

# INTERNATIONAL CONSTRUCTION MANAGEMENT THE CULTURAL DIMENSION

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A thesis submitted in partial fulfilment of the requirements of  
Liverpool John Moores University  
for the degree of Doctor of Philosophy

October 1999

## **ABSTRACT**

Cultural differences at the national level are a challenge for all companies operating beyond their own national borders. They change the way business is done in the most fundamental ways. A subject thoroughly researched in other fields, the literature indicates that, beyond a small number of very specific studies, there is a paucity of research into the impact and effects of cultural differences on the international construction industry. The international construction industry began with the Victorian railway magnates but, today, has become a sophisticated, global market, with construction enterprises operating in both developing and developed countries worldwide. When this is seen in light of the complex, project-based arrangements involved in production of the built environment, the potential impact of national cultural differences is, arguably, more pronounced than in any other industry.

From the literature, it was established that while the cultural dimension is recognised as being important within the international construction industry, there was no mention of how culture is considered at either the operational or strategic level beyond anecdote. Thus, the research sought to establish the ways in which both British expatriate construction professionals, and the companies for whom they work, respond to the cultural dimension. A questionnaire, comprising both qualitative and quantitative elements, was devised to gather the views of British construction professionals working outside the UK. This was supplemented by interviews with key decision-makers in eight, diverse construction enterprises, all of which had operations outside Britain.

It was found that both British construction expatriates and the companies they work for adopted an ethnocentric response to the differences that they encountered when working overseas. However, while the expatriates were moving towards a more synergistic approach, the companies (both consultancies and contractors) were moving towards parochialism. It is argued that in an increasingly globalised and culturally diverse market, both at home and overseas, British construction enterprises will need to focus far more on the esoteric aspects of their business, such as culture, to maintain their competitive edge. One of the organisations studied was identified as epitomising ‘best practice’ in their treatment of cultural diversity, and their approach is recommended as a way to manage cultural differences throughout the industry.

## **TABLE OF CONTENTS**

|  | <b>Page</b> |
|--|-------------|
| Abstract   | i           |
| Table of Contents  | ii          |
| Table of Appendices  | vii         |
| List of Figures  | viii        |
| List of Tables   | x           |
| Acknowledgements   | xii         |
| <br>   |             |
| <b>CHAPTER ONE</b>   |             |
| <b>1.0 Introduction</b>  | <b>2</b>    |
| <b>1.1 The Importance of Investigation the International Construction Industry</b> | <b>2</b>    |
| <b>1.2 The Need for Research</b>   | <b>3</b>    |
| <b>1.3 Existing Research</b>   | <b>6</b>    |
| <b>1.4 The Purpose and Aims of the Research Project</b>                            | <b>7</b>    |
| <b>1.5 The Thesis</b>  | <b>8</b>    |
| <b>1.6 Thesis Structure</b>  | <b>9</b>    |
| <b>1.7 Summary</b>   | <b>12</b>   |
| <br>   |             |
| <b>CHAPTER TWO</b>   |             |
| <b>2.0 The International Construction Industry</b>                                 | <b>14</b>   |
| <b>2.1 The International Construction Industry – an Historical Perspective</b>     | <b>14</b>   |
| <b>2.2 International Construction</b>  | <b>17</b>   |
| <b>2.3 A Unique Industry?</b>  | <b>18</b>   |
| 2.3.1 A Note on Terminology  | 20          |
| <b>2.4 Internationalisation of Construction Enterprises</b>                        | <b>21</b>   |
| 2.4.1 The Globalisation Process  | 21          |
| 2.4.2 The International Imperative   | 25          |
| 2.4.3 Trends in the Global Construction Industry                                   | 28          |
| 2.4.4 The Future Pattern of International Construction?                            | 32          |
| <b>2.5 Business Strategy and the International Construction Enterprise</b>         | <b>34</b>   |
| 2.5.1 Strategy Defined in a Business Context                                       | 34          |
| 2.5.2 Overseas Business and Strategic Choice                                       | 36          |
| 2.5.3 Business Strategy in an International Context                                | 38          |
| 2.5.4 Business Strategy and the Construction Enterprise                            | 41          |
| <b>2.6 Summary</b>   | <b>46</b>   |

|  | <b>Page</b> |
|--|-------------|
| <b>CHAPTER THREE</b>   |             |
| <b>3.0 The Cultural Dimension</b>  | 49          |
| <b>3.1 Cultural Dynamics and Analysis</b>                                | 49          |
| <b>3.2 Modeling Culture</b>  | 52          |
| <b>3.3 The Difference Between Culture and Personality</b>                | 57          |
| 3.3.1 Issues in Cultural Anthropology                                    | 59          |
| <b>3.4 Other Features of Culture</b>                                     | 60          |
| 3.4.1 Cultures and Subcultures   | 60          |
| 3.4.2 Language as a Facet of Culture                                     | 62          |
| 3.4.3 National versus Organisational Culture                             | 63          |
| 3.4.4 The Durability of Cultural Difference                              | 64          |
| 3.4.5 The Weberian Philosophy of Cultural Advantage                      | 65          |
| <b>3.5 Manifestations of Culture</b>                                     | 66          |
| <b>3.6 The Validity of Hofstede's Model</b>                              | 69          |
| <b>3.7 Some Lessons for the Research Project</b>                         | 71          |
| <b>3.8 Summary</b>   | 72          |
| <b>CHAPTER FOUR</b>  |             |
| <b>4.0 Cultural Dynamics and the International Construction Industry</b> | 75          |
| <b>4.1 Construction Activities Effected by Cultural Differences</b>      | 75          |
| 4.1.1 Expatriate Personnel   | 76          |
| 4.1.2 Foreign Staff and Operatives                                       | 80          |
| 4.1.3 International Legal Issues and Contracts                           | 82          |
| 4.1.4 Negotiations and Communication                                     | 84          |
| 4.1.5 Codes of Conduct and Ethical Standards                             | 86          |
| 4.1.6 Appropriate Design Approaches and Technology                       | 89          |
| 4.1.7 International Construction Marketing                               | 91          |
| 4.1.8 Joint Ventures   | 93          |
| <b>4.2 Concerns of the US International Construction Industry</b>        | 94          |
| 4.2.1 Technological Strength   | 96          |
| 4.2.2 Government Regulations   | 97          |
| 4.2.3 Personnel Traits   | 97          |
| 4.2.4 Global Competitiveness in the Year 2000                            | 98          |
| 4.2.5 A Scenario for International Construction Activity in the Future   | 98          |
| 4.2.6 Measures to Address the Issues of Concern                          | 99          |
| <b>4.3 Cultural Diversity: The Construction Enterprise's Response</b>    | 100         |
| 4.3.1 Possible Responses to Cultural Diversity                           | 100         |
| 4.3.2 The Advantage of Managing Cultural Differences                     | 101         |
| <b>4.4 Summary</b>   | 107         |



|  | <b>Page</b> |
|--|-------------|
| <b>CHAPTER FIVE</b>                                      |             |
| <b>5.0 A Research Strategy</b>                           | 110         |
| <b>5.1 The Research Questions</b>                        | 110         |
| <b>5.2 The Study Hypotheses</b>                          | 112         |
| 5.2.1 Primary Hypothesis                                 | 112         |
| 5.2.2 Secondary Hypothesis                               | 112         |
| 5.2.3 Tertiary Hypothesis                                | 113         |
| <b>5.3 Research Methodology Theory</b>                   | 113         |
| <b>5.4 Evaluating the Methodological Options</b>         | 117         |
| <b>5.5 Selecting the Research Strategy</b>               | 118         |
| 5.5.1 Philosophical Considerations                       | 118         |
| 5.5.2 Practical Considerations                           | 120         |
| 5.5.3 The Research Methodology Strategy                  | 121         |
| <b>5.6 Combined Qualitative and Quantitative Designs</b> | 124         |
| 5.6.1 The Nature of Mixed Methodology in this Project    | 126         |
| <b>5.7 Summary</b>                                       | 126         |
| <b>CHAPTER SIX</b>                                       |             |
| <b>6.0 Survey Theory and Questionnaire Design</b>        | 129         |
| <b>6.1 Aims of the Survey</b>                            | 129         |
| <b>6.2 Stages in the Survey Plan</b>                     | 129         |
| <b>6.3 Questionnaire Wording and Design</b>              | 130         |
| 6.3.1 Question Reliability                               | 130         |
| 6.3.2 Question Validity                                  | 131         |
| 6.3.3 Types of Measure                                   | 131         |
| 6.3.4 Types of Questions                                 | 131         |
| 6.3.5 Increasing Validity of Factual Questions           | 132         |
| 6.3.6 Increasing the Validity of Subjective Questions    | 133         |
| <b>6.4 Key Considerations on Actioning the Survey</b>    | 133         |
| 6.4.1 Different levels of Management                     | 133         |
| 6.4.2 Different Types of Construction Enterprise         | 134         |
| 6.4.3 Cultural Relativity                                | 134         |
| 6.4.4 Cultural Manifestations along the Dimensions       | 135         |
| 6.4.5 Recommendations                                    | 135         |
| <b>6.5 Questionnaire Structure</b>                       | 136         |
| 6.5.1 Questionnaire Structure                            | 136         |
| 6.5.2 Reliability and Validity                           | 138         |
| 6.5.3 Individual Question Rationale                      | 139         |
| <b>6.6 Piloting</b>                                      | 144         |
| 6.6.1 A Piloting Strategy                                | 144         |
| 6.6.2 Results from the Pilot Survey                      | 144         |
| 6.6.3 Changes to Survey in Light of Piloting Exercise    | 146         |
| <b>6.7 Survey Sampling Procedure</b>                     | 146         |
| 6.7.1 Total Survey Population                            | 146         |
| 6.7.2 Sampling Rationale                                 | 148         |
| 6.7.3 Sampling Procedure                                 | 149         |
| 6.7.4 Number of Responses Required                       | 150         |
| <b>6.8 Summary</b>                                       | 151         |

|   | <b>Page</b> |
|---|-------------|
| <b>CHAPTER SEVEN</b>  |             |
| 7.0 Survey Analysis   | 155         |
| 7.1 Survey Responses  | 155         |
| 7.1.1 Characteristics Describing the Respondents                                  | 156         |
| 7.1.2 Characteristics Describing the Respondents' Organisations                   | 158         |
| 7.2 General Analysis Issues   | 159         |
| 7.2.1 Statistical Analyses  | 160         |
| 7.2.2 Qualitative Analyses  | 161         |
| 7.3 Entire Sample Analyses  | 162         |
| 7.3.1 Relative Difficulty of Working Overseas in Construction                     | 162         |
| 7.3.2 Important Factors in Working Overseas in Construction                       | 166         |
| 7.3.3 Important Cultural Indicators in Managing Internationally                   | 173         |
| 7.3.4 Policy Environment for Overseas Working                                     | 180         |
| 7.3.5 Preparation for Working Overseas in Construction                            | 182         |
| 7.4 Multiple Comparisons  | 184         |
| 7.4.1 Differences between Contractors and Consultants                             | 185         |
| 7.4.2 Differences by Years of Experience Working Overseas                         | 185         |
| 7.4.3 Differences in Level of Management  | 186         |
| 7.4.4 Differences by Profession   | 187         |
| 7.4.5 Differences in Nature of Job  | 189         |
| 7.4.6 Differences in Regional Location of Posting                                 | 191         |
| 7.4.7 Differences in Experience of Previous Countries                             | 194         |
| 7.4.8 Differences in Diversity Among Subordinate Staff                            | 195         |
| 7.4.9 Differences in Perception of General Problematic Nature of Working Overseas | 196         |
| 7.5 Summary   | 198         |
| <b>CHAPTER EIGHT</b>  |             |
| 8.0 Case Study Interviews – Theory and Design                                     | 203         |
| 8.1 Aims of Case Studies  | 203         |
| 8.2 Components of Case Study Designs  | 203         |
| 8.3 Theory in Case Studies  | 204         |
| 8.4 Types of Case Study Design  | 205         |
| 8.4.1 Single- and Multiple-Case Designs   | 205         |
| 8.4.2 Replication Logic in Case Study Methodology                                 | 206         |
| 8.4.3 Holistic versus Embedded Case Studies                                       | 206         |
| 8.4.4 Implications for This Research Project                                      | 207         |
| 8.5 Preparation for Case Study Data Collection                                    | 209         |
| 8.5.1 Developing a Case Study Protocol  | 209         |
| 8.5.2 Piloting the Case Study Design  | 210         |
| 8.6 Collection of Case Study Data   | 211         |
| 8.7 Interview Methodology   | 212         |
| 8.8 The Interview Guide Design  | 213         |
| 8.8.1 Case Specific Questions   | 214         |
| 8.8.2 The Interview Schedule Questions  | 214         |
| 8.8.3 The Interview Guide (or Schedule)   | 215         |
| 8.9 Interview Transcription   | 218         |
| 8.10 Summary  | 219         |

|  | <b>Page</b> |
|--|-------------|
| <b>CHAPTER NINE</b>  |             |
| <b>9.0 Case Study Analysis</b>                             | 222         |
| 9.1.1 Case Study Organisation A                            | 222         |
| 9.1.2 Case Study Organisation B                            | 223         |
| 9.1.3 Case Study Organisation C                            | 224         |
| 9.1.4 Case Study Organisation D                            | 225         |
| 9.1.5 Case Study Organisation E                            | 226         |
| 9.1.6 Case Study Organisation F                            | 227         |
| 9.1.7 Case Study Organisation G                            | 227         |
| <b>9.2 Analysis Approach for the Case Studies</b>          | 228         |
| 9.2.1 A Review of Specific Case Study Analysis Techniques  | 228         |
| 9.2.2 Analysis Approach for the Semi-Structured Interviews | 229         |
| 9.2.3 Analysis Procedure                                   | 230         |
| 9.2.4 Data Structure                                       | 231         |
| <b>9.3 Within Case Analysis and Findings</b>               | 235         |
| 9.3.1 Findings for Case Study A                            | 236         |
| 9.3.2 Findings for Case Study B                            | 241         |
| 9.3.3 Findings for Case Study C                            | 252         |
| 9.3.4 Findings for Case Study D                            | 258         |
| 9.3.5 Findings for Case Study E                            | 261         |
| 9.3.6 Findings for Case Study F                            | 265         |
| 9.3.7 Findings for Case Study G                            | 268         |
| <b>9.4 Cross Case Analysis</b>                             | 272         |
| <b>9.5 Summary</b>   | 275         |
| <b>CHAPTER TEN</b>   |             |
| <b>10.0 Summary and Conclusions</b>                        | 281         |
| <b>10.1 Summary of Thesis</b>                              | 281         |
| <b>10.2 Summary of Methodology</b>                         | 283         |
| <b>10.3 Summary of Findings</b>                            | 285         |
| 10.3.1 Summary of Survey Findings                          | 285         |
| 10.3.2 Summary of Case Study Findings                      | 287         |
| <b>10.4 Triangulation of Findings</b>                      | 288         |
| <b>10.5 Thesis Validation</b>                              | 294         |
| 10.5.1 The Orientation Hypotheses                          | 294         |
| 10.5.2 The Research Thesis                                 | 299         |
| <b>10.6 Implications for Policy and Practice</b>           | 303         |
| 10.6.1 Achieving Cultural Synergy                          | 307         |
| <b>10.7 Implications for Future Research</b>               | 309         |

|  | <b>Page</b> |
|--|-------------|
| <b>APPENDICES</b>  |             |
| Appendix 1 Questionnaire, Cover Letter, Glossary and Completion Instructions                                       | 311         |
| Appendix 2 Statistical analysis Basis  | 325         |
| Appendix 3 <i>z test</i> Results for Question 27   | 327         |
| Appendix 4 <i>z test</i> Results for Question 30   | 330         |
| Appendix 5 Multiple Comparisons within Dependent Variables for Question 27<br>Across Various Independent Variables | 333         |
| Appendix 6 Multiple Comparisons within Dependent Variables for Question 30<br>Across Various Independent Variables | 355         |
| Appendix 7 Case Study Protocol   | 374         |
| Appendix 8 Interview Guide   | 377         |
| Appendix 9 The Use of NUD*IST in the Thesis  | 379         |

## **FIGURES**

|           | <b>Page</b> |
|-----------|-------------|
| Fig. 1.1  | 12          |
| Fig. 2.1  | 17          |
| Fig. 2.2  | 19          |
| Fig. 2.3  | 29          |
| Fig. 2.4  | 30          |
| Fig. 2.5  | 31          |
| Fig. 2.6  | 32          |
| Fig. 2.7  | 32          |
| Fig. 2.8  | 33          |
| Fig. 2.9  | 38          |
| Fig. 2.10 | 40          |
| Fig. 2.11 | 40          |
| Fig. 3.1  | 56          |
| Fig. 3.2  | 63          |
| Fig. 3.3  | 67          |
| Fig. 3.4  | 68          |
| Fig. 4.1  | 75          |
| Fig. 4.2  | 78          |
| Fig. 4.3  | 105         |
| Fig. 4.4  | 106         |
| Fig. 5.1  | 114         |
| Fig. 5.2  | 115         |
| Fig. 5.3  | 115         |
| Fig. 5.4  | 123         |
| Fig. 7.1  | 156         |
| Fig. 7.2  | 156         |
| Fig. 7.3  | 156         |
| Fig. 7.4  | 156         |
| Fig. 7.5  | 157         |
| Fig. 7.6  | 157         |
| Fig. 7.7  | 157         |
| Fig. 7.8  | 157         |
| Fig. 7.9  | 158         |
| Fig. 7.10 | 158         |
| Fig. 7.11 | 159         |

|           |   | <b>Page</b> |
|-----------|---|-------------|
| Fig. 7.12 | Number of Years Involved in Overseas Activities                                       | 159         |
| Fig. 8.1  | The Case Study Design   | 208         |
| Fig. 8.2  | Relationship Between Research Questions and Interview Questions                       | 213         |
| Fig. 9.1  | Conceptual Chart Diagram of 'General Issues' for Interviewee 3                        | 237         |
| Fig. 9.2  | Conceptual Chart Diagram of 'Workload Issues' for Interviewee 3                       | 240         |
| Fig. 9.3  | Conceptual Chart Diagram of 'Human Resource and Personnel Issues' for Interviewee 3   | 241         |
| Fig. 9.4  | Conceptual Chart Diagram of 'General Issues' for Interviewee 1                        | 242         |
| Fig. 9.5  | Conceptual Chart Diagram of 'General Issues' for Interviewee 7                        | 244         |
| Fig. 9.6  | Conceptual Chart Diagram of 'General Issues' for Interviewee 8                        | 246         |
| Fig. 9.7  | Conceptual Chart Diagram of 'General Issues' for Interviewee 11                       | 248         |
| Fig. 9.8  | Conceptual Chart Diagram of 'Human Resources and Personnel Issues' for Interviewee 11 | 249         |
| Fig. 9.9  | Conceptual Chart Diagram of 'General Issues' for Interviewee 5                        | 253         |
| Fig. 9.10 | Conceptual Chart Diagram of 'Human Resources and Personnel Issues' for Interviewee 5  | 254         |
| Fig. 9.11 | Conceptual Chart Diagram of 'General Issues' for Interviewee 10                       | 255         |
| Fig. 9.12 | Conceptual Chart Diagram of 'Human Resources and Personnel Issues' for Interviewee 10 | 256         |
| Fig. 9.13 | Conceptual Chart Diagram of 'General Issues' for Interviewee 2                        | 259         |
| Fig. 9.14 | Conceptual Chart Diagram of 'Human Resources and Personnel Issues' for Interviewee 2  | 260         |
| Fig. 9.15 | Conceptual Chart Diagram of 'General Issues' for Interviewee 4                        | 262         |
| Fig. 9.16 | Conceptual Chart Diagram of 'General Issues' for Interviewee 12                       | 264         |
| Fig. 9.17 | Conceptual Chart Diagram of 'Human Resources and Personnel Issues' for Interviewee 3  | 265         |
| Fig. 9.18 | Conceptual Chart Diagram of 'General Issues' for Interviewee 6                        | 266         |
| Fig. 9.19 | Conceptual Chart Diagram of 'Human Resources and Personnel Issues' for Interviewee 6  | 267         |
| Fig. 9.20 | Conceptual Chart Diagram of 'General Issues' for Interviewee 9                        | 270         |
| Fig. 9.21 | Conceptual Chart Diagram of 'Workload Issues' for Interviewee 9                       | 271         |

## **TABLES**

|             | <b>Page</b>   |
|-------------|---|
| Table 2.1   | Non-Profit Motivations for International Contractors to Operate Overseas 28             |
| Table 3.1   | Elements of Culture 52  |
| Table 3.2   | Hofstede's Value Orientation Studies in Context 71                                      |
| Table 4.1   | Key Issues and Topics Addressed by the CII Research 95                                  |
| Table 4.2   | Major Concerns of the American Industry 96  |
| Table 5.1   | A Comparison of Deductive and Inductive Methods of Research 117                         |
| Table 5.2   | Evaluation of Basic Research Methodologies 118  |
| Table 6.1   | Stages in the Survey Plan 130   |
| Table 6.2   | Managerial variables to be ranked by respondents 142                                    |
| Table 6.3   | Estimate of British Construction Professionals Based Overseas 147                       |
| Table 6.4   | Sample Distributions 150  |
| Table 7.1   | Survey Response 155   |
| Table 7.2   | Relative Difficulty of Working Internationally 162                                      |
| Table 7.3   | Significance of Factors Comprising Question 27 166                                      |
| Table 7.4   | Coding for Significantly Important Factors in Question 27 172                           |
| Table 7.5   | Significance of Factors Comprising Question 30 173                                      |
| Table 7.6   | Coding for Significantly Important Factors in Question 30 179                           |
| Table 7.7   | Official Policy Differences 180   |
| Table 7.8   | Informal Policy Differences 180   |
| Table 7.9   | Training or Information Received Prior to Current Posting 182                           |
| Table 7.10  | Training or Information Received Prior to Previous Postings 182                         |
| Table 7.11  | Importance of Training Internationally 182  |
| Table 7.12  | Significant Differences for Years of Experience Working Overseas 186                    |
| Table 7.13  | Significant Differences for Level of Management 187                                     |
| Table 7.14  | Significant Differences due to Differences in Profession 189                            |
| Table 7.15  | Significant Differences due to Differences in Nature of Job 190                         |
| Table 7.16a | Significant Differences based on Regional Posting (Question 27) 192                     |
| Table 7.16b | Significant Differences based on Regional Posting (Question 30) 193                     |
| Table 7.17  | Significant Differences based on Experience of Other Countries 194                      |
| Table 7.18  | Significant Differences as a result of Diversity Among Subordinate Staff 196            |
| Table 7.19  | Significant Differences due to Perception of Problematic Nature of Working Overseas 197 |
| Table 8.1   | Approaches to Satisfy the Research Method Design Tests when Conducting Case Studies 205 |
| Table 9.1   | Matrix of Coding for General Issues 234   |
| Table 9.2   | Matrix of Coding for Workload Policy and Strategy 234                                   |
| Table 9.3   | Matrix of Coding for Personnel and Human Resources 235                                  |

|             | <b>Page</b>   |
|-------------|---|
| Table A3-1  | <i>z test</i> for Dependent Variable A 327  |
| Table A3-2  | <i>z test</i> for Dependent Variable B 327  |
| Table A3-3  | <i>z test</i> for Dependent Variable C 327  |
| Table A3-4  | <i>z test</i> for Dependent Variable D 327  |
| Table A3-5  | <i>z test</i> for Dependent Variable E 328  |
| Table A3-6  | <i>z test</i> for Dependent Variable F 328  |
| Table A3-7  | <i>z test</i> for Dependent Variable G 328  |
| Table A3-8  | <i>z test</i> for Dependent Variable H 328  |
| Table A3-9  | <i>z test</i> for Dependent Variable I 329  |
| Table A3-10 | <i>z test</i> for Dependent Variable J 329  |
| Table A3-11 | <i>z test</i> for Dependent Variable K 329  |
| Table A3-12 | <i>z test</i> for Dependent Variable L 329  |
| Table A4-1  | <i>z test</i> for Dependent Variable A 330  |
| Table A4-2  | <i>z test</i> for Dependent Variable B 330  |
| Table A4-3  | <i>z test</i> for Dependent Variable C 330  |
| Table A4-4  | <i>z test</i> for Dependent Variable D 330  |
| Table A4-5  | <i>z test</i> for Dependent Variable E 331  |
| Table A4-6  | <i>z test</i> for Dependent Variable F 331  |
| Table A4-7  | <i>z test</i> for Dependent Variable G 331  |
| Table A4-8  | <i>z test</i> for Dependent Variable H 331  |
| Table A4-9  | <i>z test</i> for Dependent Variable J 332  |
| Table A4-10 | <i>z test</i> for Dependent Variable K 332  |
| Table A5-1  | Significant Differences for Years of Experience Working Overseas 333-4                  |
| Table A5-2  | Significant Differences for Level of Management 334-5                                   |
| Table A5-3  | Significant Differences due to Differences in Profession 336-7                          |
| Table A5-4  | Significant Differences due to Differences in Nature of Job 337-8                       |
| Table A5-5  | Significant Differences due to Differences in Regional Posting 338-43                   |
| Table A5-6  | Significant Differences based on Experience of Previous Countries 343-53                |
| Table A5-7  | Diversity Among Subordinate Staff 353-4   |
| Table A5-8  | Significant Differences due to Perception of Problematic Nature of Working Overseas 354 |
| Table A6-1  | Significant Differences for Years of Experience Working Overseas 355-6                  |
| Table A6-2  | Significant Differences for Level of Management 356-7                                   |
| Table A6-3  | Significant Differences due to Differences in Profession 357-8                          |
| Table A6-4  | Significant Differences due to Differences in Nature of Job 358-9                       |
| Table A6-5  | Significant Differences due to Differences in Regional Posting 359-63                   |
| Table A6-6  | Significant Differences based on Experience of Previous Countries 363-71                |
| Table A6-7  | Diversity Among Subordinate Staff 371-2   |
| Table A6-8  | Significant Differences due to Perception of Problematic Nature of Working Overseas 373 |



## **ACKNOWLEDGEMENTS**

A document as substantial as this would never have been produced without the support and help of others. As with most pieces of work of this nature, there are a considerable number of people who provided me with help, encouragement and assistance in many different ways. Firstly, I have to thank Yassine Melaine, without whose encouragement and belief, I would never have embarked on the project in the first place. He also provided a lot of valuable advice and insights on earlier work.

Secondly, my thanks go to a very supportive supervision team. Professor David Jaggar took a keen interest in the subject matter, always provided constructive and helpful criticism and, in a very busy schedule, was always able to find time to listen. He was also instrumental in encouraging, and finding the means, for me to visit conferences both in the UK and overseas where I could meet the academic community at large and meet my peers in particular. It also gave me the opportunity to get my work into the public domain. Professor John Whitelegg took on the role of second supervisor at a later stage, which was itself something for which I am grateful. He provided a very different perspective on my research interest. He also encouraged me to tighten and be more concise (and precise) with a lot of what I was writing. Otherwise, I would never have been able to produce something within the stipulated regulations (long as it is). Finally, I have to thank Peter Williams for keeping my feet firmly on the ground, especially in the early days.

A particular vote of thanks goes to Ken Seavor, for getting me through the statistics. His help and advice was essential when despondency was beginning to set in. Also there were numerous people I met at various conferences who encouraged me to think far more critically and delve into avenues I had never previously considered. My thanks also go to my many friends and colleagues who gave me words of advice throughout.

My thanks also go to the 145 construction professionals all around the world who took the time to complete what was admittedly a fairly onerous questionnaire, and the many interviewees who found the time to tell me what their companies do and why they do it. Without these peoples' honesty, integrity and trust, there would never have been any data.

I would like to especially thank Natasha, whose love made life worth living throughout, who always had a word of encouragement, who put up with me disappearing for weeks at a time on conferences and who did a fair bit of proof-reading, as well as sorting out a lot of the diagrams and tables (even if she did find the methodology "just too boring").

Finally, I have to thank both mine and Natasha's families who have always been supportive of both our endeavours, whatever they may have been.

## CHAPTER ONE

If the British and French really have some interest and aim in common, they will find a way of surmounting all those much-trumpeted cultural and traditional differences.

Sir Nicholas Henderson  
Chair of Channel Tunnel Group  
former British Ambassador to France

All this to be painted red.

Cecil Rhodes.

## **1.0 INTRODUCTION**

### **1.1 The Importance of Investigating the International Construction Industry**

The ratification of trade agreements such as GATT (the General Agreement on Tariffs and Trade) and GATS (the General Agreement on Trade and Services), together with the establishment of the World Trade Organisation (WTO) to implement them, is paving the way for the increasing internationalisation and globalisation of activities for all industries and services. This tendency is even more pronounced regionally, with deregulation of trade within the European Union, the endorsement of NAFTA (the North American Free Trade Area) and so forth. This is being further enabled through continued growth and development of technological means of information transfer, together with the increasingly sophisticated manipulation of that information.

This phenomenon applies as much to the construction industry as it does to any other industry. For example, the QS 2000 document (RICS, 1991, pp. 11) identifies the significance of international markets, noting “the threat from foreign contractors ... will increase as Europe becomes more integrated”. This latter point can be observed in the UK today. For example, Italian, Japanese and Scandinavian contractors won major contracts on the Jubilee Line extension. Similarly, the 1990’s have seen several major British-owned contractors being taken over by corporations based elsewhere in the European Union: what was the largest British construction group, formerly known as Trafalgar House, is now owned by the Norwegian Kvaerner group and is called Kvaerner Construction; the Dutch-based group HBG has taken over several medium-sized construction companies in a spate of purchases; and the French group SGE now owns Norwest Holst. Similarly, European contractors have made major inroads into the British construction industry. For example, Laing built the Second Severn Crossing in collaboration with the French contractor GTM Entrepouse (Centre for Strategic Studies in Construction & Cambridge Econometrics, 1990). The same situation applies to construction consultants. For example, the second largest in the UK (based on chartered staff) is the American-owned Brown & Root (Building, Sept 1997). These trends led to Professor Horner remarking that “...the British construction industry is about to follow the British car manufacturing industry. From a one-time thriving motor car industry, not one major British company remains” (Horner, 1996, pp. 2).

The period of change and transition throughout the 1980s has had a number of consequences for the international construction industry. Firstly, the market is no longer the preserve of firms from the developed world. Construction companies from developing and 'emerging' regions of the world have firmly established themselves in the international marketplace and are vigorously competing for their own market shares. Secondly, there have emerged, for the first time, a group of what could be called genuine multinational construction firms – firms for whom overseas activities are no longer peripheral to their domestic operations, but are central to their business strategy. These firms are constantly seeking out new markets and new investment opportunities in developed as well as developing countries. Hence, it is possible to conceive of construction as a truly global industry (Strassman and Wells, 1988).

The implications of these trends for the British construction industry (both domestic and international) are profound. The increased competition, both at home and abroad, presents challenges for all aspects of the construction industry. Consequently, companies need new and versatile strategies and approaches to their business if they are to survive in this increasingly global and competitive environment. Otherwise, they could well see their international workload begin to evaporate whilst, simultaneously, their market share at home is gradually being eroded.

## **1.2 The Need for Research**

The steady move towards globalisation of the world's industries and markets is a well recognised phenomenon. Major multinational companies are attempting to tackle the problems involved in globalising their operations while published papers and books addressing the issues, abound. Many of these issues have been discussed with reference to the construction industry (*inter alia* Neo, 1976; Seymour, 1987; Bennett, 1991; Linder, 1994; Langford & Rowland, 1995). One important area in which research has been applied to many industries is the issue of culture and its impact on the activities of companies operating in an international environment. This is because culture has become an increasingly important variable in international business research and practice (Hu & Warner, 1996). In the global communication age, employees at all levels in organisations communicate with customers and colleagues in different countries

(Darlington in Joynt & Warner, 1996). Hambrick *et al* (1989) note the increasing importance of international business to many companies in every industry and conclude that it is crucial, therefore, to establish and manage good relationships across different cultures. Earley & Singh (1995) emphasize the need to gain a deeper understanding of the relationship of management to cultural and national characteristics, instead of focusing on convergence, divergence and differential competition. Some of the industries which have been investigated in this respect include petrochemicals (Shell and BP), telecommunications (Motorola and BT), the computer industry (IBM and Apple), electronics (Thorn-EMI and Philips), chemicals and manufacturing (ICI, BASF, Glaxo and BAT) and so on (see Hampden-Turner, Trompenaars, Hofstede, etc). However, there is a significant exclusion from this list – namely, the international construction industry

Much of the ground-breaking work with respect to the influence of different cultures on the activities of international business was developed by Hofstede (1984). Many writers have built on this work and applied the theories in a variety of contexts. It has been shown that the cultural differences of a country can have a significant influence on the effectiveness of an international company's operations. Those companies that fail to take account of the influence of cultural differences in their business strategies and operational approaches, could suffer disadvantages in competing with other international companies who do give sufficient regard to cultural differences.

The traditional pattern of multinational industry was for companies from developed countries to set up operations in less developed countries on the strength of their more sophisticated expertise and technological skills. These skills and expertise gave them distinct and intrinsic competitive advantages over the local competition. However, as has been mentioned, the marketplace for international construction has profoundly changed in the last decade or so. Construction companies from many 'developing' countries, are now competing in the international marketplace on a more even footing. The technological advantages that were once enjoyed by construction companies from North America and Western Europe are now disappearing (Yates, 1991). Furthermore, the market for international construction activity has grown in the developed world.

Bearing in mind the changing environment of the international construction market, the evidence from other industries would suggest that construction companies should take account of culture and give it a high priority when formulating their global business strategies and operational approaches. Langford & Rowland (1995, pp. 5) in their book on overseas construction note the wide range of risks to which international contractors are exposed, including “the cultural, language, competitive and physical aspects of working overseas [which] will all need attention”. Elsewhere, Briscoe (1988, pp. 137) states that “another source of difficulty arises from overseas contractors having to work within the constraints of the local environment, taking heed of local customs and practices”.

The major strengths of the cross-cultural approach are (Tayeb, 1994, pp. 429):

- that cultural values are different in different parts of the world economy and can be seen as such;
- that different cultural groups behave differently because of their varying attitudes and values and;
- that the role of culture is important in shaping work organisations and the institutional context in which they operate.

Measures that construction enterprises might take could include improved training of expatriate personnel, giving more autonomy to overseas subsidiaries and, where appropriate, changing their own corporate culture (e.g. becoming less parochial in their approach to international business).

Anecdotal evidence would suggest that these issues are rarely, if ever considered by British international construction enterprises and, where they are recognised as an issue, there would appear to be little policy planning or evidence of a systematic approach. Instead, it would appear that construction companies tend to concentrate on the logistical and procedural issues when operating in an international environment. When considering more strategic factors, little or no regard is paid to the cultural context. There has been no attempt to apply the theories developed for other industries, to the construction industry, which is very different in nature to other types of industry. Furthermore, there has been little effort to assess the effect of cultural differences on international construction activity and to review the response that construction companies adopt when faced with the problems which culture can create.

### 1.3 Existing Research

The issue of culture and its relationship to multinationals in general terms has been extensively investigated. A number of principles and models (Hofstede, 1984) have been developed to help explain how cultural differences act at both the company and the national level and ways in which these differences might be mitigated or even used to a company's advantage (Adler, 1991). However, these concepts and theories have yet to be applied in any systematic way to the international construction industry.

The unique nature of the multinational construction industry is a topic which has been investigated from a number of perspectives: in economic terms (Neo, 1976); from a strategic financial perspective (Seymour, 1987); and in terms of strategic management issues (Abdul-Aziz, 1991). Furthermore, numerous texts and papers discuss administrative, procedural and traditional, operational management aspects relating to international construction. However, from the viewpoint of culture, the few books and papers concerning this in relation to international construction tend to be anecdotal in nature (Langford & Rowland, 1995; Lucas, 1986; Baden-Powell, 1993) and, where empirical studies have been undertaken, their scope is somewhat limited (Hancock *et al*, 1997; Rowlinson *et al* 1993; Enhassi & Burgess, 1991; Coles, 1986 and Rabbat & Harris, 1982). Recent examination of this issue, principally spearheaded by the Construction Industry Institute (CII) in collaboration with American Society of Civil Engineers (ASCE) in the United States, has prompted an awareness of some of the concerns and the initiation of research by academia and the industry at large (Yates *et al*, 1991 and Yates, 1991 and 1994). The views expressed in the CII literature are broadly supported by the findings of the 'Egan Report' (DETR, 1998), where improvements in productivity are linked to changes at both the project and strategic level. These changes require, in part, radical changes in current practice, including different approaches to the cultural norms and values that pervade the industry.

## 1.4 The Purpose and Aims of the Research Project

The aims of this study are to explore the links between cultural diversity and international construction activity from a British perspective, with a view to establishing how well individuals and organisations in the industry understand the issues involved, what responses, if any are forthcoming and whether the existing approaches are adequate or if they need to change. In the latter case, recommendations arising from the study will be made. These aims will be met by developing a series of hypotheses and propositions to describe the response the industry might employ to cope with the cultural differences they encounter when working internationally, based on the best practice of other industries and theoretical concepts developed in other fields. These hypotheses and propositions can then be tested by undertaking an analysis of empirically gathered primary data. Additionally, there are many models and frameworks associated with various aspects of international business generally, and cultural issues in particular. These models, which are mainly theoretical, can be related to the empirically gathered data to see whether they retain their relevance in the international construction environment.

In summary, this project seeks to investigate the relationship between a number of factors, namely: national and organisational cultural dynamics; international business strategy from a construction perspective; and management techniques in their impact on the performance and operations of construction enterprises functioning internationally. Individually, the understanding and research into all these aspects is not new. Indeed, research has been conducted into the impact of cultural dynamics on many industries operating internationally. However, the purpose of this project is to investigate how, together, they impact on the construction industry specifically and on British construction enterprises in particular.

Winfield (1987, pp. 25), in the Economic and Social Research Council report on the 'Social Science PhD', quotes the working definition adopted by the Modern Language School at the University of Oxford, which specifies "the discovery of new knowledge or the connection of previously unrelated facts or the development of new theory or the revision of older views". In the context of these definitions, the original contribution



made by this research project will be in terms of “the connection of previously unrelated facts” to produce a new understanding of the complex, multiple dynamics involved.

## 1.5 The Thesis

The following statement articulates the essence of the thesis:

***Cultural diversity effects the management and business activities of British construction enterprises operating internationally.***

This statement gives rise to a number of research questions. The literature review seeks to define and clarify these questions:

1. What is meant by the term ‘culture’ and how can it be best expressed?
2. How can different cultures be distinguished?
3. What makes the construction industry distinctive from other industries?
4. How does the internationalisation of construction fit into the context of globalisation?
5. What is business strategy, how does it differ in an international context and how does this apply to the construction enterprise?
6. How can the activities of international construction enterprises be effected by cultural differences?

The thesis is delimited specifically to British-based companies operating in the construction industry outside the UK. This is because the thesis is not attempting to make cross-cultural comparisons. Rather the focus is on the role of cultural differences within the context of a particular industry. Furthermore, in research of this nature, there is the suggestion that the researcher imposes certain cultural preconceptions and prejudices onto the findings through the development of the hypotheses and research instruments (Hofstede, 1994). The effect of this phenomenon is minimised when the researcher focuses on a cultural grouping with which they are familiar, namely the British.

## **1.6 Thesis Structure**

The literature is reviewed in three chapters. This unusual structure has been adopted because the subject relevant to the thesis covers diverse topics.

Chapter 2 addresses the international construction industry in broad terms. Within it the nature of the international construction industry and its historical context are established. It is also argued that the industry is uniquely different to others and, as a consequence, merits special study. The focus moves to construction enterprises specifically. The context of globalisation is explored and the influences that cause construction organisations to internationalise their operations are discussed. This is followed by trends in the international construction industry and speculation as to where the future lies. The chapter is developed by a review of business strategy for the international construction enterprise, initially discussing general strategic approaches before incorporating the cultural dimension. Chapter 2 is completed by an application of business strategy to the construction enterprise.

Culture at the national level is the topic of Chapter 3. The chapter begins with a review of the various definition of culture before describing and explaining the most influential approaches to modelling cultural dynamics in a business context. This is followed by theoretical discussions of a series of issues relevant to any study involving culture and cultural differences, looking at the ever-relevant argument of personality and culture prior to focusing on the issues of subcultures, language in culture and cultural durability. The chapter revisits the issue of modelling culture and reviews the criticisms that have been levelled and the principle model in use, before considering the theoretical and practical issues discussed in light of the project.

Chapter 4 brings the issues explored in Chapters 2 and 3 together to form an overarching understanding of culture and its potential impact on construction enterprises operating internationally. Drawing on various, mainly anecdotal sources, it reports on how culture can effect an array of activities and issues normally associated with international construction enterprises. There follows a report on the latest findings of American research and its implications before relating this to international construction

enterprises generally and developing a theoretical appreciation of cultural differences in international construction with the focus on competitive advantage.

