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Dhaulagiri Journal of Sociology and Anthropology



# Ethical Dilemmas in Visual Anthropology and Sociology in the Era of Artificial Intelligence

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Abstract

Scholars worldwide are in dialogue about using Artificial Intelligence (AI) in various fields of research. It has supported enhancing work efficiency, including social science research. Although ethical use of AI is still fuzzy, the use of AI in visual anthropological and sociological research that entails the Interpretive Approach raises several questions. This editorial highlights three key questions: Are researchers satisfied with the interpretation (the meaning created) by AI, i.e., the authenticity of the interpretation? Can AI reach the depth of the details of the visual object being interpreted? Thirdly, what ethical issues would AI-based research encounter if AI were highly supportive? Answering these questions, however, is not easy. Since a detailed analysis of these components needs rigorous research work, we consider issues that will be the basis for further research in this editorial note. Hence, the purpose of this note is to bring the research agenda to the forefront of researchers for further investigation rather than answering specific research questions mentioned here.

*Keywords:* artificial intelligence; ethics, interpretive methodologies; visual anthropology and sociology; social-human-technology interface

#### Introduction

Scholars worldwide have been discussing on how artificial intelligence (AI) enhances work efficiency, its ethical use, and the benefits it brings through technological advancement. Visual anthropologists and sociologists collect and analyze visual data, presenting social and cultural meanings through visual representation. Generative

AI, such as OpenAI, ChatGPT, DeepSeek, and Claude-Anthropic, has rapidly gained widespread use (Fui-Hoon Nah, 2023; Simkhada et al., 2024). AI is extensively used for creating texts, images, videos, logos, websites, data analysis, and programing. AI-powered algorithms analyze user behavior and preferences to supply personalized content feeds on social media platforms like Facebook, Instagram, TikTok, and YouTube. These algorithmic processes



This work is licensed under the <a href="https://creativecommons.org/licenses/by-nc-sa/4.0/">https://creativecommons.org/licenses/by-nc-sa/4.0/</a> Man Bahadur Khattri Rishikesh Pandey, Ratan Kumar Roy, Madhusudan Subedi, Edwin van Teijlingen, Sara Parker, and Prem Bhandari

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raise questions about epistemological authority and asethical issues in visual interpretive research. Considering their importance in visual research, we are trying to establish critical scholarly engagement to address these aspects.

Visual research methods have long occupied a complex ethical terrain in anthropology and sociology because of the potential misinterpretation and commodification of intimate cultural moments into artifacts (Pink, 2021). The use of AI in this field has further created a double burden from an ethical perspective. For decades, visual anthropologists and sociologists have been researching and trying to decode the meaning from a visual object. However, the rapid advancement of artificial intelligence (AI) technologies and their use in interpretive social sciences is transforming the language and landscape of such research. Hence, AI functions as a content generator, detector, and humanizer. Despite its several benefits, its use in research documentation and presentation poses significant challenges, particularly when AI-generated content is blindly relied on for writing academic papers and submitting to a scientific journal (van Teijlingen et al., 2024). Most importantly, the use of AI is creating unprecedented ethical issues in visual interpretive research.

Many software programs now integrate AI features to enhance functionality, making it increasingly difficult for individuals to avoid using AI when working with digital tools. Therefore, it is crucial to establish ethical guidelines for AI usage. Transparency is a key ethical component emphasized by the Committee on Publication Ethics (COPE) in its standard publication guidelines. It is not an issue if a journal explicitly permits AI-generated content and has clear guidelines. It is important, however, to make it clear to both authors and readers how AI has been used in written work. However, some journals have advised reviewers not to use AI when assessing a manuscript, or only to input a submitted manuscript into Large Language Models with the author's permission. The reason is that AI programs can use each manuscript to train their models, thus potentially putting the submitted manuscript in the public domain. Using AI as a reviewer is a breach of intellectual property rights and potentially violates the Data Protection Act if the manuscript includess personally identifiable data.

