Pauper	FPS 013	Acknowledgement of Receipt of Body
	BI1663	Notice of Death
Other	FPS 102(b) CoCT	Application for Burial of Un-identified body
	Statement	Statement from family/known person to deceased
	Diary	SAPS Investigation diary

Figure 86: FPS LiveLink Check Sheet (redrawn)

FPS LL CHECK SHEET			
Case number			
Signed and dated by SFO officer			
Comments			
Note along bottom reads Timeline; Includes FPS event history; LL Index and Scene Script			
		✓ or N/A	
Record Body Details	Body Details	EMS Ref & Incident Number No	
		Alleged manner of death	
		SAPS cas number	
		Alleged names of deceased or alias if body is unknown, Jane doe or John doe	
		GPS co-ordinates	
		Police station must be captured	
	Death Details	Exact place of death	
		Date and time body was found, if unknown came as date and time of death	
		Date and Time of Death could be declaration Date and time of Death	
		Check, alleged manner of death same as official manner of Death	
make sure all items of clothing is captured			
make sure all items of valuables are captures			
All Scene Script	Scene Script	Check police station cas number	
		Full address where body was found (include land marks)	
		Date and time of injury	
		Correct address where body was found	
		Informants full names	
		Generic scene script must be filed in docket	
		Must be completed in all specified cases printed and attached to scene script and Lab 27	
Documents scanned on Livelink	SAPS 180		
	Annexure A		
	A1 Statement		
	Declaration of Death		
	Scene Script		
	Transport Statement		
	Receiving at Facility Statement		
	Photographs Taken		
	SUDI Questionnaire Scene		
	SUD Questionnaire Scene		
	Lab27		
	FPS100		
	Death on Arrival		
	Log Incident Form		
	Information Captured on Index		
Ambulance Voucher			

Post-mortem facial depiction: A comparison between methods

Table 16: Best-practice requirements for dPMD vs virtual Facial Reconstruction: a comparison (in line with SAPS standards)

	dPMD	Facial Reconstruction
Materials	<ul style="list-style-type: none"> • Quality facial photography • Frontal at minimum; multiple viewpoints preferable • Image editing software (e.g. Adobe Photoshop) • Visual database 	<ul style="list-style-type: none"> • Clean skull and 3D scanner OR CT scan to produce digital model • Virtual modelling software with haptic interface eg Geomagic Freeform • 3D muscle database (pre-modelled) • 3D feature database (from scans) • Visual database (for texturing shape model)
Requirements	Knowledge of trauma and taphonomic effects Ability to interpret artefacts/errors of photographic context 3D-2D shape interpretation/translation skills Appropriate software and operator skill	Prepared (cleaned) skull Knowledge of craniofacial anatomy, trauma, diseases affecting facial appearance 3D visualization skills (sculpting) Appropriate software and operator skill
Process	One-step (basic image manipulation)	Two-step (build up shape then add texture)
Completion Assuming experienced practitioner	1-2 days (8-10 hours)	1-2 weeks (min 30-50 hours but up to 100 hours)
Advantages & limitations	<ul style="list-style-type: none"> • Retains as much of original face textures as possible • Efficient • Cost-effective (internal pipeline) • No/low risk to custodial integrity/chain of evidence • Only possible where enough soft tissue exists to reasonably estimate living appearance • The cleaner the face, the better the image <i>trade-off between dirt/blood in admission image which prevents accurate interpretation of trauma and facial features, vs possible post-autopsy distortion</i> 	<ul style="list-style-type: none"> • Can present multiple viewpoints/angles • Time-consuming • May require maceration which adds cost, must be outsourced, adds time • High risk to custodial integrity (separation of skulls from post-crania for transportation to VIC HQ) • Batch transportation is practical but introduces additional delays; cases are automatically on a 'waiting list'

Table 17: Proposed Revision of Routine/Non-Routine Forensic Depiction Case Allocation*

EXAM TYPE	ROUTINE (28 days)	NON-ROUTINE (75 days)
Post-mortem Depiction	X	
Age progression	X	
2D facial reconstruction	X	
3D facial reconstruction – basic <i>complete, undamaged skull digital model provided</i>	X	
3D facial reconstruction – complex <i>Fragmented/incomplete skull Requiring trauma/disease interpretation Requiring 3D scanning</i>		X
Craniofacial superimposition <i>Assuming appropriate photographic material available, otherwise non- routine</i>	X	
Mixed methods <i>Combinations of the above for complex cases involving partial burning, mummification, scavenging etc</i>		X

*Based on SAPS timeframes and informed by average timeframes reported by practitioners interviewed for this study, including case report

Recommendations for FPS/SAPS improved workflow

Recommendations for operational improvement that are broadly relevant and sensitive to the realities of stressed resources and infrastructure, informed by best-practice international standards for post-mortem photography, depiction and circulation and highlighting the benefits of attending closely to practitioner experience in future policy-making.

FPS

- PM photography must be standardized and FPOs must be trained not only to do it accurately, but to understand why
 - The majority of facial images taken on admission are too poor to use for PMD. This limits the application of this otherwise efficient technique
 - Scene images provide valuable information (body mass, clothing, context of death) that contributes to reconstructing in-life appearance and may provide more facial information than admission images (angles)
 - Always include case tag in facial image *without obscuring* the face
 - Weight **AND** height data on tag essential: a swollen face might suggest a larger person

- Retake facial images post-autopsy examination, once face has been cleaned
 - These may show some distortion but will still be useful for comparison with scene images, and will be the face the next-of-kin are eventually shown
 - Very few hospital or EMS admissions cases have viable facial images for dPMD
- Clothing and personal effects are potentially important secondary identifiers, particularly if the person is itinerant or homeless – they will have limited personal belongings and will be recognisable by them. Photograph all personal effects of unknown persons post-autopsy, along with a clean facial image.

SAPS

- Current protocol for unidentified cases poses avoidable risks to custodial integrity, chain of evidence and may represent unethical treatment of human remains. As there is currently, skulls have to be manually transported to VIC in Pretoria from all over the country. Returning these to their source (reuniting with post-crania) remains a challenge.
- Cases are sent for maceration, bio-anthropological analysis and facial recon that may not need to be. This involves a university, additional cost, human and other resources. At this stage, only the University of Pretoria holds a contract to do this work. Other institutions assist as a favour/in good faith, but this is a professional service which does not reflect mutual respect of the institutions and individuals involved, not least the deceased
 - The risks to the integrity of human remains notwithstanding, a **cost-benefit analysis** should be done to assess whether this continues to be viable, or whether it makes more sense to bring dPMD into the FPS workflow and situate it within the visual identification archive/SAPS liaison environment. It is clear that this would address a range of operational issues that have ethical consequences relative to the first objective of the SAPS/NDoH MOU
- For cases that are not appropriate for dPMD, prioritise 3D model acquisition instead of physical transportation of skulls
- Expand facial imaging to the Western Cape environment in response to documented need (population-specific challenges, caseload)
- Increase capacity of SAPS VIC Data Reconciliation by introducing community liaison/data reconciliation/death investigator ('clearinghouse') officer positions based in biggest medico-legal facilities in each province to co-ordinate with national centre.
 - Assisting with identification and document validation
 - Co-ordinating LCRS and FPS visual documentation (currently these archived separately and need to be requested)
 - Manage cases for referral for next-level analysis
- A central repository for SAPS & FPS visual documentation should be consolidated
 - Prioritise the development of a public-access database, linked to existing SAPS internal databased (NPIS, BIS) where cases can be uploaded by authorized staff; cases status can be checked by IOs and

relevant investigators/members; which is searchable by the public/media

Requirements

- Adjustments to standard operating procedures and infrastructure pertaining to visual identification within and between both services, supported by a shift in institutional cultures towards greater mutual trust
- Investment in secondary methods of identification i.e. better photographic documentation at scene and within FPS facility (facial and personal effects); formalize sharing of documentation between SAPS and FPS; commit to 3D digital imaging for cases that require full facial reconstruction (burned bodies, decomp/mummification, skeletonisation)

Anticipated risks

- Lack of support from top management
- Accessing budgets
- Failure to integrate existing IT systems
- Failing to secure co-operation with SAPS Missing Persons Unit to create an effective national/cross-border clearinghouse system
- Doubling up work

Appendix 4: Additional Materials for Chapter 4

Methods and Materials

Inviting Participants

Respondents were initially invited to participate by personal email, which included the PI sheet and consent form as attachments, so that they could make an informed decision to agree or decline. Participants then provided individual consent for formal interviews, with gatekeeper permissions provided by their managers/institutions where applicable. At least one participant working in a law enforcement context did not seek permission from their supervisor as they felt it would not be granted (or not granted in time) and chose to participate in their personal capacity.

Evolution of the semi-structured interview framework

The semi-structured framework evolved from a list of open-ended questions (v.0) into two further iterations referred to as v.1 and v.2, a 14-page fillable questionnaire (Microsoft Word 2018), combining pre-filled drop-down menus, check boxes, and open response sections, organised according to five broad areas of analytical interest conceptualised as focalising lenses (Bal, 2001), namely 1) Work Context; 2) Professional Experience; 3) Terms of Reference; 4) Policy and Procedure; and 5) Heuristic/Tacit Knowledge, with the structure intended to reinforce data collection objectives and future analysis clear. It was further sub-divided into Part A (section 1 and part of section 2) and Part B (consisting of the last part of section 2, followed by sections 3, 4 and 5). Participants could either complete the questionnaire in their own time, and over several sessions if required, with the agreement that a follow-up interview may be necessary to clarify or elaborate on certain points. Basic biographical data was recorded separately and anonymised if required.

The fillable version was developed in response to challenges conducting face-to-face interview in person or via online platforms, related primarily to time zones, workplace infrastructures and shared language.¹ Participants could either

¹ It was already understood that this is a small field with practitioners all over the world, and face-to-face interviews would not be possible, so online interviewing via video calls was built into the protocol. It became clear that gathering data by in-person conversation, with all of its rich potential

complete the questionnaire in their own time, and over several sessions if required, with the agreement that a follow-up interview may be necessary to clarify or elaborate on certain points. Basic biographical data was recorded separately and anonymised if required. This enabled many more researchers and practitioners to participate.

Based on data gathered using v.1 and further fieldwork observations, v.2 was used for interviews conducted after August 2018. This version added more detailed (explanatory, instructional) preambles to Part A and Part B; consolidated and reorganised some questions from v.1 (considered unnecessarily repetitive) including several questions in section 5 specifically relevant to Forensic Artists; added a question about capital punishment question; and most importantly, added a Likert-style Motivation Scale in which respondents were asked to select a node on a 7-level spectrum between two poles, ‘Get the Bad Guys’ on the left, and ‘Victim’s Rights/Advocacy’ on the right. A follow-up email was sent to respondents who responded to v.0 or v.1 asking them to provide a separate response to the Motivation Scale which was then added to their original interview.

Table 18 summarises questionnaire versions, methods of interview and total number of participants for each. ‘Open conversation’ refers to a meeting context or where the situational conditions, available time or lack of shared language, required a modification of the method to facilitate the encounter. These were based on questionnaire v.0.