Chapter 5 develops the initial research question into a series of hypotheses/propositions which are designed to inform the empirical element of the study. The chapter addresses the theoretical issues entailed in exploring the orientation hypotheses and a specific methodological research strategy is developed, rooted in philosophical and practical cases. This culminates in an argument supporting a mixed methodology research design.

While Chapter 5 deals with the epistemology and methodological theory supporting the validation of the study, Chapter 6 reviews the theory of surveys specifically in empirical research and outlines the rationale supporting the development of a questionnaire for this project. Questionnaire theory is discussed, with particular attention given to issues of validity and reliability in questionnaire wording and design. Following this, specific considerations relating to the literature are discussed prior to the rationale supporting the individual questions within the questionnaire being outlined. This is followed by a report of the piloting strategy and results and the sampling procedure adopted for the final survey. The sample population and the rationale adopted are described, and the final sample approached identified.

Chapter 7 provides an analysis of the questionnaire. The survey response is described and the respondents' characteristics revealed. General issues relating to both the statistical and qualitative elements of the analysis are outlined prior to the main findings being presented. These begin with findings for the entire sample, which are described and explained. These are followed by multiple comparisons between subdivisions within the sample. Where significant differences were found among the subdivisions, these have been further investigated and explanations posited.

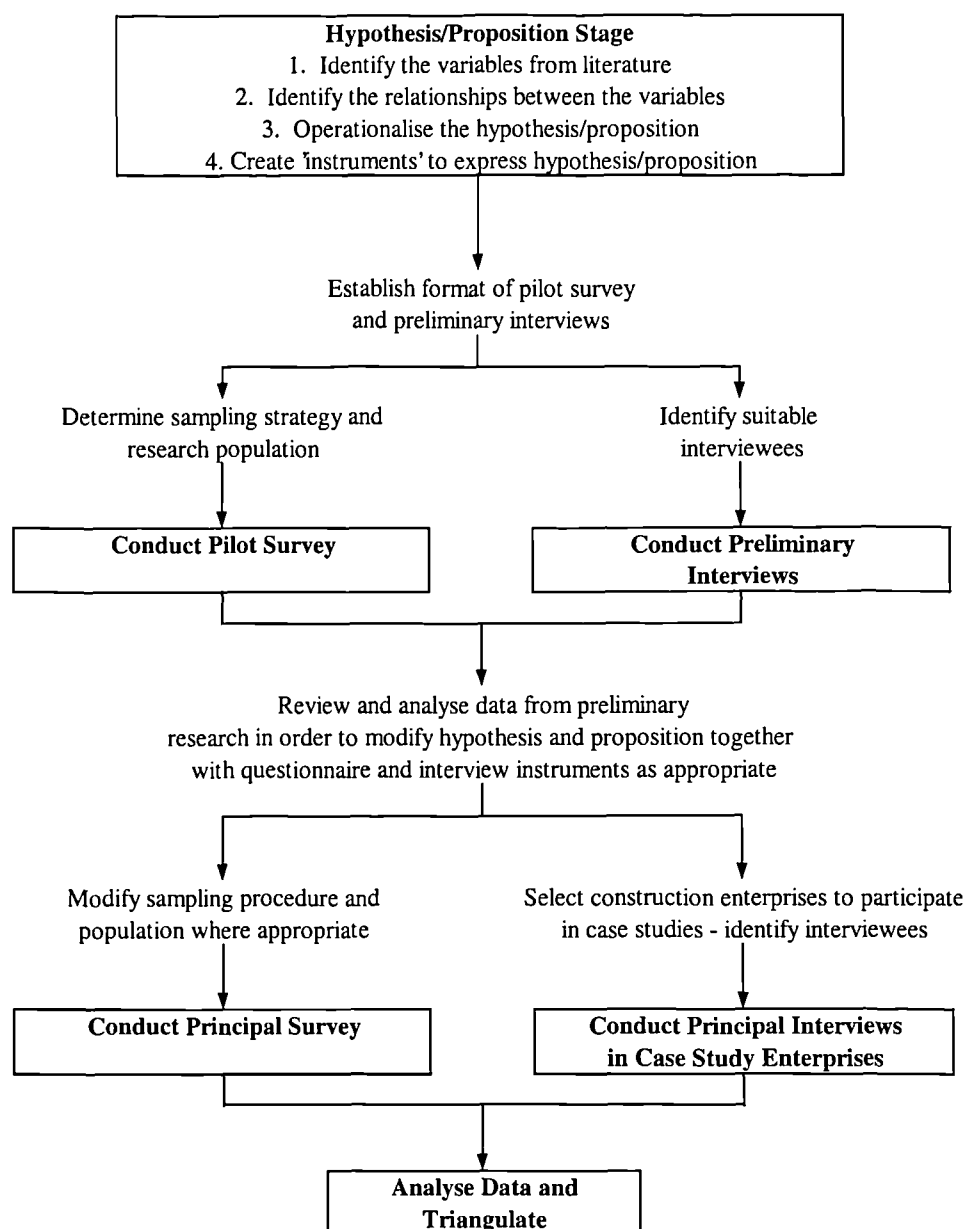
Chapter 8 turns attention specifically to the case study interview aspect of the methodological theory developed in Chapter 5. The purpose of the chapter is to review the supporting theoretical considerations and outline the design approach. The theory initially concentrates on case study methodology before turning to methodology relevant to the interviews that form the case studies. These sections of methodology culminate in a case study protocol and interview guide designed to collect data relevant to the thesis.

The structure and rationale for the questions are described, linking them to the propositions delineated in Chapter 5. The chapter is finished with a review of transcription issues.

Chapter 9 presents the findings from the analysis of the interviews within their case study format. Initially, the case studies are described. This is followed by a description of the analysis procedures adopted. The data structure that emerged from the analysis is shown and the findings for the cases presented and explored, in the first instance on a case-by-case basis. The chapter concludes with a cross-case analysis, identifying what were considered to be the most interesting themes common across the cases.

Chapter 10 presents the conclusions and outlines the key recommendations arising from the findings. After an initial summary of the broad purpose and aims of the thesis and the approach adopted to the validation of the hypotheses/propositions, the chapter seeks to revisit the chief outcomes of the data and summarise the main findings from the empirical exercises. The findings are discussed in reference to each other and the literature explored in Chapters 2 to 4. This forms the basis of the conclusions. This is followed by recommendations for improved practice.

Figure 1.1 (overleaf) maps the overall approach that was adopted in developing and validating the research questions. It shows the key elements that were required, including the iterations in empirical work. The dual method approach to validating the hypotheses, as shown in Figure 1.1 is important as it allows the capture, within the data, of both 'sides of the coin' that form the interest of the research question. On the one hand, the survey element allows the collection of the views, opinions and experiences of British construction professionals who are currently on overseas postings. The survey format allows statements to be made about this quite large population of individuals with authority, while a qualitative element within the survey enables these statements to be explained. On the other hand, the case studies allow the experiences of the expatriate construction professionals to be compared against the strategy and policy adopted by the British-based construction enterprises who send them overseas in the first instance.



**Figure 1.1** The Strategy for Validating the Research

## 1.7 Summary

This chapter has laid the foundations for the research document. In it, the area of research was briefly outlined, leading to a justification for researching the topic and a focus of the specific issues of interest. Existing research in this area was briefly reviewed and the particular aims of this project discussed. This culminated in a statement of the thesis and a listing of the key questions associated with the thesis, as well as mentioning the main delimitations. The contents and purpose of the chapters forming the research report were briefly discussed and the structure shown diagrammatically. This foundation provides the basis for a detailed investigation of the issue of the cultural dimension in the international construction industry.

## CHAPTER TWO

When the tower of Babel fell  
It caused a lot of unnecessary Hell.  
Personal rapport  
Became a complicated bore  
And a lot more difficult than it had been before,  
When the tower of Babel fell.

Noel Coward

## **2.0 THE INTERNATIONAL CONSTRUCTION INDUSTRY**

### **2.1 The International Construction Industry – an Historical Perspective**

International construction is not a new phenomenon. Construction firms from European countries were building overseas in the nineteenth century, utilising the newest technologies and techniques. The French built the Suez Canal from 1859 to 1869; Germans completed 1200 miles of the Ankara-Baghdad Railway in 1914; while British contractors were building railways in Europe and the New World throughout the nineteenth century. Indeed, Linder (1994) considers the British railway builders of the nineteenth century as representing “the first major modern paradigm of international construction” (pp. 35). They set the pattern of capital investment and of multinational labour forces that persist to this day. In the early twentieth century, Americans were building hydroelectric power stations and petroleum refineries around the world (and, of course, the Panama Canal from 1904 to 1914); and the first Japanese overseas project – a railway from Seoul to Incheon, in Korea – was completed in 1900 (Strassman & Wells, 1988).

The post-war period in international construction activity was marked by the rise of the modern-day US engineering and construction giants; most notably Bechtel, Fluor Corporation, Brown & Root, Kaiser and Morrison-Knudsen (Flanagan, 1994). The major European and Japanese firms, which had been so dominant on the world stage during the nineteenth and early twentieth centuries, were now preoccupied with rebuilding their domestic infrastructure and building stock. In fact, World War II provided the US contractors with invaluable experience of overseas construction. Their military route to internationalisation led to American dominance of the booming world market for construction for the next 25 years (Linder, 1994).

In the 1950s and 1960s, international contracting took on new dimensions. Many newly independent states in Africa and Asia launched ambitious development programmes and the availability of loans led to the initiation of large-scale infrastructure, mining, and industrial development projects. The demand for new construction work in developing countries grew at a steady pace and local construction industries were unable to cope in terms of both the quality and the quantity required (Harvey & Ashworth, 1993). Hence,

American and European firms expanded their overseas activities to meet the growing demand. At this stage, few companies had a major overseas presence – the majority used foreign projects to merely bolster their domestic earnings. Some 5 to 10 percent of turnover from overseas work was typical (Strassman & Wells, 1988). The pace of construction activity in the Middle East began accelerating in the 1960s, following the greater exploitation of the oil reserves. Initial moves towards the development of a modern built environment included the construction of water desalination plants, electric power stations and improved housing. These were followed by a steady improvement and expansion of the infrastructure, entailing construction of roads, ports, airports, telecommunications, hospitals and schools. Shortly afterwards, industrial development began and, by the 1970s petro-chemical complexes and small import substituting industries were becoming commonplace (Stassman & Wells, 1988; Stallworthy & Kharbanda, 1985 and Zahlen, 1984).

In 1973, the first round of oil price increases brought with it, virtually overnight, a four-fold increase in the revenues of the oil-rich states. Much of this new-found wealth was rapidly invested in greatly enhanced domestic development programmes with heavy emphasis on the creation of new industries. This investment called for an expansion of construction activity throughout the region on a scale and at a pace that was unprecedented. By the end of the 1970s, the Middle East had the third largest construction market in the world after Japan and the United States, with an output estimated at \$150 billion in 1982 (Zahlen, 1984). But with little available manpower and few domestic contracting firms, this market was wide open to international contractors. The new opportunities attracted many of the larger contractors and consultancies from Western Europe and North America, both groups not only developing and expanding their activities in the Middle East but also in Africa, Asia and Latin America, where the demand for new construction work grew as a result of the recycling of petro-dollars. Expansion overseas by companies from the developed world was paralleled by falling workloads in their domestic markets, resulting in the marked slow-down in construction activity in the developed world from 1973 (Langford & Male, 1991). Thus, for many of the larger companies, overseas operations came to dominate their activities, rather than merely supplementing their home earnings as they had done before (Strassman & Wells, 1988 and Stallworthy & Kharbanda, 1985).



The potential gains from overseas construction work (particularly the opportunity it afforded to accumulate capital and to generate foreign exchange) attracted many newcomers to the field. These were firms from countries that had not been traditional construction exporters. They included Japan, as well as a number of newly industrialising countries, such as Korea and Turkey, which had already developed a substantial construction capacity of their own.

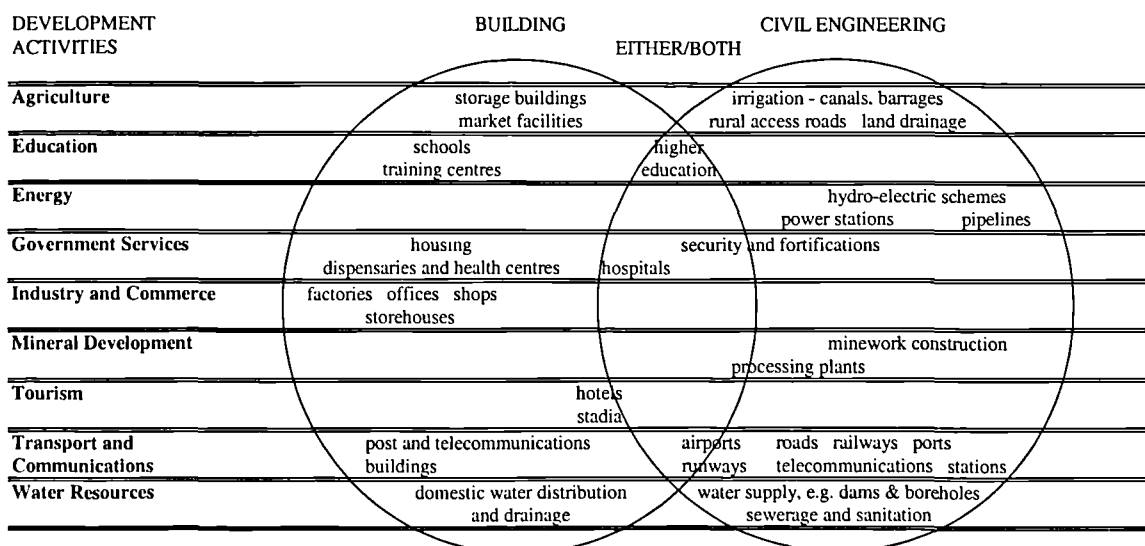
In the early 1980s, the international construction market changed once again. In 1983, there was a dramatic fall in the number of contracts being awarded to foreign firms in the Middle East, and the downward trend continued through subsequent years until the late 1980s. This decline reflected a number of factors. Firstly, the sharp downturn in world oil prices and a fall in demand for oil, led to a decline in oil revenues and a reduction in development expenditure; Saudi Arabia, for example, cut their budget for the period 1985 to 1990 by 20 per cent (Arditi & Gutierrez, 1991). Secondly, in some countries in the region, most of the major infrastructure and industrial installation developments were now complete. Finally, in a number of countries, indigenous firms had gained sufficient technical knowledge and business know-how to compete with international contractors and consultants in all but the most specialised fields. Elsewhere in developing regions, foreign contract awards had declined in number as a result of economic recession and the increasing burden of debt for many of these countries (Strassman & Wells, 1988).

The responses by consultants and contractors to the dramatic decline in their overseas workload were varied: some withdrew to their domestic base; some diversified their activities; and others attempted to find new markets in developed countries. By the time international construction workload was beginning to improve, almost one third of all international contracts were being won in the developed world (Engineering News-Record, 1986 and see also Langford & Male, 1991, pp. 21). However, in light of recent events at the time of writing, such as the virtual collapse of many Asia-Pacific economies and a general slowing in economic activity worldwide, it is anticipated that international construction volumes will be dramatically reduced as we enter the new millenium. In the Asia-Pacific, firms have already witnessed cancelled orders, suspension of construction projects and increased competition (Pheng & Hua, 1999). Some companies are restructuring to survive the downturn in business while others are

withdrawing entirely from the region. For example, Kvaerner envisaged “the closure or significant downscaling of three general construction offices in South East Asia” (Siehler, 1999, pp. 9).

## 2.2 International Construction

One ‘official’ definition of construction work (United Nations Dept. of International, Economic and Social Affairs, 1990) is very broad but somewhat elementary. It includes the construction, altering, repairing and demolition of all types of structure (although, significantly not process plants, such as chemical works or oil refineries). The UK standard industrial classification (SIC) (Office for National Statistics, 1997) does little to clarify this description. Perhaps a clearer and more succinct classification of construction activity is given by Austen & Neale (1984), which is illustrated in Figure 2.1. It can be seen that construction activities are ubiquitous: they can occur in any form of development and cover a range of outputs, both within engineering and building. For the purposes of this research project, interest lies with all aspects of this work, from conception through design and to construction (but not facility operation). Consequently, the definition covers all types of civil engineering, building and process engineering by contractors and consultants.



**Figure 2.1** The Ubiquitous Nature of Construction (Austen & Neale, 1984)

Both Neo (1976) and Seymour (1987) point to a number of factors distinguishing international construction from domestic construction activity. They include:

- an increased level of risk;
- larger project sizes and scale of operations;
- the hazards of working in remote locations and unfamiliar terrain and climate;
- potentially poor facilities for transport, communications, health services, accommodation and amenities;
- scarcity of skilled labour;
- and different or inappropriate construction techniques.

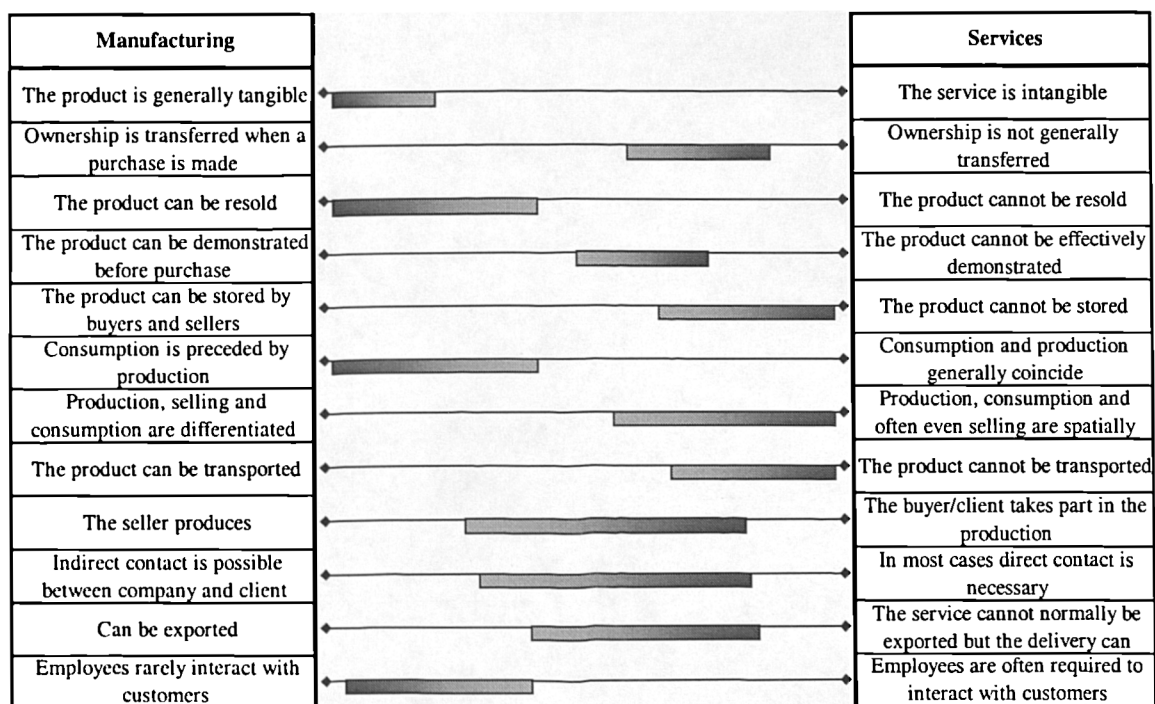
Furthermore, Strassman & Wells (1988) point out that construction activity is unevenly distributed throughout the world and the demand for sophisticated and modern construction techniques from countries with poorly developed construction industries has inevitably created conditions for the industry to become international. Meanwhile, Linder (1994) considers that the phenomenal post-war growth in the world market for construction services is the product of a combination of tied aid being provided to developing countries, linked with only small growth in the markets for construction activity in the lender countries. According to Linder (1994) this has compounded a 'neo-colonial' model of development. He goes on to illustrate this view with a number of instances of such activities in Africa. For example:

“The immediate benefit of ... a hydroelectric dam [in Mozambique] is ... primarily for the US, British and South African firms owning mines in Rhodesia, but 50,000 to 100,000 indigenous people are dispossessed and resettled” (pp. 211).

### **2.3 A Unique Industry?**

There has been considerable debate as to whether the construction industry is really any different to other industries. If there were no difference, then management techniques and theories could be imported to the construction industry from others with little or no adaptation or development. While the industry has made efforts to adopt or borrow various management techniques and systems over the past few decades, with interest focusing on Japanese manufacturing techniques such as just-in-time (JIT), total quality management (TQM) and lean production techniques, as exhorted by Sir John Egan (DETR, 1998), these efforts have met with limited success. Gann (1996), attempted to explain the problem facing the construction industry in this respect. He investigated the differences and similarities between Japanese approaches to industrialised housing

compared with manufacturing in general. He concluded that housing, as a sector of the construction industry was ideal for adaptation and application of manufacturing techniques. However, the application of manufacturing techniques to construction is limited by “the size and stability of the market, cost of transportation and ability to control and subdivide labour on dispersed sites where final assembly takes place” (pp. 450). According to Gann (1996), this is because more bespoke construction activities require the co-ordination of inputs from a wide variety of sources to produce their customised products. Miller *et al* (1995) identified a relationship between a project’s complexity and the extent to which it’s activities can be industrialised. As complexity increases, so too does the project-based and high-technology, craft-based nature of the production activity.



**Figure 2.2** Some Typical Differences between the Manufacturing and Service industries, Indicating the Position of the Construction Industry

Normann (1991) lists a variety of typical differences between manufacturing and service industries. This serves to demonstrate the ambiguous nature of the construction industry. If the characteristics of manufacturing and services are envisaged as a continuum, it can be seen that construction exhibits characteristics of both types of industry. Figure 2.2 is an indicative model of these characteristics, with the relative applicability to ‘the construction industry’ shown as a bar. While the details of this model are open to

debate, it is clear that the industry, as a whole, exhibits an indeterminate character, being neither one thing or the other.

Strassman & Wells (1988) suggest that the international construction industry differs from other international industries, such as global manufacturing, due to its ephemeral and mobile nature, primarily because there is a single point of production which continually changes. Seymour (1987) essentially agrees with this view and notes that the international construction industry differs from other international industries in the same way that the domestic industry differs from other domestic industries: by the characteristics of demand, supply and the industrial structure (that reflects the nature of the product). He posits that, if the international nature and problems of international construction are combined with the industry specific characteristics of the construction industry, the result is an industry unlike any other, including the domestic industry.

It is important, for the purposes of this research project, to recognise the unique nature of the international construction industry. The effects of cultural differences on the business activities of companies operating in the international environment are reasonably well understood, as are the approaches and strategies that can be employed to mitigate or benefit from those effects, where those companies operate in the manufacturing or service industries (*inter alia* Hill, 1998; Morosini, 1998; Usunier, 1996; Ricks, 1993; Adler, 1991; Dore, 1987 and 1973). Thus a key question is whether companies operating in the construction industry face the same constraints as those operating in other industries and, if so, whether the same solutions adopted by other industries will be successful in a construction industry environment.

### ***2.3.1 A Note on Terminology***

In reference to the organisations operating within the ‘international construction industry’, as defined above, the terminology utilised by, among others, Betts & Ofori (1992) will be adopted. Therefore, where such an organisation, or the concept of such an organisation, is being mentioned, the term ‘Construction Enterprise’ will often be used. As Betts and Ofori note with regard to the content of their paper (strategic management), the substance of this project is relevant to many types of business organisation within the construction sector, including general contracting firms,

specialist contractors, architectural and engineering design partnerships, cost consultancy practices, development companies and so on. This terminology is common in construction related literature from the US, where the distinction between the consultant and contractor tends to be far less well-defined. There, construction enterprises will often be involved in all aspects of land development, project financing and design and engineering together with the actual construction. This type of organisation is becoming far more common within the UK industry, particularly at the international through to global level. Throughout this thesis, the terms 'enterprise', 'firm', 'organisation', 'company', etc. are used interchangeably and, in most instances, these should be read as the construction enterprise, unless the context clearly suggests otherwise (e.g. when discussing enterprises from other industries or where referring to the contractor or consultancy sector only).

## **2.4 Internationalisation of Construction Enterprises**

### ***2.4.1 The Globalisation Process***

The internationalisation of industry in general can be said to be part of an ongoing tendency towards globalisation, a phenomenon which has been proceeding for a number of decades and the consequences of which are increasingly important to the management and operation of enterprises. More recently, this process has received impetus with the signing of two major trading treaties: the General Agreement on Trade and Tariffs (GATT), established in 1947 and completed in 1994, and the General Agreement on Trade and Services (GATS), initiated in 1997. The World Trade Organisation (WTO) was established in 1995 to implement these treaties (European Commission, 1998). The treaties have led to the gradual reduction of tariff barriers worldwide until they "are now approaching trivial levels among developed nations" (Hill, 1998, Postscript). In particular, GATS has paved the way for the development of world communications by the liberalisation of telecommunications, and the development of a global financial market through the liberalisation of financial services (Hill, 1998). This, combined with the integration of entire trading regions into economic blocs, (such as the formation of the North American Free Trade Area (NAFTA), the European Union and the Mercosur Trade Pact of South America) serves to highlight a clear move towards globalisation of

world trade, with implications for all parts of the construction industry (Yates & Tissier, 1996).

Waters (1995, pp. 3) defined globalisation as:

“A social process in which the constraints of geography on social and cultural arrangements recede and in which people become increasingly aware that they are receding.”

In his review of the literature on globalisation, Waters identified three ‘arenas’ of social life that are fundamental to most theoretical analyses and, thus, can be seen together as a ‘guiding theorem’ for the globalisation process (pp. 7-8):

- (1) *The Economy*; Social arrangement for the production of goods and tangible services.
- (2) *The Political Spectrum*; Social arrangements for the concentration and application of power, especially insofar as it involves the organised exchange of coercion and surveillance as well as institutionalised transformations of these practices as authority and diplomacy that can establish control over populations and territories.
- (3) *Culture*; Social arrangements for the production, exchange and expression of symbols that represent facts, affects, meanings, beliefs, preferences, tastes and values.

Waters continues by pointing out the relationship between social organisation and territoriality and argues that this link is facilitated by different types of exchange, each relating to the above ‘arenas’. These types of exchange exhibit a particular relationship with space in the following ways (Waters, 1995, pp. 8-9):

- *Material Exchanges*; including trade, commerce, development and capital accumulation tie social relationships to specific localities and encourage, by their personal nature, a process of localisation of activity.
- *Political Exchanges*; such as support, security, authority and legitimacy, tie relationships to extended territories since they are directed to controlling populations of territories and harnessing the resources of that region to political and dogmatic ends and agendas.
- *Symbolic Exchanges*; such as communication, publication, data accumulation and exchange, entertainment, advertising and so forth, liberate relationships from “spatial referents”, since symbols can be produced anywhere, at any time and with few constraints.

In short, Waters' 'guiding theorem' of globalisation postulates that the economy and political spectrums will become globalised if the exchanges that take place within them are accomplished symbolically. Thus, for Waters, effective interpretation of cultural symbols is essential to the globalisation process. It should be noted that this approach is in contrast to the post-war theories of global integration, epitomised by Wallerstein's (1990) view of the capitalist world-system (which is, itself, rooted in the philosophies of Marx), in suggesting that the driving force for global integration is "restless capitalist expansionism" (Waters, 1995, pp. 10).

The issues addressed by this thesis arise from concerns expressed in general management literature over a number of decades and, more recently, in construction related literature, particularly in North America and the UK. This literature indicates a perception of economic activity (in general) becoming increasingly globalised throughout the 1990s and into the 21st century. Dicken (1992) coined the term "Global Shift" in his book of that title, to capture the essence of this change. It has been argued that we are moving away from an economic system in which national markets are distinct entities, isolated from one another by trade barriers and barriers of time, culture and distance, toward a system in which national markets are merging into one huge global marketplace (Levitt, 1983). According to this view, the tastes and preferences of consumers in different nations are beginning to converge on some global norm. Thus, in many industries, it is no longer meaningful to talk of the 'German market' the Japanese market' or the 'American market'; there is only the 'Global market'. However, Hill (1998, pp. 5) argues that "very significant differences in consumer tastes and preferences between national markets still remain in many industries", despite the global prevalence of brands such as Levi's jeans, McDonalds and Coca-Cola. This issue is explored further in Chapter 3.

Porter (1986) notes that, although international competition is by no means a new subject, there is a new agenda for companies operating at this level.

"[International] trade has exploded since the 1950s, while foreign investment has been significant and growing since the 1960s. Countries are now inextricably tied to each other through the thread of international competition. Competing internationally is a necessity rather than a matter of discretion for many firms" (pp. 1).



For those companies, it is a case of how to manage existing networks of far-flung overseas activities as a single, effective unit. Porter continues by identifying a number of changing “currents” and “cross-currents” which characterise the nature of modern international competition and which give rise to this increasing sense of globalisation. Among the principal currents identified (Porter, 1986, pp. 2-3) are:

- Growing similarity of countries.
- Fluid global capital markets.
- Falling tariff barriers.
- Technology restructuring.
- Integrating role of technology.
- New global competitors.

Whilst these features have led to a growing sense of globalisation, Porter (1986, pp. 3-5) identifies a number of “cross-currents” which make the patterns of international competition different and more complex. They include:

- Slowing rates of economic growth.
- Eroding types of competitive advantage.
- New forms of protectionism.
- New types of government inducement.
- Proliferating coalitions between companies from different countries.
- Greater ability to tailor to local conditions.

The symptoms of these currents and cross-currents can be seen clearly on a regular basis today. Abdul-Aziz (1993, pp. 115) observes that these forces of globalisation have “imposed strategic reorientations” on the international construction industry. Their network of alliances transcend national boundaries and reach to a broad spectrum of parties. For example, research by Sommerville (1995) identified a complex and intricate pattern of cross-holdings between contractors from European countries in response to these forces. Bonke *et al* (1996) noted that these emerging, European-based, construction contracting consortia have adopted different and more sophisticated strategic approaches in order to better cope with the dynamics of globalisation. As an aside, Porter’s work has received criticism for its overemphasis on the economic factors

of competitive advantage. For example, O'Shaughnessy (1996) notes that the Porter model "neglects the role of history, politics and culture in determining competitive advantage" (p. 10). However, as will be seen, cultural differences can have profound implications for enterprises operating within this process of globalisation.

#### ***2.4.2 The International Imperative***

There are a number of explanations for why companies involved in construction choose to join the global business community. Some authors (*inter alia* Linder, 1994 and Strassman & Wells, 1988) take the view that participation in international construction stems from a rich history of capital enterprise and development throughout the 19th and 20th century. Neo (1976), in his analysis of international contractors, was among the first to define the process of internationalisation from a construction perspective and link this to established economic theory of the firm. From that time, subsequent studies have used the latest economic and management theory to support their explanations. A more theoretical, fiscally based approach was adopted by Seymour (1987), who developed a framework wherein he referred to concepts such as risk analysis and macro- and micro-economic factors. More recently, Abdul-Aziz (1991) has taken a more strategic approach, which draws on the previous theoretical perspectives for a more integrated understanding of the issue.

Porter (1986) describes some industries for which the approach of regarding the global market as a single entity is inappropriate. The firm's operations must be dealt with on a country-by-country basis due to the unique qualities of those countries. He terms such industries "multi-domestic" (pp. 17-18), in that they comprise collections of independent markets. Thus, competition is conducted on a national level and is globally co-ordinated only with difficulty. By inference, the international construction industry is one of these industries. This being said, one should not confuse global strategies with global industries: the two are not necessarily synonymous (Abdul-Aziz, 1991). Hence, in making the decision to 'go international', a firm may well have an overall strategy which is implemented on a localised basis. Such a view fits with Waters' (1995) theory of globalisation in that the trade of construction (the material exchange) is at a local level whilst the communication of goals and aims and interchange of information (the symbolic exchange) is free from local constraints.

Brooke & Remmers' (1970) investigation into multinational enterprises covering all major industries revealed two interesting points. The first was that, regardless of all the plans and strategies, the actual decision by firms to 'go international' often arose from some chance, almost freakish event. The second was that the majority of firms cited defensive reasons for the move. The principal motives for foreign operations, they concluded, were the search for raw materials and scarce resources and the protection of existing markets. The protection of existing market share emerged as a common motive in further studies (*inter alia* Buckley & Mucchielli, 1997; Jones, 1995; and Neo, 1976).

Whilst the profit motive may have been the principal reason in the past for overseas construction, Turin (1975) noted that even in the 1970s it was becoming unclear if this was still the case since the assessment of individual company performance from both a domestic and international point of view was no longer straightforward. This is because companies adopt complex financial practices and various schemes of payment, designed to shift funds from one country to another within the group. A comprehensive survey by Neo (1976) concluded that overseas contracting is not necessarily more profitable than domestic contracting. As one might expect, there is a potential for very high profits but only by incurring a commensurably greater level of risk (Seymour, 1987). Therefore, in assessing the reasons for construction firms deciding to undertake activities overseas, profit, while remaining important, is not necessarily an over-riding consideration. With this in mind, Neo (1976) established two main categories of strategic importance in the firm's decision to operate abroad; the first aggressive – to maintain growth and expansion; and the second defensive – to protect shareholder capital.

The main aggressive strategy for construction firms to go (or remain) abroad is to expand in periods of growth when this can only be achieved overseas due to a saturated home market. It can expand overseas, initially by securing one-off contracts and, later, by setting up overseas subsidiaries (Brooke & Remmers, 1977).

Personalities appear to play a major part in the off-shoot of foreign operations. Firms have gone abroad through the desire and drive of a high ranking executive to see his company become international in scope. For example, it was recently reported in the *New Civil Engineer* (1998, pp. 11) that the consulting engineers Mott MacDonald are

seeking to become a “truly global consulting engineer over the next five years”. They go on to state that if this occurs, “it will be down to the quiet but firm determination of its new chairman ... and his managing director”. Alternatively, the decision may come from the board, advocating overseas construction because of the insights and experience of the board members (Brooke & Van Beusekom, 1979).

A company operating in a single environment is subject to both political and economic forces beyond the control of its management. The industry might be used as a regulator of the economy and is vulnerable to governmental budgetary control. Firms who undertake a large amount of public sector work may have difficulty in predicting future workload. A line of defence is to maintain a proportion of the company’s overall turnover in other countries, anticipating expenditure cuts in one country to be out of phase with those of the others. A further defensive strategy adopted by major construction enterprises is to operate in more than one region of the world so that recession in one can be offset by boom periods in another. Low capitalisation in the industry has given construction enterprises the added advantage of high mobility.

Firms are often prepared to take up overseas assignments if approached by previously satisfied clients. While these tend to be one-off affairs, they are considered important within the construction industry. Similarly, an invitation to a joint venture or to join a consortium might be considered too good an opportunity to refuse. It might also be regarded that expected competition in a certain field may be less.

Finally, one of the most significant reasons given by some firms as a decision for seeking work overseas was the nature of the work they undertake. Typically, this includes firms undertaking specialist and heavy engineering work such as dredging and chemical, process and off-shore engineering.

Table 2.1 (below) summarises the main findings of Neo’s (1976) research and, to date, is the most comprehensive work of this nature relating specifically to the construction industry.

| CONSIDERATIONS FOR OPERATING ABROAD |   | Numerical Weighting | %     | Importance in percentage terms |   |   |   |   |   |   |   |   |    |    |    |
|-------------------------------------|---|---------------------|-------|--------------------------------|---|---|---|---|---|---|---|---|----|----|----|
|                                     |   |                     |       | 1                              | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| <b>AGGRESSIVE STRATEGIES</b>        |   |                     |       |                                |   |   |   |   |   |   |   |   |    |    |    |
| 1                                   | Expand in periods of growth                                       | 52                  | 11.38 |                                |   |   |   |   |   |   |   |   |    |    |    |
| 2                                   | Desire of high level executive                                    | 39                  | 8.53  |                                |   |   |   |   |   |   |   |   |    |    |    |
| 3                                   | Pressure from board advocating overseas contracting               | 37                  | 8.10  |                                |   |   |   |   |   |   |   |   |    |    |    |
| 4                                   | Familiarity with international construction                       | 36                  | 7.88  |                                |   |   |   |   |   |   |   |   |    |    |    |
| 5                                   | Identification of profitable overseas market                      | 34                  | 7.44  |                                |   |   |   |   |   |   |   |   |    |    |    |
| 6                                   | Proprietary technique or managerial expertise                     | 18                  | 3.94  |                                |   |   |   |   |   |   |   |   |    |    |    |
| <b>DEFENSIVE STRATEGIES</b>         |   |                     |       |                                |   |   |   |   |   |   |   |   |    |    |    |
| 1                                   | Protect shareholders by geographical spread of construction risks | 44                  | 9.63  |                                |   |   |   |   |   |   |   |   |    |    |    |
| 2                                   | Underemployment of resources in home country                      | 18                  | 3.94  |                                |   |   |   |   |   |   |   |   |    |    |    |
| <b>OTHER REASONS</b>                |   |                     |       |                                |   |   |   |   |   |   |   |   |    |    |    |
| 1                                   | Approach by previously satisfied client                           | 39                  | 8.53  |                                |   |   |   |   |   |   |   |   |    |    |    |
| 2                                   | Less competition expected in particular area of work              | 32                  | 7.00  |                                |   |   |   |   |   |   |   |   |    |    |    |
| 3                                   | Invitation to joint venture or consortium                         | 26                  | 5.69  |                                |   |   |   |   |   |   |   |   |    |    |    |
| 4                                   | Benefiting from foreign know-how or experience                    | 21                  | 4.60  |                                |   |   |   |   |   |   |   |   |    |    |    |
| 5                                   | Aid development packages  | 17                  | 3.72  |                                |   |   |   |   |   |   |   |   |    |    |    |
| 6                                   | "Bandwagon effect"  | 17                  | 3.72  |                                |   |   |   |   |   |   |   |   |    |    |    |
| 7                                   | Reasons of prestige   | 12                  | 2.63  |                                |   |   |   |   |   |   |   |   |    |    |    |
| 8                                   | Nature of work is international                                   | 9                   | 1.97  |                                |   |   |   |   |   |   |   |   |    |    |    |
| 9                                   | UK personnel wish to work in foreign environment                  | 3                   | 0.66  |                                |   |   |   |   |   |   |   |   |    |    |    |
| 10                                  | Company can maintain team of specialists intact                   | 3                   | 0.66  |                                |   |   |   |   |   |   |   |   |    |    |    |

**Table 2.1** Non-profit Motivations for International Contractors to Operate Overseas (Neo, 1976).

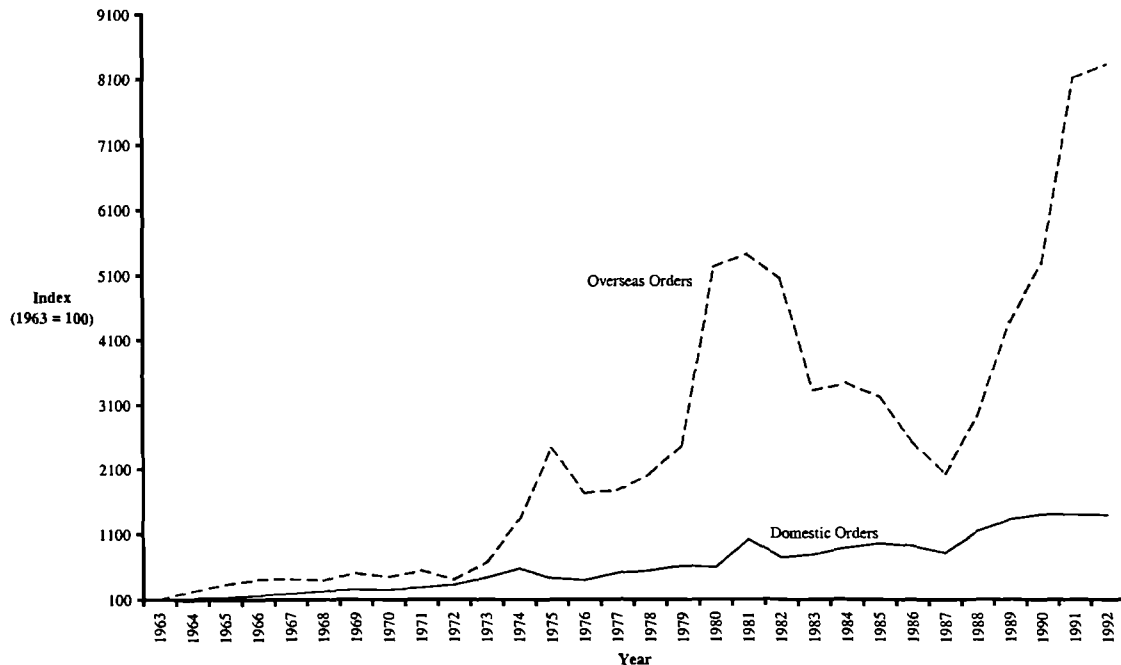
This strategic management view of the internationalisation of construction is broadly supported by the more contemporary work of Abdul-Aziz (1991) who, in his review of the literature, cites a variety of management functions as the principal focus of strategic multinational activity in a construction context. Finally, Strassmann & Wells (1988, pp. 117), in their analysis of international construction companies from several countries, observe that:

“decisions about when to enter which country, what to export there, in association with whom, under what contract form, at what price, and with whose finance ... [are dictated by] ... a firm’s internal resources of staff and capital: labour, skills, equipment, finance, and intangible capital, above all, its reputation and capacity for risk management”.