In addition to the ethical issue, another question is whether the AI has the ability to interpret the visual objects as humans/experts do? Uricchio (2017) noted disruptions in foundational assumptions about the evidentiary status of the visual interpretation because of the shift from representation to simulation, from lens-based capture to computational language. This raises the issue of the authenticity of interpretation to a complex agency, ownership, and knowledge production. In this context, this editorial note highlights the challenges that need to be addressed in the context of the ever-increasing necessity of the use of AI technologies, including in the field of visual anthropological and sociological research. It is also equally important to establish ethical frameworks and investigating if an AI

powered interpretation was superior to human interpretation. In this context, this note is structured in three subsections: (1) understanding the paradigm shift in interpretation; (2) ethical dilemma of AI use in visual interpretation research; and (3) the *Dhaulagiri Journal of Sociology and Anthropology* team's concluding note.

### **Paradigm Shift in Visual Interpretation Research**

Traditional visual research methods have historically been grounded in the indexical relationship of trace to reality (Sontag, 1977). The fundamental premise is that visual objects remain largely intact, which the AI technologies are challenging by offering new abilities. AI, as generally claimed, is enhancing rather than replacing human visual analysis, specifically in the case of the scales of details and from the volume of data, which is almost impossible for humanns. D'Ignazio and Klein (2020) claimed that machine learning systems can extract patterns from faces and bodies including emotional states and health condition that humans cannot perceive. However, when the issue of the consent of the subject becomes critical, they fail algorithmically. Therefore, as Crawford and Paglen (2019) stated, AI-generated interpretations simply do not reflect the cultural background to researchers nor its audiences, but it actively reshapes the way researchers categorize and make sense of the world from the visual data.

Visual and digital ethnography has emerged as a powerful extension of visual anthropology and sociology. Digital ethnography extends traditional ethnographic practices into online and hybrid spaces, combining visual, textual, and interactive data drawn from social media, virtual communities, and mobile technologies (Pink et al. 2016). Davidson and Morell (2023) highlighted the importance of AI-expert collaborations in archaeological research using satellite imagery that AI systems alone achieved 62% accuracy and human experts 79%, while the combination, the complementary system where AI flagged potential sites for human verification, achieved 94% accuracy, even by reducing human labor by 67%. These results demonstrated that there is no question about the AI assistive visual anthropological and sociological research. However, this sort of collaboration cannot be claimed as Artificial Intelligence. Rather, as Farisco et al. (2020) termed 'augmented intelligence' that enhances human capabilities through the assistance of machine learning, it is not to replace humans in research.

Over-dependency on AI in visual interpretive research, however, risks false conclusions. For example, Buolamwini and Gebru's (2018) demonstrated significantly worse facial analysis of algorithms for darker-skinned faces and female faces. Birhane et al. (2022) also demonstrated errors in machine learning systems since it consistently failed to recognize culturally specific visual markers immediately apparent to human observers with relevant knowledge. Since the major scope of visual anthropologi-

cal and sociological research is researching out to the marginalized communities rather than that of the modernized mainstream, these sorts of biases can systematically distort analysis, and they remain invisible. As a result, it creates 'algorithms of oppression' as Noble (2018) termed, a new form of oppression over gender, color, ethnicity, race, and disability.

Another issue in interpretation in visual anthropological and sociological research using AI is that the visual object created through DeepFakes and other AI-generated imagery, in which visual researchers face difficulties distinguishing whether it was original, a wrong interpretation cannot be ruled out. This challenge is particularly acute while working with historical materials or media from unfamiliar cultural contexts. Regarding the status of knowledge, there remains a serious ethical dilemma in using AI in visual anthropology and sociology.

#### **Ethical Dilemma**

There has been a popular trend in using tools such as screen recording and AI-assisted transcription, which have needlessly pushed the boundary of classical visual ethnography and given rise to a new framework of digital-visual ethnography. Integrating AI into social research poses new challenges for scholars interested in visual and digital ethnography. The ethical challenges are wide, ranging from the question of informed consent and data sovereignty to the moral responsibilities of researchers. Couldry and Mejias (2019) argued that 'data sovereignty' advocates for communities' rights to control the collection and analysis of their visual representations. Many indigenous communities have protocols that embed cultural values and often deny access to visual data. However, the use of AI seriously compromises this ethic.