Table 18: Interview Methods/Participants per Format

	Participants	Framework version		
		v.0	v.1	v.2
In-person	26	5	4	17
Video chat	3	1	2	0
Email	20	-	11	9
Open conversation	27	-	-	-

for tacit and non-verbal communication, (e.g. shared humour or lack of it; the power of pause and silence; overtalking; being in a shared space with associated levels of un/familiarity and dis/comfort and so on) would not be possible.

Recording, transcription and analysis

Interviews generally took place at a venue of the respondent's choice to ensure they felt most comfortable. Usually this was their workplace, but also included a hotel room, homes of friends or colleagues, or wherever provided the best combination of convenience/access, maximum privacy, optimal recording conditions, comfort, and lack of interruption. As all participants agreed to audio-recorded interviews, minimal notes were taken during the sessions to maximise conversational engagement, with the relevant questionnaire framework available to refer to (either hard copy or electronically) and a laptop or iPad with internet connection was available to look up relevant locally stored or online information e.g. case work examples.

Interviews (online or face-to-face) were recorded using a Zoom H1 audio recorder with a micro-SD card (audio files saved as *.mp3), as well as an Apple iPhone SE with Voice Memos app as a back-up (with audio files saved as *.m4a) and were transcribed using a combination of automated and manual transcription methods.

Interview transcription began by hand, in most cases immediately post-interview, along with writing reflective notes. As the data collection process continued, an automated method of transcription became essential to process the number of respondents and duration of conversations. Interviews were running to ninety minutes on average, with the longest running to 3hrs 48 mins. Each transcript could thus generate over 100 pages of text and notes and take several days to complete. Suitable applications were researched that allowed the secure upload of an audio file to be converted to text (there are many options for direct speech-to-text transcription, but this was not fit for purpose). [Happy Scribe](#) was the preferred service according to a comparison of similar products conducted by a group of investigative journalists, balancing comparable levels of accuracy, data security, speed and budget restrictions (LaForme, 2017, online).

Happy Scribe returned timecoded Word documents within minutes however the accuracy ranged considerably, from the almost-verbatim to complete AI-generated nonsense, depending on interviewing conditions (ambient noise), quality of the recording (a combination of mp3 and m4a files) and accented English. Some transcripts thus required very heavy copy-editing with reference to the original audio

file, including sections of manual transcription. Depending on the length of the conversation, generating an accurate transcript could take up to several days.²

Although permission was not sought to publish the transcripts in full as part of the study, they are primary data sources and as such, research documents of record. The option to exercise immediate and retrospective ‘off-record’ comments was completely transparent. Once edited with follow-up questions, transcripts were returned to participants for their final approval to ensure that should anything be quoted verbatim, they were satisfied that their input was accurately and appropriately represented, and that anything else which would function as contextual/background data would not comprise them, particularly if they did not request anonymity. Not all participants felt it necessary to return approved versions. Participants were given clear instructions/explanations regarding editorial mark-ups pertaining to possible quotes/central themes (marked in bold); that redactions would be noted in the final version with a bracketed ellipse [...] so it is clear redactions have been made; and that they should strike through anything they preferred not to be included in the final version, which would then be deleted and noted accordingly in the final version. Approved transcripts were then anonymised as appropriate, including the redaction of any names not mentioned in the context of published studies, or who hold public office and were mentioned in passing. This was at the researcher’s discretion, erring on the side of caution. Given the size of this community, even with anonymity identities could be inferred especially as a participant’s professional role would be recorded as per the consent process.

Data Capture and Analysis

Data from questionnaires and interview transcripts was captured in a Microsoft Excel (2018) workbook with six worksheets (one per interview section plus Biographical Data) with a separate column dedicated to each question per section. Relevant data from questionnaires and transcripts were input to create a single document with which to draw comparisons between professional experiences and across contexts (work environments and countries). For questionnaires, this was straightforward. For interview transcripts, this was much more complex, non-linear, and time-consuming.

² The total quantity of interview data is estimated at around 500,000 words.

A textual analysis of the interview transcripts and questionnaires was then undertaken, and captured within Microsoft Excel, from which trends were identified via topic, word- and phrase-searching, and correlation.³

Results

Of all the respondents approached, the majority agreed and were extremely generous with their time and resources. A handful did not respond, while those who declined suggested their current position made it untenable to participate.

Conducting the semi-structured interviews was a practice-led, methodologically responsive process. Email was the primary mode of communication, from the original invitation to participant, to clarifying conditions of participation, making interview arrangements, and conducting follow-ups. Whether participation took the form of a questionnaire or face-to-face interview (in person or electronically), email correspondence was an inevitable part of our mutual engagement over time, regardless of the form the data collection took. In-person/video-chat conversations were particularly useful self-reflexive exercises in refining interviewing technique and developing a sense of how each would contribute to the analysis through post-interview reflective writing. For example, capturing basic biographical data provides foundational demographic data for the field, but it was recognised early on that it is extremely tedious and a waste of valuable time to capture this during a face-to-face interview when it could be provided prior to an interview, either by completing Part A, or providing a separate resumé, which would also better inform the actual interview.⁴

³ The NVivo content analysis software was considered for this purpose, but ultimately regarded as surplus to requirements for the size of the data set. Exploiting my visual memory skills and conducting word/phrase searches using the 'Find' function in Word/PDF documents was adequate and more efficient than learning a new platform with uncertain outcomes in the time available.

⁴ This was requested but not always provided. Some respondents endeavoured to complete the entire questionnaire, with the interview then used to clarify, elaborate or discuss matters they preferred not to explain in writing (complex, nuanced, easier to discuss). In most cases, respondents who participated in interviews who had not provided a resumé, were requested to complete only Part A of the framework post-interview.

Cohort Information

A number of cross-sectional snapshots of the cohort were generated according to different criteria to provide a demographic snapshot of the cohort, summarised as per the following tables.

Table 19: Gender distribution across study cohort, including interlocutors

	F	M	Total
Interlocutors	35	35	70
Of which participants	30	18	48

Table 20: Interviewees by Work Context, Facial Imaging involvement, Gender, Interview Location and researcher relationship prior to study

ID	PRIMARY AFFILIATION	BASED IN	FORENSIC IMAGING WORK	GENDER	LOCATION OF INTERVIEW	RESEARCHER RELATIONSHIP
P01	Academic	USA	FT	M	San Marcos, Texas	colleague
P02	Freelance	UK	PT	M	London	none
P03	Academic	ZA	PT	M	London	colleague
P04	LE	Canada	PT	M	FaceTime	colleague
P05	Academic	UK	PT	F	Liverpool, UK	colleague
P06	Academic	Malaysia	PT	M	Skype	colleague
P07	Public Sector	Korea	PT	M	Skype & Korea	colleague
P08	LE	USA	FT	F	Austin, Texas	colleague
P09	NGO/Charity	USA	FT	F	Email	colleague
P10	Academic	UK	PT	F	Liverpool, UK	colleague
P11	Freelance	USA	PT	F	Email	colleague
P12	Freelance	Australia	PT	M	Email	colleague
P13	Academic	USA	N/A	F	Email	colleague
P14	Public Sector	Romania	N/A	F	Email	colleague
P15	Public Sector	Romania	N/A	M	Email	none
P16	LE	UK	FT	F	Email	colleague
P17	Academic	Japan	PT	M	Email	colleague
P18	LE	USA	FT	M	Austin, Texas	colleague
P19	Freelance	USA	FT	F	Austin, Texas	mentor
P20	Public Sector	Japan	FT	M	Email	colleague
P21	LE	USA	FT	F	Email	colleague
P22	Academic	Russia	FT	F	Email	none
P23	Freelance	USA	PT	F	Email	colleague
P24	Freelance	USA	FT	F	Email	colleague
P25	LE	USA	PT	F	Email	colleague
P26	LE	ZA	FT	M	Email	none
P27a	LE	ZA	FT	M	Pretoria, ZA	colleague
P27b	LE	ZA	FT	M	Pretoria, ZA	colleague
P28	LE	ZA	N/A	F	Pretoria, ZA	colleague
P29	LE	ZA	FT	F	Pretoria, ZA	colleague
P30	LE	ZA	FT	F	Pretoria, ZA	none
P31	Academic	ZA	N/A	F	Pretoria, ZA	colleague

P32	Academic	ZA	N/A	F	Johannesburg, ZA	colleague
P33	Private Sector	USA	PT	M	Email	colleague
P37	Academic	ZA	N/A	F	Cape Town, ZA	colleague
P38	LE	ZA	FT	F	Cape Town, ZA	colleague
P40	LE	ZA	PT	F	Cape Town, ZA	colleague
P41a	LE	ZA	N/A	F	Cape Town, ZA	none
P41b	LE	ZA	N/A	F	Cape Town, ZA	none
P42	Freelance	UK	FT	M	Manchester, UK	colleague
P43	Academic	UK	PT	F	Email	supervisor
P46	Academic	ZA	N/A	F	Email	none
P49	Academic	ZA	FT	F	Email	none
P50	Academic	UK	PT	M	Dundee, Scotland	colleague
P51	Freelance	USA	PT	F	Email	colleague

*LE = Law Enforcement; ZA = South Africa

Table 21: Interlocutors (background/contextual meetings) by Interviewees by Work Context, Facial Imaging involvement, Gender, Interview Location and researcher relationship prior to study*

ID	PRIMARY AFFILIATION	BASED IN	FORENSIC IMAGING WORK	GENDER	LOCATION OF INTERVIEW	RESEARCHER RELATIONSHIP
P34	LE	ZA	N/A	F	Pretoria, ZA	colleague
P35a	LE	ZA	N/A	F	Pretoria, ZA	none
P35b	LE	ZA	N/A	M	Pretoria, ZA	none
P36	Public Sector	ZA	N/A	M, M, F	Cape Town, ZA	none
P44	Public Sector	Korea	N/A	F	Korea	none
P45	Public Sector	Korea	N/A	M	Korea	none
P47	Public Sector	Korea	N/A	M	Korea	none
P48	Public Sector	Korea	N/A	M	Korea	none

*The group of 15 FPOs is not included in this table, but they are included in the cohort demographic analysis for Work Context/Role and Gender

Illustrated Interview Analysis

No participants had a developed prior knowledge of Forensic Art as a field that led to a conscious choice to pursue it as a career. Two participants (Malaysia, Romania) referred to popular culture as influencing their decisions to pursue forensic anthropology and pathology respectively, from which they have arrived at forensic facial imaging:

Was interested in *CSI* (TV show), entered undergraduate forensics course, found out that *CSI* was a lie. Interests in anthropology was second to digital forensics (which can only be taken from a computer science background and not forensic science degree). (P06, 2018)

My trigger factor which determined me to want and to perform legal medicine was a movie, *Silence of the Lambs*. Another reason was the fact that I prefer to work with dead people than living people. (P14, 2018)

The most straightforward way to illustrate comparative experiences in finding out about, accessing and then functioning within the field is to set two participant stories side by side (P21, 2018; P23, 2018). P21 is a sworn member of a law enforcement agency in the USA who works as a full-time forensic imaging investigator. She never intended to become a sworn member, but the opportunity to work as a full-time forensic artist overrode this concern. Her entry into the field began with a post-mortem depiction that resulted in a successful identification.