### 2.4.3 Trends in the Global Construction Industry

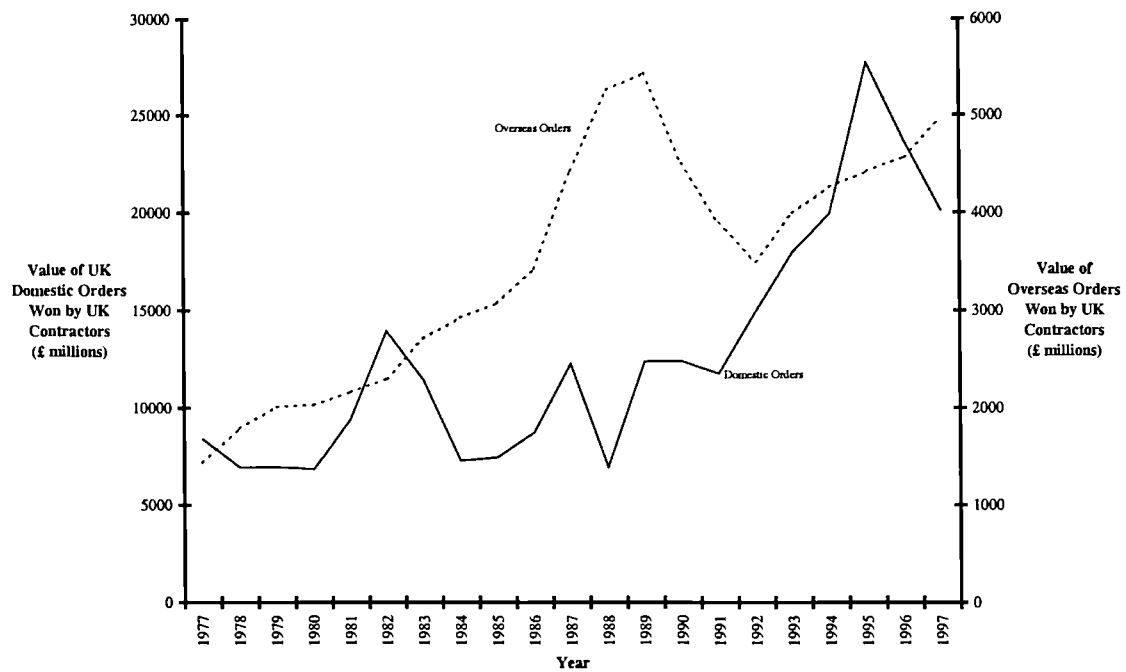
It is possible to study the empirical development of the world construction market through data compiled by the trade publication, Engineering News-Record (ENR). ENR obtains the underlying figures which reflect the prospective value of contracts awarded to the world’s top 250 contractors in a given year by means of a questionnaire. Using the ENR data, the international operations and performance of British construction companies can be put into context. In the first instance, however, one can see the absolute growth in the size of the world market for construction activities by application of a construction industry-specific price index. Linder (1994) compiled the following

graph in this way, allowing a comparison of the relative growth of the US international market with the US domestic market (Figure 2.3). This graph shows an 18-fold and three-fold increase respectively over the period.



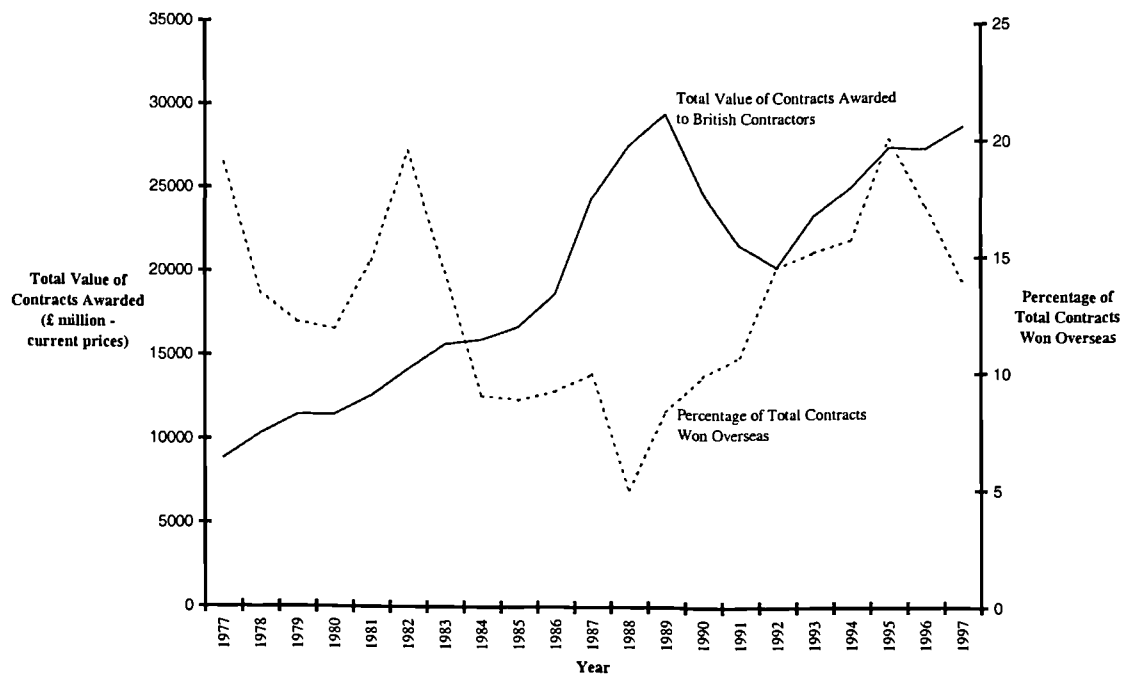
**Figure 2.3** Growth of US Domestic Construction Market Compared with Growth of US Overseas Market (Linder, 1994, pp. 170)

It is not unreasonable to extrapolate this pattern of growth to the British construction industry. Indeed, the 20 year period represented by Figure 2.4 shows a great deal of similarity between the pattern of absolute growth of construction work in the US and that for the UK. Linder (1994) notes, however, that growth in the international arena has not been uniform for the US construction industry “because the evolution of international contracts has been much more spasmodic than the course of domestic contract awards” (pp. 169). Factors that led to growth in the US industry would also have held true for the British industry. Unfortunately, indexed values for overseas orders won by UK contractors are unavailable. However, Figure 2.4 demonstrates an inexorable growth in overseas activity by British construction companies. The graph would appear to indicate that this period has been marked by a similar (albeit fluctuating) growth in domestic construction activity. However, the graph is somewhat misleading as domestic activity is indexed while international construction is based on absolute figures.



**Figure 2.4** Growth in UK Domestic Construction Market Compared with Growth in UK Overseas Market (source: Housing and Construction Statistics, various years)

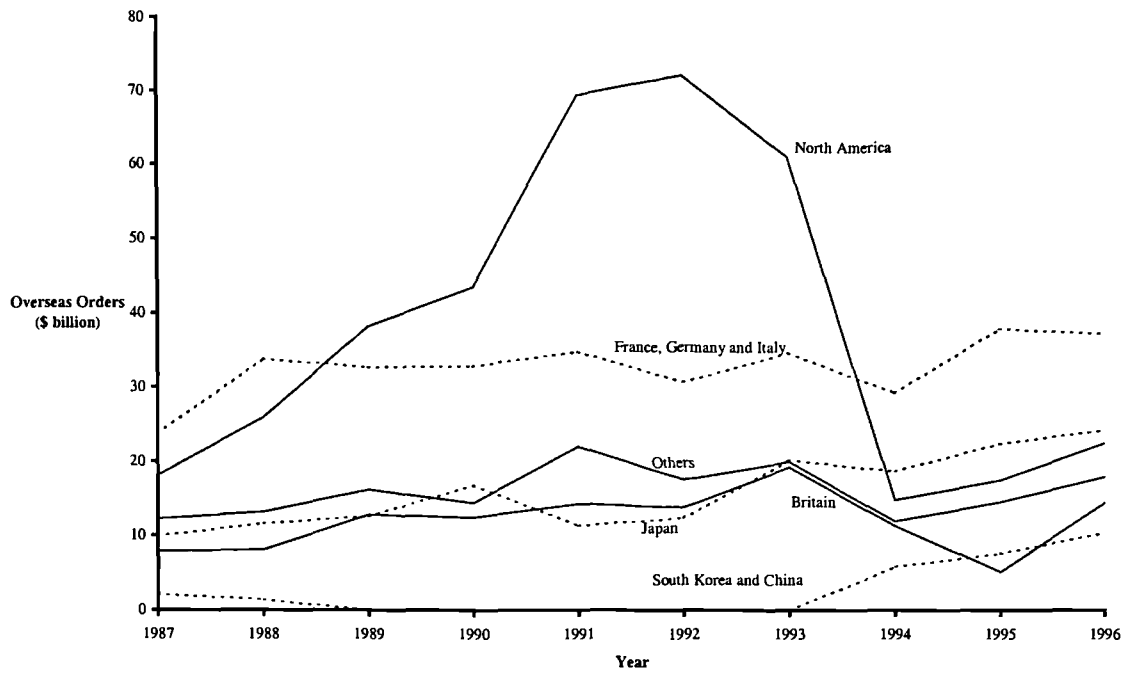
Interestingly, the graph would seem to indicate an overall strategic approach adopted by British construction contractors. Where there was a sharp reduction in UK construction activity in the mid- to late-1980s, this was compensated for by a major overseas effort. When the UK construction market improved, overseas activity was curtailed somewhat. Certainly, as much is asserted by Fellows *et al.* (1983, pp. 24), who state that, while international activity does not lead to better financial performance, it does give greater stability of workload by fluctuating domestic demand. This view is reinforced by the graph below (Figure 2.5), that shows the amount of work won by British contractors overseas as a proportion of UK construction activity.



**Figure 2.5** Value of Total Orders Awarded to UK Contractors Compared with Proportion of Contracts Awarded from Overseas (source: Housing and Construction Statistics, various years)

Within the overall picture of international construction contracting, Figure 2.6 shows a broad increase in the value of all work carried out internationally with a notable dominance by US firms, before a sharp drop in the British and, in particular, the North American values of work in the mid-1990s. At the same time, Chinese and Japanese firms saw their values of overseas orders improve considerably, while the amount of work carried out overseas by Britain's main European competitors (Germany, France and Italy) has also increased. The drop in international construction activity in the mid-1990s coincided with a general economic recovery and would suggest that the US industry, like the UK, treats international work primarily as a method of absorbing excess capacity in times of recession in their domestic construction markets. By contrast, the Japanese and continental Europeans have maintained a relatively steady level of activity over the last decade.

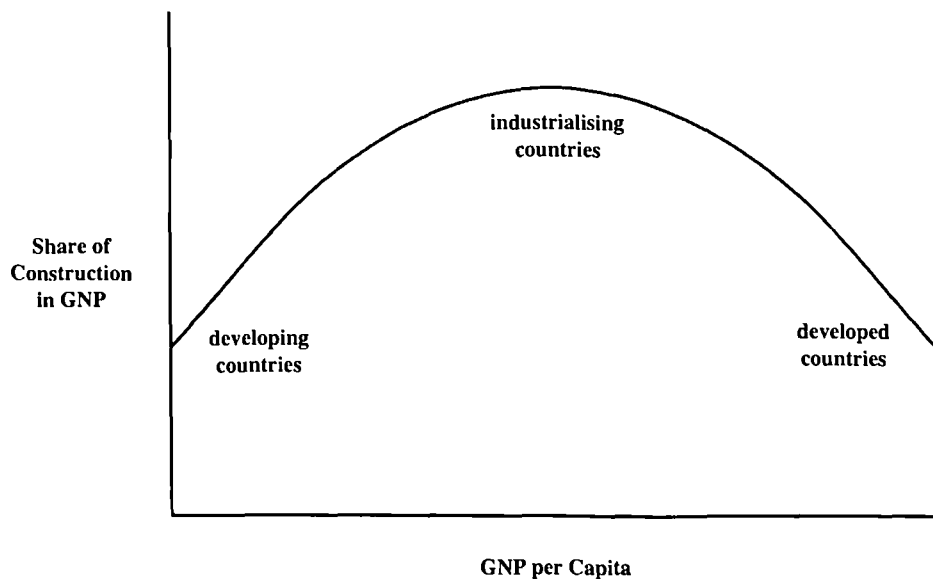




**Figure 2.6** Value of International Orders Won by Contractors by Region of Contractor Origin (source: Engineering News-Record, various years)

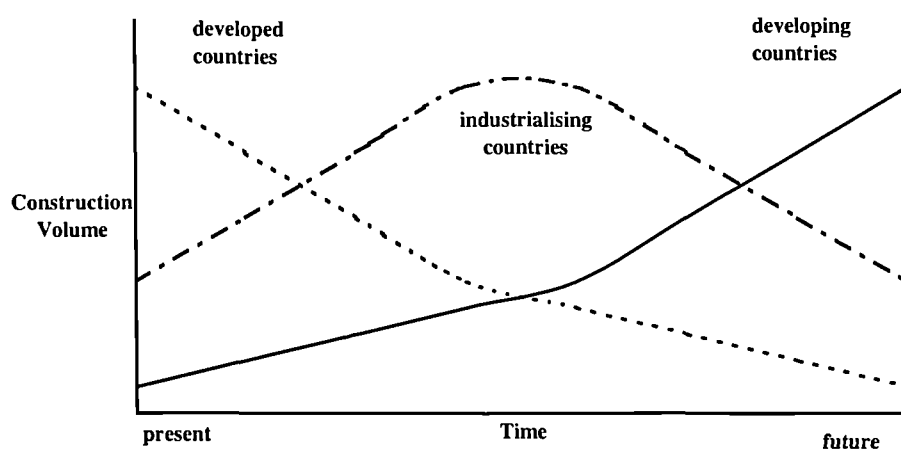
#### *2.4.4 The Future Pattern of International Construction?*

Bon (1992) shows that as countries develop, the level of construction within that economy diminishes. He describes this phenomenon as an ‘inverted U-shaped relationship’ (see Figure 2.7). Furthermore, Bon (1990) suggests this relationship may switch from relative (share of GNP) to absolute (by volume) decline at some level of economic development.



**Figure 2.7** Share of Construction in GNP versus GNP per capita (adapted from Bon, 1992)

In North America, for example, the construction industry is the only major sector of the national economy that displays protracted declining productivity (Arango, 1991). Furthermore, whilst the construction sector cannot be said to be technologically stagnant, its technological development tends to be less impressive than other major economic sectors (Bon, 1992). Figure 2.8 is a projection of the possible pattern of worldwide construction activity over the next 25 years or so. Note, that the designations of country development refer to the present status of a country, not its past or future status. Drewer (1990, pp. 29) indicates that the market for construction services is far from restricted to countries from the developed world. Both industrialising countries and developing countries already play important parts in the global market and it is, perhaps, more accurate to think of these countries as part of the “international construction system”.



**Figure 2.8** Construction Volume over Time and Level of Economic Development – Future Projections (adapted from Bon, 1992).

Bon (1992) argues that this potential pattern of change in share of total construction activity could have profound implications for the nature of future trade in construction services. Based on Figure 2.8, the present pattern of trade in the global construction market is dominated by countries from the developed world, such as those in North America and Western Europe, together with Japan. Industrialising countries, such as those from Southeast Asia, currently have a small proportion of the global share of construction activity but their share will grow until, eventually, they could eclipse that of the developed countries and become a dominant force in the market for construction services. In the distant future, Bon envisages a world where today’s developed countries could have very little involvement in international construction activity and the market

will, consequently, be dominated by countries from the developing and industrialising world. Over time, the only involvement developed countries may have in the world market for construction services would be focused on high-technology or capital intensive projects, as well as in the highly specialised maintenance and refurbishment sector, which is growing in developed regions of the world. Incidentally, Bon's most recent published research (1997) continues to support this overall view. To prevent this outcome, AEC sector enterprises from the developed world can no longer rely on traditional competitive advantages such as superior technical expertise and historical market connections. They will have to adopt a more strategic approach, focusing on aspects of management which have previously received little attention.

## **2.5 Business Strategy and the International Construction Enterprise**

### ***2.5.1 Strategy Defined in a Business Context***

This research project has as its *raison d'être* the impact of local societal variables, together with global and local trading conditions, on the international construction industry, within which individual construction enterprises operate. This being the case, the focus of all these issues and topics (or stimuli) is the individual enterprise. The paradigm of the project is the nature of the interaction between the construction enterprise and the stimuli contained within prevailing trading conditions and within local societies (e.g. globalisation, cultural dynamics, etc.). Of particular interest in this interaction is the manner in which the enterprise, and its employees and personnel react, and the reasons for this reaction. Thus, this final point is the common thread that links the disparate elements of the project together.

The implications of culture for management can be interpreted from a number of perspectives. Culture effects the operational aspects of construction activity in a variety of ways. However, it also impinges upon international construction enterprises' strategic profile. The strategy adopted by the firm in terms of, for example: the markets it targets; the countries in which it operates; its bidding strategy; its human resources policies; etc. will all be influenced, to a greater or lesser extent, by the cultural differences it encounters. Thus, when considering how culture effects the management of international construction enterprises, the term 'management' refers to a host of

activities and levels of consideration. At this point, strategic thinking and the potential impacts of culture are considered at a theoretical level. The practical implications for both operations and strategy are discussed in Chapter 4.

The term 'business strategy' is ambiguous and equivocal in nature, although many have attempted to develop a definition that suitably expresses what it means. As Moore (1992) noted, in their simplest form, the different terms e.g. general management, business policy, corporate strategy, long-range planning, corporate management and so on – all address the same issue: the determination of how an enterprise, in its entirety, can best be directed in a changing world. While Mintzberg (1988, pp. 13) argues that concepts such as strategy should not be reduced to a single definition, he notes that a common feature is that strategy constitutes the underlying logic of an organisation's interactions with its environment, which guides its deployment of resources.

Central to the managerial frame is a conception of what 'strategy' is. According to Hamel (1994, pp. 61) three themes recur. The first is the notion of 'fit' between the firm and its competitive environment. Fit entails the positioning of the firm in relation to its customers, competitors, channels and regulation framework. The second notion is 'selectivity' in resource allocation. Given limited resources and funds, the firm must decide which actions are truly strategic and which are not. The idea that strategy is more concerned with the long-term view rather than the short-term is the third notion of strategy. Thus, the idea of 'being strategic' and maximising short-term profitability are contradictory.

The basic unit of analysis in a theory of strategy must ultimately be a strategically distinct business and corporate entity (Junnonen, 1998). Meaningful approaches to strategy for diversified firms must grow out of an understanding of how firms prosper in individual business areas, and the role of the corporate office and other subsidiary business units in this process. Once the organisation has determined what business, or businesses, it wants to be in and how it will conduct them, it must then determine how it will compete – something Porter (1987) terms 'competitive advantage'.

### ***2.5.2 Overseas Business and Strategic Choice***

Bartlett & Ghoshal (1989) developed a typology for strategic activity on an overseas basis that has become an accepted way of describing the international profile of enterprises (Hill, 1998 and Daniels & Radebaugh, 1998). Bartlett & Ghoshal (1989) describe four basic strategies firms adopt to enter and compete in the international environment. According to Hill (1998), each of these strategies has advantages and disadvantages for the firm: none is intrinsically better because their appropriateness varies depending on the context of their business, the nature of their competitive advantage and the degree to which responsiveness at a local level is required (pp. 368).

#### ***International Strategy***

Enterprises operating on this basis try to create value by transferring 'valuable' skills and/or products to foreign markets where indigenous competitors lack those skills or products. Most international firms have, traditionally, created value by transferring differentiated product offerings developed at home to new overseas markets. This strategy is appropriate where the firm has a valuable core competence that indigenous competitors lack and where the firm faces relatively weak pressures to reduce costs and be locally responsive. In such circumstances, an internationally based company can be highly profitable. However, where the pressures for local responsiveness are high, companies operating on this basis will lose out to those who tailor their product and marketing strategy to local conditions.

#### ***Multi-domestic Strategy***

These firms orient themselves to achieving maximum local responsiveness. These organisations also tend to transfer skills and products developed in their home market to foreign markets, customising their products and marketing strategy to suit national conditions. The disadvantages of this approach are that, in areas where there are cost pressures, companies find it difficult to compete. They also have a tendency to develop into decentralised federations, in which each national subsidiary operates on an almost autonomous basis. As a result, they may begin to lose the ability to transfer competitive advantages between the different divisions of the organisation.

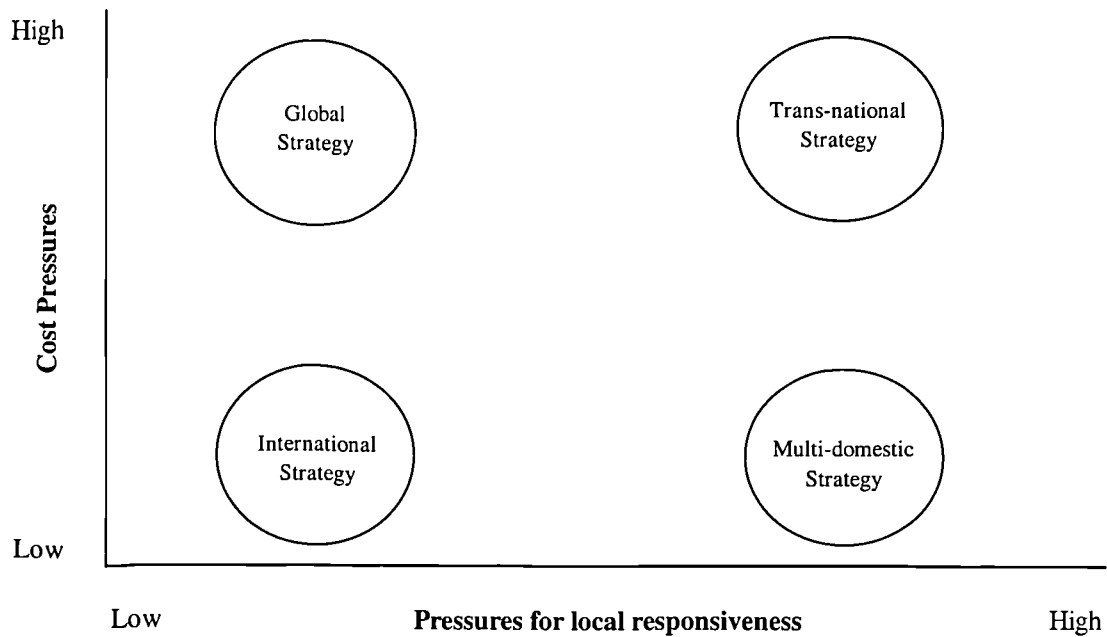
### *Global Strategy*

Firms adopting a global strategy seek to improve profitability by obtaining cost reductions through experience curve benefits and locational economies: a low cost strategy. They will tend not to customise their offerings and marketing to local conditions as this raises costs. Instead, they prefer to market a standardised product worldwide and acquire the benefits associated with economies of scale. They can also use their cost advantage to support aggressive pricing in world markets.

### *Trans-national Strategy*

Bartlett & Ghoshal (1989) argue that, in today's international business environment, conditions are so intense that, for many firms to survive, they must exploit cost advantages, be able to transfer distinctive competencies and attend to local conditions simultaneously. Furthermore, they argue that distinctive competitive advantages do not just reside in the home country but may be developed in any of the company's worldwide operations. Thus, the flow of skills and product offerings should not all be in one direction. They can flow from the home country to foreign subsidiaries and *vice versa* as well as between subsidiaries. Bartlett & Ghoshal (1989) term this process 'global learning'. This type of strategy is appropriate where the firm faces both cost pressures and demand for customising their products to local markets. While this appears to be the ideal approach, it is not easy to adopt as these pressures place conflicting demands on the firm. For example, being locally responsive entails cost increases.

Figure 2.9 illustrates these differing positions. The importance of cost and responsiveness as elements of overseas strategy are discussed in the following section (2.5.3). The reality of the situation for most companies is that they fall somewhere between the cases identified in the typology. Indeed, some organisations may pursue more than one strategy concurrently if, for example, they operate on a regional basis, with the organisation operating 'multidomestically' (say Europe) in one region and 'internationally' in another (say the Americas).



**Figure 2.9** Basic International Strategies (Hill, 1998, pp. 368)

### ***2.5.3 Business Strategy in an International Context***

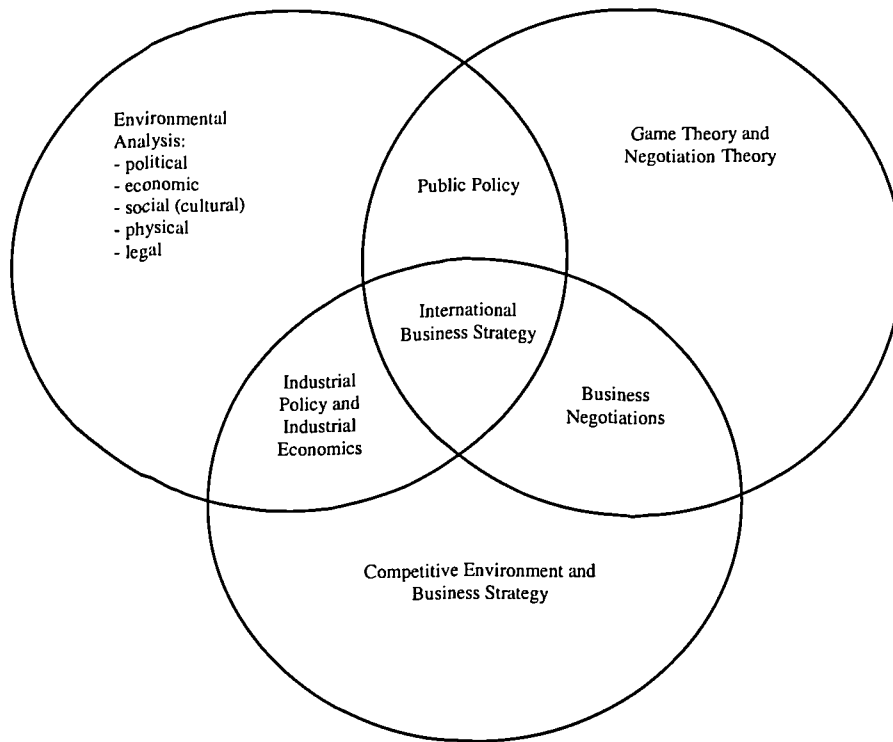
It is clear that international business cannot be reduced to foreign trade, currency speculation, accounting or politics, but that the international business enterprise must operate successfully within a foreign environment, where economics, politics and other events interact with the strategic posture and operations of the firm (Ketelhöhn, 1993). Furthermore, global markets are extremely competitive due to the liberalisation of world trade and the investment environment, as mentioned previously. “In industry after industry, many capable competitors confront each other around the globe” (Hill, 1998, pp. 358). To succeed in such an environment, companies must pay continual attention to both reducing the costs of business activity and to differentiating their services and products in such a manner that their customers are willing to pay more for the product than it costs to produce. Thus, for Hill (1998) strategy in the international arena is concerned with identifying and taking actions to lower costs and/or differentiating the company’s offerings through superior design, quality, service or functionality. However, this view could equally apply to a domestic market. What sets international strategy apart from domestic strategy is the constraint of having to be locally responsive while meeting these strategic demands. For example, reducing costs might entail producing a standard product for consumption in all the firm’s markets (an architectural practice may use a standard building design worldwide). However, local conditions may require this product (the design) to be differentiated to meet “demands arising from national

differences in consumer tastes and preferences, business practices, distribution channels, competitive conditions and government policies. Because customising product offerings to different national requirements can involve significant duplication and a lack of product standardisation, the result may be to raise costs” (Hill, 1998, pp. 365). This observation reinforces the view expressed by Ketelhöhn & Kubes (1995). They consider that strategy must be dynamic because it develops as environmental conditions evolve. Aldo Palmeri, chief strategist of the Benetton family said “the nature of an organisation changes in different environments: what works well in Italy may not do so in Japan and vice versa; that is why we must adapt our organisation to local conditions and culture” (quoted in Ketelhöhn & Kubes, 1995, pp. 4). Thus, the concept of strategy must be adaptable to different cultures and industries. This approach is supported by Gesteland (1996) who postulates two “iron rules” for anyone engaging in international business. They are (pp. 13-14) that “the seller is expected to adapt to the buyer” and that “the visitor is expected to observe local customs”. Similarly, Frey-Ridgeway (1997, pp. 1) notes the increasing importance of cultural boundaries as business is conducted across national borders.

“Culture-clash will continue to vex all aspects of international business ...  
Culture colours people’s sense of identity and their perceptions of others.  
Differences in management style and business behaviour can often be traced  
back to cultural influences”.

The model below (Figure 2.10) illustrates a conception of international business strategy which incorporates the key elements of strategic thinking together with the additional variable factors relevant to an international context, providing an integrated view.

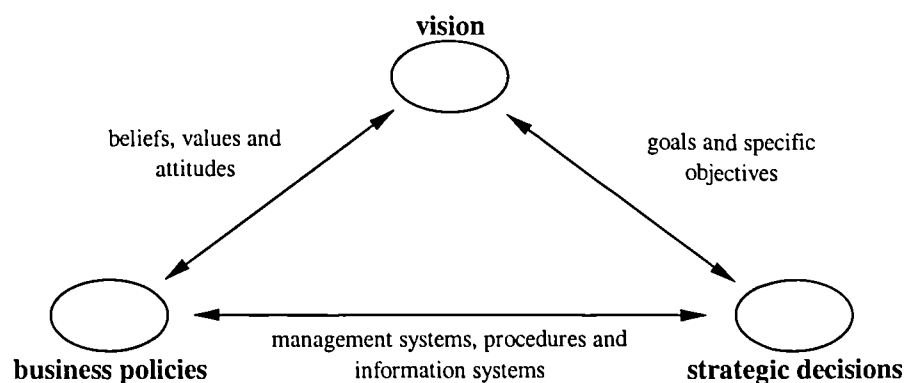




**Figure 2.10** A View of International Business Strategy (Ketelhöhn, 1993)

Ketelhöhn & Kubes (1995) see strategy in an international context as being a 'strategic management process' which adapts the company's basic posture to the different environments in which it operates. These processes are summarised in the strategic posture outlined below (Figure 2.11), which is defined as the set of management processes that specify the following components:

- A vision for the business.
- The company's specific objectives.
- Corresponding strategic decisions.
- The business policies that ensure that the many small daily decisions are complimentary.



**Figure 2.11** Strategic Posture (Ketelhöhn & Kubes, 1995)

#### ***2.5.4 Business Strategy and the Construction Enterprise***

Cultural differences, then, are clearly an important element of international business generally. In construction too, there are indications that the cultural dimension is of major consequence. For example, Flanagan (1994) comments that, in international construction “[t]here are many fundamental differences affecting the way that business is undertaken, not least language, culture and legal differences” (pp. 310). Ball (1988) notes that part of the reason for construction still being an industry carried out on largely a domestic level is that without some special competitive advantage “foreign [construction] firms face only the disadvantages of international building work arising from a diversity across countries of the social framework in which construction takes place” (pp. 36). Similarly, Biggs *et al* (1990) note that “[i]n France, everything is permitted, in Britain everything is permitted unless expressly forbidden and in Germany, everything is expressly forbidden unless it is expressly permitted” (pp. 11). Strategically, international construction enterprises must position themselves to best deal with the cultural dimension while maximising their competitive advantage.

Hillebrandt & Cannon (1989, pp. 8) note that “strategy implies taking a longer and broader view than the life of the project being undertaken”. They go on to state that:

“It enables the firm [within the construction industry] to take into account ... opportunities and constraints ... which are different from those in other sectors because of the low capital base ... The diversity of new projects for which a firm must bid also increases the options available to the firm” (pp. 8).

Ramsey (in Hillebrandt & Cannon, 1989) identifies two broad aspects of management in the construction industry. The first is project management, “which is concerned with managing people, developing loyalty and team spirit, and with the efficient logistics of individual assignments”. The second lies at the head office and involves the strategic thinking necessary to “achieve a better sense of direction, thereby, increasing long-term financial returns for the total company” (pp. 23).

Langford & Male (1991, pp. 32) note that, in the construction industry in particular, strategic decision making occurs at a number of levels:

- Corporate or Enterprise level – decisions about the organisation as a whole.
- Business level – decisions about in which market segments the firm will operate and how it will approach operations in that market segment.
- Operational or Project level – decisions made at departmental level.

In considering how to address strategic decision making, they recommend that the construction enterprise pose the following questions:

1. What is the nature and structure of the construction enterprise and what does it do?
2. What environment does the construction enterprise operate in and how does that environment behave?
3. Where does the boundary between the enterprise and the environment occur and what is its nature?

Hillebrandt & Cannon (1990) found that, in large UK construction firms there was much confusion about strategy and strategic planning, as well as the terms associated with them. Lansley (1987) suggests that, whereas the industry as a whole has been slow in reacting to change, some firms have been very successful in responding to changing needs and opportunities. The general experience of strategic planning in the construction industry is a low-profile activity (Betts & Ofori, 1992) that faces notable restrictions at many levels. Bennett (1994) takes a more optimistic perspective. He notes that the UK construction industry has a good record in the design and project management of concept buildings, using a construction management approach or a design and management approach. They assemble and co-ordinate the work of teams of specialists, their key skill being the management of complex teams. Bennett (1994, pp. 302) states that they “will own well developed procedures for controlling multi-cultural teams and have well developed information systems to support the management of innovative projects”.

Hillebrandt & Cannon (1989) note that three conditions are necessary for construction enterprises to operate internationally (pp. 43):

- Firstly, the firm should possess some competitive or ownership advantages over firms in the host country and their international competitors.
- Secondly, these advantages must require exploitation by the enterprise itself within the host country, rather than selling or licensing these advantages to other firms.

- Thirdly, it must be more advantageous for the enterprise to exploit its advantages by undertaking production outside its domestic environment.

Seymour (in Hillebrandt & Cannon, 1989) divides competitive advantage for the international construction company into ownership advantages, internalisation advantages and location advantages (pp. 45-53), drawing on Dunning's (1981) model of international competition. Ownership advantages include factors which are specific to the firm, such as its name, its reputation, the people who work for it and its size. Other ownership advantages are country-specific, such as comparative advantage (as outlined in Porter, 1987), and home country government support. The former point argues that construction companies will excel in projects which are common in their home country and will be able to take their expertise in these types of project elsewhere. The second includes co-ordinating services, export credit guarantees and tied aid that government may provide. Seymour (in Hillebrandt & Cannon, 1989, pp. 46) argues that the interaction of firm-specific and country-specific factors provide the potential for a strategy of either price competition or market differentiation. Meanwhile, comparative advantage is a source of both cost and differentiation advantage.

While the ownership advantages previously described could, in theory, be hired or leased to firms in other national markets in return for fees or royalties (externalised), within the international construction industry, they are most effective where they remain internal to the firm (Seymour in Hillebrandt & Cannon, 1989). The decision on whether to externalise or internalise ownership advantages will largely depend on the nature of the advantage. Due to the nature of the construction industry (such as a fixed point of production and the complex commodity that is the company's name, embodying the company's reputation and ability), it is unlikely that many ownership advantages would be externalised.

The third source of competitive advantage relates to location factors. Unlike international manufacturing, in international construction enterprises have little influence over demand through advertising and other marketing tools. Hence, market demand is a necessary condition of location choice. However, beyond this, determination of target markets for international construction enterprises is likely to come down to the interaction of domestic and host country factors of the enterprise

(Seymour in Hillebrandt & Cannon, 1989). The implication of the interaction of ownership and location advantages is that different nationality construction enterprises are likely to locate in different regions according to the nature of their ownership advantages.

The theory of international construction strategy outlined above broadly follows the eclectic paradigm, initially developed for manufacturing industries. This approach was later criticised by Abdul-Aziz (1995), who pointed to the “dangers of making theoretical analyses of the construction industry by rigidly applying economic conceptual tools which are inherently manufacturing biased” (pp. 118). For example, a key feature of the eclectic paradigm of internationalisation is licensing, where there is limited feasibility within the international construction industry. Similarly, locational aspects need to take into account the utilisation of host-country attributes by construction companies seeking to compete on global terms. However, in a survey of construction contractors from countries forming the ‘global triad’, e.g. US, EU and Japan (Ohmae, 1985), Abdul-Aziz (1994, pp. 474) notes that “builders with a global perspective have additional motives which, fundamentally, are similar to those of global manufacturers”. In essence, they search for overseas opportunities when the right conditions prevail (Seymour, 1987).

While there may be some doubt over the details of the international construction strategy posited by Seymour (1987), the general thrust would appear to be accurate when ‘real’ (i.e. non-theoretical) construction company strategies are considered. Flanagan (1994) considered the reasons for the success and dominance of construction enterprises from the so-called global triad and his analysis indicates a complex arrangement of the various types of competitive advantage within the eclectic model. In the first instance, Flanagan (1994) notes that, almost without exception, successful international construction organisations come from a very strong domestic base. The US international construction giants developed from being “merely engineering contractors” (pp. 308) to having an expertise in design, procurement and construction in the oil, gas, power and petrochemical sectors, as well as diversifying into general construction. From this base, they have developed a competitive advantage in design and technical skills coupled with the ability to manage effectively and arrange competitive financing arrangements.

Meanwhile, the Japanese government has been very supportive of their major construction firms where they operate overseas. Much Japanese work is based upon Japanese aid-related contracts together with Japanese clients who invest in capital projects overseas (Flanagan, 1994). Betts & Ofori (1992) note that perhaps the best illustrations of strategic planning in construction come from Japan. Bennett *et al* (1987), for example, observe the emphasis Japanese construction companies place on long-term R&D. The consequent possession of advanced and special technologies has been an important tool for competition both in their domestic market and overseas. In an analysis of competitive strategies adopted by a number of leading Japanese contractors, Hasegawa (1988) identifies a number of approaches including product diversification, business diversification and market segmentation, employed to deal with competitive forces such as the level of domestic and international competition and the threat of new entrants to the industry through diversification by non-construction companies. Japanese construction enterprises adopt what Betts & Ofori (1992) term an integrated strategic approach in that they seek to combine a variety of strategic techniques into an overall 'strategy mix'.

European construction companies have long standing associations with their country's former colonial holdings. French, German, Italian and Dutch as well as the British construction contractors and consultants all "grew [internationally] by having cultural and language ties to [specific] overseas markets, as well as home government aid related overseas work" (Flanagan, 1994, pp. 309). For example, Britain exported its construction system with the use of design consultants, quantity surveyors and bills of quantities. This provides British construction enterprises with a distinct competitive advantage in many parts of the world, even today.

As in other sectors of the economy, a key aspect of the globalisation of construction activity is the increasing tendency for construction enterprises to operate collaboratively across national borders. The creation of multinational consortia and joint ventures enable firms to pool technical expertise, reduce risk exposure and circumvent trading barriers (Betts & Ofori, 1992). In fact, Seymour (in Hillebrandt & Cannon, 1989) argues that the conditions for joint ventures are more likely to occur within the construction sector than in the manufacturing sector. Such elements have become key aspects of the geographical diversification of construction enterprises. True multinational construction

enterprises are those for whom overseas activities are not peripheral, but central to their operations (Strassman & Wells, 1988, pp. 6). They have geared their business towards solving their clients' problems and needs, thereby adding greater value to their services. In addition to product differentiation, diversification, acquisition and mergers, these firms form collaborative relationships with manufacturers, financiers, research institutions, policy makers and other contractors (Betts & Ofori, 1992). For example, a complex weave of relationships and mergers exists in Europe which strengthens these organisations against increased competition from outside the European Union (in particular, Japan) and has enabled them to exploit opportunities in new markets such as Eastern Europe (Sommerville, 1995).

## **2.6 Summary**

This chapter has reviewed the context of the international construction industry and considered the construction enterprise within the global trading environment. From a historical perspective it can be seen that there has been growth and development of the industry worldwide. From a theoretical perspective, the industry can be defined in terms of the features that set it apart from the domestic industry. It can be argued that the construction industry is unique in that, although it exhibits characteristics of both service industries and manufacturing industries, it does not fit neatly into either category. This argument supports a separate study of culture and cultural differences within the international construction industry.

There is little doubt that globalisation, and the processes involved, have become a key issue. The 'guiding theorem' of globalisation has three principle elements: the economy; the political spectrum; and culture. Within this overarching theorem, a closer analysis reveals a variety of 'currents' and 'cross-currents', which inform the nature of competition globally and create complexity for the firm operating internationally. This provides the context for discussion of the international construction industry of today. There are a variety of imperatives, beyond the profit motive, driving construction enterprises to 'go international'. These range from protection of shareholder interests and spreading construction risks geographically to jumping on the 'bandwagon' and reasons of prestige. However, analysis of trends over time shows that the attitude of construction enterprises' to international activities is far from consistent, with great

year-on-year fluctuations in the amount of work conducted overseas. This can be seen against the backdrop of increasing international competition in the construction market. It is also worth speculating on the future nature of international construction, with the suggestion that competition from companies based in the developing and newly industrialising countries will continue to increase over the longer term, increasingly marginalising those companies based in the developed world.