Concerns regarding authenticity have emerged in AI-based interpretation. Elish and Boyd (2018) observed moral crumple in AI systems that makes absorbing responsibility for actions creating challenges to maintain ethical accountability because an algorithmic work identifies patterns that influence research conclusions. In this conclusion, a researcher cannot be held responsiblele for interpretations.

As AI becomes increasingly embedded in data collection, analysis, and even representation, scholars and practitioners must also confront other urgent ethical questions. Therefore, developing AI-specific ethical codes for safeguarding participants, preserving cultural sensitivity, and ensuring research integrity is much more crucial than ever before. While using ethnographic methods to document ordinary people's everyday social and cultural life (Kharel, 2015), key research concerns include authenticity, privacy, and informed consent (Rose, 2016). The International Visual Sociology Association (IVSA) is updating its Codes of Ethics to address new technological innovations and interventions in visual research.

It suggests a disclosure for using recording technology and/or Generative AI. Photo elicitation and photo voice methodologies also address ethical issues in the classic form of visual sociology and anthropology (Harper, 2012). However, for decades, scholars have debated and discussed new concerns for image ethics in the digital age (Gross et al., 2003).

Some AI editorial facilities are provided by editing software and are specially used in social media, such as Filmora, an AI-supported editing software. Without a doubt, AI can manipulate original photos/videoes and images. Deep fakes have been used widely to create videos for fame and social recognition on social media., AI can remove video background, convert text to video, photo to video of diverse emotional scenes, change or add body movements, lip-sync and emotional features of 3D videos. Moreover, adding AI-generated music and voice cloning can change visual phenomena and bring ethical challenges, including the livelihood of people who depend upon such occupation. These AI facilities can be (mis)used to destroy images, trust, and create conflicts of interest and experiences. Not all individuals know the power of AI software and use and mis-use of AI. That creates confusion and develops a false reality among the low AI-literate people. Due to the misuse of AI, people are worried about taking photographs. This situation has both social and cultural implications in modern society.

In the context of ethical use of AI, Rose (2016) has summarized six key principles for the Economic and Social Research Council (ESRC) in the United Kingdom (UK). These principles are (a) voluntary participation; (b) do no harm; (c) providing appropriate information regarding objectives, processes, and possible use of images; (d) maintaining anonymity; (e) review, and (f) no conflict of interest. These ethical principles raise several complexities in visual research, as places and individuals are often identifiable in visual data. Some questions become more important, such as - what are the hard and fast visual/anthropological sociological ethical rules that should be followed? How to measure the ethical standard of a researcher? How far can we use AI while editing ethnographic film? Are photo elicitation and voice the best practices that do not harm the research participants? Is it possible to maintain the anonymity of people and place in visual anthropology and sociology? How does a researcher maintain his/her self-honesty towards their work without manipulation? The most important and bright side of technological advancement always supports genius researchers around the world, and we ask established scholars of the field to contribute critically to the use of AI in research. The compilation of which would be a valuable resource for the emerging researchers.

#### Concluding note

The most important dilemmas in interpretive research

are maintaining the authenticity of the method and the outcome, i.e., generated meanings. From the ethical perspective, key questions include: What level of privacy can be protected? AI users must safeguard the integrity of cultural studies by promoting the most accurate representation of the phenomena studied. For scholars in digital and visual ethnographic research, along with consent and anonymity, it is essential to be aware of the biases and cultural misrepresentation in AI-driven image circulation. Therefore, ethical codes for the current times should be co-produced with the participants and practitioners to uphold the integrity of visual ethnography in the age of artificial intelligence. Furthermore, technical literacy is becoming a prerequisite for ethical practice beyond computer science (Benjamin, 2019). Ccomplementary roles of human and algorithmic analysis using AI in research findings are undeniable in the present world order; the ethical practice in using AI, especially in visual anthropological and sociological research works, has become more important than ever.

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