P23 has had long-standing employment in an unrelated field which supports her service to a local police department by allowing personal days to do suspect composites when necessary, for which she is paid. Outside of her formal work hours, she completes post-mortem depictions on a volunteer basis for the local ME's office that are published on the public-access database of Unidentifieds for this facility. This service laid the foundations for her entry into the composite work, which required establishing considerable trust; she mentions the lack of respect law enforcement culture has for citizen volunteers. As an active member of the IAI, she has also authored an illustrated set of guidelines for postmortem image capture ahead of the ASTM guidelines being ratified, but which unfortunately remain unpublished. In many ways, the separation between services and service-provider relationships that P23 negotiates represents, it is suggested, an ideal delineation between suspect-related and post-mortem-related work, according to the foundational disciplines that restively inform each pathway. What is not ideal however, is the fact that this work, which is highly skilled, remains unpaid and therefore, undervalued.

Both stories encapsulate the multifactorial interests and values at work in those committed to this work, and highlight the step-wise and circuitous entry into the field for artists in the USA where no formal academic training in Forensic Art exists, which as anywhere else relies heavily on networks and contacts in the field. The importance of the 'long game' required to develop cognitive authority in this field, and the commitment needed to build up a portfolio of cases applicable for accreditation, even *within* LE are also foregrounded. Both artists also have postgraduate qualifications in adjacent subject areas. They extend the discursive

responses to the Motivation scale and thus cultures operating within in forensic deathwork, which is the focus of the next section.

P21's story

I had been working as a graphic designer at a multi-media company designing websites. It didn't take me long to realize that while I had a love for design, I did not like the environment of working in a corporate world. In addition to art, I also have a love for horses and grew up riding. After quitting my job as a designer, I came across an application to join the Sheriff's Office mounted unit. I thought to myself that I knew horses enough to be a good candidate for the position and if I did get hired I would have my foot in the door and could apply for a position in the graphics unit when one opened. So with that in mind I applied for the position and was hired on.

I didn't know what Forensic Art was. I do remember once when I was younger, maybe 16, I saw a sketch composite on the news and thought now there is a cool job! Right after the news segment I went online and looked up what it would take to become a police sketch artist. I couldn't tell you what article I read but it said that all police artists were law enforcement officers. Well, that crushed that idea as I definitely did not want to become a police officer, I figured I would find something else art related and I put the idea of Forensic Art from my mind.

After some time working at the Mounted Unit I decided I would make my way up to the Graphics department and introduce myself, maybe volunteer so everyone in the unit would know who I was and if a position opened I would increase my chances of getting hired there. Fate had something else in mind. A Deputy I worked with in the mounted patrol division agreed to introduce me to someone he knew in the graphics unit and so off we went to the main Public Safety Building. The graphics unit was on the third floor but at the second floor we were stopped by a detective that knew the deputy. After a short conversation as to why we were in the building the detective said, "I have someone I want you to meet." We followed him back through a long hall and past several winding cubicles before we came to the desk of another detective. A tall older man with salt and pepper hair, an old school moustache, and on his belt a badge and a gun. He had sketches pinned all around the walls of his cubicle, good sketches too. Some with accompanying mugshots and some without. He introduced himself and told me that he was a robbery detective who also did sketch composites of suspects from the memory of victims and witnesses. He asked if I knew Photoshop. I told him about my degree [BFA specializing in Graphic Design] and my work as a graphic designer and that I knew Photoshop and the Adobe suite well. You see, this detective was not good with technology at all; while he could draw an amazing picture, he could barely get a CD to work properly. He told me that the homicide detectives had a recent case in which a man was shot in the head, they had a good image of the unidentified man except they couldn't use it because of the bullet wound. He asked me if I was interested in helping. I was, I did, and they were able to identify the man. I never made it to the

graphics unit. That day I had a purpose. That day my skill as an artist had a purpose. I decided I would dedicate myself to learning Forensic Art and that I would commit myself to the field as a career. That department only used forensic artists on a part time basis and was not going to hire a fulltime position so ironically, I did become a law enforcement officer. I was prepared to become a sworn deputy so that I could earn enough pay to continue as a part-time Forensic Artist. It paid off when the department I currently work for offered me a position fulltime. Case by case I earned my certification and now I work fulltime as a sworn forensic imaging investigator.

P23's story

I've always liked to draw faces. About eight years ago, I stumbled across a forensic artist job profile in a career counselor's office. I thought, "Bingo! That's what I should do." Then I took my first class [...] After taking a few more classes, I joined my village's 'citizen's patrol' in order to make inroads with local PD, so they'd give me some work – even as a volunteer. But they were committed to using a sworn officer from another town who likes to draw. However, they did hook me up with [...]. My involvement with [the county ME's office] comes from a connection with another local forensic artist, who is also a victim's advocate (a hard combination to manage – helping law enforcement while advocating for victims). Through her contacts, she and I were able to go to the morgue. I gave [the acting ME at the time] a packet of information about my qualifications. [...] Not long after, out of the blue, [the ME] had her lead photographer [...] contact me about doing Photoshop clean-up work on some images. Not long after that, I did my first 2D reconstruction. Before giving me any work, they did something of a background check and my good 'record' with the citizen patrol (e.g., I didn't seem crazy) mattered a lot to the morgue. Incidentally, I only served on the patrol for a year. Once the morgue work started coming, I figured my time was better spent doing forensic art than patrolling the town after work for handicapped parking scammers and directing traffic in the rain at drunk-driving checkpoints. Also, many of the cops had little respect for the citizen volunteers, so it was somewhat disheartening to 'serve'. So, I handed in my windbreaker and citizen patrol binder. (But I still have the light-up traffic directing wand because you never know when you need to step up!)

Training

I've always loved the idea that Forensic Art in a police environment was cheap. Pencils and paper and erasers and clay don't cost very much. You have to invest in a person's training, but that's a whole other story. (P19 in Smith, 2020b, p.203)

Professional certification, accreditation and membership

The only reason for certification as I see it is so that the appropriate and accurate exchange of information with regards to the case can happen. It's a good idea to open up or to validate a relationship between the investigating authority and the practitioner that allows the exchange of accurate information. Being a certified forensic artist would come with a responsibility to store the information securely, for example. It's about being accountable to that. (P10 in Smith, 2020b, p.155)

At one point – post-OJ – I had a conversation with a US prosecutor at some conference. He'd just done a lecture about a case in which Forensic Art was used. [...] And he said, 'All I can tell you is, that's what happening going forward. Everything you can pin down, quantify, set guidelines, train, certify – all that matters in court and it's always going to matter going forward.' And that has proven to be true. So I've re-embraced the idea of certification, but it still troubles me. (P19 in Smith, 2020b, p.197)

If nine out of ten of the dead bodies that I've worked on happened, by chance, to have been homeless hermits with no family and nobody looking for them – which is why there are Unidentifieds in such a high population density, right? – then they might not get identified. You could put out a photo of them and it wouldn't get ID'd because nobody's looking for them. So *that's* not about accuracy. Whereas [...] if you've got a family of twenty people looking for a teenage boy and you put out a Mr. Potato Head image, and underneath it says, 'White male aged fifteen to eighteen', they're *still* going to go, "That could be *him!*" So how is it fair to judge this work by 'hit rate'? Rather look where you are and what you're doing. (P50 in Smith, 2020b, p.334)

Some people take one of Karen's classes and they say, 'Well, now I'm endorsed by Karen Taylor.' And I go, 'Wow... Hang on, hang on...' You paid your 900 bucks and you got yourself to wherever the course is being held, but you're not necessarily a composite artist at this point. And I think that gets a lot of people in trouble. And it also sullies the field. Like you know, you get a bunch of flaky artists who draw people? And I think some people put it out there that they've reached qualifications and they're certified and everything else. And you kind of go, 'Well, hang on. *Who* certified you? And who are *they* to certify you? And where have you gone to get certified and who oversees that certification?' And that's always been one of my issues with some courses – 'You take so many courses from us and we're going to dub you certified, no matter how good you are or how bad you are. You've done the hours, and your cheque went through, so you're good.' And you kind of go, 'Oh my god, there's got to be more to it than that!' [...]

That's the thing with a science, like a pure science: you've got this recipe or this formula, and your experiment comes up with this end result. Whereas with Forensic Art, it's not that cut-and-dry. There's no

recipe. And there's no formula. It's a tough call to say who can certify you or not. What I do like about the IAI is that they're removed in a step. They don't have anything, in a sense, riding on whether you pass or not. Certification, I mean. If you are getting certified through them, you are paying their yearly membership fee, and you will attend an [annual] IAI conference every five years, so in a sense that kind of takes the neutrality [out] of the assessment. But by the same token, you've got a well-recognised organization with people who are trained in that and specialize in that who can look at your work and say, 'This is acceptable,' or not. And from what I understand, it's totally anonymous. They get a package without any names on it and they assess it based on the work that's in the package, not the name that's associated with it. And so, I like that. I like that aspect. Yeah, it's not an easy answer. (P04, 2018)

Supportive Work Environment

Working with different departments and with different people have such a wide range of experiences. Sometimes good, sometimes bad. Every time we work with someone new, whether it be a new ME or a new detective, it is a new experience. Some people respect Forensic Art and highly recommend the use of an artist while others are skeptical and call it 'worthless' or 'voodoo.' It's hard to say what their prior experiences with Forensic Artists were but thankfully the success of the cases handled within our unit has built a strong reputation for us to stand on. Our help is often requested and is generally viewed in a positive light. (P21, 2018)

Structural aspects of Post-Mortem Identification and Facial Imaging

KS: If there is an identification matter, at what point do you guys get called in? So you would get called in by the IO assigned to the case or also by...?

41b: Or the mortuary.

41a: It's a little bit of both, ja.

41b: Because the doctors don't really know if the person is unknown. Well, that's the idea we get. Because they receive a body, do an autopsy, they're looking at cause of death. But the information regarding the technicalities of identifying the person seems to fall more within the administration people of FPS. [...] I think it also might work is if you have your post-mortem depictions and you correlate it with the Pink Ladies, like these flyers here. [we look at a selection of Missing Persons flyers]

41a: I think they get them from the families...?

41b: Or the families give it to the investigating officer, and then to them?

(P41a, 2018; P41b, 2018)

It is unusual for police agencies to have forensic anthropologists on staff; this is where SAPS VIC is an exception to the rule, but they also rely heavily on anthropologists at major universities. In the United States and Canada, forensic anthropologists will be attached to a Medical Examiner's office, and these are unevenly resourced. P13 (2018) notes that it is not compulsory to make use of forensic anthropologists. Not every ME's office will have a resident forensic anthropologist, and only some states operate some sort of centralized system, with a chief ME based in a major city. As P19 describes, Oklahoma is centralized whereas in Texas, a huge state with 254 counties, ME's have resisted any form of centralization and prefer their own "kingdoms." P08 (full-time artist, Texas DPS) reiterates this fragmentation, which results in a lack of consistency and understanding of the services available across the state.⁵ Unless experts are recognised and a formal relationship exists, consulting them produced issues of timing and trust which are amplified when the practitioner is freelance, with no past service within law enforcement, as P25 cogently explains:

It can be a challenge for non-law enforcement freelancers to gain the trust of law enforcement agencies. Law enforcement agencies closely guard what information is given out about a case, especially in homicides. LE agencies may be more willing to trust an individual associated with a university (as opposed to someone who 'comes in off the street'), but only if they show they can safeguard case information. LE agencies are more likely to use an artist if they have law enforcement background or have done work for other LE agencies. Forensic artists within a research environment may also be privy to a lot more scientific information (scientific studies/best practices) than those working in the law enforcement environment. Unfortunately, research and best practices can take time to filter out to those who are not in the research realm. (P25, 2018)

⁵ Interesting parallels can be drawn between Texas DPS and SAPS, supported by multiple interlocutors from each work context, with reference to context (a distinctive mix of urban and rural); uneven distribution of resources and knowledge; internal visibility for Forensic Art methods; high caseload and two full-time artists operating within a specialized unit (Rangers division vs VIC).