International competitive business strategy is an important element of the research project. It forms the theoretical basis within which cultural differences can be considered from the perspective of the firm and, to a lesser extent, the individual working overseas. General international business strategy is concerned with seeking competitive advantage within the context of globalisation mentioned previously. Thus, in considering the three fundamental themes of 'strategy' ('fit' between the firm and its competitive environment; 'selectivity' in allocation of resources; and balancing long-term and short-term priorities), there are four basic approaches to working outside the domestic business environment. These are: an international strategy; a multi-domestic strategy; a global strategy; and a trans-national strategy – the main drivers in the approach adopted being cost pressures and pressures to be locally responsive. Within this basic strategic view, conducting business internationally requires the balancing of a whole host of complex, interrelated issues, and the right balance will be determined by the enterprises' strategic stance, or posture. This, in turn, relates back to competitive advantage. When these issues are referred back to the international construction, a host of additional issues are of concern, these relating primarily to the nature of competitive advantage associated with construction enterprises.

In sum, the chapter makes a case for consideration of the cultural dimension from the unique perspective of construction companies operating outside of their home country in a dynamic and changing global scene. Before this cultural dimension can be related to the international construction industry, however, there needs to be a clear understanding of what is meant by the term 'culture' and how this might be considered within a business context. Such is the purpose of Chapter 3.



## CHAPTER THREE

But to my mind, though I am native here  
And to the manner born, it is a custom  
More honour'd in the breach than the observance.

William Shakespere  
*Hamlet, 1:4*

### **3.0 THE CULTURAL DIMENSION**

#### **3.1 Cultural Dynamics and Analysis**

It has been said that “culture is one of the two or three most complicated words in the English language” (Williams, 1983, pp. 87). The idea of culture embraces a range of topics, processes, differences and even paradoxes. The concept is, at least complex and, at most, so divergent in its various applications as to defy the possibility of a singular designation (Jenks, 1993). Despite this, ‘culture’, together with ‘society’ are the two most widely used notions of sociology (Giddens, 1989, pp. 31).

Notwithstanding this, many writers have sought to make a definitive statement of culture. Perhaps the earliest attempt was by the British anthropologist Edward B. Tylor who, in 1871 used the term ‘culture’ (quoted in Harris, 1993, pp. 104) to refer to:

“the complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits acquired by man as a member of society.”

However, anthropologists met with little success in developing a more exact or precise understanding of the term until the first attempts to analyse culture systematically were made, principally by American anthropologists, shortly after the Second World War – most notably *inter alia* Malinowski (1944), Mead (1951), Kroeber & Kluckhohn (1954), Hall (1959), Benedict (1961) and Sapir (1964). Whilst scholars were still unable to agree on a single, all embracing definition which would, in any case, be undesirable, they all agreed on the point of culture being learned behaviour rather than genetically endowed behaviour. With regard to the possibility of developing an ‘all embracing definition’, Sapir (1964, pp. 199-200) states that:

“cultural analysis, as ordinarily made is not the study of behaviour at all but is essentially the orderly description, without evaluation ... of a behaviour ... which, in the normal case is not, perhaps cannot be, defined.”

For a more exact understanding of culture as a concept, and as an aspect of human behaviour, it was realised that what should really be studied were cultural differences, for it is the differences between cultures that allow us to discover what it is that makes

them unique and, consequently, leads us to an understanding of the concept itself. This arose from the development of an understanding of ‘cultural relativism’: the idea that people in different societies perceive the world in fundamentally different ways (Harris, 1993; Giddens, 1989). In this context, a widely accepted anthropological definition was posited by Mead (1951, pp. 12):

“a body of learned behaviour, a collection of beliefs, habits and traditions, shared by a group of people and successively learned by people who enter the society”.

Perhaps the single, most important contribution to the study of culture in the context of management was the development, by sociologists, of models and frameworks to describe and demonstrate cultural difference (*inter alia* Hofstede, 1980; Trompenaars, 1993 and Lessem & Neubauer, 1994). It should be noted, however, that this is only the case from a ‘Western’ viewpoint, where thought is characterised by categories, distinctions and separateness. ‘Eastern’ thinkers could well adopt a different viewpoint, where continuity and connectedness are of more interest (Maruyama, 1984). Indeed, it should be borne in mind that a central criticism of the body of work relating to the analysis of culture is that it approaches the subject from too narrow a viewpoint, in effect enforcing a type of ‘Anglo-Saxon’ concept of culture in international business practices (Hall, 1995), a fact that the likes of Trompenaars and Hofstede themselves recognise.

Bearing in mind that this study is not principally concerned with analysing culture from a sociological or anthropological perspective, but instead, from a business and strategic perspective, it would seem reasonable to follow the consensus of views arising from the literature with regard to the study of culture and adopt the following ‘working definition’ of culture as being:

“the collective programming of the mind that distinguishes the members of one human group from another. ... Culture, in this sense, includes systems of values; and values are among the building blocks of culture”  
(Hofstede, 1984, pp. 21)

From this ‘definition’, it would follow that (Mead, 1994, pp. 6):

- culture includes systems of values;
- a culture is particular to one group and not others;

- [culture] is learned and is not innate – it is passed down from one generation to the next;
- [culture] influences the behaviour of group members in uniform and predictable ways.

Root *et al.* (1997) note that Hofstede does not use the term ‘definition’ for this description of culture. Instead, he uses the term ‘treatment’ (1984, pp. 21) and, while he acknowledges that it can be seen as being somewhat simplistic, turns to the broader definition provided by Kluckhohn (in Lerner & Laswell, 1951, pp. 86).

“Culture consists in patterned ways of thinking, feeling and reacting, acquires and transmits mainly by symbols, constituting the distinctive achievements of human groups, including their embodiments in artefacts; the essential core of culture consists of the traditional (i.e. historically derived and selected) and especially their attached value.”

Culture, then, is more than just a mental programme within Hofstede’s model. It also includes behavioural aspects of people and the artefacts they produce. Thus, activities that people are not programmed to do, do nevertheless occur, such as traffic jams (Harris, 1993).

A great deal of emphasis in the study of culture has been placed by researchers on value orientation studies, including developments of the original research instruments used by Kluckhohn and Strodtbeck (1961) and validations of Hofstede’s (1980) dimensions (see Section 3.2 below). Leeds (1994) notes how Hofstede’s (1980), Trompenaars’ (1993) and Lessem & Neubauer’s (1994) work relates to pragmatic and holistic approaches to management in newly emerging democracies, concluding that managers worldwide are gradually learning to reconcile contradictions or apparent opposites.

Drawing on the work of Czinkota & Ronkainen (1993), Hofstede (1991) and Trompenaars (1993), Darlington (in Joynt & Warner, 1996, pp. 35) has drawn up a “diffuse range of elements” which, combined, ‘contain’ culture. This approach to identifying a range of elements that represent culture can be found in the work of *inter alia* Malinowski (1944). The elements can be found in Table 3.1.

|   |   |
|---|---|
| economics                               | social institutions, social strata or<br>classes and family structure |
| religion                                | customs   |
| politics                                | material items  |
| values                                  | aesthetics  |
| attitudes                               | manners   |
| language: both verbal<br>and non-verbal | education   |

**Table 3.1** Elements of Culture

However, one of the foremost writers on culture of contemporary times, Clifford Geertz, might consider this attempt to ‘break culture down’ into constituent elements to be somewhat of an anathema. He takes the analysis of culture not to be “an experimental science in search of law but an interpretive one in search of meaning” (Geertz, 1993 (1973), pp. 5).

### 3.2 Modelling Culture

A consequence of the approach to the study of culture described in Section 3.1 above, was an emphasis on the modelling of cultural dynamics (*inter alia* Kluckhohn & Strodtbeck, 1961 and Hall, 1976). While these were valuable from an anthropological perspective, demand was growing from the international business community for a theoretical view of culture which could be utilised for management and business purposes. Indeed, Edward Hall was a pioneer in teaching American technicians, Foreign Service officers and military personnel, due to be posted overseas, in understanding cultural differences and developing cultural sensitivity and awareness (Hall, 1959). From this standpoint, however, the models contained weaknesses in that the cultural orientations and variations were imprecisely defined and the interpretations were subjective, while the management implications were rarely demonstrated (Mead, 1994).

Throughout the 1960s and 1970s, Hofstede (1980) undertook one of the most extensive ever analyses of cultural differences across a broad range of nationalities (more than 50) using a unique data source (surveys of IBM employees). These detailed and extensive

data was applied to a carefully structured model which divides culture into five (initially four) dimensions (Hofstede, 1980 and Hofstede & Bond, 1988). However, for management purposes, the most important features of the research were that all the cultures involved were compared on a systematic basis and the results were applied to a company organisation scenario, demonstrating the business and management implications.

Subsequently, the original work by Hofstede has been built upon and developed by many others (*inter alia* Adler, 1991, Trompenaars, 1993, Hampden-Turner & Trompenaars, 1994) which tends to lend support to Hofstede's original findings. Altogether, in three studies, five dimensions of national culture were identified (Hofstede, 1980, Hofstede and Bond, 1988 and Hofstede *et al*, 1990). The dimensions are summarised below (Hofstede, 1994):

#### *(1) Power Distance*

This is the extent to which less powerful members of groups accept and expect that power is distributed unequally. This represents inequality (more versus less), but defined from below, not from above. It suggests that a society's level of inequality is endorsed as much by the followers as by the leaders. Power and inequality are fundamental facts with "all societies being unequal but some ... more unequal than others" (pp. 2).

#### *(2) Individualism versus Collectivism*

This is the degree to which individuals are integrated into groups within a specific society or culture. On the individualist side, we find societies in which the ties between individuals are loose: everyone is expected to look after themselves. On the collectivist side, people in societies are integrated into strong, cohesive in-groups, often with extended families, which protect those individuals in return for unquestioned loyalty.

#### *(3) Masculinity versus Femininity*

This refers to the distribution of roles between the sexes. Studies found that: (a) women's values differ less between societies than do men's values; (b) men's values from one country to another contain a dimension from very assertive and competitive and emphatically different from women's values on the one side, to modest and caring

and similar to women's values on the other. The assertive pole is termed 'masculine' and the modest pole is termed 'feminine'.

#### *(4) Uncertainty Avoidance*

This deals with a society's tolerance for uncertainty and ambiguity. It indicates the extent to which a culture programmes its members to feel either comfortable or uncomfortable in unstructured situations. Unstructured situations are novel, unknown, surprising and different from the usual. Uncertainty avoiding cultures try to minimise the possibility of such situations by strict laws, rules and safety and security measures, and at a philosophical and religious level, in a belief in an absolute truth.

People from uncertainty accepting cultures tend to be more tolerant of opinions and ideas different to what they are used to and, consequently, seem more relaxed. On the other hand, people from uncertainty avoiding cultures are anxious when confronted with different opinions and ideas and, consequently, appear emotional.

#### *(5) Long-Term versus Short-Term Orientation (or the Confucian Dimension)*

The fifth dimension was established using a questionnaire designed by Chinese scholars. It can be said to deal with "virtue regardless of truth" (pp. 5). Values associated with long-term orientation are thrift and perseverance; those associated with short-term orientation are respect for tradition and fulfilling ones' obligations. The values of this dimension are rooted in the teachings of Confucius although the dimension applies to countries without a Confucian heritage.

The nature of these dimensions is further illustrated in Figure 3.1 (Hofstede & Bond, 1988), with the key extremes of each dimension listed in tables. The dimensions were used to 'map' the cultural profile of the countries from which data were gathered in the IBM studies. It is this aspect of Hofstede's approach that makes his work of so much value in a business-related context. Other writers and researchers have developed similar models. For example, Gesteland (1996) postulated four dimensions: Deal-focused versus Relationship-focused; Informal versus Formal; Rigid-time versus Fluid-time and; Expressive versus Reserved. However, Gesteland, like Trompenaars and others, failed to develop his dimensions into quite such a comprehensive model as Hofstede.

Hofstede's research findings are invaluable when applied as a general model which needs to be interpreted in terms of a specific situation. However, they are likely to be misleading if applied literally in all circumstances. In applying the model, special attention should be given to sub-cultures, industry differences and organisational differences. Hofstede's research indicates which orientation most members of a cultural group are likely to adopt in routine situations, by mapping out tendencies. This is because cultures differ in relative, not absolute, terms (Mead, 1994).



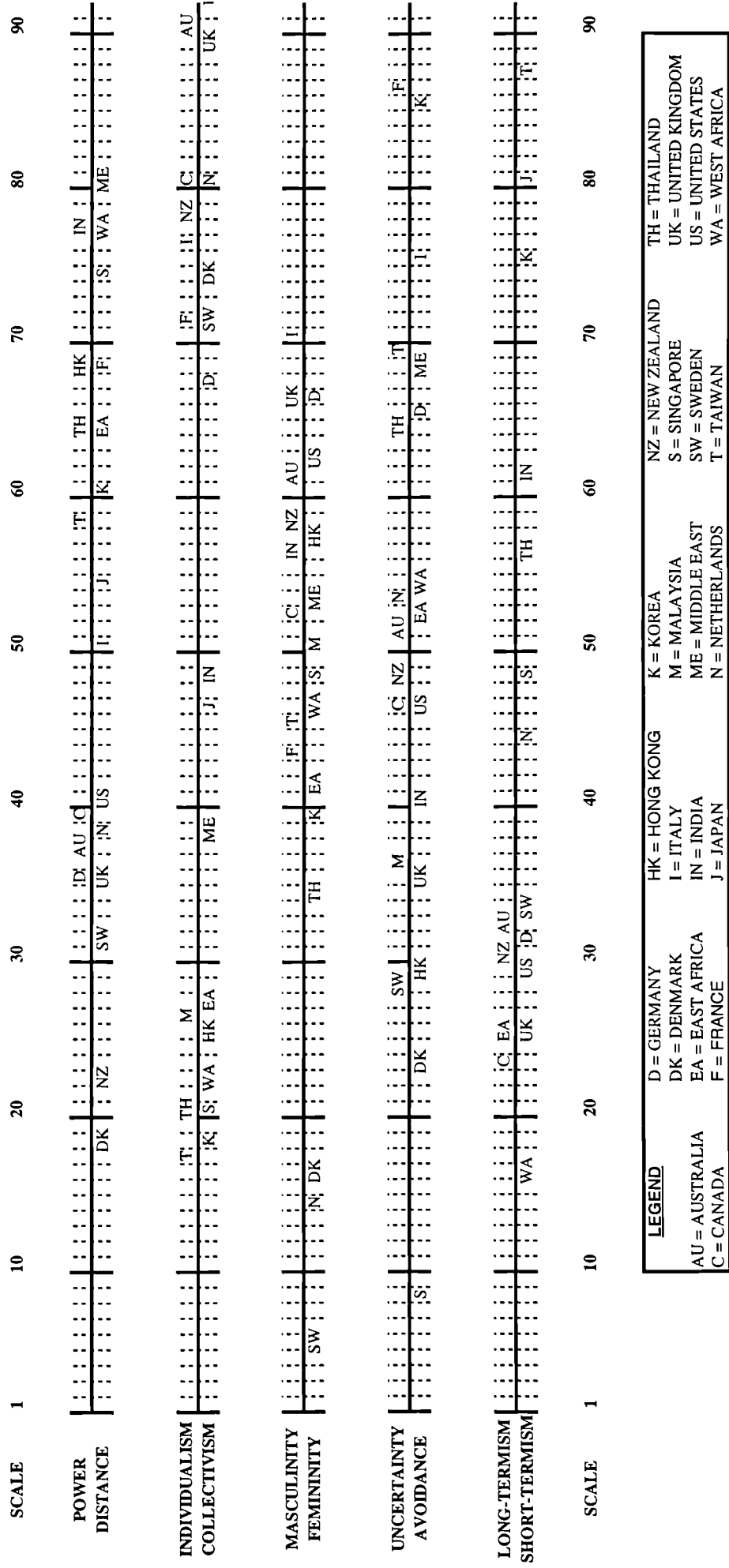


Figure 3.1 Hofstede and Bond's 5 Dimensions of Culture (adapted from: Hofstede, 1994)

### 3.3 The Difference Between Culture and Personality

One of the findings of the pilot survey (described in Chapter 6) was that some of the respondents attributed their response to people from different cultures more to personality issues than to cultural factors. They went as far as to say that cultural factors were of no concern to them. Rather, personality issues were of paramount concern which meant, therefore, that, for them, none of the cultural factors identified in the questionnaire were of any importance. This was an unforeseen response since it seemed self-evident, during the design of the questionnaire, that cultural factors were a major consideration in business, working and personal relations between people with different cultural backgrounds. If, however, the respondents were correct in their reading of the situation, and personality was more important than culture in these kinds of encounters, then this project should not be addressing the topic of 'culture' at all. Instead, the individual psychology of the participants would be a more appropriate topic of investigation. Kluckhohn & Murray (in Kluckhohn *et al.*, 1965) addressed this very issue. They outline the problem very clearly in their opening sentence (pp. 53):

- “Every man is in certain respects
- a. like all other men,
  - b. like some other men,
  - c. like no other man.”

They go on to describe what they mean by this statement which, superficially, is totally obvious. For example, each man is like all others in terms of their physical being and the physical environment in which they live and grow. However, men are also alike because, as social animals “men must adjust to a condition of interdependence with other members of their society and with groups within it and, as cultural animals, they must adjust to traditionally defined expectations” (pp. 54). They go on to say that:

“Human beings ... learn not only from experience but also from each other. All human societies rely greatly for their survival upon accumulated learning (culture). Culture is a great storehouse of ready-made solutions ... . This storehouse is man's substitute for instinct.”

The universalities of human life produce comparable effects upon the developing personalities of men of all times, places and races.

‘Culture and personality’ denote a range of problems on the borderline between anthropology and sociology on the one hand and psychology and psychiatry on the other. Kluckhohn & Murray consider this an unfortunate characterisation, however, as it implies a dualism, whereas, “‘culture in personality’ and ‘personality in culture’ would suggest conceptual models more in line with the facts” (pp. 63). Sapir (1964) illuminates this argument when he observes that our interest in human behaviour alternates between the group and the “psychic organisation of the individual himself” (pp. 194). He argues, however, that these two aspects do not necessarily form a dichotomy: “it is merely that the locus of reference is different in the two cases”. Under familiar circumstances with familiar people, interest is likely to focus on the individual whereas, with unfamiliar types of behaviour or with individuals who do not readily fit into a familiar context, the interest tends to focus on the cultural facets rather than those that are personal in character. According to Sapir (1964) we have no awareness of this change in focus, and it is not a precise mechanism. We are aware of both cultural and personal implications of a given situation, with the emphasis constantly shifting.

Thus, in most cases, the observed similarities as well as the differences, between groups are largely attributable to fairly uniform social and cultural processes (Kluckhohn & Murray, 1965, pp. 66). According to Kluckhohn & Murray, the personality of an individual is the product of inherited dispositions and environmental experiences. These experiences occur within the field of that individual’s physical, biological and social environment, all of which are modified by the culture of the person’s group. So, while an individual’s personality is an important factor in relationships across cultures, the cultural dimension prevails over the effects of personality in this context. In short, the personality of the individual is the product of inherited dispositions and environmental experiences. These experiences occur within the field of that person’s physical, biological and social environment, all of which are modified by the culture of that person’s group. “Similarities of life experiences and heredity will tend to produce similar personality characteristics in different individuals, whether in the same society or different societies” (pp. 67).

This view is, however, somewhat in contradiction to the work of Linton (1945), who regarded individual psychology and, therefore, personality traits, as being largely free from the influence of culture. “His [the individual’s] integration into society and culture

goes no deeper than his learned responses, and although in the adult the greater part of what we call personality, there is still a good deal of the individual left over” (pp. 14-15). In Linton’s view, individuals may have personalities quite separate from their cultural background. Thus, the question of whether personality is culture-bound or culture-free is complex, and one which it is difficult to resolve on a scientific basis. In fact, Morris (1994) argues that the concept of the individual is a product of culture. Thus, the concern with ‘self’ within society is a question far more likely to arise in individualist societies, where the collective is seen as being less important. In any case, numerous studies throughout the 1950s and 1960s proved inconclusive (Usunier, 1996, pp. 15). However, the weight of evidence arising from these studies, based on the concept of a ‘national character’ or ‘national culture’, would seem to support the view of the personality and culture relationship as espoused by *inter alia* Kluckhohn & Murray (1965) and Sapir (1964). Thus, this view is adopted for the remainder of this study.

### **3.3.1 Issues in Cultural Anthropology**

The discussion of the distinction between the individual’s personality and that individual’s culture introduces two key issues of contention in the field of social anthropology. Firstly, there is a debate over the influence of biological and natural phenomena in the formation of societies. Undoubtedly, cultures have developed to a certain extent in response to the physical environment and the biological aspect of man. This contrasts with the view of cultural inheritance that has been described up to now. In this debate, Giddens (1989) notes that, while people have biological needs, these are, in fact, satisfied in different ways by different societies. One society’s ways of meeting biological needs often seems absurd or bizarre in other societies, who have found entirely different ways of meeting those same needs.

The second issue relates to the study of culture and specifically concerns the dichotomy between the *emic* and *etic* (Headland *et al*, 1990). The *emic* approach concerns the study of culture from the perspective of the people being studied. In this approach, the validity of the descriptions arising from the study are correct if they correspond to that which natives accept as meaningful, real or appropriate. The *etic* approach, on the other hand, arises merely from observation of culture and is valid if, from this observation, one is able to generate rigorous scientific theory. Thus, the former is appropriate where a

specific culture is being studied while the second approach is appropriate where culture as a concept is being described.

### **3.4 Other Features of Culture**

#### ***3.4.1 Cultures and Subcultures***

Differences due to national boundaries can be referred to as differences “in the small”, resulting from institutional factors and behavioural differences that are coincidental with national boundaries. These can be distinguished from differences due to culture that can be referred to as differences “in the large” (Farley & Lehmann, 1994, pp. 118). These are differences that are culturally based and would exist even if the world were not organised into nation states. They are due to the ‘life experiences’ of people from different cultures, such as the idea of ‘being Japanese’, the value systems of Islam and Christianity and so on. Culture and country are not synonymous, so cultural factors are only loosely related to the nation state (Mead, 1994).

Distinctions made sub-culture by sub-culture, region by region and even city by city make the assumption of generalising by national group a difficult methodological issue. The concept of national culture sums up a “complex and multiform reality” (Usunier, 1996, pp. 14). As a variable, it is too artificial to avoid the traps of cliché and stereotype. Stereotyping stems from making generalisations about people and forming judgements based on those generalisations. While it can be seen from the work of Hofstede and Trompenaars that generalising is important in understanding and making sense of the world, the danger arises when the generalisations from which the stereotypes are formed are based on incomplete information, leading to an unreliable stereotype. This, in turn, leads to what is termed ‘ethnocentrism’ (see Section 4.3.1) (McLaren, 1998).

Featherstone (1995) notes that when one considers a locality, one must be careful not to presume an integrated community. However, a general statement is of value in situations where sub-cultures have different priorities (Mead, 1994). This is because, if one considers the idea of cultural homogeneity as being bounded within a specific nation-state, one can then address the term ‘homogeneity’. The term implies one or more of the following (Usunier, 1996):

- the existence, throughout the whole population of a unique modality in comparison with the mean value of the characteristic across the whole population,
- an accepted diversity, such as the agreement for maintaining several languages, more or less spoken and/or understood by everybody.
- and, perhaps most importantly, ‘perceived homogeneity’, that is, the perception of differences within a country as being acceptable within the national community.

Further, while acknowledging the arguments that a ‘national culture’ cannot possibly exist in the same way as it exists at a far more localised level, Featherstone (1995) argues that there is a further dimension of cultural integration to which reference should be made. This is the generation of “powerful emotionally sustaining rituals, ceremonies and collective memories” (pp. 107). He sees the nation as being represented through a series of more or less coherent images and memories, which deal with the crucial questions of origins, difference and the distinctiveness of people. Additionally, it can be argued that the bilateral interactions that occur between nation-states, especially those that involve increasing competition and conflict, have the effect of unifying the national self-image. In this respect, the cultural element of national identity entails “a part being represented as a whole” (pp. 111).

Maffesoli (1996) considers that the sheer proximity of people (as in a nation-state) encourages the development of cultural identity. His argument relates to Featherstone’s in that he sees a “close relationship between territory and collective memory” (pp. 136). While this consideration of spatial proximity is, in particular, relevant to localised cultural homogeneity, the existence of networks of spatially located groups is the “foundation of a succession of ‘we’s’ which constitutes the very essence of all sociality” (pp. 139). Thus, this logic would suggest that the culturally distinct cities, within culturally distinct regions create an interconnected network of cultures which, together form the culture of the nation. This view, when linked with the concept of cultural distance so graphically illustrated in Hofstede’s model (Figure 3.1) allows one to conceive of collections of culturally distinct but, at the same time, culturally close localities. This means that, for example, while a Scot is culturally very different to a Londoner, the intervening network of cultures forms a connection between the two which makes them both British, just as a Catalan and Andalusian are both Spanish.

Finally, Usunier (1996) remarks that, since management often requires the successful integration of individuals, an individual's cultural orientations may need to be determined, incorporating various cultural factors which may be outside those of the dominant national culture.

### ***3.4.2 Language as a Facet of Culture***

Edward Sapir (1964) and Benjamin Lee Whorf (in Carroll, 1956) were among the foremost scholars on the nature of language in respect of culture. For Sapir, linguistics was his principal area of study. Usunier (1996) notes the criticism levelled at Whorf and Sapir, by proponents of linguistics in the sense of phonetics and of language as a body of natural science, primarily for their insistence on a direct link between culture and language. Whorf (quoted in Carroll, 1956, pp. 65) stated:

“... the problem of thought and thinking in the native community is not purely and simply a psychological problem. It is quite largely cultural. It is moreover largely a matter of one especially cohesive aggregate of cultural phenomena that we call language.”

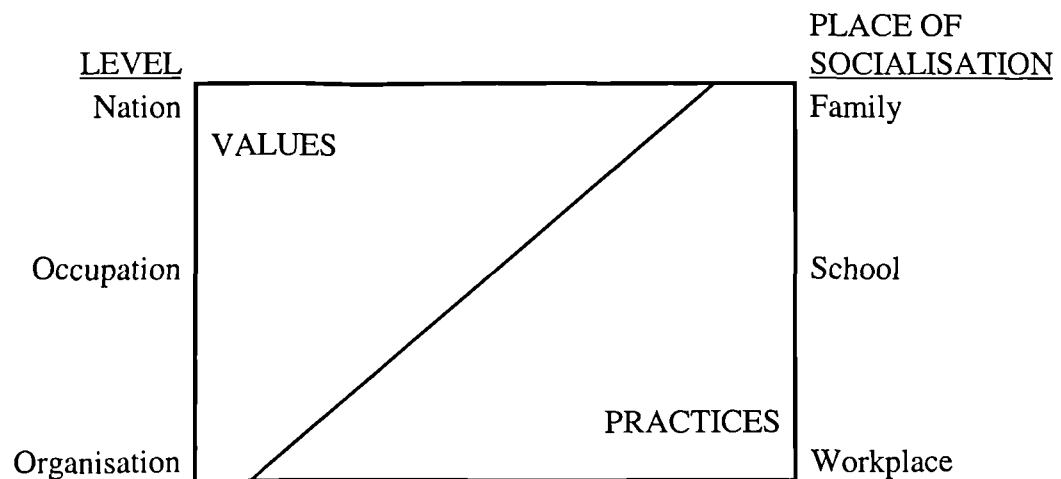
Sapir (1964) notes that language was quickly adopted as a convenient research tool by anthropologists and has, since, become a valuable guide to the scientific study of given cultures. Sapir asserts that the network of cultural patterns of a civilisation is ‘indexed’ in the language which expresses that civilisation (pp. 68). Sapir saw Language as such a useful tool because, of all the forms of culture, it seems to be the only one that develops its “fundamental patterns with relatively complete detachment from other types of cultural patterning” (pp. 72). This is because other, more basic symbolisms of behaviour become densely overlaid with cross-functional patterns of a bewildering variety, making them difficult, if not impossible to isolate for analysis. Malinowski (1944) regarded language as the single, most unifying aspect of culture as it serves as the primary method for the transmission of culture.

“[A] common tradition of skills and knowledge, of customs and beliefs, can only be carried conjointly by people who use the same tongue. Co-operative activities, in the full sense of the word, are again possible only between people who can communicate with each other by language” (pp. 165).

### 3.4.3 National versus Organisational Culture

Any discussion of culture, in a business context, will have two themes: national culture on the one hand and organisational culture on the other. Hofstede *et al* (1990) attempted to describe the distinction between the two. They asserted that, based on their research, people from different national cultures, who were otherwise similar, were found to have considerable differences in 'values', in the sense of broad, non-specific feelings such as good and evil. However, in organisational cultures, it was found that considerable differences existed in 'practices' for people who otherwise held broadly similar 'values'. Hofstede postulated that this difference was explained by the different places of socialisation for practices and values respectively. It is suggested that values are acquired in early youth from influences such as the family, community and school whereas practices are learned through socialisation at the workplace (Pascale, 1985).

The difference is more clearly illustrated in the diagram below (Figure 3.2). 'Occupational culture' is placed halfway between national and organisational cultures, representing the acquisition of both values and practices on entering an occupational field (Hofstede *et al*, 1990).



**Figure 3.2** Cultural Differences: National, Occupational and Organisational Levels (Hofstede *et al*, 1990)



#### ***3.4.4 The Durability of Cultural Difference***

There is an ongoing debate as to whether societies around the world are moving increasingly to some 'global culture' or whether, instead, we are becoming more distinct (Featherstone, 1995). This is an important argument in terms of long-range strategic thinking and planning. For example, were the prevailing view to be that cultural identity, as described here, was diminishing, then this research project may well become irrelevant in the future – cultural difference, in that scenario, would be an unimportant factor for overseas business. However, the debate seems to be ongoing. On the one hand, there are those that argue that the 'globalising' influences of American popular culture as embodied by Coca-Cola, McDonalds and so forth, together with the ease of international communications, are evidence of how cultures may be becoming less heterogeneous. This view is known, within anthropology, as 'diffusion': the passing of cultural traits from one culture and society to another (Harris, 1993, pp. 108-111). In truth, this popular view of a 'global culture' just described is more like the hegemony of a specific culture (modern American) over others (Wallerstein, 1991). On the other hand, there are those that argue that this evidence is merely at a superficial level and that underlying values are untouched by the effects of these phenomena (see Section 3.5). Even Coca-Cola and McDonalds have had to adapt to local cultural tastes and mores (Usunier, 1996). This view is called 'enculturalisation': a partially conscious and partially unconscious learning experience, whereby the older generation "invites, induces and compels" the younger generation to accept traditional ways of thinking and behaving (Harris, 1993, pp. 105). This argument is of particular relevance to the world of design and architecture, where the debate is ongoing (see Section 4.1.6). At the present moment, the argument seems insoluble and is epitomised by the concept of postmodernism, which can be used to argue both perspectives. For example, postmodernism can be seen as a "movement away from the universalistic ... where the emphasis is upon totality, system and unity, towards an emphasis upon local knowledge, fragmentation, syncretism, 'otherness' and 'difference'" (Featherstone, 1995, pp. 43). On the other hand, the same concept can be used to argue that we become merely individuals within a chaotic world. In this view, "we live in a depthless culture where 'TV is the world'" (pp. 44).

### 3.4.5 *The Weberian Philosophy of Cultural Advantage*

Marx's view of industrial capitalism was less to do with the pursuit of gain than the "regular orientation to the achievement of profit through economic exchange" (Giddens, in Weber, 1992, pp. x). Max Weber, together with Sombart, were among the first to regard the economic conditions that Marx believed determined the development and future transformation of capitalism as being embedded within a unique cultural totality (Giddens, 1972). 'The Protestant Ethic and the Spirit of Capitalism' was Weber's attempt to specify the distinctive characteristics of modern capitalism in Western society. He noted that only in the West and then, only in relatively recent times, has capitalist activity become associated with the rational organisation of formally free labour. Weber believed that the regular reproduction of capital, involving its continual investment and reinvestment for the end of economic efficiency rather than to acquire wealth for the purposes of material comfort, pleasure or power, was rooted in a moral imperative stemming from the Protestantism that arose from the Reformation. What is now popularly known as *The Protestant Work Ethic*, together with Weber's other commentaries dealing with ancient Judaism, Hinduism and Buddhism, Confucianism and Islam, were never conceived as mere descriptions of world religions but, rather, as "analyses of divergent modes of the rationalisation of culture, and as attempts to trace out the significance of such divergences for socio-economic development" (Giddens, in Weber, 1992, pp. xiv). In essence, Weber argued that, in the 'West', cultural conditions were appropriate for capitalism while, in the 'East', the nature of relationships and social hierarchy prevented unbridled capitalism, in the sense intended by Marx. Thus, in Weber's analysis, the Orient was only able to develop capitalism to the extent that their shared Confucius heritage would allow, limited by, for example, the moral superiority basis to authority in China.

This view has since been reinterpreted (*inter alia* Furnham, 1990). Weber appeared to have been correct in his analysis of capitalism *as conceived by Marx*, and its relationship to cultural morality. However, capitalism was not interpreted in the same way in different societies. The Japanese example of capitalism is very different to the Western notion of capitalism: both are appropriate within specific cultural milieus. However, this has not prevented Weber's analysis from being used as the basis of a philosophy of cultural superiority. Early anthropologists such as Sir James Frazer, in his highly

influential treatise on 'primitive' cultural practices, 'The Golden Bough' (1993 (1922)), asserted a hierarchy to different cultures that has formed a lasting impression in the modern, Western psyche. In reality, historical factors, such as colonialism, have conspired to impose inappropriate forms of capitalist activity upon 'traditional' societies. The implications can be profound for labour intensive industries such as construction. Take a modern, international construction company attempting to operate in a society that had not previously known of the capitalistic notions of a disciplined labour force and regularised investment of capital. Suppose the company introduced piece-rates, whereby workers could improve their wages, in the expectation that this would provide the members of their labour force with an incentive to work harder. The opposite may actually occur. This would be because the workforce would not necessarily be interested in maximising their daily wage, but only in earning enough to satisfy their traditionally established needs.

### **3.5 Manifestations of Culture**

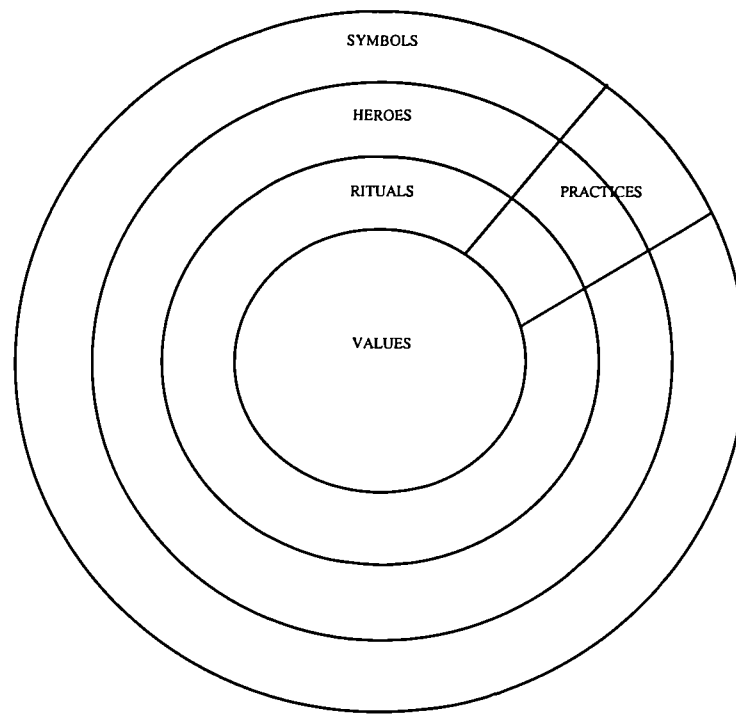
Hofstede (1991) proposes that, in addition to viewing culture as the variation of societies along various dimensions and in terms of the level of socialisation as described and illustrated in Section 3.2, culture can also be seen as manifesting itself as different 'layers' (Figure 3.3). This proposition is supported by Trompenaars (1993) who advances a similar model.

*Practices* comprise *symbols*, *heroes* and *rituals*, each of increasing significance. They are visible to someone foreign to that culture but (Hofstede, 1991, pp. 8):

“... their cultural meaning, however, is invisible and lies precisely and only in the way these practices are interpreted by the insiders.”

This roughly corresponds to what Trompenaars (1993) terms the explicit products or artefacts of culture (pp. 22):

“... the observable reality of language, monuments, agriculture, shrines, markets, fashions and art. They are symbols of a deeper level of culture. Prejudices mostly start on this symbolic and observable level.”



**Figure 3.3** Manifestations of Culture at different Levels (Hofstede, 1991)

*Symbols* are words, pictures, gestures or objects that carry meaning recognised only by those who share that culture and include language and jargon, dress, hairstyles, flags, status symbols, etc. (Hofstede, 1991). *Heroes* are persons (or characters), alive or dead, real or imaginary, who possess characteristics highly prized in a specific culture and, thus, who serve as models for behaviour. *Rituals* are the collection of activities within a culture which serve no technical role but are socially essential. They include ways of greeting and paying respect, social and religious ceremonies, arrangements for business and political meetings, etc.

Underlying practices are *values*. They are the “core of culture” (Hofstede, 1991), representing the tendency to prefer one state of affairs over another. They manifest themselves as feelings with positive and negative sides with regard to such fundamental aspects as good and evil, clean and dirty, beautiful and ugly, etc.

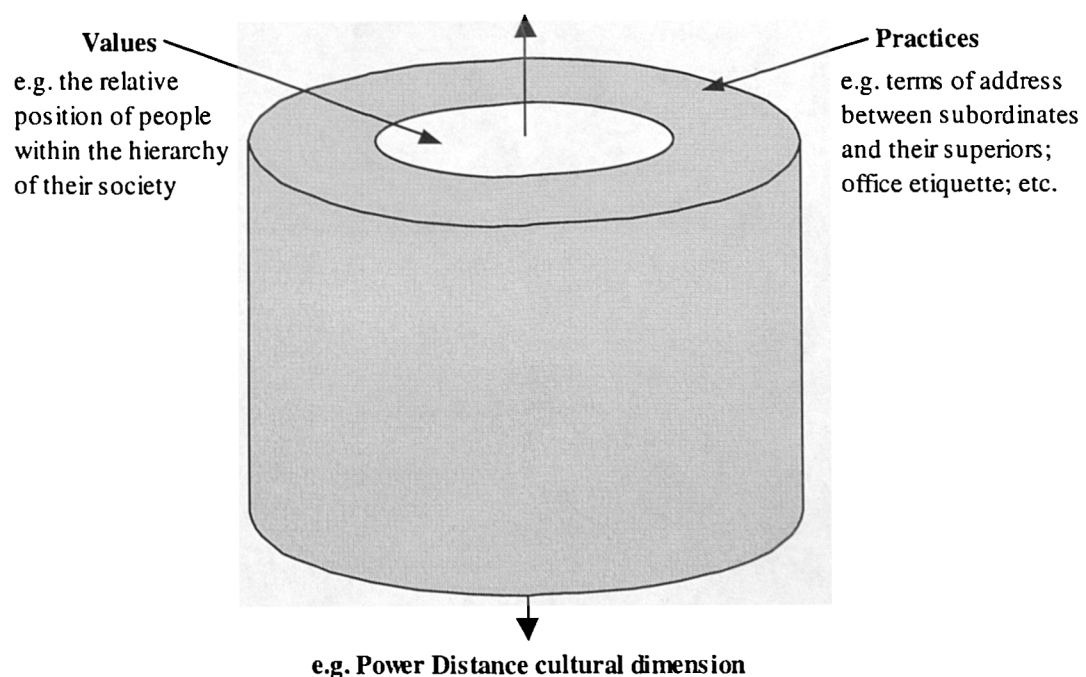
“... many values remain unconscious to those who hold them. Therefore, they cannot be discussed, nor can they be directly observed by outsiders. They can only be inferred from the way people act under various circumstances.”

(Hofstede, 1991, pp. 8)

This corresponds to what Trompenaars (1993) terms *norms*, that can “develop on a formal level as written laws, and on an informal level as social control”, and *values* which “determine the definition of ‘good and bad’ and are, therefore, closely related to the ideals shared by a group.”