All participants represent some form of specialist assistance, so they will only attend recovery scene on invitation. Special skills are required to properly recover skeletonised remains that may have become scattered due to predation, or exhuming buried remains, and in such cases, it makes sense to have anthropologists at scene to direct and assist (P13, 2018; P27b, 2018; P28, 2018). Forensic imaging specialists may attend a mortuary to view an unidentified decedent, to produce their own documentation, or additional images if what was supplied was insufficient. Composite artists may be required to attend a scene to interview a victim, but P38 and P21 are adamant that attending to victims immediately at the scene may be very distracting or additionally traumatizing due to other crime-scene management activity taking place, and it is preferable to wait until quiet place where a measure of personal comfort and safety can be assured is available, to optimize efficacy of cognitive interview techniques, which is further supported by P19 (P19, 2018; P21, 2018; P38, 2018).

Participants around the world agree that cases may be prioritized for various reasons (by special request, high profile, suspected identity, media pressure) and especially where a crime (murder) should be prosecuted: “There is a greater sense of urgency with homicide deaths” (P25, 2018) Each case presents its own challenges, but basic procedures and handling processes should remain consistent, with the exception of MDM-DVI situations which have their own protocols.

Service providers have internal protocols that govern their workflow, informed by the relevant legislation of that country. They may triage cases based on a variety of factors including likelihood of resolution and order of admission/receipt. Within a medico-legal environment (routine autopsy), identified individuals will be assigned for examination first, followed by unidentified/unknown individuals, then skeletal remains (P46, 2018). Within an anthropology or facial imaging environment, suspected identity cases will be given priority, otherwise cases are handled in order of receipt. Cases that are incomplete (missing mandible, or otherwise broken/fragmented where the skull itself requires reconstruction) will shift to the back of the queue. If a case requires preparation prior to analysis (e.g. maceration), this will be started immediately upon receipt, with analysis following according to case order. Factors that are taken into consideration depending on context and

resources are volume (of cases), access, time, condition of remains, human resources, level of training, and available equipment.

Imaging Modalities: Work Rates & Case Experience

The most common job in Forensic Art in the United States is composite sketching. I imagine it always will be. For that, you need to draw faces. It's a great facility, period. Interpersonal skills naturally should be there, and victim sensitivity training and all that stuff. And you need a heck of a lot of understanding of memory function. And that doesn't seem to be part of the training very much at all. Anything else – age progression of children or fugitive updates of adults and the Unidentifieds – post-mortem depictions and the skeletal cases – there's a whole other knowledge-base you need to acquire to do those properly. (P19 in Smith, 2020b, p.195)

I'm *sick* of bickering about the pedantry of terminology when we're all trying to do the same thing! And whatever works, you know? [...] So we're talking about whether it's facial approximation, reconstruction, estimation or depiction... I'd say, if I'm taking a measurement from a skull, putting it through an equation and getting a soft tissue measurement, that's approximation or estimation. If I'm putting on average tissue depths, sculpting muscles and then *deferring* to the muscles and allowing them to swallow up the average tissue depths so I'm just going by the musculature – the shape of that with reference to the skull – that's reconstruction. That's *not* approximation or estimation. There's no metric element to that. [...] And then depiction is to texture it at the end of it. That's a different thing. You can't estimate that from the skull. (P50 in Smith, 2020b, p.330)

Practice in composite production is by far the most prevalent, with the most reported cases >2000, averaging thirty minutes to two hours to complete. However, as P21 (full-time LE artist, USA) comments, “We actually spend most of our time doing line-up image modifications and photographic comparisons (video to mugshots).” (P21, 2018). Practitioners who also have composite production as part of their duties report a far greater frequency of such facial depictions relative to post-mortem related work. It is unusual as a freelancer to be called in for regular composite work, although not unheard of. Three freelance respondents do this work, one ex-LE. Practitioners also report greater hit rate on composites, likely due to greater

circulation/exposure due to the time-sensitive nature of such cases. P24 reports 154 composites leading to positive identification of a suspect (P24, 2018).

Documentation and Reporting

Data Sharing

Adequate data sharing is a source of frustration among participants, particularly freelancers (P02, 2018; Smith, 2020b, p.60), as P02 describes. Where law enforcement artists work with partner services such as ME's office for post-mortem work, additional case documentation must be chased, as P21 explains:

A post-mortem depiction much like a skull reconstruction requires as much report detail as possible. I request police reports, crime scene photos, evidence slips, morgue photos and the medical examiner's report. If the photos of the deceased are not of good quality or lighting, I will request that the ME retake photos. Occasionally I will observe the individual at the morgue in person. If it is observed that the individual is in a stage of decomposition in which severe bloat has begun, I will request that the ME drain the face of fluids and to take pictures both before and after the draining and clean-up process. (P21, 2018)

Data-sharing practices vary widely and are surprisingly informal across both groups. Some agencies who commission external specialists may insist on stringent data security standards that meet their own, in line with relevant legislation (encryption, password protection, passwords sent separately and so on) but this is inconsistent across global contexts. Some practitioners report receiving relevant case data from a commissioning agency as a normal email attachment, while others ensure a more secure form of data transfer when returning results, including sending depictions in PDFs locked to external changes. It would be expected as a basic practice that any physical or digital information associated with a forensic case would be stored securely (physically locked away or digitally encrypted/password-protected) and

only shared with the relevant investigator, agency or service, unless permission is granted to do otherwise.⁶

Reporting

I wrote reports when I was in law enforcement. Since I became freelance, agencies do not require reports from me. (P24 in Smith, 2020b, p.233)

Reporting is a more common requirement within government and academic institutions (P20, P07, P43) who approach this work in accordance with scientific methodologies. P02 (freelance, UK) and P21 (LE, USA) both advocate for submitting a report in conjunction with a facial depiction. Reporting is otherwise not common practice among other LE and freelance practitioners.

In the South African context, P27b confirms they provide reports on a post-mortem facial depiction if an IO requests an affidavit for court, but because most forensic depictions are not evidence, this is unlikely to happen (P27b, 2018). With the Facial Identification environment, facial composites and comparisons are accompanied by illustrated reports that express findings as confidence levels or declare reasons why a comparison was not attempted.⁷

Practitioners also note the importance of using ‘plain language’ in reports for the benefit of families and non-specialists in the courts (P14, 2018; P20, 2018).

Standards and Regulation

Forensic anthropologist P13 notes that while OSAC are developing their own anthropology guidelines, SWGANATH (Scientific Working Group for Anthropology) ‘best practice’ guidelines remain the recommended point of reference but that these are “fairly generic.” In response, environments tend to develop their own SOPs and guidelines that reflect their specific conditions, highlighting *inter alia* the importance of multifactorial methods, not overstating findings, and understanding the limits of

⁶ Where this might raise alarm in respect of criminal investigations, the efficiency of text messaging and WhatsApp are embraced by anthropologists working with LEAs to confirm cases of non-human remains (P13, 2018; P37, 2018).

⁷ South African composite artists use a scoring system with witnesses to confirm likeness. One respondent in the USA also uses a scoring system with the witness to rate the likeness out of 10. If a score is less than 8, it may prevent the composite from being circulated.

tools like Fordisc (P13, 2018; P32, 2018; P46, 2018). For forensic photographer P49 (ZA), a basic rule of thumb is 'no cell phone cameras' for quality reasons (P49, 2018), but data security is an additional consideration (Edirisinghe et al., 2020).

I think that standards and practices can be problematic. Because when you start to standardize an approach to something that so many people do differently, and the results can't necessarily be replicated each and every time, because it depends largely on the practitioner's skill.... My obligation first is to my department. I have to fulfil the SOP for my department. And then anything beyond that is my own personal decision. But no, I don't necessarily advocate for the use of standards and practices or guidelines endorsed by any scientific working group. I think it's more applicable for controlling the end product that we see. (P18, 2018)

It is challenging. The anthropology route accredits me, but there is no accreditation for forensic artists in the UK and this field suffers from frauds, attention-seekers and cranks. Regulation would be beneficial to all. Practitioners do not feel that they have to abide by the same expert guidelines as other professionals and this can bring the field into disrepute. (P43, 2018)

Motivations

Fig. 87 illustrates the average scores per country/state according to whether a country (or state in the USA) actively carries out capital punishment sentences. For those countries or states who do not execute criminals, the average score is 4.9. For those that do, the average score is 4.1. With work roles taken into consideration, this suggests that on balance, a capital punishment context does not have a significant effect on attitudes; this is more a matter of personal belief.

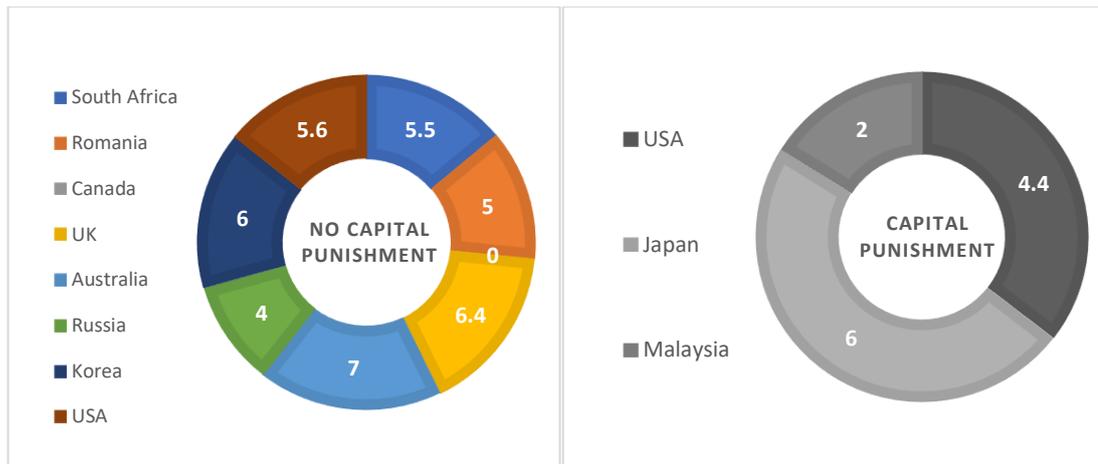


Figure 87: Motivation scale average score distribution relative to capital punishment practices per practitioner context (country/state)

Four solely narrative responses were given (no corresponding scores), which offer alternative perspectives on a question which by design, was intended to highlight the complexities of coming down on one side or another. They offer a unique, discursive insight into individual motivations:

Narrative Response 1

This is an interesting question that you have posed. I was going to put my checkmark right in the middle, but that wouldn't have been accurate, so I'm not putting a check mark anywhere! I have two very different, yet associated roles that very important to me personally, but one isn't more important than the other.

Composite sketches: When I'm doing composite sketches, that checkmark would be to the far left. Perhaps this bias is from being a police officer and in this role, my main objective is to work with the Victim/Witness to get the unknown suspects image down on paper and 'catch the bad guy.' I love being a cop! I love going after that bone and catching it. I also enjoy working with the Victims when we sit down for an interview and sketch out the unknown suspect's face. This helps the investigators know what the guys looks like, helps to initiate tips and phone calls to the police, etc. I am also very aware that these interviews allow the Victim to make a critical contribution to the investigation which greatly empowers them and gives them back a measure of self-confidence and perhaps diminishes the feeling of being a helpless victim. They have contributed to the efforts in apprehending or identifying the person/s who have wronged them. Can there be a better feeling that knowing that you have helped this person (Victim) retrieve some sense of self-dignity/empowerment as well as helping your colleagues identify a subject in a criminal investigation?? Good triumphing over evil once again!

Facial Reconstruction/Approximation: Giving back a name to the contents of a cardboard box sitting on a metal shelf with a Medical Examiners/Police file number. Whether or not this skull sitting before you, titled 'Unidentified Remains' was at one time a living breathing good and honest contributing member of society or a criminal with a long and horrendous record (and perhaps the author of his own demise), everybody deserves to be buried with a name. This person was a mother's son or daughter. This person had a father, siblings perhaps, and relatives. Maybe they were estranged from their families, or maybe they were snatched from their loving family's lives. Maybe their families have given up on them long ago and haven't spoken to them in years. Perhaps their families are still grieving for them, wondering where they went, what happened, still consciously or unconsciously searching for their faces in crowds. Can there be a better feeling knowing that the work you did in conjunction with a team has led to a person being identified? Your efforts have led to the remains of a person having their identity returned to them and their remains being returned to their family. You have given the family something other than memories to bury. They may not know the circumstances surrounding the death of their loved one yet, but they at least know where their loved one is....finally. The 'police officer' side of me is content that I have contributed to the file in that my work has identified the 'who.' Now I leave it to my colleagues to pick up the file and chase the other 'who-what-when' and most importantly the 'why' and 'how.' If this person was the victim of a homicide, the investigation can gain some traction and the investigators can begin to untangle why this person ended up as they did, possible motives for their death and perhaps identify those responsible . Good triumphs over evil! (P04, 2018, Canada)

Narrative Response 2

I don't know that I can sum up my primary motivation for working in the field of human identification into one specific reason; really there are several reasons, a cumulative result of the impact this work has on people and the pride that you feel in being able to do it. This career is challenging and can make a positive impact on the community in numerous ways. It's having a unique skill in a unique field that makes this work satisfying; it's knowing that your work can not only help catch violent criminals but also potentially save the lives of those who would have fallen victim to these criminals had they not been caught. It's about being able to help a family reunite with the remains of a missing loved one and finally get some answers, however painful, that can help them move towards healing. It's about serving a purpose larger than yourself and using a God-given gift to dedicate yourself in a positive way. A way that can impact and influence the lives of those around you. It's about giving back to those who have had so much taken from them and taking from those who have found pleasure in violence towards others. I know, for me at least, my motivation comes from something deeper than the outcome alone. Something that speaks to the core of who I am, the person I want to be, and how I want to live my life. I don't see this kind of work as just a job. What I see, is a calling. (P21, 2018, USA)

Narrative Response 3

From my perspective, I don't think about either. [...] I honestly don't think about either. [When you look at the identification side of things], all I see is that image, and could that image be [of] this person? That's it. Maybe it's difficult to understand or believe, but I don't look at whether I want to get the bad guy or get somebody off. It makes no difference to me. [...]. When you're doing the image – the medical artwork – again there's no emotion attached for me, it's like, 'There's a slash there, there's a slash there. That's on the real body, so that's on my avatar.' [...] My wife says I'm a bit cold. But it's like, I have no feeling for it. (P42 [UK] in Smith, 2020b, p.320)

Narrative Response 4

I have no primary motivation related to law enforcement (catching the bad guys) and only secondary motivation in supporting victims. My primary motivation is the application of academic knowledge to real world cases – to have impact for my research and teaching. (P43, 2018, UK)

score	context						role						gender		Capital punishment				
	LE Sworn	LE Civ.	Acad.	Pub. Sector	NGO/ Charity	Pvt Sector	Free-lance	Imaging	ID	Anthro	Path	Human ID Other	Death Investig.	F	M	Y	N	Susp	
7	4	1	5	-	-	-	3	6	-	2	-	3	2	8	5	2	11	-	
6	2	2	5	3	-	-	1	3	2	4	1	2	1	9	4	1	11	1	
5	2	-	-	-	-	-	1	1	1	1	-	-	-	3	-	-	3	-	
4	3	-	2	1	-	-	2	5	1	-	1	-	1	4	4	3	5	-	
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	1	1	1	-	-	-	-	1	1	1	-	-	-	2	1	2	1	-	
1	1	-	-	-	-	1	-	-	2	-	-	-	-	1	1	1	1	-	
narrative total	15	4	14	4	0	1	8	20	7	8	2	5	4	29	17	10	34	1	
% of total	32.6	8.7	30.4	8.7		2.1	17.4	43	15.2	17.4	4.3	10.7	8.7	63	37	21.7	73.9	2.1	
																		76%	

Table 22: Motivation Scale analysis by Work Context, Role, Gender, and Capital Punishment context

Language, Affect and Knowledge in Forensic Deathwork

We have a closed-door policy. From cultural to religious reasons, people don't want to walk in and see a skull sitting on your desk. The type of work that we do, we need our own space. You need dedicated space for every single task that you actually do here. It's very important. (P27a in Smith, 2020b, p.262)

The names we give⁸

You have to pick your audiences for sure. And they have to know what you're talking about. Even though there is an imaginary border between us and the States, there's still some terms there that you just would not say in Canada. (P04, 2018)(P04)

Experienced forensic anthropologists P13 (USA) and P32 (ZA) both see the value in attempting an assessment of ancestry, race or ethnicity⁹ when providing biological profiles for unidentified decedents (P13, 2018; P32, 2018). P13 advocates for recognizing how people might self-identify as belonging to groups associated with “(admittedly) broad geographic locations (i.e., Africa, Europe, Asia)”, whilst also acknowledging correlations in skeletal variation with these regions. However, they will only offer an ancestry assessment if an individual shows strong association with a single group, with the objective of assisting to narrow the pool of potential identifications. In more ambiguous cases, investigators are instructed to prioritize matches according to other factors (age, sex and time since death). P13 remarks further that ambiguous cases offer particular imaging challenges, and their artist thus avoids including visual information such as colour, skin tone or hairstyle that cannot be justified. P32 (2018) agrees: “To deny that ancestry exists and that we can't tell anything of it from a skeleton... I don't think it's helpful in a forensic context. I think that you should always be careful how you interpret it though; you can't say absolutely. Because it is a spectrum.”

⁸ This relates to a thematic pathway in *Speaking Likeness*

⁹ These terms are used variously within both groups, without any apparent consistency of meaning, suggesting that ancestry or ethnicity are used in an attempt at self-correction, i.e. to avoid using racialised language.

Respondents were asked if they distinguished or understood a difference between ‘body’, ‘corpse’, ‘cadaver’ or ‘remains’. While some respondents did not see a significant difference between these descriptors, or made idiosyncratic associations, generalized tendencies emerged which discriminated between these terms by site i.e referring to a context in which they signify.¹⁰

‘Body’ is considered a relatively neutral term referring to either a living or dead body; being ‘fleshed’ is its primary condition. ‘Corpse’ is associated with literary or historical usage; is not frequently used, a strong association with Halloween inferring it would be inappropriate to do so. ‘Cadaver’ is understood to refer to human remains within teaching or research environment, bequeathed or donated and preserved accordingly. ‘Remains’ are accepted as being disarticulated or fragmented, or “whatever is left of the person after death,” primarily referring, but not limited to, biological material.

I’ll start saying ‘body’ and then as soon as we start looking into identity, I’ll start referring to them as ‘the decedent.’ And in all written paperwork, it’ll always be ‘the decedent.’ [...] I always think of them as people. I think it’s more that it had an owner, and you’re trying to find out who the owner was so that you can return the property to them?
Interview included in *Speaking Likeness* (P50 in Smith, 2020b, p.331)

This transfer of ontological status from body to decedent as described by P50 echoes that described further on with reference to the dynamic spectrum of subject~object.

Nicknaming is a generally uncommon practice outside of the American tradition of John/Jane Doe¹¹, where the Doe placeholder name may be further specified through location, date or other idiosyncratic feature selected by whomever confers the name.¹² Location of recovery was a common shorthand to reference cases in face-to-face interviews, and an apparently powerful mnemonic: practitioners

¹⁰ Malaysia has a very sophisticated post-mortem vocabulary, with specific terminology for types of dead, who also described in relation to the context of their death/discovery (P06, 2018), and in Japan, the word for ‘dead body’ may carry a prefix to denote respect, which is preferred term used within medico-legal death investigations (P20, 2018)

¹¹ Media presence has ensured this placeholder naming system is part of popular culture. P16 (2018) reports this system also being used by a UK charity.

¹² P08 describes the case of ‘Princess Blue’, which their agency was managing but which had been taken up as a cold case of interest by the [Websleuths](#) online community. P21 recalls a cold case from 1982 where two pennies were found in the pocket of a deceased woman, whose subsequently became known to investigators as ‘Penny’ (P08, 2018; P21, 2018).

were often (or only) able to remember specific details if a case is ‘sited’ in this way (P27b, 2018; P37, 2018). Otherwise, cases are referred to and archived by case numbers or operational references received from investigators or the commissioning agency, which maintains chain of evidence.

Participants were then asked their views on what should happen to unidentified decedents should they not be identified or claimed by family. Storage for multiple unclaimed cases is widely acknowledged as a challenge, with the overwhelming majority of respondents favouring burial over cremation to retain the possibility of future exhumation should an identification eventually be forthcoming.¹³ Donation for scientific education/research is strongly supported.¹⁴ Further, it is expected that the legal custodians of the unidentified dead in each context/country would be sensitive to cultural or religious diversity as relevant and incorporate this into their protocols and budgetary planning as far as possible, or look to organisations such as the ICRC, Interpol and other organisations with well-developed, internationally recognised humanitarian guidance in mass disaster and mass grave investigations, for assistance.

The impact it has on the individual differs. Unnatural deaths are more disturbing, especially if it involves children. Accidents are more the natural course of life. (P41b, 2018, ZA)

If there was trauma to the face, we would inform the family and cover the injuries. The viewing of the decedent would help the family in the grieving process, but we would typically suggest it be done in a mortuary setting after the autopsy was completed. In homicide cases, families were not allowed to view the decedent before the autopsy in order to preserve evidence. (P25, 2018, USA)

¹³ P04 notes that in his jurisdiction in Canada, skulls of the unidentified may be retained by the ME for identification purposes and the rest of the remains buried. If later identified, the remains will be exhumed and reunified with the body.

¹⁴ P13 pointed out the subjectivity of deciding whether a pauper’s burial or scientific donation is a more or less respectful choice when unclaimed/indigent decedents are generally of lower socio-economic status: either could be considered as contributing to their further ‘victimization.’