This concept of indefinable values and attitude underlying the manifestation of culture is not a new one. Malinowski (1944), for example, proposed a similar idea when he remarked on the fact that culture “includes some elements which apparently remain intangible, inaccessible to direct observation, and where neither form nor function is very evident” (pp. 69). Although he failed to develop a model such as those proposed by Hofstede and Trompenaars, it can be seen that these later models, and the theory which accompanies them, is rooted in anthropological theory – specifically ‘semiotics’. Semiotics are non-verbal cultural signifiers (or symbols) that contain cultural meaning and are considered a useful way to make cultural comparisons (Giddens, 1989).

These conceptualisations of culture are useful for the purposes of this study as they add an additional dimension to the existing 2D model of culture illustrated in Figure 3.1. That model is a convenient way to express relative cultural differences. If the model shown in Figure 3.3 is appended to this existing model, cultural differences could then be identified in three directions. This 3D conceptualisation of cultural dynamics is illustrated in Figure 3.4.



**Figure 3.4** A 3D Conceptualisation of Cultural Dynamics

For example, one of the dimensions is power distance. According to the theory postulated by Hofstede, and supported by the work of Trompenaars, power distance could be further divided according to practices and values. *Practices* which demonstrate power distance in a specific society may include the language with which subordinates refer to their superiors and the visible symbols of status possessed by different ranks in that society (e.g. company car, size of office, etc.). Power distance might also be expressed in terms of the legal relationships between subordinates and their superiors; a way of enshrining the *values* of a society.

### 3.6 The Validity of Hofstede's Model

While the models developed by Hofstede and Trompenaars provide a very convenient method of comparing differences in culture, the work itself has been the subject of a great deal of criticism. In particular, the rigour with which the methodology was applied has been questioned while members of the postmodernist movement (those concerned with studies using the principles of ethnomethodology and social interactionism, such as Geertz (1973) 1993) would go further and suggest the study of culture as a social object is a fundamentally flawed notion altogether. Indeed, some go as far as to suggest the term 'culture' should be dispensed with entirely (Bhagat & McQuaid, 1982). However, while it is conceded that it is difficult to operationally define 'culture' it is widely accepted that the phenomenon of cultural differences has a significant effect on the performance of organisations (Child, 1981). In light of this, Root *et al* (1997) take the view that the type of research undertaken by Hofstede and his contemporaries is complimentary to the more ethnographic approaches espoused by *inter alia* Garfinkel (1967).

The first significant issue of Hofstede's model is that his work assumes that national territory and the limits of national culture correspond. This has already been discussed in section 3.4.1, which argues that cultural homogeneity cannot be taken for granted in countries which include a range of culture groups.

Secondly, there are conceptual and methodological problems. Some of the dimensions listed overlap or even paraphrase each other (Mead, 1994). Further, not all potential

value dimensions are represented and the structure of those dimensions that are used can be challenged. For example, the Masculinity versus Femininity dimension is, perhaps, misnomered as it invites interpretation in terms limited to sexism (Sekaran & Snodgrass, 1989). Similarly, problems arise in applying a single concept, such as 'individualism', across cultures. It may have a certain connotation in one context which does not apply elsewhere (Yeh, 1989). Additionally, the scores listed for different countries along the cultural dimensions should be regarded with care (Darlington, in Joynt and Warner, 1996).

Thirdly, the research itself is 'culture-bound'. The results inevitably reflect the methodology used and, hence, the cultural bias of the researchers. Hofstede (1991) himself argues that this imposes limitations on the effectiveness of the research instrument.

Fourthly, the data is, in some cases, out of date. An extreme example is that of Yugoslavia, which no longer exists, in part due to internal cultural incompatibilities. Whilst cultures are slow to change and the underlying values are, arguably, 'ingrained', they do, nevertheless, change in terms of superficialities (Mead, 1994).

Finally, Hofstede's sample worked in one industry for one multinational. While Hofstede provides a justification for this (Hofstede, 1991, pp. 13), nevertheless, IBM employees are unlikely to be typical of their countries and certain social classes (unskilled manual for instance), will have been excluded altogether (Mead, 1994).

Having pointed to these criticisms, it should be borne in mind that, as mentioned previously, various writers who have re-assessed Hofstede's work have found it to be largely validated. For example, Smith (1994) summarised the findings of a meta-analysis by saying that cultural diversity is not disappearing and that two of the dimensions (Power Distance and Individualism) find parallels in all the more recent large-scale surveys. These two dimensions are reliably linked to day-to-day behaviour, difficulties in cross-cultural negotiation, joint venture management and teamwork in multinational corporations. Similarly, Darlington (in Joynt & Warner, 1996) notes that "it is generally accepted that Hoppe's (1990) large scale work validates the generalisability of the Hofstede survey outside IBM" (pp. 39). Darlington (in Joynt &

Warner, 1996) further puts Hofstede's work in context. Table 3.2 (below) places Hofstede & Bond's (1988) value orientation studies into the context of value-based studies carried out elsewhere and groups them into broad categories. This overview demonstrates both the general agreement between the socio-management writers and the anthropologists as well as the broad applicability of Hofstede's work.

|                             | <i>Kluckhohn &amp; Strodtbeck (1961)</i>                      | <i>Hall (1959, 1976)</i>   | <i>Hofstede (various years)</i><br><i>Hofstede &amp; Bond (1988)</i> | <i>Trompenaars (1993)</i>   | <i>Hampden-Turner &amp; Trompenaars (1994)</i>            |
|-----------------------------|---|--|--|---|---|
| <b>Human Nature</b>         | Good, Evil<br>Neutral, Mixed:<br><br>Changeable, unchangeable | Agreements   | Uncertainty<br>Avoidance index                                       | Universalism:<br>Particularism  | Universalism:<br>Particularism                            |
| <b>Relation to Nature</b>   | Subjugation<br>Harmony<br>Mastery                             |  | Uncertainty<br>Avoidance index                                       | Internal: External<br>Orientation   | Inner: Outer Directed                                     |
| <b>Activity Orientation</b> | Doing, Being<br>Being-in-becoming                             | Monochronic,<br>Polychronic<br>(interacts with individualism)    | Masculinity<br>index   | Achievement:<br>Ascription  | Achievement:<br>Ascription<br>Analysing: Integrating      |
| <b>Human Relationships</b>  | Individual,<br>Collective,<br>Hierarchical                    | Amount of space,<br>Possessions,<br>Friendship,<br>Communication | Power Distance index<br>Individualism index                          | Equality: Hierarchy<br>Individualism:<br>Collectivism<br>Affective: Neutral | Equality: Hierarchy<br>Individualism:<br>Communitarianism |
| <b>Relation to Time</b>     | Past, Present,<br>Future                                      | Past, Future   | Long-termism:<br>Short-termism                                       | Sequential: Synchronic<br>Past, Present, Future                             | Sequential: Synchronic                                    |
| <b>Space Orientation</b>    | Public,<br>Private, Mixed                                     | Public,<br>Private   |  |   |   |

**Table 3.2.** Hofstede's Value Orientation Studies in Context (adapted from: Darlington, in Joynt & Warner, 1996, pp. 38).

### 3.7 Some Lessons for the Research Project

An essential point to keep in mind is that this research project is not intended to be 'cross-cultural study'. The research focuses on the experience of British construction professionals and companies and their responses to different cultures at the national level. This chapter has sought to explain and describe the nature of culture and demonstrate how previous analyses (in particular, those of Hofstede) provide both a deeper understanding of the nature of culture and cultural differences and a model showing the relative 'cultural distance' between people of different societies, this latter being reproduced as Figure 3.1. Evidence that cultural distance is a factor in international business activities has been demonstrated by Johansen & Vahlne (1977). They referred to it as "psychic distance" (pp. 25).



A deep, rich and developed understanding of the nature of culture is vital if one is to understand the way cultural differences can impinge on the strategies and operations of businesses (in this case, construction enterprises in particular) that are already working internationally, or seeking to spread their activities to an international level. Hofstede's model enables one to 'predict' the theoretical reaction of one culture to another culture from around the world which, in turn, enables one to put the findings of any empirical work into context. Thus, the intention, in explicating the concept of culture, is not to replicate or emulate Hofstede's (or any other investigator's) work. Rather, their findings will be used to inform any findings arising from empirical work. In this way, Hofstede's model can be seen as a potential analysis tool, in that it provides an empirically derived set of comparisons which will help to explain the comments and experiences of British construction professionals and organisations working in a foreign environment by reference to basic and fundamental assumptions about how cultures differ at the national level. Linked to the 'onion' model of cultural layers (Figure 3.3), this has the capability of being a powerful mechanism (Figure 3.4) by which manifestations of culture in everyday construction-related settings can be linked back to their cultural source.

### 3.8 Summary

'Culture' is undoubtedly a difficult concept to define. The greatest anthropologists of the late-nineteenth and twentieth centuries have been unable to arrive at a definition that satisfactorily incorporates the various elements that are culture. However, the concept has developed over time so that, today, it is possible to arrive at a general agreement of what is meant by the term. Culture can be said:

- to include a system of values;
- be particular to one group and not others;
- be learned and not innate;
- and influence peoples' behaviours in predictable and uniform ways.

This understanding allows culture to be modelled and analysed. The most influential work in this field is that of Geert Hofstede, although he formed his conception of the multidimensional nature of culture based on the work of a variety of anthropologists. In various studies, Hofstede was able to identify five main dimensions to culture at the national level. These were:

1. Power distance.
2. Individualism/Collectivism.
3. Masculinity/Femininity.
4. Uncertainty avoidance.
5. Long-termism/Short-termism.

However, there are a number of debatable issues that concern the theories underpinning this model of culture. Perhaps the over-riding debate concerns the dichotomy of culture and personality. While there is no conclusive evidence for either argument, and the dichotomy does not invalidate the general basis for the study of cultural differences, it does raise two issues that can not be satisfactorily resolved. Firstly, there is debate over the influence of biological and natural phenomena on the formation of societies. The second concerns the perspective from which culture is being studied. Other features of culture that are worth consideration, include the issue of subcultures within cultures, language as a facet of culture, national cultures in relation to organisational cultures, the durability of cultural differences and the issue of cultural superiority.

Returning to the modelling and analysis of culture, Hofstede's dimensional model can be considered within the context of 'practices' and 'values'. The former comprise the symbols, icons and rituals that make up everyday life and are directly observable, being the reflection of the underlying latter, which are unobservable 'core of culture'. If the model described above is combined with Hofstede's multidimensional model, a 3D conceptualisation of cultural differences is possible, providing a useful tool for making comparisons between different cultures. Hofstede's approach has been criticised but, despite these shortcomings, his model has been found to retain general applicability and relevance.

## CHAPTER FOUR

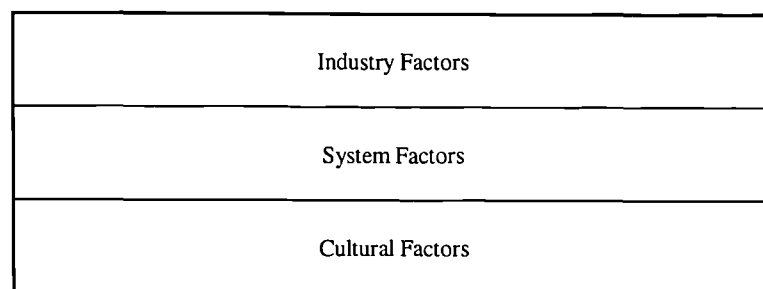
North American civilisation is one of the ugliest to have emerged in human history, and it has engulfed the world... This great, though disastrous culture can only change as we begin to stand off and see ... the inveterate materialism which has become the model for cultures around the globe.

Arthur Charles Erickson  
Canadian Architect (1973)

## **4.0 CULTURAL DYNAMICS AND THE INTERNATIONAL CONSTRUCTION INDUSTRY**

### **4.1 Construction Activities Effectuated by Cultural Differences**

Texts relating to the impact of cultural diversity on the management of construction activity in an international environment abound (*inter alia* Langford and Rowland, 1995; Baden-Powell, 1993; Lucas, 1986; and Stallworthy & Kharbanda, 1985). Also, the issue is often referred to in trade, professional and academic journals (*inter alia* Piranni, 1997; Palmer, 1995; Alisse, 1993; and Burritt, 1988). Indeed, McGeorge & Palmer (1996) go as far as to suggest that, in the construction industry, culture is the 'bedrock' underlying all other factors. To support their claim, they advance the following conceptual model (Figure 4.1).



**Figure 4.1** A Conceptual Model of Factors Influencing Construction Management (adapted from: McGeorge & Palmer, 1996, pp. 404).

However, this wealth of literature is lacking in a number of key areas (Hall & Jaggar, 1997b and 1997c).

- There is rarely an attempt to put the impact of culture into a theoretical context.
- There is little empirical support for the many observations made and, where empirical studies have been conducted (*inter alia* Rowlinson et al, 1993; Enshassi & Burgess, 1991; Khan, 1990; Coles, 1986; and Rabbat & Harris, 1982), their scope is somewhat limited and tends to be specific to given circumstances or scenarios.
- The strategic implications are only superficially explored and there is little attempt to fit those strategic implications into a company's overall strategic framework. Where culture is referred to in a strategic context, it often takes the form of vague assertions.

One of the goals of this project is to address these shortcomings.

Baden-Powell (1993), Loraine (1992), Stallworthy & Kharbanda (1985), Cox (1982) and Bidgood (1976), among others, give an indication of the range of construction

activities that can be effected by cultural differences when working overseas. The following selection of examples is not intended to be exhaustive, but merely serve to demonstrate how pervasive cultural differences can be in an international construction situation. The discussions of each factor are illustrated by examples drawn from the literature albeit these are mostly anecdotal in nature. The factors apply to both contractors and consultants and to operational and strategic issues alike.

#### ***4.1.1 Expatriate Personnel***

Moving managers around the world to address global business needs and to help reduce skill and management shortages is now very common (McCormick & Chapman, 1996, pp. 326). Historically, the construction industry has also transferred craftsmen as well as managers overseas. However, in recent years, construction enterprises have tended to rely on local craftsmen and transferred only senior and professional people who have experience of company practices (Drucker and White, 1996). Ultimately, the balance of people imported depends on the location and nature of the project, client preference and the type of expertise required. Dowling and Schuler (1990) note the administrative and logistical difficulties of recruitment, transportation and housing of expatriates: issues which any international company must deal with. In this respect, systems are usually in place which curtail any problems from arising.

From the cultural point of view, however, the concern is how the expatriate 'takes' to living and working in another society for an extended period of time. 'Culture shock' (a term originally coined by Oberg, 1960) can be described as the expatriate's reaction to a new, unpredictable and, therefore, uncertain environment. Upon entering a foreign culture, they lack an interpretation system for the new culture and, therefore, inappropriately and ineffectively use their home culture's interpretative system. The consequences can be traumatic and expensive. For example, Eldin (1978) noted that some construction companies were sending up to half their expatriate managers home within four to six months due to their inability to adjust to local conditions.

Surprisingly, the most effective international managers tend to suffer the most severe culture shock. By contrast, less effective managers suffer little or no culture shock. Severe culture shock is often a positive sign that the expatriate is becoming involved in

the new culture rather than remaining isolated in an expatriate ghetto. The question becomes how best to manage culture shock, not how to avoid it (Adler, 1991 and Furnham & Bochner, 1986).

Change causes stress. Expatriates face many changes in leaving their home country and organisation and transferring to a new country and job. The separation from friends and family is exacerbated by different perceptions and conflicting values upon arrival in the new country. For example, expatriates are faced with situations they neither understand nor believe to be ethically correct. The expatriate may be appalled by the poverty in many developing countries (especially in relation to their own, often luxurious, living standards) or may feel uncomfortable being provided with servants. Stress-related culture shock may take many physical and psychological forms: embarrassment, frustration, impatience, anxiety, sleeplessness, headaches, etc. (Craig, 1971). Expatriates in the construction industry can be especially vulnerable, where they may be working on isolated sites, possibly the only Western person and with particularly large foreign workforces and staff (Drucker & White, 1996).

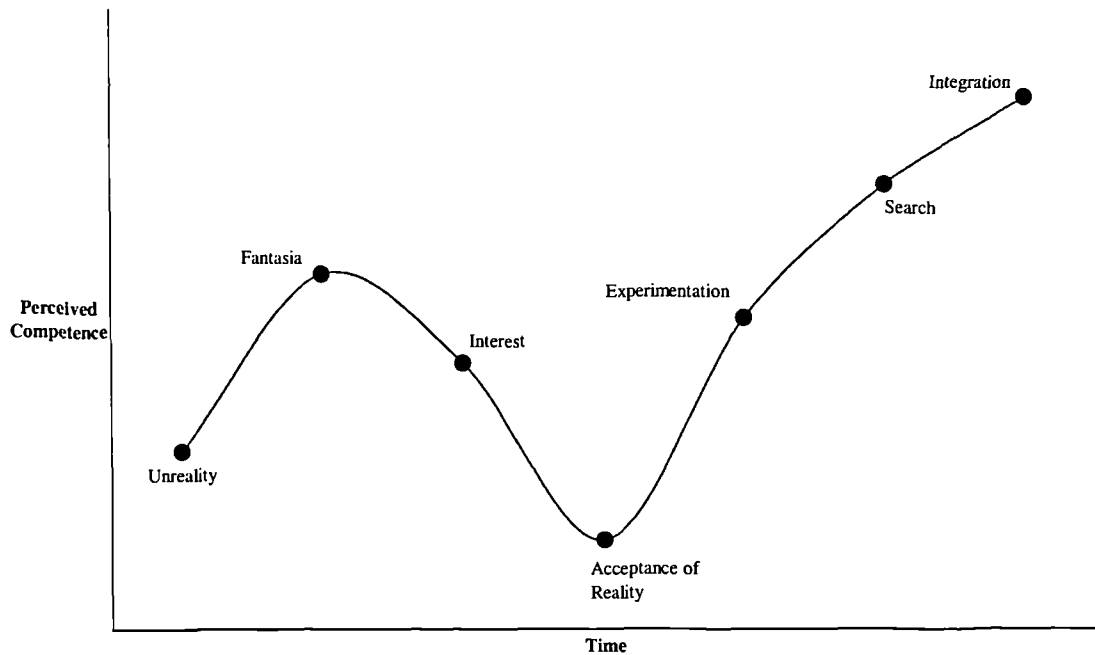
Craig (1971) postulates three potential responses to the disorientation arising from stress-related culture shock, which manifest themselves in the form of different behaviour patterns:

- The *encapsulator* - withdraws into a bubble, haunting the expatriate club and having little or no contact with the local people and foreign work force.
- The *absconder* - goes 'native', becoming totally involved in the local society, possibly forming intimate relations with locals and even taking on citizenship.
- The *cosmopolitan* - 'keeps a foot in both camps' and adjusts to both the expatriate lifestyle and the local society.

Of these, the *cosmopolitan* is likely to be most successful, both personally and professionally, while the others are liable to personal problems, which could well effect their performance. Thus, it is essential that the firm selects the right type of person in the first instance and that, where possible, appropriate support is provided by the company throughout that person's assignment. Parish (1985, pp. 122) stated that, for construction industry expatriates:

“the cardinal thought ... should be that they are guests in the host country and that it is for them to take the initiative in avoiding or solving problems. A genuine interest in the country, its culture and its history provides a significant bridge across any cultural differences.”

McCormick & Chapman (1996) developed the following model of expatriate adaptation and transition in a new environment. The curve is not a new idea: several others have used similar models in related areas of personnel management (pp. 327-329). This model is based on, and develops, that previous research (Figure 4.2).



**Figure 4.2** The Relocation Transition Curve (McCormick & Chapman, 1996, pp. 328).

Briefly, they define the stages as follows:

- **Unreality** – because moving to a new location is a very busy time, characterised by frenzied activity, new expatriates behave in a dreamlike state.
- **Fantasia** – this stage is characterised by a fascination with what is often a new and exotic environment.
- **Interest** – this stage is typically associated with a downward emotional trend as the individual realises that the new place is not a wonderland but has flaws and faults like anywhere else.
- **Acceptance** – this is a crisis point where the reality of the situation is accepted. This is typically the make-or-break time for most expatriates as they decide whether to return home or ‘stick it out’. Some individuals may become embittered, cynical and racist and may never move beyond this point.
- **Experimentation** – for those who do accept the relocation, together with the benefits and drawbacks, it is possible to move on. Because expatriates are still unfamiliar

with the environment, they find it difficult to make choices and begin to experiment with options.

- Search for meaning – expatriates begin to understand the reasons for success and failure and begin to create personal models and theories to help understand their environment.
- Integration – expatriates who reach this stage will have accepted and understood the reality of their environment and are able to spend the majority of their psychological effort dealing with work and family issues.

McCormick and Chapman (1996) identified a number of coping techniques that enable expatriates to proceed through the stages of adaptation identified in the model (Figure 4.2). These broadly mirror the ‘skills’ required for adaptation to ‘ecoshock’ identified by Fontaine (1997) and include:

- confidence, essential if expatriates are to try new experiences and experiment with lifestyle options;
- social support, important at all stages of adjustment, to help expatriates face the frustrations that are typical of new cultural environment;
- lifestyle, particularly important when adjusting to a new environment but difficult to maintain in a balanced way;
- welcoming the challenge, rather than relocating for monetary reasons;
- being creative can help in finding innovative and novel ways of adjusting and;
- a sense of humour will enable them to take mistakes and problems in their stride rather than personally.

For expatriates within the construction industry, Parish (1985, pp. 122) noted that:

“in reality British engineers have succeeded particularly well in establishing these personal relationships which are important to success. The consultants tradition of loyalty to the interests of the client can be a surprise in some overseas countries but once understood is of the greatest value in cementing the relationship on the project.”

In reference to selection of contractor’s expatriate staff, Duncan (1985, pp. 129) stated that “Careful selection of [expatriate] staff is vital. ... Those selecting staff must know the country or territory and must be particularly aware of the relevant national characteristics and sensitivities ...”. McCormick & Chapman (1996, pp. 334-335) stress the ways in which the company can improve the success of expatriate relocations. These include appropriate selection criteria, interviewing the whole family where they are to



accompany the expatriate, providing a preliminary visit, ensuring sufficient social support and setting realistic performance goals.

#### ***4.1.2 Foreign Staff and Operatives***

Almost all international projects managed by an international construction company will entail an expatriate managing a work force of multinational origins. In developing countries, where construction techniques are more labour intensive and standards of living are far lower than Western levels, these individuals will generally be drawn from developing countries. Commonly referred to in the literature as Third Country Nationals (TCNs), these individuals are generally willing to learn and are highly educated by the standards of their home country. They are usually keen to work for a 'progressive' multinational company which will offer them working conditions and levels of pay far superior to domestic companies (Burritt, 1988).

One area of concern is consistent high-quality work output. Standards taken for granted in Europe are more often the exception rather than the rule. The problem is due to a combination of a number of factors: cultural, technological and educational. To improve the situation, the project manager must patiently refuse to accept poor or incomplete work. This leads to a gradual change amongst the employees who become proud to submit work they know will meet the required 'standard'. Positive incentives are far more successful than negative ones in achieving this goal.

Communication on site can be a serious problem, again requiring patience and, above all, the ability to listen carefully with a broad interpretation of what constitutes 'proper' English. More than in any other circumstance, an effective hierarchical system of command (from project manager down to engineer down to foreman down to worker) is essential since instructions will need to be understood and translated. TCN staff will generally have good English speaking ability but understanding is helped if senior staff speak slowly, clearly and enunciate carefully. Stallworthy & Kharbanda (1985) agree that, in an international construction context, successful communication with the workforce is a vital ability. As they observe (pp. 85):

“We have just been demonstrating, through the mouths of project managers, the vital importance of communications to successful project management. To get things done, the project manager has to ensure a constant flow of information and instructions through his project team to the entire workforce – a workforce that can range from a few hundred to several thousand on a large-scale project. Effective communication, therefore, whether written or verbal, is absolutely essential.”

Managing a multinational staff and workforce can either be an educational opportunity or a frustrating experience and has much to do with the skills and personalities of the project manager and his senior staff. The single most frequent cause of failure is a lack of flexibility. The staff of the project must be able to cope with a myriad of differences in cultural values, standards of quality, religious beliefs, business practices and work ethics. However, this flexibility should not be construed as a need to dilute the standards associated with British management skills. The successful manager of TCNs is one who refuses to lower standards or concede defeat. Instead, through patience and understanding, performance can be raised to acceptable levels by insistence on quality and refusal to accept substandard performance (Enshassi & Burgess, 1991 and Burritt, 1988). Duncan (1985, pp. 128) graphically illustrates some of these points when he describes a contractor's attempts to establish a presence in Hong Kong.

“It is important that you learn as quickly as you can the local custom and practice with regard to the employment of labour. The employer is expected to entertain all his employees with dinner (Chinese) and entertainment, preceded by Mah Jong, once or twice a year. Superstition is rife and the employer must always be aware of ‘Fung Shui’ ... The presentation of orange trees and the killing of pigs may also have to be taken into consideration!”

The problem with managing employees of different cultures, however, relates more fundamentally to the underlying differences in cultural values (Herbig & Genestre, 1997). For example, if a Western project manager is attempting to manage Chinese employees, the management techniques that he will probably adopt will be based on the management literature and practice in his society: Taylorist scientific management; participative management such as that expounded by McGregor or a Herzbergian job enrichment approach. This would contrast with the Chinese management approach that derives from ancient Chinese literature. These different origins of management approach, rooted in cultural values, lead to radically different responses (Blunt & Jones,

1997). Some consequences of failing to adapt management approaches to cultural context include “complaints, criticisms, absenteeism, wasted time, the forgetting of important details, communication of false information, failure to report problems and decisions to take the ‘path of least resistance’” (Herbig & Genestre, 1997, pp. 565). Herbig & Genestre claim the main way to resolve these problems is to work on forming a shared corporate culture that will transcend national cultural differences.

#### ***4.1.3 International Legal Issues and Contracts***

Contracts serve to define the obligations and expectations of parties and to allocate the risks accordingly. In working overseas, construction enterprises will need to be able to comply with a bewildering array of local, area and government laws. They might:

“relate to the inspection and approval of works, the acceptance of plans, the use of certain materials, the conditions under which labour may be employed, health and safety regulations ... the list is endless” (Stallworthy & Kharbanda, 1985, pp. 108).

Certain contract provisions and terms common in Britain may be offensive or unacceptable in another culture, whilst services seen as customary in one country may be considered as extraordinary in another. Similarly, words and phrases may be susceptible to different interpretation. Thus in undertaking work overseas, the international construction enterprise must develop a cultural understanding and awareness to appreciate the legal and business environment in which it will operate (Natkin, 1993).

In negotiating an agreement with a foreign client, the firm must immediately confront an important choice regarding the law that will govern the contract and the forum in which disputes will be adjudicated. The choice of law involves a number of important legal and statutory matters such as sequestration rights, statutes of limitations, employment relations, the possibility of arbitration and the regulation of business activity. Meanwhile, the choice of language of the contract is significant since international construction projects are often negotiated and implemented in more than one language. Ideally, the contract would be written so that only one language controlled its meaning. However, it is more usual for contracts to stipulate that both languages control the

meaning, presenting an increased risk of dispute arising out of disparate translations and interpretations.

Many parts of the Muslim World use the specific Muslim code (the Sharia) in addition to the more familiar civil and common law, with either the secular legal system or the Sharia taking precedent. Operations in countries using common law, which is guided by judicial precedent, should present few difficulties for British international construction firms. However, in those countries applying civil law, the law is highly and intricately codified and judicial determinations are controlled accordingly. If the company considers itself to be global, a thorough understanding of this system is essential, together with an understanding of the Sharia, both of which it is likely come across in its business activities.

In other regions of the world, the situation could be even more unfamiliar. For example, Chinese contracts, which were only introduced to the construction market 10 years ago, are sketchy three- or four-page affairs that pay more attention to trust and personal relationships than to obligations and penalties (Knutt, 1997, pp. 23). And even within the EU, laws and regulations relating to the construction industry can seem strange and even bizarre. For example, “British architects active in Italy should take heed: we do not expect to end up in the slammer as a result of a routine design error here [in the UK] but ... this is a very distinct possibility in Italy” (Hyett, 1997, pp. 27). Where the FIDIC (Federation Internationale des Ingenieurs de Conseil or International Federation of Consulting Engineers) contract form is not being used, language may become a serious issue. “While the peculiarities of language may be relatively trivial on holiday, they become rather more serious when signing a contract” (Bowman, 1995, pp. 23).

Another aspect about legal issues and contracts is a stultifying bureaucracy (relative to what might be considered normal) which can be encountered. For example, in his discussion of foreign construction enterprises trying to do business in China, Chen (1997, pp. 8) notes that the “approval period for a ... contract may be delayed for months without reason. Indeed, local bureaucracy affects the whole construction process from its early stages, to the later stages of the construction phase or even after completion of construction works.” According to Chen (1997) this is because Chinese people are motivated by personal relationships where they feel they can trust the people

with whom they are doing business. Thus, good relationships, particularly between the top management of the construction company and local officials is essential, especially when negotiating and agreeing the contract. Similarly, apart from the incomplete legal system, which affects the enforcement of contracts, many internal regulations are 'confidential', which means they may not be disclosed to foreigners.

Additionally, the company may well find that the use of the legal framework varies significantly from country to country, depending on the cultural context. For example, the Japanese remain reluctant to go to law. Compromise is the preferred method, even in serious situations (The Architect's Journal, 1994, pp. 29). In the Middle East standard forms of contract, loosely based on British forms, exist and, initially, this may seem reassuring. In practice, however, the application of the contract clauses may be somewhat erratic. The contractor or consultant might find that, where the client is at fault, the contract will be put to one side and a deal contrived. On the other hand, where the contractor or consultant is at fault, the full weight of the contract may be applied (Stager, 1996). Even within a 'cultural region' significant contractual variations can occur. For example, with Asian countries contractual arrangements and attitudes can vary considerably among Japan, China and the elsewhere in Southeast Asia (Sillars & Kangari, 1997, pp. 149).

#### ***4.1.4 Negotiations and Communication***

Negotiation is, arguably, one of the single most important international business skills. International negotiations contain all the complexity of domestic negotiations with the added dimension of cultural diversity. In an international construction environment, 'negotiation' can occur at any one of a number of levels. For example, when first entering a country, an organisation will have to negotiate with government officials and, often, prospective joint venture partners. Once it has achieved a presence, representatives will probably need to negotiate with business contacts in order to win the opportunity to tender for work. During tendering, contractors and consultants alike will have to negotiate rates with appropriate suppliers and subcontractors. Finally, when they begin work on a project, negotiation will be primarily at the operational level between organisations. According to Adler (1991, pp. 182) international managers can spend more than 50% of their time in negotiations. Klaus & Bates (1978) carried out a survey

of almost 400 engineering personnel and discovered that nearly 80 percent of their time was spent in face-to-face interpersonal interaction with co-workers. Further, it was found that, although the oral message was important, the style and credibility of the communicator, as perceived by the recipient, was the key to conveying an impact within the message.

Cultural diversity makes effective communication more difficult because foreigners perceive, interpret and evaluate the world differently. Communicating needs and interests in ways that will be understood becomes more difficult, as does fully understanding the others' words and meanings (Adler, 1991). Stallworthy & Kharbanda (1985) agree with this view. They remark that (pp. 86):

“When we come to international construction, there are additional complications, such as cultural and language barriers, that also hinder effective communication. These can have the further damaging result that they distort the message that *is* received. Those in international construction need to appreciate national traits not only with respect to language but also to gestures.”

Although linguists have severely criticised the connection of language to culture (see section 3.4.2), it does, nevertheless, have a prominent role as an element of culture (Whorf (in Carroll, 1956) and Sapir, 1964). For example, language, through tenses and words, shapes time-related behaviour in particular, which has an influence on business where negotiating or dealing with delivery times and appointments (Usunier, 1996).

While communication becomes more difficult, however, creating mutually beneficial options can become easier. If negotiators can overcome the problems associated with culture and language, identifying ‘win-win’ solutions can be easier. For example, Malaysians, with their high unemployment and low wage rates, may find labour intensive projects more attractive than, say, the Swiss who face high wage rates and negligible unemployment. Differences rather than similarities form the basis of mutually beneficial solutions. The chance of substantial areas of difference and, therefore, substantial areas of mutual gain, generally increase in multicultural situations (Adler, 1991).

#### *4.1.5 Codes of Conduct and Ethical Standards*

In operating internationally, the construction firm can take various standpoints in light of local business customs, codes of ethics, professional practices, etc. For example (Baden-Powell, 1993):

- the codes applicable in the UK can be regarded as paramount and always be followed regardless of local procedures
- or the local codes and standards can be adopted.

It is not always easy to establish what the codes and standards of a strange country are. Its laws may be a guide but they may be silent on points which a British construction company may consider paramount. Quite frequently, there are widespread interpretations of, and departures from, the local laws while many countries, as mentioned previously, have two or more standards in operation simultaneously. This need not necessarily be a cultural phenomenon but could depend on the nature of a specific project and the source of its finance.

With regard to ethical issues, the majority of international enterprises take the view that there are a few “non-negotiable principles that apply worldwide” (Webley, 1997, pp. 11). However, most will recognise that there are some important differences which require particular attention and local guidelines. For instance, diverse markets where there is often inadequate information and ineffective supervision, volatile and unstable financial regimes, close host government involvement and a multi-cultural environment can lead to a clash of values and perceptions about what is right and what is wrong, and the need to choose between the rights of domestic stakeholders and those of the host country. Donaldson (1989) suggests eight main areas of concern that enterprises must address in internationalising their domestic codes of business practice. These include:

- bribery and corrupt payments,
- employment and personnel issues,
- marketing practices,
- the impact of the multinational on the development of host countries,
- effects on the natural environment,
- cultural impacts of multinational operations,
- relations with host governments,

- and relations with home countries.

These are broad areas but if they are not addressed by the organisation, and guidelines drawn up with the full involvement of local directors, Webley (1997) suggests that problems will emerge in some or all of these policy areas. The main aim is to anticipate the issues before they become a public matter. One example of this principle, which appears in most UK domestic codes, is of equal treatment of men and women. Most domestic codes of ethics have a policy on non-discrimination on the grounds of gender, even in the male-dominated construction industry. Indeed, many have adopted an equal opportunities policy. “Yet, in countries where a Muslim culture predominates, the policy has to be applied in a rather different way from that which is normal in a Judeo-Christian culture” (pp. 11).

Corruption is a fundamental aspect of operating overseas that cannot be ignored. In some countries, particularly where officials are poorly paid, this can be endemic, from the issue of customs clearance certificates at one end of the scale to political contributions and awarding of contracts at the other, and with potentially dire consequences. For example, in China, it has been reported that corruption is a major cause of shoddy building quality and fatal building collapses (Studwell, 1997).

Stallworthy & Kharbanda (1985) observe that, while expenses as a result of ‘favours’ can range between 7 and 10 percent of the value of a contract, “depending upon the nature of the ‘favour’ being granted, they are an integral part of every contract in those countries where it is custom and *must* be allowed for in the estimate” (pp. 20). They continue by noting that (pp. 106):

“Our breadth of experience across several continents shows us that such [corrupt] practices and others like them are fairly widespread all over the world. We doubt whether any country is immune.

Usunier (1996, pp. 477) reports that “... even the Japanese construction industry has been plagued by bribery scandals in recent years”. The practice of bribery and corruption attracts worldwide attention and condemnation, although this might often be very hypocritical. However, it is generally the economy of the host country that is biggest



loser, especially if the practice is widespread – the country pays more for construction work of a possibly lower standard than it need.

The British company in such circumstances is in a very difficult moral and ethical dilemma because, as Livingstone (1989, pp. 192) stated:

“It is an interesting comment on the current state of international morality that it is apparently a good deal more wicked to offer a bribe than to accept it. While a few prominent or unlucky individuals are now and then pilloried as recipients of largesse, the great majority of bribe takers are never identified let alone punished. However, as one international businessman pertinently remarked: “What you call bribery, we call extortion!” It is reasonable to suppose that the initiation of corrupt practices comes from the recipients of the bribe not the payers: in a society where corruption is endemic it takes far more effort for the foreigner to opt out of the system, even if they can, than go along with it.”

The indirect costs of the bribe are more profound than even this. In his paper, Barco (1994) analysed and summarised the direct and indirect costs of bribery, the later of which applied specifically to the construction company and its individual members.

These included the following:

- Establishment of an international reputation for being susceptible to payoff demands.
- Establishment of an international philosophy that bribery is acceptable in the ‘right’ cases that could easily be misconstrued to include the ‘wrong’ cases.
- Bribery may cover up other organisational problems that have led to the lack of competitiveness that has made bribery an acceptable option.
- Bribery may cause psychological problems for those in the bribe-paying organisation that feel that it is wrong.

Johnson (1985) helps identify the economic effects of bribery by citing an economic description of bribery as:

“behaviour which injures competitors without the socially redeeming values of lower costs or better quality products.”

On a specific note, Barco (1994) reported that Hong Kong’s Independent Commission on Corruption estimated that bribery and *guanxi* (‘gifts’) accounted for 3-5 percent of the cost of doing business in China which, at current levels of investment could mean US \$3-5 billion annual cost. To show that the problem is not confined to the developing

world, Barco (1994) comments that about US \$30 billion of Italy's national debt has been attributed to costs increased by corruption. This is due to an endemic system of corruption pervading the entire economic system (Smeltzer & Jennings, 1998). They claim that various forms of corruption are so rife in a number of countries that an international code of business ethics would be good for all concerned.

Another issue of major concern to British contractors working overseas is one of safety. Health and Safety are issues that are firmly on the agenda in the British construction industry, with serious sanctions applicable to those organisations that fail to provide a safe working environment for their employees. Particular attention has been applied to the construction industry, which is perceived to be inherently dangerous and which has a particularly poor historical safety record. According to Druker & White (1996) it is "one of the most important issues which people in the construction industry have to contend with" (pp. 200). This environment contrasts sharply with safety standards in many other countries where international construction enterprises work. For example, in Hong Kong, safety standards have been reported as being "extremely low" (Duncan, 1985, pp. 127). "Little effort seems to be put into control of noise ..." while "... one can often step across bare wires twisted together, lying on a wet pavement as a shopfitter goes about his work". Similarly, "Bamboo scaffolding soars ten or fifteen storeys high above one's head" while elsewhere, "one can see a ... excavator machine working in close proximity to hand excavation using wicker baskets for carrying spoil".

#### ***4.1.6 Appropriate Design Approaches and Technology***

Construction in the UK is designed for a particular set of climatic conditions and social criteria which, invariably, do not apply when designing buildings abroad. Furthermore, the building will probably be designed with the presumption that it will be constructed using a specific level of construction technology.

According to Hyett (1997, pp. 31) once the difficulties of travel, local partners and so forth have been resolved, the major problem for architects is "evolving appropriate designs for local circumstances. This raises ... cultural ... issues" because "design conditions differ through local and cultural conditions". Thus, building design for overseas markets requires the understanding of the end users and the implications of

their culture. For instance, in the Middle East, typical factors which need to be considered are social status and grouping, the position of women in society, religious observance, dietary restrictions and Koranic symbolism (Baden-Powell, 1993, pp. 53).

These cultural differences manifest themselves in any number of ways. For example, in Japan, the preferred floor planning grid is a 0.8 metre module. This is based on the traditional Japanese tatami floor-mat dimensions. Similarly, the term 'tsubo', a uniquely Japanese unit of measurement (approximately equal to 48 square feet) is frequently utilised in lieu of square metres. Another dimensional difference is found in the varying floor-to-floor heights acceptable in Japan, which tend to be lower than in Europe and America and give rise to unexpected additional stories in high-rise construction. Meanwhile, in Germany material selection is strongly influenced by the requirement to meet stringent German fire safety criteria (Alisse, 1993).

However, there is a conflict between the national and international architectural approaches, the implications of which can effect all international construction companies. On the one hand, there is a trend towards a universal international style, either because of the ambition of developing countries to emulate the leading developed countries, or because of the increasing globalisation of culture brought about by truly global conglomerates (such as Coca-Cola and McDonalds). On the other hand, many countries wish to establish a national identity and to develop a related national style of architecture, perhaps based on historical motifs. In many cases, there will be conflicting elements within a single country. A respected international construction company can have considerable influence on which style is chosen (Baden-Powell, 1993). A recent example of just this conflict was the new Singapore arts complex, the Esplanade-Theatre on the Bay, designed by the American architectural practice Michael Wilford and Partners, in association with a Singapore architectural practice. As Powell (1997, pp. 89) reports, the project's blending of Eastern and Western styles has been the subject of heated debate, with concern over the penetration of Western values into Singaporean life.

Another major difference between construction in the developed and developing regions of the world is, superficially, the manner in which construction is undertaken. This

applies to the way the local construction industry is structured and the extent to which it is labour- or capital-intensive (Baden-Powell, 1993).

The availability and skills of local craftsmen is an important factor. For example, in most parts of Southeast Asia and the Indian Subcontinent there are many skills available in all areas of construction work. In the Arabian Peninsula, however, there is a dearth of skills in modern construction techniques and in the use of modern materials. Thus, in this part of the world, nearly all construction labour must be imported from other parts of the world.