Affective tensions

Understanding the difficulty of – and the *significance* of – dealing with a traumatised person is just a huge part of this work that is undervalued, under-known, underestimated. I know of a forensic artist who cries all the time, including when interacting with witnesses. And I don't think that does anyone any good. You *want* to cry a lot of the time, but in my view you should become, like a medical practitioner: you have to help someone. (P19 in Smith, 2020b, p.199)

Counselling for practitioners themselves does not translate to being sufficiently skilled at dealing with traumatized witnesses, which may be part of a forensic artist's job. Victim-support had to evolve within the law enforcement with P19 (USA) and P38 (ZA) both asserting the significant role that interpersonal intelligence plays in assessing how different personalities respond to the situation and what additional support they might need. P38 further suggests that ensuring victims understand the scope of an investigation, and the respective roles and responsibilities of all involved, is potentially empowering (P38, 2018). Personal encounters with informal interlocutors during fieldwork in Cape Town were powerful confirmations that explaining post-mortem identification procedures in detail, and with empathy (versus assuming they need to be 'protected' from certain information) is a powerful remedial for the anger and frustration families often feel when faced with an overburdened service facility.

Bodily materialities: subject or object?¹⁵

Obviously, if we're alive, we're subjects, right? But once we're deceased, we are subjects to other people that would know us, but we are objects to people who do not. (P31, 2018)

I remember they sent the body of this child from the Cape for us to analyse [...] And it was a small boy. And he's still fully clothed. And it shouldn't be like that when it reaches us, you know? Clearly there was no autopsy. How can he arrive with all his clothes on? So, we had to undress him. And I remember he had a green balloon in his pocket, that boy. And I remember that. That balloon just stays with me, because it just brought this person to light. When anyone asks me about my *worst* ... It was that green balloon in that boy's pocket. This kid going out to

¹⁵ As with the previous section, 'Subject or Object' is a thematic pathway in *Speaking Likeness*.

play and this is what happened to him? It just brought him to light... Or to *life*, ja. It's always the children. They have no business being dead there on my table. (P32, 2018)

When I'm dealing with remains, I don't have a family looking over my shoulder, or the investigators or anybody else, because nobody knows who this person is. And so, in a sense, there's no emotion involved in that, with the remains. It's just, I'm reconstructing a skull. [...] It's kind of like when I was in art school, and you're doing figure studies, you're not looking at it as a naked person sitting before you. You're not drawing the person; you're drawing shapes and negative spaces and shadows. It's the same as with the skull. You've got a structure that you're refreshing and animating, in a sense. (P04, 2018)

I was fine with it until I saw that they were wearing nail polish. That then makes them a person.” (P10, 2018)

[nail polish is] a little bit jarring...a bit of a hint, or a *reminder*” (P37, 2018)

[nail polish is] one of the very few things that'll actually get through... Otherwise I'm totally distant. Others see it as a person; I see it as something I have to analyse; I have to find out exactly what happened to this person, but I never see it as a 'person' as such.” (P37, 2018)

I remember some of the first days that I was in the mortuary, I was massaging the hands, trying to work out the rigor mortis to get fingerprints. The rigor mortis causes the hands to curl up again. Because at first the people look like they're sleeping. They don't always look like they're dead. And you're not really sure that this person is dead! [laughs] I was working on opening up the hand, and as I was pressing the hand, the hand would curl up again, into my hand. And I'd push back, and this hand would come up again. The third time, I *ran* out of the mortuary! [laughing] I was so frightened! Because I thought, 'No, wait! This one is not dead!' (P41b, 2018)

Valuing heuristic and tacit knowledge

I'm not much of a feeler. I'm like, 'Ok, it is this.' Systematic. But I think that part of the hidden curriculum in my attitude has been somehow transferred to my students. I did a qualitative study on how to develop

expertise in forensic anthropology and I couldn't do the interviews myself because they were my former students, so I had one my friends from Pharmacology do it. And he, of course, was creative, and he went off-topic and he wanted to know, 'How you *feel* when you work on a case? [And] when you macerate, when you process? Every single one of them said, 'We don't feel anything, we just treat it as a bone.' And I'm like, "Oh my God, what have I done? I've taught them to be unfeeling children! (P31, 2018)

This self-reflexive account P31 shares of experiencing herself reflected in her students via the results of a research survey stands as one of the most instructive moments in the fieldwork process, and exemplary of one of many kinds of tacit knowledge at work with forensic deathwork (but of course not confined to this field). Here, she is made aware of the role of individual personality within forensic anthropology's 'hidden curriculum', a tacit form of knowledge exchange, which was provoked by her colleague going "off topic" and asking emotions-focused questions. Deviating from standard protocol thus reveals new knowledge, not only about individual disciplinary practices, but about what values might be unconsciously transferred in a pedagogical context.

I absolutely do now [feel I have the skills to do the work], especially with a few years of experience behind me. (P09, 2018)

Yes experience helps! (P11, 2018)

I thought that my nursing experience would be helpful particularly in witness interviewing. Also, prior anatomical knowledge was useful. (P16, 2018)

Once I have worked dept of anatomy. This experience gave me lots of knowledge. (P17, 2018)

I used to perform DNA identification also (in anthropology section). This experience helped me to recognize that DNA identification and anthropological work must be collaborated each other for identification success [...] Experience through case works is more important than training. (P20, 2018)

Where ethical research involving post-mortem material is concerned, some advocate for only making use of donated collections, especially regarding osteological study repositories. While one participant suggests conducting *in vivo* research is more difficult than post-mortem research, two others suggest the opposite, citing confusion when visual methods are the focus of post-mortem studies, particularly where health sciences faculty research ethics committees are concerned. PM imaging (e.g. CT, Lodox) is becoming increasingly accessible and enabling less invasive PM examination, and the importance of *in vivo* imaging has been long established as critical validation tool for facial reconstruction methods.

Prioritized cases, or those that informed future work, are instructive lenses into practitioner culture as a reflection of social concerns which in turn reflect questions of professional collaboration, peer-to-peer networking and fostering greater academic-practitioner engagement. Cases involving children are often mentioned as particularly intense (greater urgency, sensitivity) as well as those involving interpersonal aggression, where someone needs to be held to account for the death of another person, particularly cases of gender-based violence, sexual abuse/rape and serial offenders. As P41b (SAPS VIC) explains:

Key cases are ones that were urgent, media cases, difficult cases or disturbing cases. Mostly I remember cases by the impact it had on me personally, usually if it was negative. But there are also cases where I was able to identify someone who seemed unidentifiable, those I will always remember. Or cases where I tried something new and it worked. Or cases where I had to persist and work hard to involve the help of many people, and it eventually resulted in an identification (hard fought for). (P41b, 2018)

This was one of the first cases after we updated the guidelines on how to process skeletal cases received in the Gauteng Southern Cluster and information (in addition to the human remains themselves) we documented and photographed the personal items associated with the remains. The case was analysed and then we were notified that DNA had failed to produce a profile. However ante-mortem data was collected by the relevant SAPS individuals and the family provided detailed descriptions of the clothing in particular the shoes. Among other investigative leads a potential match was established and the human remains were sent for skull superimposition. There were a number of unique features and healed trauma observable on the remains which lined up with several scars observable in photographs and a match was

established using several different secondary identifiers. I think this case helped stress the multifactorial approach to identification and the use of several different disciplines in a single case. (P46, 2018)

Both accounts draw parallels with approaches being successfully applied in the ‘mirror site’ contexts of Mellili and OpID, and are also indicative of counter-forensic approaches operating within official forensic services.

Part 2: FPO focus group

Methods and Materials

The cohort

Based on information entered into the session register (age, employee grade, gender and year they joined the service) and verified against consent forms and any additional information provided on the worksheets, the cohort consisted of 12 male and 3 female members, ranging in age from 22 – 49 yrs (average age 29.7 yrs). Employees self-identified according to grades L0 (including interns, n = 4), L1 (n = 9), L2 (n = 0) and L3 (shift supervisor, n = 1). The officer with the longest record of service (M, 35yrs) also served under the previous SAPS administration. One of the youngest members was also one of the most recent recruits, joining FPS that year (2018). The most senior member (shift supervisor, F, 49 yrs) has served since 2009. Only 1 participant did not provide this information.

Facilitation and conditions of participation

Participation was voluntary, with no financial incentives.¹⁶ A representative of SRM management acted as gatekeeper. The objectives and activities of the focus group were described in detail in the original research ethics application (on which the facility was a named partner, so they had sight of all relevant Participant Information and consent forms long in advance of the session), but it was still re-iterated that staff should not feel obliged or otherwise pressurised to participate.

¹⁶ It is unknown whether participants received overtime pay for attending work outside of their normal shift hours.

FPOs work in shifts from 'six to six': 06h00 - 18h00 and 18h00 - 06h00 (the following day), organised in teams (A,B,C,D) on a rota system over a two-week cycle. The day shift assists FMPs with post-mortem examinations which commence at 07h30 and run until about 12h00. During public opening hours FPOs also conduct visual identification with next-of-kin, field enquiries from investigation officers and the public, and facilitate the release of bodies to appointed funeral services or other authorities. Underpinning all this is a host of administrative tasks and interpersonal dynamics. In contrast, the night shift is less determined by these routines, and how busy they might be is unpredictable, except for weekends, when socializing in the city is likely to take dark and fatal turns and staff are kept constantly busy.¹⁷

Organising this session involved considerable negotiation over the period of a year. Remote communications with FPOs were an agreed solution at the commencement of the sub-study (March 2018) but a number of communication challenges in the intervening period (unreturned emails, requests ignored or misunderstood) resulted in considerable frustration and necessitated the 2018 fieldwork session, further justified by having secured formal access to SAPS members. However, on arrival in Cape Town, none of the agreed arrangements were in place and new arrangements had to be made on site. Due to limited time in the country and the final data collection opportunity, only two shift teams could be interviewed during this research visit instead of all four as originally planned.

Facility management arranged for the session to take place at shift change-over on the first day of a new shift cycle (Thursday 1 November 2018) between 16h30 – 19h30, with the incoming shift arriving early and the outgoing shift staying late to enable the session. This contribution of personal time is acknowledged as considerable, particularly given a long shift ahead or just completed.

The encounter

For the majority of FPOs in this session, this was our first mutual encounter, but some were familiar faces from a previous research visit (2016). During the week

¹⁷ The independent documentary film *Six to Six* (Six to Six, 2016) offers a very human and accurate portrait of a night-shift at this facility, reflecting external perceptions of their work, personal commitments to it, and coping mechanisms of individual officers that is intimate, pragmatic and gently humorous.

prior to the session while conducting observation work, some FPOs had offered me their unsolicited (but welcomed) opinions on their involvement with past research projects. These were both positive and negative. One of these was a participating shift supervisor who reminded me on several occasions in passing that they ‘had no time for academics who take our knowledge and don’t give us any credit.’ These confrontations were invaluable as they supported my observations regarding the hierarchies of knowledge and experience, and perceived benefits versus exploitation that produce authority and forms of expertise within this particular institutional culture. These inevitably shape the interpersonal dynamics within this environment as evidenced by the focus group debriefing and were significantly amplified in my interactions with members of the SAPS during the same fieldwork period.

The majority of the group arrived promptly, with some latecomers throughout who were accommodated and briefed accordingly. The tone of the session was established as very informal in order to optimise the possibility of open conversation.