A typical area where the use of technology must be appropriate is with the incorporation of components within a structure. For example, it is particularly foolish to make use of lifts or air-conditioning facilities where there are neither the resources to operate them (e.g. a reliable power source) or a facility to provide maintenance. However, it is argued that, beyond this, 'technology' has an intrinsic relationship with culture. Gyekye (1995, pp. 122) states that:

“Like science, technology – which is the application of knowledge or discovery to practical use – is also a feature or product of culture. It develops in the cultural milieu of a people and its career or future is also determined by the characteristics of the culture.”

This is important, not just in terms of the incorporation of technology within building and engineering designs, but also from the perspective of, for example, technology transfer, as construction enterprises are facing an increasing ethical and moral duty to transfer their knowledge and technologies to their host countries (Hall & Jaggar, 1998a). This is in addition to sanctions often imposed upon those enterprises by regulations within the host country. Coles (1986), Barrett (1997) and Hall & Jaggar (1998a) argue that cultural distance can impede the ease with which technology is transferred.

#### ***4.1.7 International Construction Marketing***

At one time, marketing was largely an unnecessary activity in the international construction industry. “A well known name and a good estimating department was basically all that was required to win international construction work” (Hand, 1998, pp.

55). However, major international clients are less often bi-lateral and multi-lateral funding bodies and government and state-owned organisations. Today, international construction projects are more likely to derive from the private sector and the client base has changed to include developers, financial organisations and other construction enterprises (Chapman, 1998). Thus, marketing is now considered to be a crucial activity by construction consultants and contractors alike. With the growth in popularity of design-build-finance-operate (DBFO) type projects, the ability to compete on aspects other than price is also important (Addis & Al-Ghamdi, 1998) and marketing can enable this (Morgan, 1990).

Apart from some minor differences, Moore (1984) considers that the principles of marketing apply to overseas construction work as much as they do to UK work. However, Bidgood (1976 and 1980) notes some basic differences which may be encountered. For example, while the language of business in many parts of the world is English, it is common practice to provide something as prosaic as company brochures in both English and the local language. However, the organisation must be careful to have a technical translator to ensure that the translation carries the same sense. Similarly, although people-relationships are an important part of any marketing strategy, “work abroad is all about people, to a far greater extent than in the UK. Clients may know and accept that they are dealing with the firm, but in so many cases it is the man with whom they made the agreement that they expect to deal with ...” (Bidgood, 1980, pp. 65).

Hall *et al* (1998) note the importance of cultural factors in marketing construction activities overseas. As an example, Pheng (1998) refers to various mythological and historical treatises as being indicative of the Chinese culture. He claims that an understanding “Sun Tzu’s Art of War” enables international construction companies to understand the competitive environment of Chinese industry (pp. 108) while gaining access to officials who are in a position to promote a company’s interests is aided by awareness of the “Thick Face, Black Heart phenomenon ...” which describes how the Chinese view the marketplace as a battlefield (pp. 109). The Chinese construction market is an interesting one in that, unlike, Western markets which are at the point of supply saturation, and the Middle Eastern and Southeast Asian markets which have been shrinking, it continues to experience phenomenal growth. According to Lan & Jackson (1998) it was expected to reach a volume of US\$ 220 billion in 1998 and continue to

grow at approximately 10% annually for the foreseeable future. Thus, Lan & Jackson (1999) argue that understanding the ‘operational environment’ of the Chinese market is vital for construction companies seeking to seriously operate internationally.

#### ***4.1.8 Joint Ventures and Alliances***

Joint ventures have become an almost ubiquitous way of carrying out international construction projects. In many instances, local regulations will require an international construction enterprise to form a collaborative arrangement with a company from the host country (Baden-Powell, 1993 and Parish, 1985, pp. 121). Often, this approach to business is seen as “a panacea for winning work and reducing risk” (Armitt, 1985, pp. 61). Typically, it is used to (Armitt, 1985):

- increase the credibility of a prequalification or bid by demonstrating a predetermined commitment of the resources of two or more enterprises;
- reduce exposure on very large projects to more manageable proportions;
- combine specialist skills and resources;
- share bond requirements;
- meet requirements for local participation;
- assuage “the pride of individual partners which precludes subcontracting” (pp. 62).

According to Morosini (1998), with regard to international joint ventures, “substantial empirical evidence shows that these fail about half the time” (pp. 35). Partly due to this dismal track record, cultural factors, which were initially neglected (relative to strategic and financial factors) as an issue, have attracted increasing attention as an important aspect of joint venture and cross-cultural alliance performance. Morosini (1998) continues by noting that “it is a company’s ability to handle complex national cultural issues in these situations which can ultimately be regarded as [the main] determinant of performance” (pp. 38).

Parish (1985) considered that “personal qualities” of the managers responsible for the maintenance of the joint venture or alliance became “profoundly significant” (pp. 122). Specifically, he cited the following attributes as being vitally important:

- Sensitivity to cultural difficulties leading to quite different basic attitudes of the two nationalities;

- Sensitivity to national pride and national aspirations;
- Tolerance of local customs and of local bureaucracy;
- Recognition that technology transfer is regarded as important and having the corresponding patience to explain and instruct and;
- Recognition that senior officials of the host country may be surprisingly young for the responsibility that they carry but are, nevertheless, entitled to respect.

This view is supported by empirical research conducted within Japanese/US construction company alliances by Sillars & Kangari (1997). They note the vital aspect of having the right staff to ensure the alliances go smoothly – “... proper staffing ... is linked to the success of intra-alliance communication” and “alliances go badly due to lack of communication...”

Where organisations are required, or desire, to engage a local partner, additional cultural factors can become evident. For example, Try & Rush (1985) report that where an enterprise attempted to be prudent in terms of the size of project it would undertake, the enterprise’s partner was unhappy. “He was reluctant to talk about a limitation on his company’s ability to take on work but wished to be able to say that his company could tackle anything” (pp. 142). Similarly, they note that “... the local partner is always stronger at the end of the day and even if one completes a number of successful building contracts the ‘local factor’ may prevent you from participating in the profits in the manner expected” (pp. 142-143). In a similar vein, Walker (1998) notes that companies establishing operations in China must be aware that “local construction companies either do not understand risk or resist taking risks: they try to pass them to the overseas contractor or the client. If they do not understand them, they will try to negotiate if things go against them” (pp. 264).

## **4.2 Concerns of the US International Construction Industry**

In light of the changing patterns of globalisation identified in Chapter 2, there is increasing concern in countries throughout the world at the poor competitiveness of many of their industries. The construction industry is not immune to these forces of change and, more than most industries, it suffers from inefficiencies and structural problems that reduce its productivity. Those countries and organisations which tackle

and overcome these productivity problems first will be poised to become dominant in the world market for construction enterprise. The consequence of this has been a series of surveys, reports and proposals generated by the Construction Industry Institute (CII) in the US, in collaboration with the American Society of Civil Engineers (ASCE) and the establishment of the Construction 2000 taskforce (Yates *et al*, 1991). The research was extremely extensive and far-reaching, entailing interviews and surveys involving all sectors of the US international construction industry, and focusing on key decision makers from a wide variety of construction related enterprises (Yates, 1994). Table 4.1 summarises the key issues addressed in the research.

| Area of Interest   | Majority Response   |
|--|---|
| 1 Predicted State of the Economy                         | * Increase or continuation of current trend   |
| 2 Major Concerns in International Construction           | * Cultures and stability  |
| 3 Possibility of an Energy Crisis                        | * Possible  |
| 4 Predicted Global Centres                               | * Japan/European Union, Asia, or homogenous   |
| 5 Technological Strength                                 | * Stagnant or declining   |
| 6 Shortage of Workers                                    | * Likely  |
| 7 Facing the Future Labour Situation                     | * Incentives as well as paycheques  |
| 8 Government regulations                                 | * Increasing  |
| 9 Global Political Situation                             | * Stability will increase   |
| 10 Key Factors to Remaining Competitive                  | * Personnel, technology and innovation  |
| 11 Factors Contributing to Loss of Competitive Advantage | * Education and technology  |
| 12 Project Financing                                     | * Financial engineering using financial leverage to acquire projects  |
| 13 Role of Trade Unions                                  | * Decreasing  |
| 14 Personnel Traits                                      | * Communication skills, flexibility and technical skills  |
| 15 Corporate Culture                                     | * Emphasis on quality, creativity, personal incentives, efficiency, ethics, opportunities, teamwork, training programmes and benefits |

**Table 4.1** Key Issues and Topics Addressed by CII Research (Yates, 1994)

Construction enterprises' identified the further exploitation of the global market as a major area of future growth and expansion in what is perceived as an increasingly stagnant and saturated domestic market. This move is expected to have a positive and



invigorating effect on the economy in general and for the construction industry in particular. However, to take advantage of this situation would involve changes in the way the industry functions, with greater emphasis on adjustment and adaptation to international market conditions and competition (Yates, 1994).

This adjustment and adaptation would need to be in a broad range of areas, addressing the concerns of consultants and contractors operating in the international arena. These concerns pertain to political stability, education and training (Arango, 1991) and differing cultures (McCuen, 1991 and Lewis, 1994). In addition, increasing incidences of partnerships, joint ventures (Barco, 1991) and internationalisation were cited as factors affecting construction industry productivity (Yates, 1994).

The possibility, and need for, change was unanimously observed by those interviewed. Table 4.2 shows some of the results of the research, focusing on the aspects identified as requiring. As can be seen, the interviewees both recognise the importance of culture and consider it a primary objective in their business strategy for their overseas operations.

| Area Where Change is Needed   | %  |
|---|----|
| A need to understand and appreciate the ethics and cultures of other countries and adopt appropriate new methods. | 55 |
| The need for clear understanding and appreciation of the political dynamics of host countries                     | 21 |
| Developing alternative avenues for a constant source of labour and material supply or adjusting to the situation  | 18 |
| Expecting and adjusting to differing levels of education and training   | 6  |

**Table 4.2** Major concerns for the American Industry (Yates, 1994)

#### ***4.2.1 Technological Strength***

The technological advantage currently enjoyed by the United States would either be eroded or stagnate and be surpassed by other countries in the near future. It could be argued that this is already occurring with the advances in automation and other technological building systems developed in Japan. This would indicate that, for the Americans, technology is no longer an issue in undertaking work in an overseas environment since the superiority once enjoyed has (or soon will) disappear. This would

explain why there is so much interest in addressing different issues in international construction, such as their understanding and appreciation of the cultures and political dynamics of other societies within which they seek to operate (Lewis, 1994).

#### ***4.2.2 Government Regulations***

On the whole, the Americans see tight government regulations in their domestic market (Arditi & Gutierrez, 1991) as beneficial from an international construction perspective (Barco, 1994). This is based on the reasoning that, in the long run, familiarity and compliance with stringent US regulations would make it easier to enter heavily regulated but lucrative foreign markets, such as Western Europe and Japan as they will more easily be able to adapt and meet the regulations of those countries which also have high safety, quality and ethical standards.

#### ***4.2.3 Personnel Traits***

In terms of the personnel that international construction enterprises will require in the future, the Americans are split between developers and consultancy organisations on the one hand and contractors on the other. The former consider that communication skills, flexibility and technical skills will be important to employers are. Other traits cited were possession of multiple skills, innovativeness, leadership skills and language skills (exemplifying the perception of a global marketplace) (Yates, 1989 and Lewis, 1994). Conversely, contractors saw traditional values such as ambition, dedication, honesty, loyalty, trustworthiness and willingness to learn as more important. By indicating this difference of opinion, Yates (1991) implies a split between consultants and developers who are keen to employ people with the necessary skills to make the most of the global marketplace whereas contractors appear to fail to realise that an organisation will only respond to the cultures and societies within which they operate if that organisation employs people with the skills and vision to enable that response.

#### ***4.2.4 Global Competitiveness in the Year 2000***

Based on the CII/ASCE survey, Yates (1994) identified key issues (or “driving forces”) that she predicted would have a major impact on the global competitiveness of the industry by the year 2000.

1. Global competition will force companies to re-examine:
  - organisational structures
  - client/supplier relationships
  - new and emerging markets.
2. Multifaceted partnering will provide a competitive advantage to construction companies.
3. Firms will partner with foreign companies to remain globally competitive.
4. Cultural diversity blocks are emerging which will prevent US construction firms from entering developing countries and Eastern Europe unless they adapt their management structures to meet the idiosyncrasies of those cultural dynamics.
5. Competition will force a consolidation and stratification of contractors into ‘large’ and ‘small’.
6. A massive increase in regulation of the industry will occur.
7. Environmental pressures will force companies to find a competitive edge in sustainable developments.
8. Design and Build/Develop will become the most common contracting process.

This list of issues shows that the American industry recognises many aspects of concern for the future of the international construction industry and that they see culture as being one of those issues.

#### ***4.2.5 A Scenario for International Construction Activity in the Future***

In concluding her paper, Yates (1994) developed a scenario which represented the international construction industry of the future, where all the issues discussed thus far were addressed. She suggested that, due to an increasing global economy there will be streamlined US firms and partnerships formed to maintain international market share.

“Dealing with diverse cultures both within organisations and internationally will be a major concern to construction firms operating in the international arena”.

It is envisaged that the world economy will split into three major global centres – Japan, the United States and the European Union (Ohmae, 1985 and Thurow, 1992). Firms from these locations will continue to dominate the international construction industry for a number of years based on their project management expertise and technological advantages. The global political situation is seen as stabilising and remaining so, thus enabling firms to move into new markets.

#### ***4.2.6 Measures to Address the Issues of Concern***

Many individuals (*inter alia* Barco, 1994; Lewis, 1994; Yates, 1994; and McCuen, 1991) have published papers for the ASCE (and other organisations) throughout the 1990s, identifying approaches to address the problems faced by the US international construction industry and highlighted by the work of Yates (1991 and 1994).

These approaches can be divided into two broad strategies. The first is to synergise the efforts of all involved in the industry, entailing co-operation and strategic partnering between entities traditionally considered to be corporate adversaries. The second is to train and educate both college graduates and new expatriates in cross-cultural issues and how they can best be benefited from or mitigated.

Many sources support the concept that training prior to an overseas assignment is necessary for all levels of construction personnel and professionals. However, Yates (1994) observes that it is still rare for companies to provide cross-cultural training programmes for their operational level construction management personnel.

In order to develop well-rounded business strategies, targeted at increasing competitiveness in the international marketplace, Yates suggested that multinational construction companies needed to become aware of the necessity for cross-cultural training for their employees. Furthermore, they needed to consider providing proper training before sending them to work on overseas assignments. The CII interviews and surveys would seem to indicate that the industry has now achieved that awareness and that all that remains is for the cross-cultural training programmes to be implemented.

### 4.3 Cultural Diversity: The Construction Enterprise's Response

Within the construction industry, Kliem & Ludin (1992) suggest that cultural issues can be characterised as 'soft' issues – those about which people can learn but take considerable experience to master. Consequently, they receive less attention than 'hard' issues such as planning, structural design and so forth – issues that can be “mastered through learning alone” (pp. 170). This, then, provides the context within which construction enterprises treat cultural differences when they are encountered and would indicate the expected response one might expect from such an organisation.

#### 4.3.1 Possible Responses to Cultural Diversity

Adler (1983a) outlined three approaches a firm could adopt when faced with a culturally diverse situation. These are outlined below and provide a useful working framework for describing a specific organisation's or individual's attitude when confronted with the dynamics of a culturally diverse scenario:

(1) The *Parochial* approach is the most common response to cultural diversity in which the members of the organisation do not recognise the diversity of their environment or its impact on their organisation. In parochial organisations, members believe that “our way is the only way”.

(2) The *Ethnocentric* approach is the second most common approach to diversity, wherein the members of the organisation recognise the diversity of their environment, but only as a source of problems. They believe that “our way is the best way”.

(3) The *Synergistic* approach is the rarest response to a culturally diverse environment, occurring only where the organisation members explicitly recognise the concept of culture, seeing it as leading to both advantages and disadvantages. The members of a synergistic organisation believe that “our way and their way differ, but neither is inherently superior to the other”. Combinations of both ways produce the best approaches.

The various perceptions and assumptions have different implications for companies' approaches to managing diversity. If organisations assume that the impact of culture is negligible, as with parochial organisations, the selected strategy is to ignore cultural diversity. This strategy precludes the effective management of diversity and, therefore, the possibility of minimising the negative aspects and enhancing the positive aspects. If organisation members assume that the only impacts of culture are negative, as in the case of ethnocentric organisations, then their strategy is to minimise the sources of cultural diversity within and upon the organisation. This strategy can be implemented either:

- by attempting to select a culturally homogenous workforce
- or by socialising all workers into the behaviour patterns of the dominant culture.

However, this means they preclude the opportunity of benefiting from the many cultural perspectives present. If the members of an organisation see the impacts of cultural diversity as having both positive and negative effects within and upon the organisation, as in the case of synergistic organisations, then their strategy is to manage the impacts of cultural diversity rather than the diversity itself, thus minimising the problems and maximising the potential advantages. Synergistic organisations train their staff to recognise cultural differences and to use those differences to create competitive advantages for their organisation. According to Darlington (in Joynt & Warner, 1996, pp. 35), however, realising “synergistic integration” between cultures depends on the peoples’ “awareness of their own deeply held values and beliefs and their awareness of others’ values and beliefs”. It is only when this awareness is manifest that they can “choose to make the behavioural adjustments necessary to enhance their capability to work successfully with people from other cultures”. This does not require people working in a foreign environment to mimic or copy the locals. Gesteland (1996) advises that people should ‘be themselves’, although, in so doing, they should be “aware of local sensitivities and generally ... [honour] ... local customs, habits and traditions” (pp. 14).

#### ***4.3.2 The Advantage of Managing Cultural Differences***

Effective cross-cultural management means working with members of another culture, tolerating differences as far as possible and recognising their priorities when developing shared goals (Mead, 1994). According to Cox & Blake (1991), management of that

diversity can bring many economic benefits. Among those benefits, a company's ability to attract, retain and motivate people from diverse cultural backgrounds gives that company competitive advantages in cost structures, creativity, problem solving and adapting to change. Watson *et al* (1993) found that culturally diverse groups relative to homogenous groups are more effective both in the interaction process and job performance, where that diverse group had been together for a period of time. Meanwhile, Jain & Verma (1996) think we are only beginning to realise the potential of well-managed cultural diversity in terms of decision-making, creativity and innovation. Hu & Warner (1996), however, relate the issue of management of cultural diversity to the firm's competitive advantages in a far more explicit way. They associate cross-cultural concepts with both economic and strategic concepts. The key to their argument is in the transferability of competitive advantage between countries, because "without transferable competitive advantages there can be no successful international operations" (pp. 395).

There are many sources of competitive advantage that companies can enjoy. They can be classified, for example, in terms of the activities and functions of the firm's value chain, types of assets (resources), types of skills (capabilities), order-winning criteria, generic strategies adopted by the firm and so on (Hymer, 1976, pp. 41-42). Hu & Warner (1996), however, collect these into two broad groups. Firstly, there are those which lie at the interface between the company and its customers. These include price, product quality and range, reputation, speed and timeliness of delivery and financing. Secondly, there may be advantages associated with the company itself: "what it is, what it does and what it has" (pp. 379). These could include specific attributes, activities, assets, skills and internal and external relationships. At both levels, cultural factors can impinge on the company. For example,

"national ... culture affects both the quality and speed of service, it effects the way the firm sees itself and does things and it also affects the speed and frequency with which new products and processes are brought to fruition and then to market" (Hu & Warner, 1996, pp. 380).

In industries characterised by rapid technological progress (like the computer industry, for example) it is internal, company-specific factors that will matter most. However, where that company operates in an industry characterised by relatively slow

technological change, the interface with the customer is correspondingly more important. According to Ball (1988, pp. 27-28) construction enterprises would fall into this category as:

“The building industry does not correspond to the environment of a factory and, as a result, it is concluded that the building industry is doomed to relative technical stagnation.”

The nature of the competitive advantage is overlaid by the fact that many of the advantages have a cultural component, or can be recast in terms of culture (Hu & Warren, 1996). Furthermore, because culture differs between different societies, its importance in international competition is particularly pronounced.

As has been mentioned, the successful transference of competitive advantage is a key element of a given company's success internationally (Hall & Jaggar, 1997a). Hu & Warren (1996) define international transfer of competitive advantage as (pp.384):

“the process whereby the firm draws, from its home-base, on some or all of its unique advantages (advantages relative to home competitors), its underlying assets and capabilities or the general qualities enjoyed by the home-nation and/or industry, and makes use of these things (if necessary in conjunction with ‘complimentary assets’) to give its operations in a foreign country a competitive edge relative to the competition or alternative.”

There is little doubt that the international construction industry derives from a single national base. The British construction industry conducts little more than 20 percent (at most) of its business overseas (refer to Figure 2.5) while individual construction companies based in Britain conduct in the region of 25 percent of their work outside the UK (Building, 1998). AMEC and Tarmac, for example, conducted 28% and 23% of their respective turnovers overseas. While this pattern is reflected outside the UK, here the proportion of work conducted overseas tends to be higher. Thus, the largest of the European contractors, Bouygues, carries out 35% of its turnover outside France, while Hochtief conducts nearly 40% of its turnover outside Germany.

Hu & Warner (1996) specifically distinguish between competitive advantage derived from ‘codified’ knowledge and that derived from ‘tacit’ knowledge. Codified knowledge is that which can easily be expressed in terms of procedure. Thus,



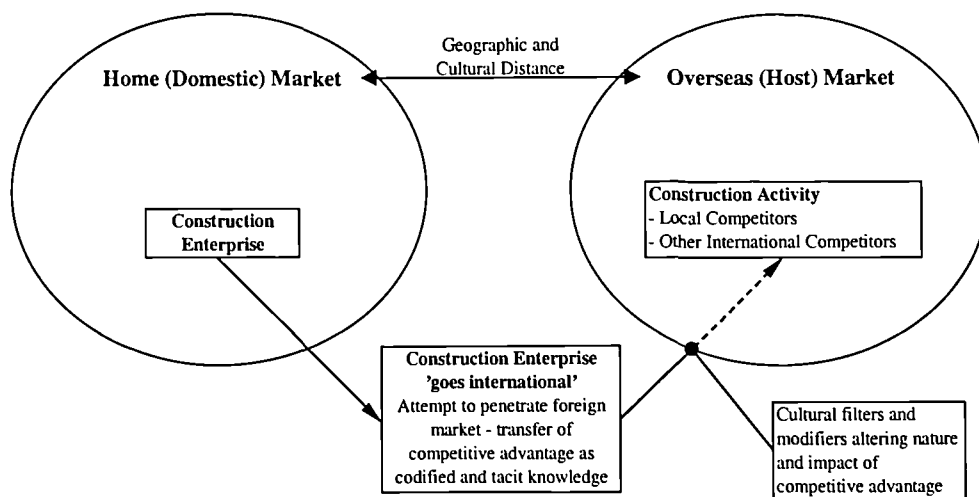
mechanics, engineering and construction technology is codifiable. Tacit knowledge is that which is less easy to express as formulae or procedure and typically includes aspects such as skills, managerial ability in general, people management policies specifically, and the use and understanding of technological concepts (Gyekye, 1995). Codifiable knowledge is relatively easy to transfer as it tends to be less 'culture-dependent' than tacit knowledge. This is because employee and consumer behaviour is effected by cultural values and tacit knowledge is dependent on that behaviour and those values – in other words, it is 'culture-bound'. Hu & Warner (1996) characterise codified knowledge (such as operating instructions, standard procedures, computer programmes, predictive models, formulae or blueprints) as approaching 'zero-transfer cost' (referring to neo-classical economic theory). Tacit knowledge, on the other hand (that is person- or institution-embodied knowledge) is difficult and costly to transfer because (pp. 387-388):

- Tacit knowledge is complex (because, by definition, it involves the ability to deal with complexity). Furthermore, it is context-dependent and, if the background is not understood, it is difficult to interpret.
- Tacit knowledge is acquired through experience and 'trial and error'. Thus, it may take many years and a great deal of human capital in order to accumulate tacit knowledge.
- Tacit knowledge is taught (and learnt) through demonstration, observation, imitation, practice and feedback. This requires close personal contact over a prolonged period of time which, in turn, presupposes linguistic and cultural affinity and geographical proximity (Maffesoli, 1996).
- Organisational learning and the tacit knowledge that results is often collective in nature. Because it does not reside in a single person, transfer becomes even more problematic.
- The tacit knowledge being transferred may not be static but continuously evolving.

However, for many industries, sustainable competitive advantage lies in the area of tacit knowledge. While knowledge is far from the only competitive advantage which is transferable (for example, the ability to provide finance or a market for the finished product is also important) it often features prominently and is certainly the main reason expatriate staff are required (Hu & Warner, 1996). This would seem to be the case within the international construction industry, where Western construction personnel are valued in developing countries as much for their ability to introduce novel procurement and managerial solutions to construction projects as for their technical ability (although this too is often highly valued) (*inter alia* Stallworthy & Kharbanda, 1985, pp. 29-30

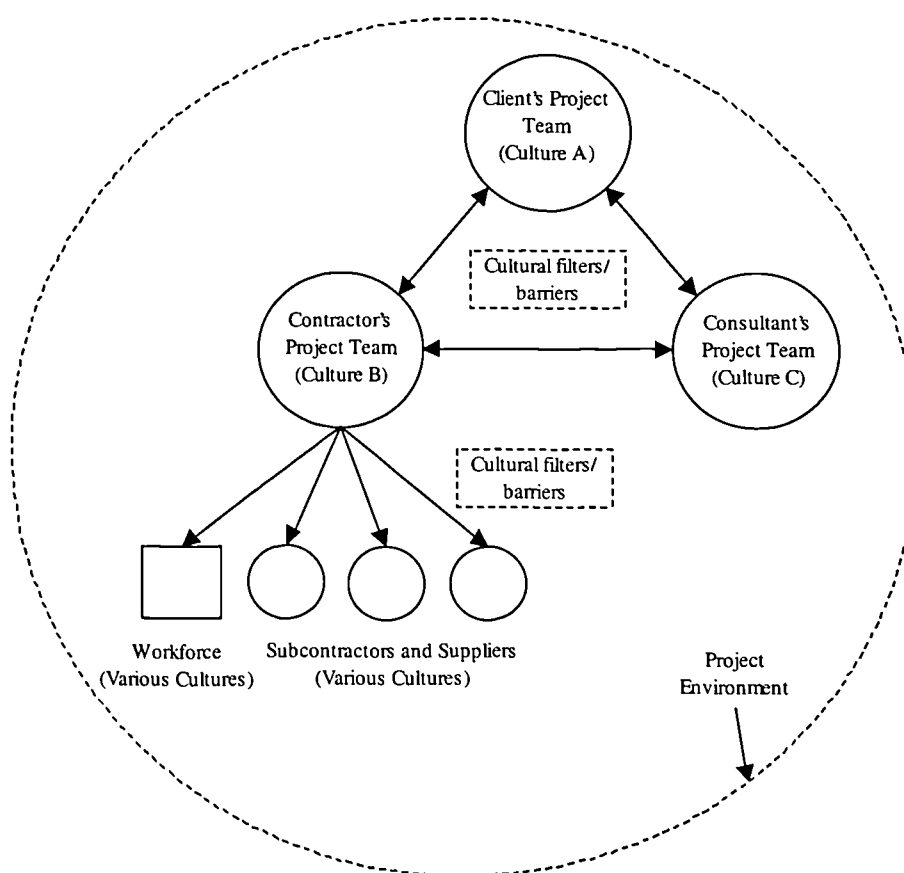
and Elton, 1985, pp. 73-74). Bidgood (1980, pp. 57-58) agrees with this and adds that the concept of British “professionalism” is also highly prized by overseas clients.

As tacit knowledge forms a prominent part of their competitive advantage, construction enterprises must find a way to overcome the inherent culture-bound nature of that knowledge if they wish to transfer it in a useful form to different cultural environments. One solution might be to codify as much knowledge as possible but “[a]dvantages based on skills, competences, capabilities, know-how, technology, expertise and so on cannot be reduced entirely to codified knowledge or information” (Hu & Warner, 1996, pp. 387). However, more effective than this ethnocentric approach is to consider which advantages will transfer best to what *cultural* environments. This balancing of tacit competitive advantage with cultural profile would provide construction enterprises with a strategic basis for deciding which countries they will operate in and on what basis. Thus, if their company reputation were well-known in a given country but all other aspects of operation would be prohibitively difficult, a construction organisation might just licence it’s name to an indigenous company operating in broadly the same field and markets. Similarly, that same company may find many of its domestic competitive advantages readily transferable to a different country where the culture is less distant. Here they may wish to set up a regional office and recruit and train local staff. Thus, what has relevance in one cultural environment may have little or no relevance in another.



**Figure 4.3** An Illustration of how Culture Impacts Construction Enterprises Across National Boundaries

Figure 4.3 illustrates the way cultural differences at the national level impact upon the construction enterprise operating internationally. The overseas construction environment will comprise different norms and values to the domestic construction environment. The construction enterprise's culture will primarily reflect that of its home (or domestic) culture and its competitive advantages will be based upon this culture. As the diagram shows, 'cultural filters' will modify those advantages when the enterprise enters the foreign environment. The nature and impact of the enterprise's competitive advantage may be changed. Where that advantage is codifiable, this change may not be very significant. However, where that advantage is tacit, cultural differences may reduce or, possibly, enhance their impact in the foreign cultural and construction environment. Another possibility is that the competitive advantages are modified, leading to unexpected, but neither improved nor lessened outcomes. The strategic approach of the organisation (parochial, ethnocentric or synergistic), together with the cultural awareness and capability of its employees will determine the extent to which the enterprise's competitive advantages are considered in the light of cultural distance and the actions taken to maximise the benefits and minimise the drawbacks of that cultural distance.



**Figure 4.4** Cultural Differences in the Construction Project Environment

Figure 4.4 shows how, within a specific, hypothetical construction project environment, cultural diversity can impact. The general project arrangement will be familiar to anyone involved in the construction industry. However, all the usual interfaces between the various parties involved in the project are complicated by the addition of cultural differences. Each arrow represents possible cultural distance and, with cultural distance comes the potential added complexities discussed in Section 4.1. Thus, the challenge for the international construction enterprise is to understand and manage cultural differences both at the strategic level identified in Figure 4.3 and at the operational, project level identified in Figure 4.4.

#### **4.4 Summary**

There is a wealth of anecdotal literature indicating the many ways in which cultural differences can effect construction enterprises operating outside their domestic environment. Among the areas addressed by the literature are:

- Expatriate personnel adaptation and effectiveness in foreign places.
- Management and participation of culturally diverse foreign staff and operatives.
- The impact of differences in international legal issues and contracts.
- Negotiation and communication of business in an overseas construction context.
- Codes of conduct and ethical standards where these differ to those with which staff are familiar.
- Appropriate approaches to design and the use of technology in different countries.
- Marketing construction services internationally.
- Forming and maintaining joint ventures and alliances internationally.

This literature is set against a backdrop of decreasing competitiveness within the international interests of construction enterprises from the developed world (based on research of US organisations). The most important factor identified as explaining this increasing lack of competitiveness was an inability to effectively understand and appreciate the ethics and cultures of other countries and adopt appropriate management methods. Bearing in mind the increasing profile of culture as an element of competitive advantage within the international construction industry, dealing with diverse cultures both within organisations and internationally, will be a major theme for firms in the construction industry.

There are a number of responses that can be adopted when encountering cultural differences, grouped as 'parochial', 'ethnocentric' and 'synergistic'. The latter, entailing the management of cultural differences, is usually the most effective although the former two are more common. This is because understanding and managing cultural difference is more difficult than either ignoring that difference, or seeking to minimise cultural difference, thereby reducing the likelihood of culture becoming an issue. Managing cultural differences has a number of advantages for enterprises operating internationally. The crux lies in using those differences as a key element of the firms' competitive advantage. At the international level, competitive advantage comprises the transfer of knowledge, which can either be codifiable or tacit. This understanding provides a basis for the management of knowledge transfer, which allows construction enterprises to recognise what aspects of their competitive advantage will be effective in a given cultural environment and what aspects will be less effective. They will also be able to identify what policies and procedures they need to adopt to make the most of the competitive advantages they have at their disposal.

## CHAPTER FIVE

Culture doesn't save anything or anyone, it doesn't justify. But it's a product of man: he projects himself into it, he recognises himself in it; that critical mirror alone offers him his image.

Jean Paul Satre

## **5.0 A RESEARCH STRATEGY**

### **5.1 The Research Questions**

The introduction outlined of the purpose for undertaking this project, together with an indication of the project thesis. Based on the literature, discussed in Chapters 2 to 4, and the project aims, the thesis may be verified and substantiated using appropriate validation techniques. However, the thesis firstly needs to be articulated as a series of research questions. The following statement is a development of the thesis as outlined in the introduction, from which the research questions derive:

*Cultural diversity, at a national level, effects the management and business activities of British construction enterprises operating internationally.*

In addressing this thesis, aspects of the literature will be incorporated. For example, the cultural models (illustrated in Figures 3.1, 3.3 and 3.4 in Chapter 3) will be used to help devise questions relating to culturally diverse scenarios. They can also be used in framing the data analysis and interpretation of that analysis. Likewise, the definition of international construction enterprises, outlined in Chapter 2, will enable identification and categorisation of the companies that agree to participate in the validation process. Similarly, the nature of business strategy in international construction, which was also reviewed in Chapter 2, will provide a context for the strategic solutions adopted by various construction enterprises operating internationally. Finally, their approaches at different levels of management will be classified in terms of the framework outlined in Chapter 4. The following research questions give an indication of the variables contained within the project thesis and are grounded in the theory previously explored in the literature. The questions are phrased to reflect the two 'sides of the coin' that are implicit within the nature of the main statement of the research thesis above. The first is the policy and strategy of construction enterprises working internationally with particular reference the cultural dimension. Because the main 'instruments' for projecting those enterprises' competitive advantage into their overseas markets are their expatriate personnel, the second 'side of the coin' implicit within the main statement of the research thesis are the experiences, views and opinions of those construction

professionals charged with projecting and implementing the strategy of the construction enterprises' into their foreign markets. The research questions were:

- What is the extent of strategic effort given to the international activities of construction enterprises? In other words, where do international activities fall within their 'strategic mix'? This includes two elements:
  1. the degree to which international work is included within the organisation's overall strategy;
  2. and the level of planning at a local level in, for example, an overseas office.
- Does the company operate on a global, centralised basis (which might be seen as being proactive) or does it adopt a regional approach (which could be seen as being reactive) (Ketelhöhn, 1993)?
- What level of awareness is there among those involved in international construction, of cultural issues? If there is an understanding, is this the case at every level of management or does it vary at different levels of management? What sort of responses do construction professionals adopt in response to cross-cultural dynamics? Furthermore, do they adopt these responses as part of a planned company response or on an individual basis? In other words, are their responses informed by company policy?
- What provision exists within the strategy of construction enterprises to deal with cultural differences? This might be manifested as policies for expatriate recruitment, joint ventures and partnerships, establishment of overseas offices and in guidelines for conduct of local activities and project management, as reviewed in Chapter 4. If there is some form of provision for dealing with culture, is it on an *ad hoc* or systematic, planned basis?
- To what extent does culture impact on the activities of international contractors and/or consultants? This might be measured subjectively and/or objectively in combination with the responses to some of the other issues highlighted above and in combination with data from published accounts.



## 5.2 The Study Hypotheses

The research questions indicated in Section 5.1 can now be developed into research hypotheses which can be operationalised for the purposes of gathering data through the research instruments identified in the strategy shown in Figure 1.1 (i.e. a questionnaire and case study interviews). The primary hypothesis is a restatement of the research thesis outlined in Section 5.1. The secondary and tertiary hypotheses are developments of the research questions outlined in section 5.1.

### 5.2.1 Primary Hypothesis

***Cultural diversity, at a national level, effects the management and business activities of British Construction Enterprises operating internationally.***

Variables to be operationalised:

1. Dependent variable:- “management and business activities”
2. Independent variable:- “cultural diversity (at a national level)”
3. Extraneous variables:-
  - (a) ‘technical & logistical issues’
  - (b) ‘commercial issues’

### 5.2.2 Secondary Hypotheses

***Managers operating internationally for British construction enterprises adopt an ethnocentric/parochial approach in response to cultural diversity.***

Variables to be operationalised:

1. Dependent variable:- ‘management approach’
2. Independent variable:- “cultural diversity”
3. Extraneous variables:-
  - (a) ‘company policy’
  - (b) ‘previous overseas experience of individual managers’
  - (c) ‘educational and training background of individual managers’
  - (d) ‘individual managers’ personal sensitivity to cultural differences’

***As part of their international company policy and strategic approach, British construction enterprises provide little or no training and education in cross-cultural issues for their managers who are working in a culturally diverse environment.***

Variables to be operationalised:

1. Dependent variable:- “training and education in cross-cultural issues for ... managers”
2. Independent variable:- “international company policy and strategic approach”
3. Extraneous variables:-
  - (a) ‘previous overseas experience and educational background of individual managers’
  - (b) ‘individual managers’ personal sensitivity to cultural differences’

### **5.2.3 Tertiary Hypothesis**

***British construction enterprises do not adopt a strategic approach to their overseas work.***

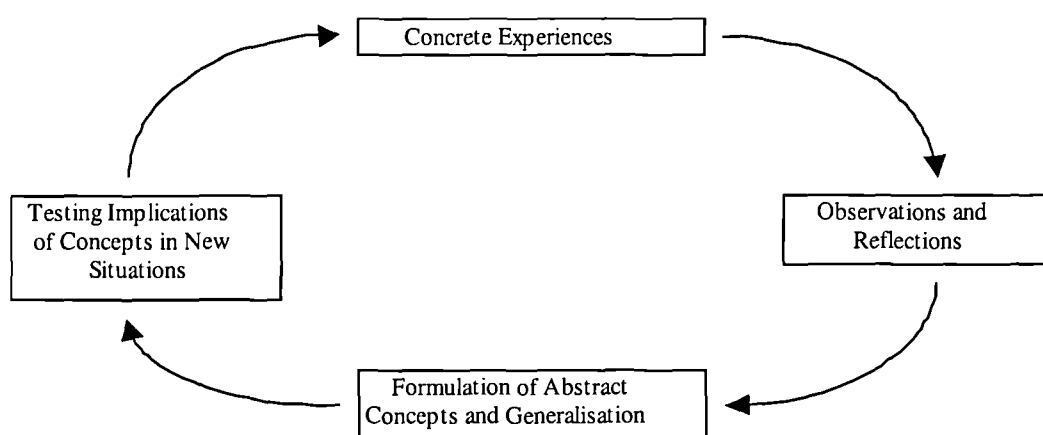
Variables to be operationalised:

1. Dependent variable:- “strategic approach”
2. Independent variable:- “overseas work”
3. Extraneous variables:-
  - (a) ‘size of company’
  - (b) ‘previous company experience in overseas markets’

## **5.3 Research Methodology Theory**

The research hypotheses outlined in Section 5.2 form the basis of the empirical approach to the research. In order to find answers to these hypotheses, primary data will be gathered in the ‘field’ (i.e. the ‘real’ social and business world in which British international construction enterprises operate). In order to collect this data in a suitably rigorous manner, an appropriate methodology will be developed. This methodology will be contained within a research strategy, which will, in turn, be based on a number of theoretical considerations, which are discussed and explored below.

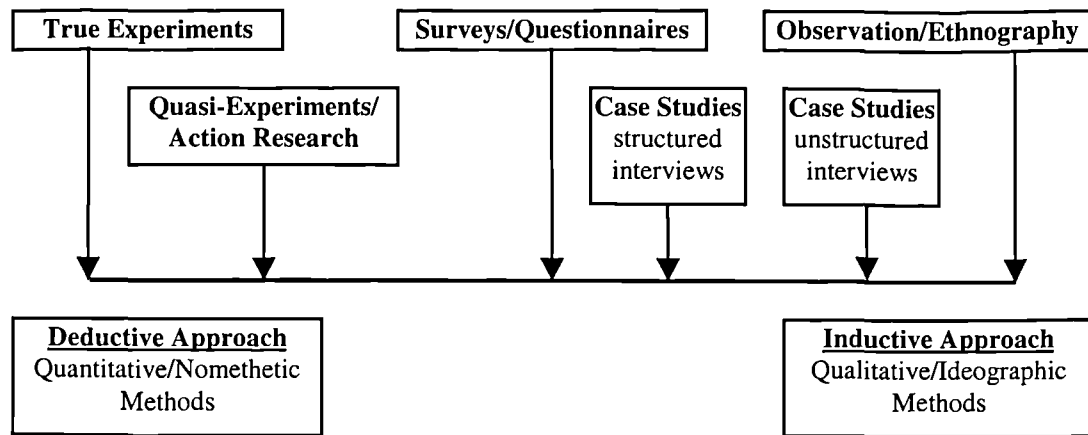
The model (Figure 5.1) shows that the basic premise of understanding phenomena in the world around us is one of learning through the testing out of assumptions (Kolb *et al*, 1991).



**Figure 5.1** Kolb's Experiential Learning Cycle (Kolb, Rubin & McIntyre, 1991, pp. xiv).

A *deductive* research approach entails the development of a conceptual and theoretical structure prior to its testing through empirical observation. Thus, this corresponds to the left side of Kolb's model, since it begins with abstract conceptualisation and then moves on to testing through the application of theory so as to create new experiences or observations. The logical ordering of *induction*, on the other hand, is the reverse of deduction as it involves moving from the position of observation of the empirical world to the construction of explanations and theories about what has been observed. In this sense, induction relates to the right hand side of Kolb's learning cycle. Thus, in sharp contrast to deduction, in which the conceptual and theoretical structure is developed prior to empirical research, theory is the outcome of induction (Gill & Johnson, 1997). While this description, and the associated model, are somewhat simplistic, they do, nevertheless, neatly encapsulate the two main thrusts of empirical research.

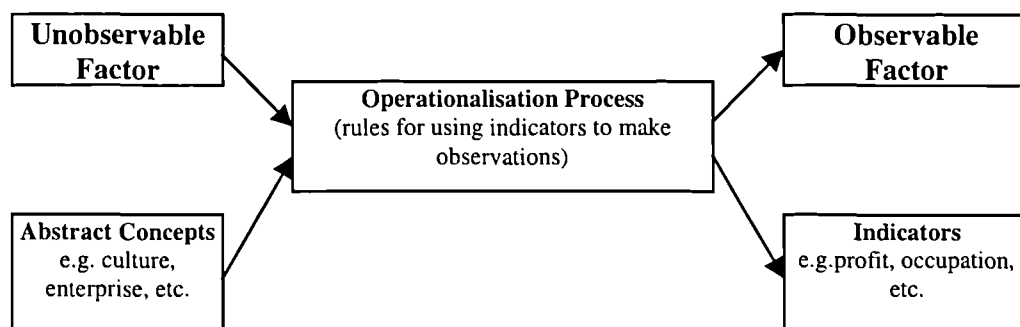
Fundamentally, the array of approaches for testing or judging hypotheses or exploratory propositions, can be visualised as a continuum of techniques, ranging from the deductive at one end, to the inductive at the other (Figure 5.2).



**Figure 5.2** The Relative Position of Various Research Techniques on the Research Methods Continuum.

Essentially, the process of deduction involves a number of distinct stages (Gill & Johnson, 1997, pp. 28-33).

1. Initially, the concepts, which represent important aspects of the theory or problem, have to be established. For example, 'national culture', 'construction enterprises', 'overseas construction' and 'business activities' might all be seen as abstract concepts. These concepts are linked together in a 'causal chain' – a set of untested assertions about the relationship between the concepts – to yield a theory or, more accurately, a network of hypotheses.
2. These concepts then need to be 'operationalised', which means defining them so that what were abstractions become observables or indicators. This process is illustrated in Figure 5.3.



**Figure 5.3** Operationalising Concepts (Gill & Johnson, 1997, pp. 30).

3. Operationalisation enables the creation of clear and specific instructions about what to observe and how it should be observed. This enables the testing of hypotheses and theories by confronting them with empirical data.
4. The outcome of testing operationalised concepts within a network of hypotheses against 'facts' collected by observation enables corroboration of the theory as a valid (or invalid) explanation.

In summary, the process of deductive research can be expressed as follows (Popper, 1974, chap. 1):

- i. Theories are developed that are capable of being empirically testing.
- ii. Scientists vigorously attempt to refute these theories.
- iii. Science advances as refuted theories fall away, leaving theories not yet disproved.

One of the main themes of the deductive approach (essentially a 'positivist' approach) is a conception of scientific method constructed from (what is assumed to be) the procedure in the natural sciences, particularly physics (Gill & Johnson, 1997). This entails the development of covering-laws that explain past and predict future observations, through causal analysis and hypothesis testing, such that A causes B, e.g. stimulus in A causes response in B.

Supporters of induction in the social sciences reject this causal model because they consider this explanation to be inappropriate. This is because there are fundamental differences between the subject matter of social sciences (people) and natural sciences (animals and physical objects). As Laing (1967, pp. 53) says:

“The error, fundamentally, is the failure to realise that there is an ontological discontinuity between human-beings and it-beings ... Persons are distinguished from things in that persons experience the world, whereas things behave in the world.”

The methodological implications of this perspective involve the avoidance of the highly structured approaches of deduction which, it is claimed, prevent an appreciation of the research participants' 'subjectivity'. This occurs because the deductive researcher imposes an external logic (a theoretical model of behaviour) on something which has an

internal logic of its own. To discover this internal logic, supporters of induction recommend unstructured approaches to research that allow access to human subjectivity without creating distortion (Gill & Johnson, 1997).

Gill & Johnson (1997) continue by arguing that neither the deductive (nomothetic) or inductive (ideographic) are intrinsically more appropriate or ‘better’ for research of a sociological hypothesis: both approaches have advantages and disadvantages in terms of practical, philosophical and ethical considerations. By way of illustration, Hartley (in Cassell & Symon, 1994, pp. 208) states:

“There is nothing about a method *per se* which makes it weak or strong. The argument about the method depends on two factors. First, the relationship between theory and method and, second, how the researcher attends to the potential weaknesses of the method”

These advantages and disadvantages are most pronounced at the extremes of the continuum of research methods previously described (see Figure 5.2) and alter across that continuum. Table 5.1 shows a comparison of some of the key features of both approaches but it should be remembered that any specific technique will adopt a position on the continuum according to its relative emphasis upon these characteristics.

| Deductive Methods  | Inductive Methods   |
|--|---|
| Explanation via analysis of causal relationships and explanation by covering laws (etic)           | Explanation by subjective meaning systems and explanation by understanding (emic)                                       |
| Generation and use of quantitative data  | Generation and use of qualitative data  |
| Use of various controls (physical or statistical) so as to allow the testing of hypotheses         | Commitment to research in everyday settings to allow easy access to and minimise reactivity among the research subjects |
| Highly structured research methodology to ensure replicability of above characteristics will occur | Minimum structure to ensure above characteristics will occur  |

**Table 5.1** A Comparison of Deductive and Inductive Methods of Research (Gill & Johnson, 1991, pp. 37).

## 5.4 Evaluating the Methodological Options

Gill & Johnson (1997, pp. 128-129) propose three criteria with which to evaluate the various methodological options and select an appropriate one to conduct a specific research project. The basic research techniques in relation to each of these criteria are classified in Table 5.2.

### *(1) Internal Validity*

This criterion refers to whether or not what is identified as the ‘cause(s)’ or ‘stimuli’ actually produce what have been interpreted as the ‘effects’ or ‘responses’.

### *(2) External Validity*

Generally, this criterion refers to the extent to which any research findings can be generalised or extrapolated beyond the immediate research sample or setting in which the research took place. This relates to both the wider population (population validity) and the social context (ecological validity).

### *(3) Reliability*

This refers to the consistency of results obtained in research. To satisfy this criterion it should be possible for another researcher to replicate the original research using the same subjects and the same research design under the same conditions.

| <i>Criteria</i><br><b>Methodology</b> | <i>Internal</i><br><i>Validity</i> | <i>External Validity</i><br><i>(Population)</i> | <i>External Validity</i><br><i>(Ecological)</i> | <i>Reliability</i> |
|---------------------------------------|------------------------------------|---|---|--------------------|
| <b>Experimental Designs</b>           | V. Good                            | V. Poor (Probably)                              | V. Poor   | V. Good            |
| <b>Quasi-experiments</b>              | Fair - Good                        | V. Poor   | Fair  | Fair - Good        |
| <b>and Action Research</b>            |                                    | (Generally)                                     |   |                    |
| <b>Survey/Questionnaire</b>           | Fair - Poor                        | Good - V. Good                                  | Fair - Poor                                     | Good - V.          |
| <b>Research Designs</b>               |                                    |   |   | Good               |
| <b>Ethnographic</b>                   | Fair - Poor                        | Poor - V. Poor                                  | Good - V. Good                                  | V. Poor            |
| <b>Research</b>                       |                                    | (Usually)                                       | (Relatively)                                    |                    |

**Table 5.2** Evaluation of Basic Research Methodologies (based on: Gill & Johnson, 1997 and Cassell & Symon, 1994).

Table 5.2 shows that no single research method successfully achieves all the main criteria by which it can be judged. All methods contain inherent weaknesses and strengths. Thus, in developing a research method for use in a research project, researchers must emphasise the strengths and minimise the weaknesses.

## **5.5 Selecting a Research Strategy**

### **5.5.1 Philosophical Considerations**

In conducting social research, one is confronted with a fundamental philosophical choice regarding ‘human nature’ (Burrell & Morgan, 1979). A ‘positivist epistemology’ will draw the researcher to deductive solutions while an ‘interpretivist epistemology’ will suggest an inductivist solution as being more appropriate (pp. 6-7). Gill & Johnson

(1997) suggest that, philosophically, ‘methodological parochialism’ – the reliance on a single methodological approach – depends on a nominalist conception of the world. Burrell & Morgan (1979, pp. 30-31) describe nominalism as the view of the social world as “an emergent social process which is created by the individuals concerned”. In this view, social reality is seen as having little existence outside the individual apart from a network of assumptions and inter-subjectively shared meanings. Thus, “[t]he ontological status of the social world is viewed as being extremely questionable and problematic”. However, Gill & Johnson (1997, pp. 134) state that taking a ‘nominalist’ approach and viewing methodology merely as a dichotomy is “fundamentally flawed”. It ignores what could be termed a “methodologically pluralist” position, which relies on a ‘realist’ conception of the world. Burrell & Morgan (1979, pp. 4) regard the realist conception of the social world as taking the view that:

“... the social world exists independently of an individual’s appreciation of it. The individual is seen as being born into and living within a social world which has a reality of its own. It is not something that the individual creates – it exists ‘out there’ ... For the realist, the social world has an existence which is as hard and concrete as the natural world.”

Thus, for realists, the array of research methods is at their disposal because human action has an internal logic: people do not merely react to stimuli as ‘it-beings’ would but nor do they merely act without reference to the social reality within which they find themselves. People are individuals with their own will, which guides their behaviour, but this behaviour is informed by the social reality within which they find themselves. Giddens (in Weber, 1992, pp. ix) explained this by saying that while natural occurrences can be ‘explained’ in terms of causal laws, human conduct is intrinsically meaningful and has to be interpreted or understood in a way that has no counterpart in nature, a philosophy associated with the ‘hermeneutic’ tradition. In adopting the realist position (with its attendant weaknesses), methodological choice becomes a case of finding the method most appropriate to the research questions, rather than being confined to a particular methodology. It is from this position that Trow (1957, pp. 33) states that:

“... different kinds of information about man and society are gathered most fully and economically in different ways, and the problem under investigation properly dictates the methods of investigation ... This view seems to be implied in the commonly used metaphor of the social scientist’s



‘kit of tools’ to which he turns to find methods and techniques most useful to the problems at hand.”

### ***5.5.2 Practical Considerations***

Overlaying the philosophical debate are issues of practicality in conducting the validation of the research. Put simply, it is a matter of which methods are accessible and which are likely to be successful in enabling the ‘testing-out’ of the theory. These issues are a function of resources and the nature of the research (Glastonbury & MacKean, in Allan & Skinner, 1991).

Resources include the time considerations, manpower and financial limits, which form and constrain the environment for actually carrying out the research. Where resources are plentiful, many people can carry out a number of validation methods independently, and bring their findings together to develop a deep, reliable and valid understanding of the social phenomena under consideration. Similarly, a long time period enables longitudinal testing to be conducted. However, a single researcher, operating within a set timeframe will be limited in terms of the methodological options available, prior to making the necessary philosophical choice and developing the specific research strategy. Consequently, this has implications for the validity and reliability of the subsequent research.

The nature of the research is also important since it limits choice where some techniques are wholly inappropriate. For example, if the research is of a highly sensitive nature, highly structured approaches that rely on large numbers of responses and voluntary participation are unlikely to meet with much success. Likewise, where the subject population is small, techniques containing high population validity become unnecessary and inappropriate. Furthermore, it is prudent to select an option that is likely to successfully yield ‘good’ data. For example, if, under certain circumstances, the research subjects find it difficult to respond or refuse to participate, or do so only grudgingly, the resulting data are likely to be inaccurate and non-representative. In such a case, an alternative method, which does not rely on those conditions would be more suitable.

### ***5.5.3 The Research Methodology Strategy***

Relating the practical considerations to this particular research project, it is apparent that there are substantial constraints. Time (three years), manpower (one researcher) and financial means are all limited. Suitable research methods must be found within these constraints. Additionally, the nature of the research questions delimits the potential respondent population (i.e. British construction enterprises operating internationally and individuals working in an overseas position for those organisations). These limitations set the context within which a choice of methodological approaches can be made.

Experimental approaches, in the vein of the Hawthorne Studies, are clearly inappropriate as, of the areas of interest, business strategy is not usually amenable to this form of research while the cultural interaction between people of different cultures in a construction environment would be difficult to reproduce. Similarly, quasi-experiments, such as action research, together with observation and participation/interventionist techniques are inappropriate, as the participants who are the subject of the study are not easily physically accessible – they are likely to be based overseas.

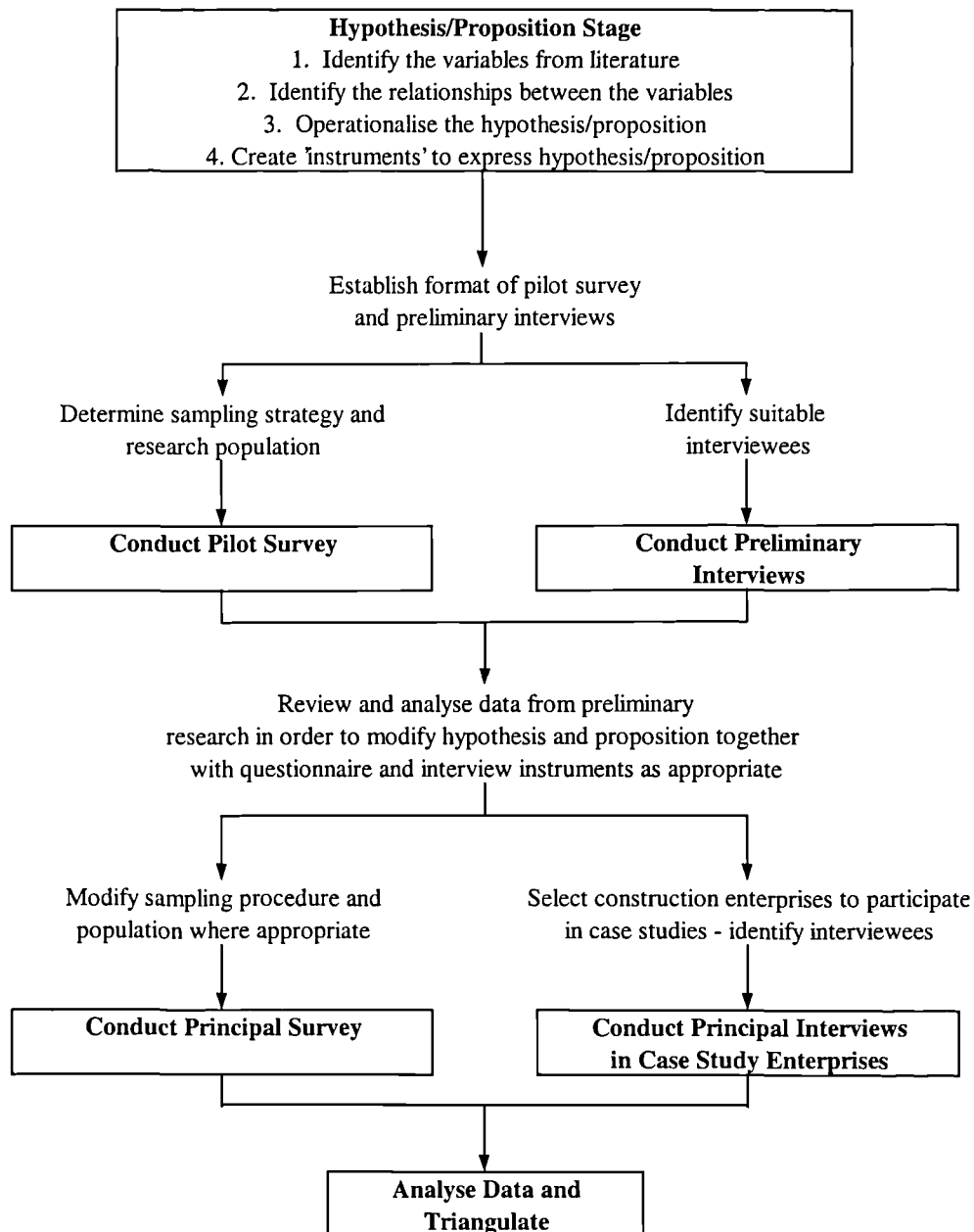
Of the main methods available for gathering of empirical data, surveys and case study approaches remain. Both have a substantial body of associated literature relating to their execution, and are accessible within the practical constraints placed upon the project. Furthermore, depending on emphasis, both of these techniques can be deductive or inductive in nature, although surveys tend to be more quantitative and case studies more qualitative (see Figure 5.2).

As has been previously indicated, the decision to select just one of these approaches to gather all the required data, or to use both approaches, is largely a philosophical choice. In this instance, a philosophical compromise is regarded as the most appropriate course of action. In this respect, a bias towards the realist conception of social reality would enable the adoption of a pluralist approach to the research strategy. Such an approach has the advantage of the strengths of one method mitigating the weaknesses of the other as they will provide complimentary, but different, data. Naturally, the final choice will be based on a ‘culturally-bound’ (see Chapter 3) decision – that is, that the research will be ‘theory-laden’ in that it will be conducted from a particular point of view, or

paradigm (Burrell & Morgan, 1979). With this rationale in mind, the following strategy has been adopted.

1. Undertake a preliminary, pilot exercise in order to confirm the issues relevant to the hypotheses (arising from the literature) and verify the nature of the relationships between the variables. Additionally, the specific nature of the survey and case studies can be corroborated based on the data generated at this stage. The format for this part of the strategy could take the form either of interviews or a survey but both will probably be used.
2. Conduct a survey (containing analytical and descriptive elements) which will provide population validity and reliability for the validation of the hypothesis. The survey will be directed to the overseas (expatriate) contingent of British construction professionals, thereby obviating the need for overseas visits.
3. Investigate a number of case studies, through the medium of interviews, which will enrich the study with a deep and fertile source of data, thus endowing the project with ecological validity. The case studies will be directed to individuals responsible for, or involved in the formulation of overseas strategy and policy for British international construction enterprises. As most of these enterprises operate on the basis of maintaining a 'head office' in the UK, accessibility to the individuals within these organisations will be less constrained.

The main strength of this strategy is that it enables access to both people working in a culturally diverse construction environment (the operational/project aspect of the enterprises) and to the head office decision-makers, representing the strategic aspect of the business. This will allow the thesis, together with the associated research questions (identified in Section 5.1), to be addressed. Additionally, it will provide a means for determining the extent to which policy developed at the strategic level informs activity at the operational level in respect of the stance of the company in response to culturally diverse environments. The principal weakness of this strategy is the lack of inherent internal validity. However, it is anticipated that the review of the literature and subsequent theory building will be sufficiently rigorous to address this issue. The strategy is illustrated in Figure 5.4.



**Figure 5.4** The Strategy for Validating the Research.

Thus, the operationalised statements made in Section 5.2 can be regarded as either ‘hypotheses’ or ‘propositions’. As hypotheses, they can be seen as statements to be either proven or disproven through the deductive process while, as propositions, they can be seen as statements to be explored and understood through a process of induction. Incidentally, the term ‘propositions’ has been used when setting the objectives for semi-structured interviews for gathering case study data (Hartley, in Cassell & Symon, 1994).

It is unlikely that a survey will adequately answer all the hypotheses (as expressed in Section 5.2). For example, the respondents are unlikely to have much knowledge concerning the tertiary hypothesis (5.2.3), and what knowledge they do have will be

based on their own personal experience and on their own perception of their company's policies. A better picture of company strategy will be gained through conducting case studies. Similarly, the survey is likely to produce fairly shallow information (albeit, from a relatively large sample). One of the purposes of including case studies as part of the data gathering strategy is to explore some of the issues in greater depth.

As indicated in Section 5.3, inductive research of a qualitative nature, such as the case studies and substantial parts of the survey that are required for this study, should occur prior to the development of theory and explanation. They are used to create theory from which positivist methods of a quantitative bent can arise. However, there needs to be sufficient structure to ensure that the topic of interest is covered by both the survey and the interviews contained within the case studies. Thus, while falling into the realm of qualitative research methods, the interviews and survey will retain a degree of structure. This approach has been characterised as 'hypothetical reasoning', combining both qualitative induction and qualitative abduction (Kelle, 1997). This means that the theory developed from the literature is initially used to establish a framework for the analysis of the data arising from the case study interviews and survey. This will be overlaid with unexpected themes and concepts emerging spontaneously from the data. This is in contrast to the grounded theory approach where the researcher analyses the data 'free from presuppositions' (Strauss & Corbin, 1990). Consequently, a part of the case study interview data and questionnaire data must be structured around the framework arising from the theory. For this research project, the theory is expressed as propositions (see above). Merton (1968) terms these propositions as 'orientation hypotheses', e.g. "tentative and imprecise conjecture about possible relationships between domains of interest" (Kelle, 1997).

## **5.6 Combined Qualitative and Quantitative Designs**

Denzin (1978, pp. 301-302) described two techniques for producing 'combined studies': the "within methods" approach, where different types of technique using similar paradigms are utilised (e.g. a survey and an experiment); and the "between methods" approach, drawing on techniques from two different paradigms (e.g. a survey and in-depth interviews). The strategy detailed in Figure 5.4 requires the combining of research methods from both deductive and inductive paradigms, but in a novel way, meaning

that, for this research project, both techniques are relevant. The survey will partly comprise qualitative questions, while the case studies will involve conducting interviews. This is the within methods approach. Meanwhile, the survey will also contain quantitative data which, when contrasted with the qualitative data gathered in both the survey and case study interviews, is an example of the between methods approach.

Traditionally, discussion about combining quantitative and qualitative approaches focuses on mixed methods where the goal is to triangulate findings to demonstrate convergence in results (Jick, 1979). However, Creswell (1994) notes that the purposes for combining methods have broadened to include the examination of overlapping and different facets, to find contradictions and new perspectives and to add scope and breadth to a study. In his extensive review of the literature regarding 'combined studies', Creswell (1994) advances three models:

*(1) The Two-Phase Design*

In adopting this model, the researcher conducts the qualitative and quantitative phases of the study entirely separately. Because the procedure for this design requires the researcher to, effectively, conduct two studies in parallel, the result will, inevitably, entail some form of compromise compared with a single paradigm project; either in the scope of the hypotheses investigated or in terms of the level and sophistication of that investigation.

*(2) The Mixed-Methodology Design*

This model endorses the mixing of methodological paradigms extensively and throughout the study. Thus, paradigms could be combined at the introduction, literature review and the purpose statement stages as well as the data collection stage. Consequently, a key feature of the approach is also one of compromise; not in terms of the depth and scope of the subsequent investigation of the hypotheses but in terms of commitment to the philosophical integrity of the methodological continuum.

*(3) The Dominant-Less Dominant Design*

In this approach, the researcher presents the study within a single, dominant paradigm with one, smaller component of the overall study drawn from the alternative paradigm.

It's chief advantage over the other two designs lies in achieving the task of 'triangulation' whilst compromising neither the scope of the work or the philosophical foundations underlying the project. There is a firm commitment to one methodological paradigm throughout the development of the study with the alternative paradigm being used to complement this approach. Thus, the concept of 'triangulation', used by Denzin (Denzin & Lincoln, 1994) to mean checking the validity of the results of one method through the application of another method, is not the intention in this case. Instead, as Morse (1991) suggests, the less-dominant element of the study is used to "elaborate, enhance and illustrate" the results of the dominant methodology, while helping to overcome the shortcomings of that methodology. The implementation of the dominant-less dominant model requires the further consideration of two concepts: the weighting and the sequence of the paradigms. To signify which paradigm was dominant, Morse (1991) made use of upper and lower case letters (e.g. QUANT-qual or QUAL-quant, where QUANT = quantitative and QUAL = qualitative).

#### ***5.6.1 The Nature of Mixed Methodology in this Project***

Using Morse's (1991) typology, the design for this project can be characterised as QUAL-quant. The majority of the empirical data will be gathered using approaches that tend towards the qualitative end of the continuum. The interviews for the case studies, and the analysis of the case studies themselves will yield data that is principally qualitative in nature. Similarly, elements of the questionnaire will yield qualitative data, to allow contextualising of the quantitative element of the study which is the other portion of the questionnaire, where data regarding a large population of British construction professionals currently working overseas, will be collected and analysed statistically.

### **5.7 Summary**

The statement of the research thesis is:

***Cultural diversity, at a national level, effects the management and business activities of British construction enterprises operating internationally.***

This can be developed into a variety of research questions, which reflect the two key aspects of the thesis: the approach of British construction enterprises to working outside their domestic environment and the cultural dimension within those different countries; and the people working overseas for those companies. The research questions lead to the development of several hypotheses.

Methodological theory requires an understanding of the distinction between induction, where observation precedes theory, and deduction, where observation follows theoretical development. Between these two extremes lie a variety of approaches to empirical research, each reflecting elements of both the deductive and inductive philosophy. Furthermore, each methodological options supports validity (both internal and external) and reliability to differing degrees. Thus, in selecting a methodological approach, attention is required of the philosophical basis of the study and which tendency (deductive or inductive) is most appropriate, together with the attendant reliability and validity strengths and weaknesses. Overlaying this choice are practical constraints which must also be taken into account.

This choice leads to a methodological strategy for validating the hypotheses. In the case of the study thesis, the most appropriate approach was a mixed methodology strategy, containing both quantitative and qualitative elements, and directed at different populations: company decision-makers in a case study format and expatriates in a survey format. The findings from the empirical research will be triangulated between methods, with the case studies and survey findings enriching and developing the understanding of each other. They will also be triangulated between paradigms, with the qualitative element in the survey elaborating, enhancing and illustrating the quantitative element.



## CHAPTER SIX

The soul takes nothing with her to the other world but her education and culture; and these, it is said, are of the greatest service or of the greatest injury to the dead man, at the very beginning of his journey thither.

Plato

## **6.0 SURVEY THEORY AND QUESTIONNAIRE DESIGN**

### **6.1 Aims of the Survey**

The questionnaire took the form of a postal survey with the intention of eliciting the opinions and experiences of British construction professionals currently working outside the UK. In this respect, it aimed to fulfil the operational and project related elements of the hypotheses/propositions, as characterised by Langford & Male (1991). The survey contained both qualitative and quantitative elements. The quantitative elements were intended to provide statistical data concerning the nature of construction industry expatriate opinions and behaviour in a culturally diverse environment. This supplied a degree of population validity. However, as the concept of culture is highly equivocal, qualitative elements were required: to establish the research participants' understanding of the term culture and how this corresponded with the anthropological and sociological views discussed in Chapter 3; and to allow the respondents to provide context to their answers. Thus, the ecological validity of the survey was improved. Of course, questionnaires tend to be intrinsically reliable in nature as they collect data in a structured and uniform way (see Table 5.2).

### **6.2 Stages in the Survey Plan**

The stages forming the basis of any survey plan are listed in Table 6.1 below (Oppenheim, 1992). Iteration is a key feature of the process, with some stages occurring simultaneously to others and consideration of later stages essential prior to commencing earlier stages. The survey plan provided a convenient checklist for the development of the survey in this research project. Following this plan enhanced the rigour that was brought to the survey: in its *a priori* conception; through the design and development of the questionnaire instrument; and to the collection and analysis of the empirical data. The consideration of the stages in the thesis is also identified in the table.

| Stage  | Dealt with...  |
|--|----------------|
| 1. Consider aims of research and theories to be investigated | Chapter 1      |
| 2. Summary review of relevant literature                     | Chapter 2 to 4 |
| 3. Preliminary conceptualisation of the research             | Section 5.1    |
| 4. Selecting the overall design of the research              | Chapter 5      |
| 5. Select hypotheses to be investigated                      | Section 5.2    |
| 6. Select research instruments                               | Chapter 6      |
| 7. Carry out necessary pilot work                            | Section 6.6    |
| 8. Designing the sample(s)                                   | Section 6.7    |
| 9. Drawing the sample  | Section 6.7    |
| 10. Executing the fieldwork                                  | Chapter 7      |
| 11. Data processing  | Chapter 7      |
| 12. Data analysis  | Chapter 7      |
| 13. Hypothesis testing                                       | Chapter 7      |
| 14. Writing-up the results of the research                   | Chapter 7      |

**Table 6.1** Stages in the Survey Plan

### **6.3 Questionnaire Wording and Design**

The purpose of the survey was to ‘measure’ peoples’ opinions and attitudes on a number of issues, such as their reaction and behaviour in a culturally diverse environment. This was achieved by asking questions of those people. The answers were not necessarily of interest in themselves but because they related specifically to something being measured (Fowler, 1993, pp. 74). Consequently, they had to be ‘reliable’ (providing consistent measures in comparable situations) and ‘valid’ (in that the answers corresponded with the variable being measured).

#### **6.3.1 Question Reliability**

A key step in ensuring consistency in a questionnaire is to ask each respondent the same question. This may seem obvious but, essentially, it means that differences in the respondents’ answers stem from the respondents themselves rather than their interpretation of the questions. Fowler (1993) recommends that, in order to generate consistent data, ‘good’ questions have the following properties (pp. 79-84):

- The questions as written, fully prepare the respondent to answer those questions.
- The questions mean the same thing to every respondent.
- The kinds of answers that constitute an appropriate response are communicated consistently to all respondents.

### 6.3.2 Question Validity

The idea of validity varies depending on whether one is trying to measure objective facts or subjective opinions. Because of this difference in the meaning of validity, there are different approaches to maximising validity in each case (Fowler, 1993). Where it is hypothetically possible to check the accuracy of an answer, as with a factual question, the measure of validity becomes the similarity of the survey data to the value of the 'true' measure. Although it may be very difficult to obtain this 'true' measure, the understanding of validity can be consistent with objective situations. By contrast, where people are asked about subjective states, feeling, attitudes and opinions, there is no objective way of validating the answers. For such measures there is no independent direct measure possible; the meaning of answers must be inferred from patterns of association.

### 6.3.3 Types of Measure

Fowler (1993, pp. 85) identifies four ways to measure in social sciences. A basic task is to decide which measure is required and this will have clear implications for the form of the question to be asked:

1. Nominal Data - people or events are sorted into unordered categories (e.g. "are you male or female?").
2. Ordinal Data - people or events are ordered or placed in categories along a single dimension (e.g. "how would you rate your health - very good, good, fair or poor?").
3. Interval Data - numbers that provide information about distance between ordered classes (temperature is a common interval measure).
4. Ratio Data - numbers assigned such that ratios between values are meaningful as well as intervals between them, including measurements by an objective scale such as distance, weight or pressure (e.g. "how old were you on your last birthday?").

### 6.3.4 Types of Questions

A *closed* question is one where the respondents are provided with a predetermined list of possible answers. An *open* question is one allows the respondents to self-select the types of response. Where the goal is to obtain nominal data, virtually identical questions

can be designed in either form. Open questions permit researchers to obtain answers that were unanticipated. They may also describe more closely the real views of the respondent. Furthermore, it has been found that respondents like to answer questions in their own words. Finally, open questions are appropriate when the list of possible answers is longer than is feasible to present to respondents (Oppenheim, 1992). However, Fowler (1993) suggests that closed questions are usually more satisfactory. This is because the respondent can more reliably perform the task of answering the question when response alternatives are given. Additionally, the researcher can more reliably interpret the meaning of answers when alternatives are given to respondents. Finally, unexpected and rare responses are eliminated. If, on the other hand, ordinal data are required, categories must be provided for the respondents. The researcher assumes a continuum of possible answers, ranging from the 'highest' to the 'lowest'. This continuum is ordered into categories that the respondents must consider. They then place their answers in the appropriate category.

#### ***6.3.5 Increasing Validity of Factual Questions***

The validity of factual data depends on how well the respondents choose to report it. This depends on what they are asked and how it is asked. Fowler (1993, pp. 91) lists four reasons why respondents may not report factual data accurately:

1. They do not understand the question.
2. They do not know the answer.
3. They cannot recall the answer although they do know it.
4. They do not want to report the answer.

If respondents do not all have the same understanding of what is being asked, error will occur in the data. To maximise the validity of factual data, an essential step is to write questions that will be understood by all respondents. If they do not know or cannot recall a piece of information, a 'don't know' category is appropriate. Naturally, the researcher cannot make respondents offer information but by emphasising the importance of accuracy and confirming confidentiality and anonymity, missing data from non-reporting can be minimised.

### ***6.3.6 Increasing the Validity of Subjective Questions***

According to Fowler (1993, pp. 95-96) there are only three steps to improve the basic validity of subjective measures:

1. Make the questions as reliable as possible. In the case of ordinal measures, the response alternatives must deal with only one issue (i.e. be unidimensional) and be presented in order without inversion (i.e. monotonic).
2. When putting people into ordered classes along a continuum, it is generally better to have more classes than fewer. However, this has to be within the respondents' ability to discriminate their feelings or opinions.
3. Ask multiple questions with different forms that measure the same subjective state and combine the answers into a scale. This will help even out response idiosyncrasies.

## **6.4 Key Considerations in Actioning the Survey**

In designing the questionnaire, apart from taking into account the general issues of questionnaire validity and reliability discussed above, there were a number of specific issues that needed to be resolved before any progress could be made in producing, piloting and distributing the survey. These are discussed below and resolved in Section 6.5.

### ***6.4.1 Different levels of Management***

The survey is to be targeted at British construction professionals working for construction enterprises with an overseas interest. However, these construction professionals will be in different positions and have different levels of responsibility. Consequently, they will have differing perspectives on, and experiences of, culturally diverse environments. Thus, a company director will be more concerned with corporate and strategic decisions (Langford & Male, 1991) and, when dealing with people of a different culture, will be involved with those at a decision making level, particularly in terms of marketing the enterprise's presence overseas. Meanwhile, a chief quantity surveyor (for example) would be more concerned with decisions at a business level and would possibly have very little direct contact with people from different cultures (outside the organisation). Depending on the scale of the enterprise's overseas

operations, both these individuals may well be based in the UK. Finally, a project manager would probably be based overseas and would be concerned with operational decisions. This individual would almost definitely have daily interaction with other cultures, both within and outside his own organisation.

Based on the different business environments that these (hypothetical) individuals will have experience of, their exposure to, understanding of and response to people from different cultures is likely to be quite different. This will have important implications for the results of the survey, particularly from the viewpoint of population validity and, consequently, statistical significance. However, the varied perspectives and experiences should enable the gathering of rich data with a high ecological validity.

#### ***6.4.2 Different Types of Construction Enterprise***

The term 'architectural, engineering and construction (AEC) enterprise' has been used to refer to any organisation operating within the construction procurement process (see Chapter 2). Thus, the term would include all the various construction related consultants (architectural, surveying, engineering, etc.) and all types of contractors (specialist and general, main and subcontractors) operating on an international basis. The question, in this instance, becomes one of whether an individual working for a contracting organisation would, for the purposes of a survey, be regarded as being equivalent to an individual working for a consultancy organisation. If, for example, a contractor's project quantity surveyor was considered to be equivalent to a consultancy's quantity surveyor (that is, ecological equivalence) this would have profound implications for the population potential of a survey, since both international contracting and consultancy enterprises could be contacted. The result would be a substantial increase in the overall number of responses.

#### ***6.4.3 Cultural Relativity***

Hofstede's cultural dimensions (Hofstede & Bond, 1988 and see also Chapter 3) show some countries differing in terms of 'cultural distance' far more than others. For example, Australia differs from the UK only slightly across all the dimensions identified

whilst Japan differs from the UK tremendously across those same dimensions (see Figure 3.1).

This will have implications for the collection of, and reliability of, data. Individuals working in, and interacting with, societies that are culturally similar to the UK (e.g. Australia, North America, etc.) may consider the effect of culture to be negligible. However, those working in, and interacting with, societies which are very different (e.g. Japan, Malaysia, etc.) may consider cultural issues to be more important than any other. This will influence those individuals' attitudes and understanding of cultural issues considerably.

One solution may be to group responses by regions, or even specific countries. This would serve to reduce the population validity of the survey. However, a positive consequence of this would be the ability to compare different regions, thereby adding to the ecological validity of the survey. Another solution would be to identify a number of countries and regions which differed 'significantly' from the UK, in terms of culture, and focus the survey on only those regions, discarding other responses.

#### ***6.4.4 Cultural Manifestations along the Dimensions***

Hofstede found that culture can vary along a number of broad dimensions. This approach to analysing culture (described and illustrated in Chapter 3 and Figure 3.1) is seen as a convenient way to frame the individual questions for the survey, as well as serving as a tool for analysis. However, this model is complicated by Hofstede's (1991) additional proposition that culture exists at a number of 'layers', each layer being of increasing significance (see Figure 3.3). Hofstede made no effort to link these two understandings of culture. However, as was suggested in Chapter 3 and illustrated in Figure 3.4, they could be combined. If culture is considered to vary between distinct societies along each of the dimensions identified and, additionally, to vary in terms of how it manifests itself, this provides a detailed conceptual framework to help devise and analyse the questionnaire, thereby helping to determine those specific aspects of culture that are most significant to those experiencing them.



### **6.4.5 Recommendations**

Based on the comments made above, the following recommendations for consideration in the design of the survey instrument are made.

- Population validity can be maximised by eliciting responses from individuals in both contracting and consultancy organisations, and from all parts of the world. The implications this has for the findings need to be taken into account in the analysis.
- To maintain the validity of the survey, detailed, nominal information will be required regarding each respondent's position, overseas experience and training. This data will enable the respondents to be grouped accordingly and allow a variety of more detailed analyses to be undertaken.
- When answering specific questions, the respondents may choose to select specific experiences against which to relate their responses. This would require consideration of the nationalities of the individuals with whom the respondent was interacting. The models devised by Hofstede will prove very useful in resolving this issue.

## **6.5 Questionnaire Design**

### **6.5.1 Questionnaire Structure**

The questionnaire instrument, which is shown in its final form in Appendix 1, comprised the following sections:

- Covering letter; introducing the research, outlining the purpose and importance of the survey, and assuring the respondent of anonymity.
- Questionnaire summary and instructions; providing a brief outline of the structure and nature of the questionnaire together with completion instructions and a glossary of keyword definitions used throughout the questionnaire.

- Section A – Company information; seeking to establish the general nature of the organisation for whom the respondent worked, including the level of involvement that company had in international construction activities.
- Section B – Individual respondent information; seeking to determine –
  - (i) the cultural heritage and educational background of the respondent (e.g. were they British?),
  - (ii) the professional and overseas experience of the respondent,
  - (iii) where the respondent had worked and was currently working,
  - (iv) their position within their company and the responsibilities that position carried,
  - (v) and the degree of cultural diversity they were currently experiencing and had previously experienced.

This section provided the context (i.e. the independent variables) for the later answers.

- Section C – Respondents' approaches to managing multi-cultural situations; attempting to establish what style of management the respondents adopted in response to a multi-cultural working environment. This section included questions that attempted to discover how construction managers coped in such circumstances and what aspects of cultural differences they saw as problematic. Thus, the questions in this section were the dependent variables. The orientation hypothesis being principally addressed by this section of the questionnaire was the first secondary orientation hypothesis in Section 5.2.2:

*Managers operating internationally for British construction enterprises adopt an ethnocentric/parochial approach in response to cultural diversity.*

- Section D – Cross-cultural training prior to overseas placement; endeavoured to ascertain the amount of preparation expatriates received prior to an overseas placement. Aspects of preparation included the nature of their selection, together with any language and cross-cultural training received. A further issue was whether they viewed the training they had received as adequate or relevant or, even necessary. The orientation hypothesis primarily being addressed by this section of the questionnaire was the second secondary orientation hypothesis in Section 5.2.2:

*As part of their international company policy and strategic approach, British construction enterprises provide little or no training and education in cross-cultural issues for their managers who are working in a culturally diverse environment.*

### **6.5.2 Reliability and Validity**

Question reliability was difficult to achieve throughout the questions, as the issues being dealt with were fairly complex in nature. As has been mentioned, a reliable question would be one that meant the same thing to all respondents. However, the questionnaire contained a number of words that could have been interpreted in a wide variety of ways. An attempt to resolve this was the provision of a glossary. This glossary provided a definition of each 'complex' or equivocal word or term.

Another key element of question reliability was that the respondents understood what constituted a suitable answer in each instance. Although most questionnaires would resolve this by asking predominantly closed questions, a stated purpose of this questionnaire was to ask open questions. Consequently, the only way to achieve a high level of validity was to word the questions as carefully as possible so that the respondent was left in no doubt as to the type of answer expected.