Designing the Sequential Array

The original experimental design envisioned projecting visual stimuli (10 depictions) on a screen in a meeting room (see Preface, fig. 2) with officers scoring each on personal scoresheets. However, the venue had no projection facilities and it was not known in advance exactly how many officers would attend the session. Working off an estimate of ten attendees, scoresheets were prepared accordingly. The final recorded cohort of fifteen officers (although more were intermittently present as informal observers) were thus asked to work in pairs to share limited resources but to record independent scores and/or comments for each depiction.¹⁸

Artists were not named in the exercise, although one depiction (2) clearly included a legible signature, which was deliberately not masked. In one depiction, the agency badge was edited out (5), but in two others, the organisation’s logo or

¹⁸ The decision to get members to work together was anticipated ahead of the session, with a view to doubling as an ice-breaker if officers seemed reticent to engage, or if certain voices dominated the early part of the discussion. Based on an assessment of responses to the session’s introduction, it was decided the exercise would be more effective if officers were invited to pair up. The risk that this may influence scores, as members may collude and write the same thing, especially if paired with a more senior member, or stronger personality, was acknowledged, but considered worth taking. The importance of scoring and commenting individually was therefore repeatedly stressed.

institutional insignia was retained (6, 8). Half had open mouths (2, 3, 4, 7, 8), and the other half closed (1, 5, 6, 9, 10). Would this be interpreted as inferring facial expression, for example, or understood as a practical way to reveal characteristic dentition? One (5) showed both frontal and lateral views, and in another (7), a photograph of the decedent's jewellery has been included in sharper focus than her face. It was hoped that these features would become spontaneous topics of conversation in the debriefing session about what officers felt contributed or distracted from the image's objectives. Specific mention of these details may further indicate levels of close observation, curiosity and visual literacy/competency amongst the group.

Table 23 summarises score range (min., mean, max.) per depiction, indicating whether all respondents gave numerical scores (n = 15) or provided comments in lieu of scores (Depictions 3 & 6: n = 14; Depictions 8 & 9: n = 13). Mean values were calculated relative to total number of scored responses (weighted). Asterisks indicate where comments were given in lieu of a score.

Table 23: Focus Group Image Response Scores (detailed)

	1			2			3			4			5		
															
n	15			15			14			15			15		
	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max
REALISTIC	5	7.7	10	3	6.3	10	2	8.1*	10	5	8.5	10	6	7.8	10
PLEASING	3	6.5	10	3	6.3	10	4	7.5	10	3	7.3	10	3	6.7	10
RESPECTFUL	4	7.1	10	3	7.1	10	5	8.1	10	3	7.7	10	4	7.7	10
BELIEVABLE	4	7.8	10	3	7.1	10	5	8.5	10	7	9.1	10	5	8.3	10

	6			7			8			9			10		
															
n	14			15			13			13			15		
	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max
REALISTIC	0	8.4*	10	4	7.7	10	6	8.5*	10	5	7.6	10	5	8.5	10
PLEASING	4	8.4	10	3	7	10	3	7.2	10	5	7.7	10	3	8.5	10
RESPECTFUL	3	8.8	10	5	7.9	10	7	8.2	10	5	7.3	10	5	8.7	10
BELIEVABLE	2	9.1	10	6	8.1	10	6	8.7	10	3	7.2*	10	5	9	10

Appendix 5: Additional Materials for Chapter 5

Inviting the sitters

Speaking Likeness features seventeen out of forty-eight interview respondents (35.4%), with my own inclusion making a total of eighteen narrative portraits. At the centre of the work is the set of research interviews produced either face-to-face (the vast majority), remotely, or as a form of auto-ethnography (I conducted my own participant-observer interview), where participants agreed to also sit for a video portrait as part of their interview, or in the case of those who participated remotely, agreeing to supply a video file according to specific instructions (included in this Appendix).

In order to explain the envisaged artwork, a proof-of-concept explainer video was made and circulated to potential sitters, which may be accessed here: <https://vimeo.com/262812354> (password LOTF_2018). At this stage, the work was envisioned as a gallery installation, but during the process of research, an online presentation was considered a better conceptual solution which was also less resource-heavy, but with the option to scale up in future.

Through close textual analysis and contextual reflection of the conditions under which the interviews were conducted, and my relationship to the participants, these interviews were designed to draw out some of the less visible aspects of the role and function of the forensic artist – its emotional labours were a key interest – along with related experiences of ‘visibility’ and invisibility.

Table 24 charts the relationships and networks embedded within this collection of portraits and stories, which also indicates the significance of research activities in the recruitment of participants for the study in general, and how these spaces overlap, or don’t (academic/practitioner spaces in particular, with the notable exception of P01).

Table 24: *Speaking Likeness* participants according to initial/current researcher relationship

P	Teacher/ mentor	Dundee	FACTS 2018	IAI 2018	IACI 2017/2019	SAPS
01						
02						
03						
05						
07						
08						
10						
11						
19						
20						
24						
27a						
27b						
38						
42						
50						
51						

Conditions of participation was the primary consideration. Would participants who requested to remain anonymous agree to being visually represented? If so, what might this say about the relationship between being named versus an anonymous facial image? What is at stake engaging in frank dialogue that at worst, could be potentially compromising, or at best, a source of community chatter? An interview transcript produced for the purposes of raw research data is a very different object to a script designed for wider (public) circulation. A voice, whether recorded audibly or transcribed, is a recognised tool of potential forensic identification, whether through analysis accent, tone or linguistics as exemplified in the work of Lawrence Abu Hamdan (Kreuger, 2015; Apter, 2016; Raponi, 2016). Accent and articulation skills are also a source of bias, transmitting perceived authority, or the opposite.

One of the potential affordances of *Speaking Likeness* is thus how it confronts issues related to ethics and anonymity, implicitly critiquing ineffective performances of maintaining anonymity (eye blocks) whilst also recognising the importance of providing a space and platform for voices who might require a measure of protection within their professional lives (where personal views may be at odds with the institutional culture). Given that several participants who requested anonymity welcomed engaging in this artistic experiment, suggests that this mode of presentation offers a space free from ordinary professional constraints, and an

opportunity to voice concerns that would thus appear to have no alternative platform, or for practitioners who represent different kinds of authority or expertise within the field by virtue of their work context, experience or training, an equal platform. My own prior experience as an artist and curator, as well as a qualified forensic artist, enabled this anticipatory insight and was also the source of the skills deployed in response to these problems.

Capturing the portraits

Fourteen of the portraits were captured by me, either before or after conducting the semi-structured research interview. Four portraits (3 x US, 1 x Japan) were submitted by the sitters themselves, following instructions sent to them by the artist-researcher. Of the four sent in remotely, three had participated in the research via questionnaire due to challenges of geographic distance and language (I was unable to interview them in person or via video conferencing due to scheduling, time zones and translation issues).¹

Capturing the portraits required a simple set-up: a minimum of five minutes alone in a room, sitting comfortably against a pale neutral background, head and shoulders in frame, looking into a video camera. Experience and process refined the approach, which evolved in direct relation to practicality (portability) and available circumstances. Where possible, natural light was used in favour of a portable lighting set-up (LED ring-lights) because sitters reported the ring-lights to be somewhat distracting or uncomfortable, and a particular lighting set-up may be difficult to replicate for participants producing their own portraits.

When approaching participants, I explained my interest in ‘returning the gaze’ of those tasked with producing facial images for forensic identification as a way of giving a face to the often-anonymous artists behind forensic imaging. Might

¹ The fourth portrait remotely submitted was in fact the very first research interview (P01) conducted during my first period of fieldwork in the United States in February 2018, attending Karen T. Taylor’s *Drawing to Depict the Deceased* workshop at the FACTS facility at Texas State University, San Marcos, before *Speaking Likeness* was conceived. Attending the International Association for Identification conference in San Antonio, TX (July-August 2018), would afford an opportunity to follow up with those introduced to the project at FACTS, and meet other potential participants. Although we discussed filming the portrait in San Antonio, circumstances did not permit. The participant then committed to recording his own portrait. The cancellation of the IACI event in Baton Rouge (July 2019) due to a hurricane also prevented the capturing of at least one other interview follow-up and portrait that had been agreed (P23), but could not take place.

this foster a reflection on the reciprocity between subject (artist) and object (casework), and then between a visitor to the site/reader of the accompanying book, as their gaze is held by images of unnamed people looking back at them? I was also interested in what might be at stake in considering ourselves ‘in the image of’ the kinds of images we are tasked with making as forensic imaging specialists. References to passport photography and criminal mug-shots was made explicit in terms of the visual objective and the desired pose (neutral expression).

The process of sitting still and holding a gaze – ‘becoming an image’ for a period of time – inevitably records the moment when external awareness turns inwards. If participants found themselves reflecting on their work, they were encouraged to record this experience in a form of their choosing, and share it with the researcher. This did not happen; many instead reported that they found the experience to be meditative or relaxing. Some found five minutes to feel much longer than they anticipated but for the majority who were concerned they wouldn’t be able to sit still for that long, the time flew by.

Crafting the scripts

For the narrative portraits, fourteen were based on conversational transcripts, and four on written interviews, including email follow-ups. I include my own ‘interview’ as written. Of these, only one face-to-face interview was conducted with someone I had never met in person prior to the interview (P02) compared to another participant (P27a) who I first met twenty years ago. The rest represent relationships established between 2012 and 2018.

Initially the written interviews were considered richer sources of narrative potential, with the possibility that only these portraits would be viable. However, developing the narrative pathways indicated this was not the case, although they produced shorter scripts, and the final piece makes use of all the portraits recorded/submitted. Eighteen also turned out to be an ideal number for the final design of the portrait gallery, which fell into place around two grids of 3 x 3 as seen in the end pages of the e-book, or a single 3 x 6 grid as seen in the online iteration.

Developing the scripts began in tandem with the textual analysis of data towards reporting empirical research findings, to create a space for the more affective aspects of storytelling. Working from verbatim transcripts which faithfully

retained non- or extra-verbal communication (laughter, sighing) and tone that might convey something of the mood and spirit of our dialogue and an attitude to what is being discussed, reinstated the context of the encounter; I was able to recall a sense of energy (excitement, exhaustion, nervousness); a facial expression in response to a certain question or mention of a particular person or event. I could recall ambient smells or sounds, if we were drinking coffee or sharing a snack. In a sense the transcripts and interviews were my sculpting materials or collage elements, representing what has been conceptualised, negotiated and produced over the period of a year.²

The narrative themes extend those used for the qualitative analysis of research findings in Chapter 4 into tropes that represent key matters of concern and care that are broadly consistent across the field, cutting across cultures and contexts, namely, *It all started with...*; *The names we give*; *Subject or object*; *Working cases*; *Accurate or recognisable*; *There was this case...*; *Interdisciplinary interactions*; *Evidence or intelligence*; *Emotional labour*; *Matters of Care, matters of concern*; *Being seen*; and *Forensic futures*. As such, they suggest possible interventions towards addressing these issues in an international relevant way (or at least where attention should be focused to ensure the future relevance of the field).

Once the formalities of confirming consent and that the participant understood the interview's objectives, the general pattern of a conversation tended to start with technical or small talk based on biography and current role, with a participant engaging with maximum relaxation and frankness after approximately ninety minutes. On average, an interview of two to three hours would deliver compelling stories towards the end of the session, a likely result of rapport and trust being long-established, and sufficient account given of professional experience to shift into a more personal register. Or perhaps that, knowing the session was about to

² It is also worth noting that I found it very productive to write the thesis 'with' these transcripts, both during the transcription and editing process, and later during their empirical analysis and re-editing as scripts for *Speaking Likeness*. Treating them like technical editing exercises was not nearly as effective as using them as a way to engage real flow, in thinking and writing of sections of the thesis itself. Day one or two would be a conscious effort, but by day three, ideas would flow/overflow freely, and writing was fluid across any number of draft chapters, note-dumps, and follow-up lists, fuelled by being back in these conversational spaces, and thinking across/linking them to other interviews and activities (meetings, workshops, reading the literatures). Writing with literatures is a common practice for me (this occurs literally, producing palimpsestic objects out of printed articles) but I became particularly conscious of it here recalling a sited encounter with a conversation partner.

end was an incentive to open up even further, a ‘last chance’ to express their opinions.

This process made me very aware of how stories and scenarios function as an interviewing technique, either to establish a bond based in a shared experience or currently topical subject. The affordances and challenges of social media as an appropriate circulation space for Forensic Art, and ways in which these platforms are being used by amateur artists and online sleuths; or the representation of our field in the media, and ways in which documentaries, news shows or fictional dramas, were a critical entry-point or moment of awareness about the field existing at all for many practitioners were topics of shared interest and relatability for many. I realised I was interviewing myself as much as I was engaging a research participant, so it only seemed fair to commit to this as the eighteenth (or first) participant.³

Analysing the interviews with a view to recrafting them as stories offered an opportunity to attend closely to ways in which a conversational form or medium influences its content, and how each interview thus required a different editorial approach with a view to creating versions of these accounts suitable for reading and listening. For example, face-to-face conversations with participants with whom I had a prior relationship were naturally more informal than those conducted over email with participants I have never met in person. Or conducting an interview in space where the participant felt most comfortable – their own home for example – was likely to result in a more relaxed encounter, even if this was taking place over video chat, versus if the interview took place in an unfamiliar environment or workplace. Retaining expressive idiosyncrasies that characterise an individual’s speech and patterns of language but removing distractions and the non-sequiturs of spoken conversation highlights the significance of individual voice, both in terms of conversational content but also as a material which can be shaped, akin to sculpture.

One deliberate strategy was to refer to extra-verbal conversational traces like laughter or sighing, indicated in square brackets where appropriate. Another was to retain direct reference to my presence by participants. For example, P01 draws an analogy between racial attitudes in the American South and apartheid South Africa and how this shapes language (Smith, 2020a, p.32); P03 saying ‘you are one of

³ Interviewing myself did not just happen once, it happened as part of every conversation. By this I mean that every encounter shaped and challenged my thinking and advanced the ideas that formed the initial motivation and objectives for *Laws of the Face* as a whole.

them' (Smith, 2020a, p.75) in the context of identity politics; or when a participant may refer to a visual example that is unavailable to a third-party listener/reader: How do we imagine what we cannot see? These instances shift the dyadic encounter to a triadic one, placing the viewer/reader in my position, receiving the 'address of the other.'

Crafting the voice-over scripts were exercises in detailed selection and re-organisation. Finding the most clarifying way into these stories whilst also maintaining hold of the complexity and competing interests within the field was probably the most difficult and time-consuming and conceptually taxing task, requiring several draft/review/rethink processes that are akin to the dynamics of a studio practice, how some participants describe the need to step back from a depiction and return to it with fresh eyes.

No alterations were made to the substance of the transcripts whatsoever. Final scripts were sent back to participants for final approval, to ensure that they were happy with how they would be represented within the piece. In this way, the work involves an element of collaboration and participants are acknowledged as such.

Choosing a voice

The decision to record the scripts in my own voice was informed by practical and conceptual concerns. Practically speaking, not all interviews were audio recorded; some were emailed questionnaires due to language barriers, geographical distance and time zones as previously discussed. Because face-to-face interviews were recorded only for the purposes of transcription, and environments varied widely, the audio quality was not consistent and thus unsuitable for use as voice-overs. The ways in which the transcripts would need to be edited was also a factor.

Both voice actors and AI voices were considered in the interests of supporting anonymity, but this was abandoned as this would not serve to foster the necessary human intimacy I was hoping to achieve. Using my own voice not only achieve both these objectives but would also foreground my role as the only consistent interlocutor. Because I conducted the interviews, and have a very clear memory of the encounter, I would be able to infer tone and emphasis which I would

lose with an AI and would have to direct with a voice-actor. The technique of re-voicing was also recognised as an accepted device within journalistic reportage to protect the identities of informants. It is therefore not the intention that this should be interpreted as an attempt to ‘speak on behalf of’ these practitioners – the scripts are after all their own verbatim words – but rather, has the effect of amplifying alertness to questions of trust, authenticity and implicit bias.

Technical production and beta-testing

Portrait post-production was done between the Liverpool School of Art and Design, Face Lab and A4 Arts during 2018-2019; voice-overs were recorded and produced in Liverpool during February 2020, and final video editing was completed in early March 2020. Portraits were edited in Adobe Premier CC 2019), removing any associated audio and converting them to grayscale to balance the tonal range across the set, applying levels and adjusting exposure accordingly. Likewise, some minor adjustments were necessary to ensure compositional parity across the set. A ‘letterbox’ filter was then designed and applied to each video, customised to the proportions of each face, to create the impression of in-focus eyes and blurring the surrounding face, shoulders and background. Finally, all portraits were trimmed to exactly five minutes duration. Each narrative portrait varies in length from several seconds to several minutes. The longest is just under ten minutes. For the longer narratives, which used the full five minutes of video in its entirety or as a reversing loop to extend over a longer period (but creating the illusion of a continuous period of sitting), the transition of an outward gaze slowly turning inward, is visibly perceptible. The total viewing time for the complete piece of 222 videos is approx. six hours.

The platform and user interface were conceptualised and drafted with the assistance of digital artist Alana Blignaut, during a residency at A4 Arts Foundation in Cape Town, and then remotely as the work developed. It was built using a customised Wordpress template and is best experienced on a desktop system using headphones and the Google Chrome browser, but it has been optimised for mobile devices (iPhone, iPad). The work (including the accompanying e-book) is published under a Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-

ND) licence. A beta version of the site was circulated in April 2020 for peer-review on the UI experience (accessibility and navigation logic) and stability/playback testing, from which feedback was applied through two further iterations to arrive at the final version.⁴

⁴ This took place during the first several weeks of Covid-19 lockdown between Liverpool and South Africa, when internet traffic was at its peak, making it difficult to accurately assess playback stability. Further work was then done to ensure optimal playback under significant bandwidth pressure.

Appendix 6: Additional Materials for Chapter 6

From fieldnotes (2018), reflecting on Cape Town fieldwork

I had a couple of very instructive encounters with Uber drivers on this trip. My pick-up and drop-off sites – a police criminal records centre, Salt River mortuary, SAPS Forensic Science Laboratory – were familiar (probably somewhat feared) spaces for most, especially undocumented people. Both E and M [drivers] told me on different days and in different ways that I was ‘not the type of person’ they were familiar with encountering at these places. I didn’t ask what type of person they meant. As we chatted, I realised my strangeness was an advantage, as was my willingness to answer their questions. I am generally wary of conversations triggered by a mention of the ‘f’ word (forensic) but both encounters ended up being invaluable lessons about the ‘client experience’ of FPS.

Field vignette 7: Uber trip with E, 30 October 2018, 10h50

When E began telling his story, he could barely contain his anger, the consequence of an erosion of a deep pride as a result of his experiences. As the de-facto leader of the Malawian community in Cape Town (and because he has a car), he told me he is called on to support fellow displaced Malawians in various ways, but especially when they experience xenophobic violence. When such attacks have been fatal, he is asked to attend visual identification sessions at the Salt River mortuary along with the family, where his credentials are questioned, along with whomever he is supporting. If they cannot produce original documents, they get sent away, or in his most recent experience, threatened with arrest. “But they don’t understand it is dangerous to carry our original papers. We get robbed all the time, so we make copies. But they think we are all criminals! But we are ordinary people and we just want to bury our friend.” He apologised self-consciously. I said I understood, that I was sorry that he had this terrible experience, I had seen it myself. Without excusing the behaviour he described, I explained that fraud was a big problem there and any mistake can create big problems for at least two families. E appreciated this, but said “But they don’t talk to us nicely?” Yes, and there is no excuse for that. But they are not the police, so they have no power to arrest anyone. “But I see the police vans there? And they have uniforms?” No, I insisted. Many of them may have been police before, and they work with the police, but they are part of the Department of Health. “Aha!” he said, “Next time this happens, I will tell them I know they are not police.” Yes, I said, and you can tell them I said so, handing him my card. When we had pulled up at my destination, and I was gathering my things to get out the car, he was tucking the card carefully into his wallet.

Field vignette 8: Uber trip with M, 30 October 2018, 13h45

M picked me up at the mortuary one afternoon. I had never had a female driver in Cape Town before, so I asked her if she enjoyed the work. “Yes!” she laughed, “I like being out and meeting people. But I don’t work at night, just days.” Probably wise, I said. I didn’t imagine it was very safe. No, she agreed, “but what is a nice girl like you doing at that terrible place? *Hawu!*” I was about to laugh but I sensed she was not joking. I explained I was doing research about unidentified people, that there is a national crisis. Did she mean ‘terrible’ because of the dead? People are wary of the place, but usually because what happens there seems secretive. She insisted it was not because of the dead, that this was necessary work. But her

cousin had been murdered and they would not release the body. She had been there more than a week, but no one was able to identify her until the day before. I asked if anyone had explained to her family what procedures must take place, that there are many things to take care of between them and the police? “No,” she said. “They just say we must wait.” I replied that they are telling her exactly what the police tell them, which made her sigh-laugh. *Ja, ne? SAPS!... Eish.* I then asked if she wanted to know exactly what happens or if it would be too upsetting for her. “No,” she insisted, “you must tell me, so I can know. Then I will not be so angry.” I explained what happens under normal circumstances as well as if things get challenging. I wanted her to know what questions she could ask if the process got further delayed. “You see now, why don’t they explain it like this? It makes sense. *Eish*, but if they take longer...”

Negotiating facelessness

The effects and affects of an encounter with facelessness are powerfully illustrated in P19’s account of interviewing a traumatised survivor of a violent assault in order to produce a composite drawing of her attacker. The assault left the woman with significant facial injuries. Anticipating the victim’s extreme vulnerability and the risk of re-traumatisation by having to face her attacker again (albeit in a sketch) the artist realised the importance of conferring some of the power of this unavoidable confrontation to her witness in order to elicit further details to correct, refine and complete the composite. The artist placed the in-process drawing on an easel, covered by a plain white sheet of paper, and asked the victim to reveal the face to reveal the image herself when she felt ready to do so:

She looked at the piece of white paper for a long time but she got her courage up and eventually, she moved it and she looked at the face. The dynamics of working all that out was one difficult thing, but at some stage she said to me, ‘I know my face is going to look really bad. I’m a nurse, I know what’s happening. But what I really care most about is that I don’t have a face and when I’m out in public, it will scare little children.’ And I can remember having to turn away and wipe the tear that was trickling down my face, because I didn’t want her to see me doing that. But it was really tough. (Smith, 2020a, pp.200–201)