Open questions were appropriate for this particular questionnaire, as they allowed the respondents to more closely describe their real views and would, hopefully, produce some unanticipated answers. Furthermore, Fowler (1993) suggests that respondents often prefer to answer questions in their own words. In some instances, the questions required responses from a potential range of answers that would be impossible to fully list. Finally, open questions do not 'lead' the respondent into providing a particular answer. In the case of this questionnaire, what the respondents did not say might have been as revealing as what the respondents did say. Furthermore, the responses to the open questions could help to improve the reliability of the questionnaire, as the answers would demonstrate how the respondents interpreted previous closed questions.

Some of the questions asked respondents to provide factual information. The responses to these questions would largely depend on the respondents' memory, the information they had access to and their willingness to impart such information. The problem of

validity of the resulting data would occur where information was missing in these instances. This was minimised by emphasising the need for accuracy and assuring the confidentiality and anonymity of the responses.

### ***6.5.3 Individual Question Rationale***

The detail below provides the rationale supporting the design of individual questions and groups of questions as they appear in the questionnaire and is the culmination of the review of questionnaire theory. In particular, links between the questions and the orientation hypotheses have been clearly indicated.

#### ***Questions 1, 2, 3, 4 & 5***

These questions provided a context for the later sections of the questionnaire. Corporate culture has a bearing on how aware the respondents are of cultural differences (Dowling *et al*, 1994). If the company had a great deal of involvement in international work, over a long period of time, one could infer that the corporate culture within which the respondent worked would be more attuned to cultural differences internationally than a company that has very little experience outside its domestic environment. A second function of these questions was to ‘ease’ the respondent into answering the questionnaire. Consequently, the questions are relatively straightforward.

#### ***Question 6***

This question was left open. It was found, during piloting, that some respondents felt the need to provide more contextual information than was allowed in Questions 1 to 5. This question gave them that opportunity.

#### ***Questions 7 & 11***

These questions were intended to partly answer extraneous variable (c) of the first secondary hypothesis and part of extraneous variable (a) of the second secondary hypothesis (see Section 5.2.2), namely;

*“... educational and training background of individual managers”*

#### *Questions 8, 9, 14 & 15*

These questions were particularly intended to address extraneous variable (b) of the first secondary hypothesis and part of extraneous variable (a) of the second secondary hypothesis (see Section 5.2.2), namely;

*“previous overseas experience ... of individual managers”*

#### *Questions 10 & 12*

These were administrative questions intended to confirm the managerial position and level of responsibility of the respondent, in line with the managerial hierarchy identified by Langford & Male (1991). As such, it sought to clarify the issue mentioned in Section 6.4.1.

#### *Question 13*

This was also an administrative question. According to Hofstede (1991), the cultural heritage of the respondent will have a significant bearing on the way that respondent behaves in any given multicultural environment. The respondent could not be asked their nationality, as this may not necessarily indicate the culture with which the respondent identified.

#### *Questions 16, 17, 18, 19 & 20*

In order to understand the nature of the respondent's behaviour in an overseas management role, the degree of diversity that respondent experienced on a day-to-day basis had first to be understood. Using Hofstede's (1991) cultural indicators (illustrated in Figure 3.1), an assessment could be made of the relative cultural difference between that of the respondents (indicated in answer to Question 13) and the social environment in which they found themselves.

#### *Question 21*

As with Question 6, this was an open question allowing the respondents to add information they thought might be relevant but had not been captured in the preceding questions.

### *Questions 22, 23 & 26*

These questions attempted to address extraneous variable (d) of the first secondary hypothesis and extraneous variable (b) of the second secondary hypothesis (see Section 5.2.2), namely;

*“individual managers’ personal sensitivity to cultural differences”*

Depending on the cultural environment within which they found themselves (indicated by the answers to Questions 16-20), the literature would suggest that they will find working overseas more problematic than working in the UK for a number of reasons, including cultural differences. Question 23 was purposely left open to prevent ‘leading’ the respondents to mention culture as a factor. If they failed to mention culture as a factor, this would imply a low degree of cultural sensitivity. An analysis of Question 26 would support the previous two questions by indicating the attitude the respondents took to culture.

### *Questions 24 & 25*

These questions attempted to address extraneous variable (a) of the first secondary hypothesis and the independent variable of the second secondary hypothesis (see Section 5.2.2), namely;

*“international company policy and strategic approach”*

Again, Question 25 was left open to see whether the respondents freely mentioned the cultural dimension as part of their answer.

### *Questions 27, 28 & 29*

In Question 27, the respondents were asked to rank a list of 12 managerial variables. These variables were based on a list of items considered vital to the success of internationally based managers in a model developed by Ronen (1989). This model is, in turn, based on three previous studies together with additional research (reported in Dowling and Schuler, 1990). All the variables are important to overseas managers but the sample were asked to indicate which were the most important to them by ranking the variables from 1 to 12 (1 being most important and 12 being least important). They were

then asked to list any additional factors they thought to be important in Question 28. The respondents were asked to give their reasons for their top four selections in Question 29. It was decided, as a result of a pilot survey, that requests for comments beyond the top four items would result in a substantially reduced response rate. The twelve items they were asked to rank could be divided into four groups. These were job related factors, cultural empathy and relationship factors, motivational factors and language. Table 6.1 shows the items and the category to which they belong. According to the orientation hypotheses, the cultural empathy and relationship characteristics would not be considered to be as important as the other factors, by the sample (Hall & Jaggard, 1998b).

| Ref | Characteristic                                | Grouping                          |
|-----|---|-----------------------------------|
| A   | Technical ability                             | Job related                       |
| B   | Good language skills                          | Language                          |
| C   | Flexibility of management style               | Cultural empathy and relationship |
| D   | Knowledge of company systems and organisation | Job related                       |
| E   | Tolerance of ambiguity                        | Cultural empathy and relationship |
| F   | Treating people in a non-judgemental way      | Cultural empathy and relationship |
| G   | Ability to relate to different cultures       | Cultural empathy and relationship |
| H   | Interest in specific host country             | Motivational factor               |
| I   | Willingness to learn from others              | Motivational factor               |
| J   | Administrative competence                     | Job related                       |
| K   | Interest in overseas experience               | Motivational factor               |
| L   | Ability to communicate intuitively            | Language                          |

**Table 6.2** Managerial variables to be ranked by respondents

### *Questions 30, 31 & 32*

Drawing on the cultural analyses of *inter alia*. Hofstede and Bond (1988), Kogut and Singh (1988) Trompenaars (1993) and Hampden-Turner and Trompenaars (1994), a series of cultural indicators were identified through reference to the construction management literature reviewed in Chapter 4. These indicators were found to be relevant to the experience of British construction professionals working internationally. The indicators primarily related to values, although certain of the indicators were purposely intended to reflect more superficial aspects of culture (items D, E, H and J). Responses to Question 30 would identify those cultural indicators that were most important to construction professionals working internationally. As with Question 27, the respondents were asked to rank the variables, in this case, from 1 to 10, with 1 being the most important and 10 being the least important. They were then asked to list any additional indicators that they thought were important in Question 31 and comment on their three highest ranked variables in Question 32.

These were a complex series of questions aimed to discover whether the respondents viewed culture from a parochial/ethnocentric perspective or whether they saw culture more from a contingency/synergistic perspective (Adler, 1991 and see Section 4.3.1). These questions sought to show how the respondents view the issue of cultural diversity, the independent variable of the first secondary hypothesis (see Section 5.2.2).

#### *Question 33*

Again, the respondents were offered the opportunity to provide additional comments to this open question.

#### *Question 34*

This question provided the respondents with an opportunity to mention any previous training or experience of culturally diverse working environments as reasons for their overseas posting. Furthermore, it may have given some indication of the strategic approach of the company by whom the respondent was employed. Thus, this question could provide data for both the dependent and independent variables of the second secondary hypothesis (see Section 5.2.2).

#### *Questions 35, 36, 37 & 38*

These questions sought to establish whether expatriates working internationally for construction companies received any training and, if they did, whether that training included cross-cultural management techniques. The questions were worded to enable the respondents to volunteer their answers, rather than providing them with potentially 'leading' lists of possible training they may have received.

#### *Question 39*

This question formed an integral part of understanding the second secondary hypothesis as it indicated whether cross-cultural training was considered by the respondents to be of value. If they felt it not to be so, then companies would see no reason to provide it. However, the value of training as perceived by the respondents had to be viewed in light of their stance to cultural differences as an issue in overseas construction management.



#### *Question 40*

The final question allowed the respondents to add anything they thought might be relevant to the issue of training and preparation for overseas working.

### **6.6 Piloting**

Piloting can help not only with question wording but also with procedural matters such as the design of the letter of introduction, the ordering of question sequences and the reduction of non-response rates (Oppenheim, 1992). It is essential to pilot every question, every question sequence, every inventory and every scale. Also, the question layout on the page, the instructions for respondents, the answer categories and even the question-numbering system should be piloted. In the case of open questions, not only the question itself but also the coding and quantifying of responses needs to be piloted.

#### **6.6.1 A Piloting Strategy**

With due regard for the time constraints and limited resources available for this particular research project, the piloting strategy was to distribute the questionnaire to university construction departments throughout the country, as well as to some individuals in industry, who had experience of working overseas. In this way, feedback was received on both methodological issues and practical issues of the questionnaire.

#### **6.6.2 Results from the Pilot Survey**

The responses to the pilot survey were insufficient for meaningful statistical analyses to be conducted. However, the qualitative element was analysed. Each respondent was profiled according to their experience, education and other contextual factors. This allowed predictions to be made about their likely responses to cultural diversity. The main findings from this process are listed below.

1. While the context for each respondent varied little, a factor that did vary was the nature of the organisation for which they worked. They worked for a variety of companies, each with a different profile. Some had a fairly minor involvement in international work and provided little or no training. Others were major international

organisations providing high levels of training and support. Another area of variability was the scale of cultural diversity to which they were exposed. Some were working in high context and exceptionally diverse cultural environments. Others were working in parts of Europe which, although culturally very different to the UK, were, nevertheless, familiar and of a similar contextual nature.

2. None of the respondent's reacted to culture in, what could broadly be described as, an ethnocentric manner. Some of them considered a larger number of factors to be more important than others, but they all thought job related issues were generally of less importance. Similarly, they all considered relationship and motivation factors as vital to their success as expatriate managers.
3. In the final analysis, all the respondents' reacted to their culturally diverse environments in broadly the way they were expected based on their profiles. Consequently, there would appear to be a match between the patterns of each case and the theoretical predictions.

In order to find meaning from these findings reference was required to the original orientation hypotheses being explored by the survey. They were that:

*Managers operating internationally for British construction enterprises adopt an ethnocentric/parochial approach in response to cultural diversity.*

*As part of their international company policy and strategic approach, British construction enterprises provide little or no training and education in cross-cultural issues for their managers who are working in a culturally diverse environment.*

The second of these propositions was easily testable. The individuals representing British construction enterprises overseas reported receiving no specific training prior to their posting. This was with the exception of the one who received language training prior to working in Europe, which was for well-recognised reasons. Furthermore, the respondents believed that the main criteria in their selection were traditional technical qualities as opposed to how well they might respond to their new environment. There was one exception to this, who was carefully selected by and received extensive training from the Overseas Development Agency (ODA).

Interestingly, the respondents did not seem to feel they needed training. When asked the question, they specifically said that information about the country and its culture would have been helpful. This does make sense in light of their profiles (well educated and experienced), and in light of their reported response to cultural differences. As mentioned previously, none of them adopted, what might be called an ethnocentric or parochial approach to cultural diversity (the first orientation hypothesis).

### ***6.6.3 Changes to Survey in Light of Piloting Exercise***

Changes to the questionnaire were in two areas: general layout and style; and question wording. In general terms, the questionnaire presented few problems to those who responded. Although they seemed to be uncomfortable with open questions (preferring tick boxes), they had few problems understanding what was required and in two cases, suggested more space was required to enable lengthier answers. The final questionnaire (shown in Appendix 1) required additional questions and changes in the sensitivity of existing questions. The main change was in the inclusion of more options for responses and in changing the scale for (what became) Questions 27 and 30, from a Likert-type scale to a rank-order-type scaling system. This was because all the factors listed were found to be important. The purpose of the questionnaire was to assess which factors were *most* important.

## **6.7 Survey Sampling Procedure**

### ***6.7.1 Total Survey Population***

As with most survey populations, it is difficult to establish the precise number of British construction professionals currently working internationally. However, an estimate has been made, using the following method.

It has been decided to state the potential population as being the combined total of the overseas membership of the four main, British, construction professional organisations. These are the Royal Institution of Chartered Surveyors (RICS), the Royal Institute of British Architects (RIBA), the Institution of Civil Engineers (ICE) and the Chartered

Institute of Building (CIOB). Between them, these organisations probably represent the vast majority of chartered construction professionals, although it is recognised that professionals from other institutions may also be represented overseas. However, as numbers from these are relatively minor, they have been excluded from the survey population. Table 6.3 indicates the number of registered members from each of these Institutions who were working overseas.

|                    | <b>RIBA</b> | <b>RICS</b> | <b>ICE</b> | <b>CIOB</b> | <b>Total</b> | <b>%</b> |
|--------------------|-------------|-------------|------------|-------------|--------------|----------|
| <i>Africa</i>      | 576         | 1322        | 1100       | 428         | 3426         | 10.8     |
| <i>Australasia</i> | 723         | 1142        | 1081       | 393         | 3338         | 10.5     |
| <i>Asia</i>        | 1947        | 7362        | 5394       | 2253        | 16956        | 53.5     |
| <i>Europe</i>      | 848         | 1102        | 1130       | 394         | 3474         | 11.0     |
| <i>Middle East</i> | 151         | 338         | 283        | 110         | 882          | 2.8      |
| <i>Americas</i>    | 819         | 1215        | 1179       | 423         | 3635         | 11.5     |
| <i>Total</i>       | 5064        | 12481       | 10167      | 4000        | 31712        | 100.0    |
| <i>%</i>           | 16.0        | 39.4        | 32.1       | 12.6        | 100.0        |          |

**Table 6.3** Estimate of British Construction Professionals Based Overseas

There are a number of flaws associated with this approach. It is unlikely, however, that any other method will be without similar flaws and, for the purposes of this survey, which is intended to be both quantitative and qualitative in nature, the approach is considered suitable. Problems include:

- Overseas members being foreign nationals who have joined the respective Institution and not British nationals working internationally. However, it is anticipated that foreign nationals will comprise a small number of total overseas members in any given institution as the structure of construction professions with the UK is peculiarly fragmented, with many professions being unique to the British industry.
- Duplication of membership. In some instances, professionals will hold membership of more than one professional Institution. This is particularly true of the CIOB, the members of which can hold membership of either the RICS or ICE.
- Differences in grades of membership and accuracy of membership records. The Institutions' have different practices in this respect. For example, the RICS has four main grades of membership, but only updated annually and does not provide figures for either the student or the probationer grades. In contrast, the ICE maintains records

for 20 separate grades and is able to provide figures for all those grades, updated on a daily basis.

- Individuals without professional affiliation. Some individuals have worked for many years in the industry without acquiring formal qualifications or joining an Institution. These individuals have, in some cases, reached positions of seniority and some of them will be based in managerial positions overseas. Such individuals will not be included in the figure for the total population. However, it is expected that this figure will be quite small, as one of the requisites for receiving an international posting is often to be a member of one of the professional institutions.

Table 6.3 was compiled using figures available at October 1997. Each of the Institutions was individually contacted and asked to provide more detailed information concerning the geographical location of their international membership, incidences of duplication between Institutions and numbers of non-British members. This should help address some of the flaws identified in establishing the sample frame.

#### **6.7.2 Sampling Rationale**

The following principles were incorporated within the sampling procedure:

- Specific consideration was given, within the sampling strategy, to collecting 'representative' responses from the regions identified in Table 6.3 above. This would enable comparisons to be made between different regions and, possibly, individual countries.
- A further comparison could be made between the different professions, e.g. architects, surveyors and engineers. Bearing in mind the differences between the professions as a consequence of their respective educational and professional cultures (i.e. architecture having an 'artistic' paradigm while, in contrast, civil engineering could be said to have a 'scientific' paradigm), together with the view that certain aspects of an individual's cultural make-up are developed at the organisational and occupational level (Hofstede *et al*, 1990), there is a possibility that professionals from different construction backgrounds will respond differently to cultural differences more because of their training than their underlying cultural value system.

Thus, the sampling strategy was designed to yield approximately proportional responses across the professions.

Because the survey contained a substantial qualitative element, each response could be regarded as an individual case, with case study analysis techniques being used in the analysis to supplement the statistical analyses. In this instance, for the survey to be 'representative', the respondents had to represent a 'range' of different contexts and backgrounds. According to Yin (1994) in generalising from cases, arriving at the number of replications required is analogous to selecting levels of significance in statistical studies. The choice of a number is not based on any formula but is a matter of discretionary, judgmental choice. The greater number of cases, the greater one's certainty in the veracity of the results. A further factor in the decision as to the number of cases required is based on the degree of complexity contained in the area of external validity. Where there is uncertainty that external conditions will produce different case study results, a larger number of cases may need to be identified. Additionally, an element of statistical manipulation of the results was possible across certain variables where trends were discernible. From the perspective of this 'quasi-statistical' characteristic of the survey, a high number of respondents were desirable. In summary, the sampling procedure aimed to yield results that contained a high degree of variability to enable sufficient theoretical replication. At the same time, a large number of responses would be desirable in order to observe any statistical trends that may emerge.

### ***6.7.3 Sampling Procedure***

The sampling procedure was not statistical in nature. This was for a variety of reasons. For example, the ease with which potential respondents could be contacted varied. The RICS provided a breakdown, in their yearbook, of chartered surveyors based overseas, together with their specific locations. However, the RIBA merely listed registered members in alphabetical order, regardless of their locality. Furthermore, in order to maximise the number of responses, each potential respondent was invited to distribute the questionnaire to any colleagues they thought might be interested in responding. Similarly, some international contractors and consultants were contacted directly and asked to provide lists of potential respondents who could then be contacted directly.

In the event, the sample was based on proportions of construction professionals currently working overseas. This is known as stratified sampling, in that different sections of the population were identified and sampled independently (Fowler, 1993). It was decided not to contact CIOB members (due to lack of details). Instead, these members were assumed to work for contractors and, thus, those questionnaires sent to contractors are included in this category as ‘others’ (their profession was generally unknown). Table 6.4 shows the number of potential respondents and the total number of questionnaires sent. Section 6.7.4 explains how the number of questionnaires eventually posted (484) was established. The difference between the notional number of posted questionnaires (based on proportions of different professionals working overseas) and the actual number of posted questionnaires reflects the relative difficulty or ease with which contact information could be sourced. The main sources of contact details were published yearbooks and published company information. Contacts were chosen randomly from yearbooks. The response rate is reported in Chapter 7.

|  | Architects | Surveyors | Engineers | Others<br>(CIOB) | Totals |
|--|------------|-----------|-----------|------------------|--------|
| <i>Total sample frame by profession<br/>(see Table 6.1)</i>                | 5064       | 12481     | 10167     | 4000             | 31712  |
| <i>Proportion of professions in sample<br/>frame</i>                       | 16         | 39.4      | 32.1      | 12.6             | 100    |
| <i>Proportionate distribution of<br/>questionnaires</i>                    | 77         | 189       | 155       | 63               | 484    |
| <i>Actual distribution of<br/>questionnaires</i>                           | 68         | 225       | 126       | 65               | 484    |
| <i>Percentage difference between<br/>proportionate/actual distribution</i> | 87.8       | 119.2     | 81.4      | 103.3            |        |
| <i>Actual proportion of questionnaires<br/>distributed</i>                 | 14         | 46.5      | 26        | 13.4             | 100    |

**Table 6.4** Sample Distributions.

#### **6.7.4 Number of Responses Required**

While a large number of responses were desirable, both for literal case study replication and in order to observe any quantitative trends which may have arisen, an essential element was variability in the responses, in order to enable sufficient case replications to be made. Bearing in mind the lengthy and complex nature of the questionnaire, if responses were required from 1 per cent of the total population (approximately 310 responses), at least 1550 questionnaires would need to be sent out (assuming an optimistic 20% response rate). More realistically, to obtain 80 responses (about ¼ percent of the total population) would probably require about 400 questionnaires to be

posted. In short, there is no 'correct' sample size for a survey (Fowler, 1993). Certainly, a larger sample will increase the reliability of the survey. There are three main approaches to calculating sample size, none of which are satisfactory. These are: to specify a fraction of the population; using an 'accepted' number that is typical for such populations; and calculating the confidence intervals for a specific variable. Fowler (1993, pp. 42-43) notes that precision increases steadily up to sample sizes of 150 to 200, after which gains in precision are more modest. Bearing in mind sample size is connected with response rate, it is appropriate to consider how many responses are required and calculate based on that. A response rate under 20 percent would render the survey statistically redundant as, below this percentage, the final sample is unlikely to have any relationship to the original sample, being essentially self-selected. In such instances, the respondents cannot be generalised to the population as a whole. It was anticipated that approximately 80 responses would be sufficient for the main analysis aspects of the survey (both quantitative and qualitative), as this would provide sufficient numbers for statistical manipulation, while, at the same time, being achievable from a practical perspective. Thus, for the survey to be regarded as a success, at least 80 responses were required, with a response rate greater than 20 percent. In the event, 484 questionnaire were posted to individuals. Thus, the minimum number of respondents required would be in the region of 100.

## **6.8 Summary**

The aim of the survey was to collect data describing the experience of British construction professionals currently working outside the UK. The resulting data included both qualitative and quantitative elements. A survey was selected as it would provide population validity while the qualitative elements introduced ecological validity. The design of a survey requires a plan, involving a series of stages between which iterations are necessary. Once the plan has been established, the key stages can be executed. Some aspects of the plan have been satisfied in previous chapters. Others remain to be completed in the remaining chapters.

The design of a questionnaire that is both valid and reliable requires careful attention to question wording and other details. To achieve improved reliability, question wording seeks to accomplish a consistent meaning for all the respondents and to yield



standardised responses. Validity was ensured in the instance of this survey through the inclusion of open questions relating to closed questions. It is important to decide what type of measures are required (nominal, ordinal, interval and ratio). This is linked to the type of questions asked, which becomes a particular issue when the questionnaire is seeking to elicit subjective data. Finally, strategies are available to improve the validity of both factual and subjective questions.

Within the context of the questionnaire in this study, a number of key issues related to the nature of the area of interest needed particular attention during questionnaire design. These were:

- Different levels of management, who will have different perspectives of working overseas due to their different positions within the decision-making structure.
- Different types of construction enterprise, primarily focusing on the difference between contractors and consultants.
- Cultural relativity, which means that British construction professionals working in some locations will have different experiences to those in others.
- Cultural manifestations along the dimensions, which mean that, together, they provide a convenient framework for developing the questions and framing the analysis.

The questionnaire instrument comprised four sections together with ancillary documents. The first two sections sought to acquire data relating to the companies for which the companies worked and information relating to the individual respondents. The third section aimed to elicit data concerning the way the respondents' reacted to and managed within an overseas environment. The fourth section focused on the training and preparation provided to new and experienced expatriates.

Piloting is an essential element of questionnaire design. The piloting procedure not only seeks to ensure the validity and reliability of the questions asked but also seeks to ensure that the questions are appropriate, comprehensible and result in useful data. The piloting strategy, whilst limited by time and resource constraints, did result in a number of changes and alterations to the final questionnaire and allowed an initial analysis to be conducted.

Another requirement prior to launching the survey instrument proper, is to establish the survey population and develop an appropriate sampling strategy. Based on responses from the four main institutions representing construction professionals in the UK, it was possible to estimate the population of British construction professionals working outside the UK to be in the region of 32,000. The sampling technique was designed to provide representative responses from the groupings identified, while providing sufficient responses to allow statistical testing of the sample. The stratified sampling procedure targeted a total of 484 individuals from the four professional groupings identified. Otherwise, the sample was selected randomly.

## CHAPTER SEVEN

Father, Mother, and Me,  
Sister and Auntie say  
All the people like us are We,  
And everyone else is They.  
And They live over the sea  
While we live over the way,  
But – would you believe it? – They look upon We  
As only a sort of They!

Rudyard Kipling  
*We and They – 1st Stanza*

## **7.0 SURVEY ANALYSIS**

### **7.1 Survey Responses**

Chapter 6 reported that 484 questionnaires had been sent to construction professionals working overseas. Of these, 68 were sent to architects, 225 were sent to surveyors, 126 to engineers and 65 to others. The responses from these different categories are shown in Table 7.1.

|                                       | Architects  | Surveyors   | Engineers   | Others<br>(e.g. CIOB) | Totals     |
|---------------------------------------|-------------|-------------|-------------|-----------------------|------------|
| Actual distribution of questionnaires | 68          | 225         | 126         | 65                    | 484        |
| <b>Number of responses</b>            | <b>15</b>   | <b>61</b>   | <b>52</b>   | <b>17</b>             | <b>145</b> |
| <b>Percentage response rate</b>       | <b>22.1</b> | <b>27.1</b> | <b>41.3</b> | <b>26.2</b>           | <b>30</b>  |
| Percentage of total respondents       | 10.3        | 42.1        | 35.9        | 11.7                  | 100        |

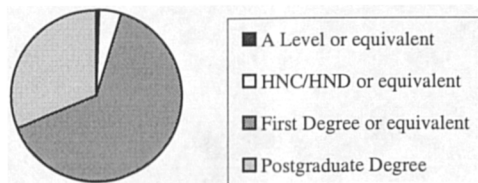
**Table 7.1** Survey Response

The number of questionnaires received (n=145) was substantially greater than the 80 indicated as being required in Section 6.7.4. Additionally, the 30% response rate is widely considered as being adequate to regard statistical analysis of the responses received to be representative of the entire sample. Just as there are no specific rules on how big the sample should be, there is equally no agreed standard for response rates (Fowler, 1993). While the respondents are almost certainly biased to the topic of interest (international construction), the specific focus of that interest was not revealed until Section C of the questionnaire, reducing the bias in this respect. Even then, cultural indicators were only one of several types of indicator provided in Question 27 of the questionnaire, hopefully reducing the bias further.

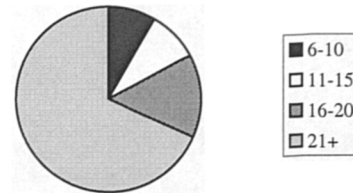
The respondent profile can be further described by a number of different indicators. These are shown in the following charts. The first set of charts describe characteristics of the respondents themselves. The second set of charts describe characteristics of the companies for whom the respondents worked. The data populating these charts were collected in Sections A and B of the questionnaire.

### 7.1.1 Characteristics Describing the Respondents

The data describing the respondents themselves were gathered in Section B of the questionnaire (see Section 6.5.3). However, as this is considered most pertinent to the experiences of the respondents in an overseas construction context, these data are presented first.

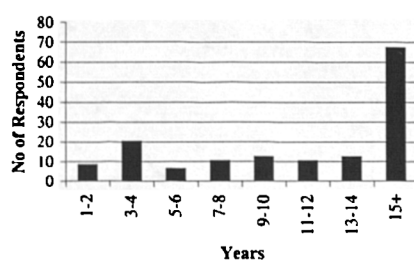


**Figure 7.1** Level of Education

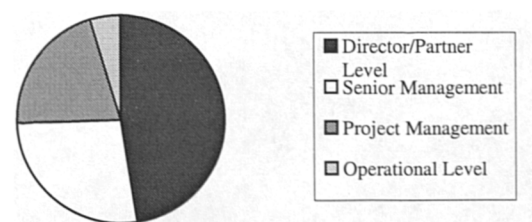


**Figure 7.2** Total Number of Years in Industry

The level of education of the respondents (Figure 7.1) was revealed by their responses to Question 7. It was originally thought that there may be a relationship between this factor and the reaction of the respondents to cultural differences. However, it can be seen that the general level of education of the respondents was good (first degree or postgraduate qualifications). This would be expected of 'construction professionals'. It is unlikely that any meaningful statistical inference can be drawn from this factor. The data in Figure 7.2 (derived from Question 8) shows that the majority of the respondents had had considerable experience of the construction industry generally.



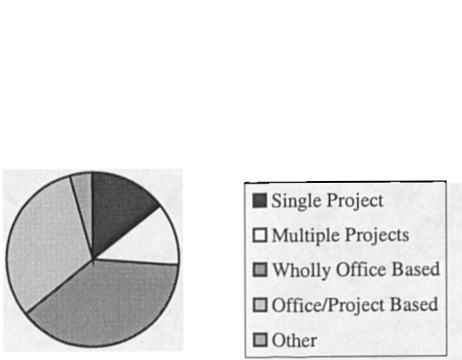
**Figure 7.3** Total Number of Years Working Overseas



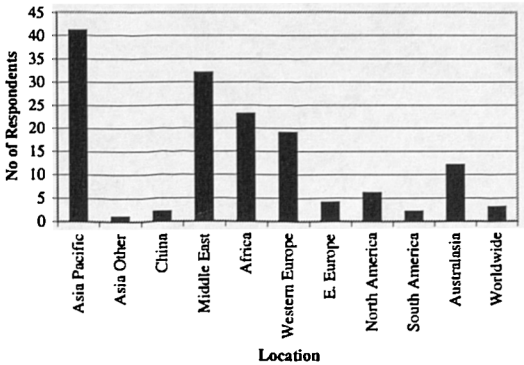
**Figure 7.4** Managerial Level of Responsibility

Figure 7.3 (data from Question 9) shows more interesting data. This indicates the period of time the respondents had been working outside the UK. In broad terms, the periods can be separated into a short period, i.e. less than 6 years ( $n=34$ ), a medium period, i.e. between 7 and 12 years ( $n=32$ ) and a long period, i.e. 13 years or more ( $n=79$ ). This produces sufficient numbers to correlate with the responses in later parts of the

questionnaire. Similarly, Figure 7.4 (in response to Question 10) enables the day-to-day activities of the respondents to be ascertained and correlations based on this to be made.

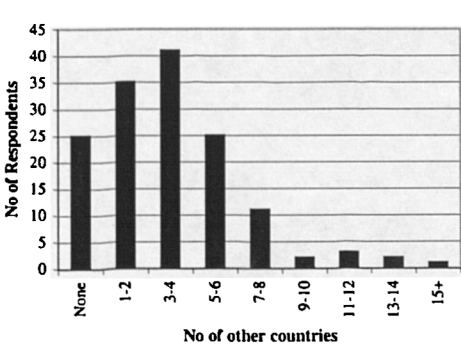


**Figure 7.5** Nature of Respondent Job

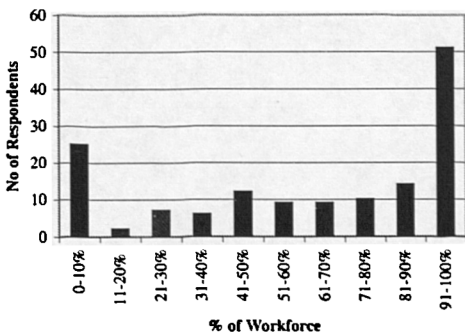


**Figure 7.6** Location of Respondent

The nature of the respondents’ jobs (Figure 7.5 from Question 12) is interesting, as it enables a comparison to be made between those based on construction sites and those who are more office based. The ‘other’ category included partners and directors who took responsibility for several projects at that level and those individuals who traveled widely in a range of marketing and project management roles. The locations of the respondents (Figure 7.6) indicates concentrations in mainly four regions of the world. These were Southeast Asia (n=41), the Middle East (n=32), the African continent (n=23) and Western Europe (n=19). If Eastern and Western Europe were combined, this would increase the concentration in that region (n=23). There was also a smaller concentration of responses from Australasia (n=12).



**Figure 7.7** Experience of Other Countries



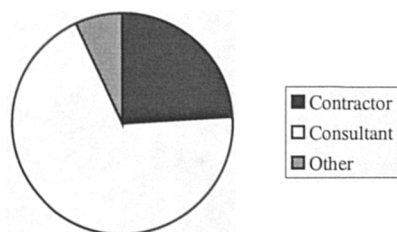
**Figure 7.8** Diversity Among Subordinates

Finally, Figures 7.7 (from Question 15) and 7.8 (from Questions 17 and 18) provide an indication of the level and degree of exposure that the various respondents had previously experienced in a working environment and were currently experiencing. In terms of previous locations, while some respondents had lived and/or worked in a great

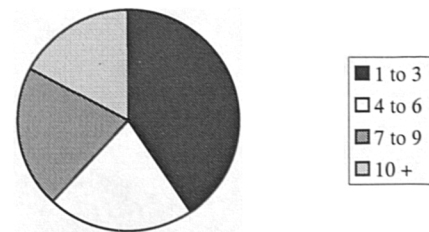
many different countries other than the one in which they were currently based, the vast majority (87%) had previously worked in six countries or less and, for 17% of the respondents, their current location was the only country in which they had worked. By contrast, a great many respondents were exposed to a high degree of cultural diversity in their daily working lives. Nearly 52% had a group of subordinates of whom 71% or more were of a different cultural background. On the other hand, over 17% of the respondents worked in environments where they had no subordinates from a different culture. While questions were asked relating to the cultural diversity of their colleagues, clients, and other industry relationships, these proved too variable to capture in numerical terms. However, this element of the questionnaire is covered in the qualitative analysis.

### ***7.1.2 Characteristics Describing the Respondents' Organisations***

The data describing the organisations for which the respondents worked is possibly less interesting than those data describing the respondents themselves. The influence of the construction organisations on the way the respondents reacted to and viewed cultural differences in the environment in which they worked is difficult to determine with much certainty, as the causality between the nature of the organisation and the respondents views is uncertain. However, there may be a relationship between, for example, the period of time the organisation has been involved in overseas construction activities and the degree of sensitivity to cultural differences exhibited by the respondents. Thus, tentative correlations can be drawn and the findings incorporated into the overall analysis as a means of explaining unforeseen results.



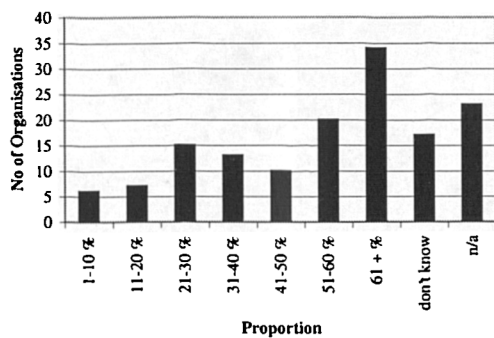
**Figure 7.9** Type of Organisation



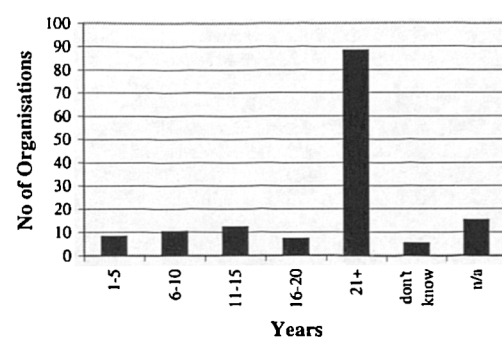
**Figure 7.10** Number of Regions in Which Company Operates

Figure 7.9 (from Question 1) indicates that the majority of the respondents worked for consultants. This possibly bears out the view, made by some of the interviewees (see Chapter 9) that consultancy is more 'exportable' than contracting. It may also reflect the fact that fewer construction professionals employed by contractors and working

overseas will be listed as such in their respective Institutions’ yearbooks. Additionally, contractors are more likely to employ managers without professional qualifications who have ‘worked their way up’ from more junior positions or ‘from the tools’. For example, all the respondents who had HND/HNC or lower qualifications worked for contractors. The ‘other’ category included people who worked for organisations such as government agencies and aid/voluntary groups. Figure 7.10 (derived from Question 3) shows that the largest group of organisations worked in three or fewer geographic regions outside the UK (n=59).



**Figure 7.11** Proportion of Activities Carried Out Overseas



**Figure 7.12** Number of Years Involved in Overseas Activities

It can be seen from Figure 7.11 (from Question 4) that there was a relatively even distribution across the various categories for the proportion of work organisations carry out overseas. The largest proportion of respondents worked for organisations that carried out the majority of their operations outside the UK (more than 37%). The ‘not applicable’ category tended to be completed by those respondents who worked for foreign companies or other nations’ governments. Figure 7.12 (from Question 5) shows that most of the organisations had been working overseas for a great many years. Again, the ‘not applicable’ category was used by respondents who worked for foreign-based organisations.

## 7.2 General Analysis Issues

The general approach to the analysis of the questionnaires was partly quantitative and partly qualitative in nature. In part, this was due to the nature of the research question, which was more aimed at improving understanding rather than testing hypotheses. Additionally, it was difficult to substantiate a firm causal link between the dependent and independent variables. Therefore, an analysis relying entirely on statistical



correlations would have little meaning alone. Thus, the large number of open questions yielded many written answers that enabled the statistical analyses to be considered in terms of their content. In this sense, the written responses were used as a means of illuminating and enriching the findings of the statistical analyses, thereby taking the “dustbowl empiricism” of the survey data and developing it with “meaningful and rich” data provided in conjunction with the numerical indicators (Hartley in Cassell & Symon, 1994).

Furthermore, the written responses can also be regarded as arms-length structured interviews. This means that each individual questionnaire could be analysed on a case-by-case basis. These cases could be generalised to the case of the British expatriate working in the international construction industry through the use of pattern matching analysis (Yin, 1994).

The types of analyses can be divided into two broad categories:

1. Analyses of the questions containing the dependent variables against the independent variables for the entire sample. This allowed for questions to be asked and findings to be expressed and elaborated on for construction expatriates generally.
2. Analyses by major subgroupings. Within the independent variables for the entire sample reside a number of major subgroups. In some instances, the findings differ between specific groups and where this is the case, those differences are exposed using statistical tests and explained by reference to the analysis of the textual data.

### **7.2.1 Statistical Analyses**

The questionnaire contained three main questions against which the various contextual variables could be related. These were contained within Section C of the questionnaire – Questions 22, 27 and 30. The results from these questions were correlated against data arising from Sections A, B and D of the questionnaire, which contained questions describing the respondents themselves. The basic statistical test used to draw inferences about the data was the *two-tailed z test*. The *z test* is a method of comparing the mean averages of different sets of data to see whether or not there is a statistically significant difference between them. Details of these tests can be found in Appendix 2. Throughout

the tests, the level of significance was taken as being 1% ( $P=0.01$ ), on the basis of the following categories (Coolican, 1994).

- Significant:  $P \leq 0.01$
- Highly significant:  $0.01 > P \leq 0.001$
- Very highly significant:  $0.001 < P$

It should be remembered that while the statistics employed to analyse the data were not particularly sophisticated, the strength of the analysis lay in supplementing the statistical findings with qualitative data.

### *7.2.2 Qualitative Analyses*

The non-numerical data arising from the respondents' answers to the various open questions was read and coded into categories. The qualitative computer software package NUD\*IST (an inferential database) was used as a means of storing and analysing the qualitative findings (see Appendix 9).

Open questions were asked throughout the questionnaire but the most important questions were those asking the respondents to elaborate on their responses in Section C, namely: Questions 23, 28, 29, 31 and 32. The coding was performed inductively, that is; the answers to each question from each respondent were read and the answer placed into one of a variable number of categories for that question. Rather than impose predetermined categories upon the answers, the categories were created as they became apparent from the answers. This process was applied to every response to every open question. In applying the results of this analysis process to the entire sample analyses (Section 7.3), the coding for each category identified was totalled and the nature of the categories made explicit through liberal use of quotations from the returned questionnaires. Where the sample was analysed according to subgroupings, demographic data were used to cross-reference the coding, allowing the arising patterns to emerge. In this way, pattern matching, as described by Yin (1994) occurred. In each instance, the results of the coding were gathered in tables, summarising the coding and ranking the categories discovered within each set of question responses.

## 7.3 Entire Sample Analyses

### 7.3.1 Relative Difficulty of Working Overseas in Construction

In the first instance, the analysis aimed to discover characteristics of the sample of respondents as a whole. This enabled meaningful comments to be made about all construction professionals working overseas. The analysis focused on the questions containing the dependent variables – primarily those contained within Section C of the questionnaire.

|                | Number | Percentage |
|----------------|--------|------------|
| More difficult | 88     | 60.69      |
| About the same | 46     | 31.72      |
| Less difficult | 11     | 7.59       |
| Totals         | 145    | 100.00     |

**Table 7.2** Relative Difficulty of Working Internationally

Table 7.2 (derived from responses to Question 22) shows that, on average, the majority of respondents found it more difficult working outside the UK construction environment compared with working in a domestic environment. However, a sizeable minority thought that there was little difference. Question 23 asked the respondents to explain their answers shown in Table 7.2. When collected into categories, these explanations provide an indication of why the respondents considered working overseas to be more difficult, easier or about the same as working in the UK. Of the 88 saying that working overseas was more difficult than working in the UK, 74 mentioned the *cultural differences* they encountered as being a factor. Many respondents simply stated something like ‘differences in culture’, often together with a number of other factors. Others mentioned aspects of the people they were working with that were culturally related. For example, the following comments were categorised as culturally related comments:

“French bureaucracy and administration.” (Respondent 34).

“Habits and expectations of members of international teams (e.g. Dutch, Belgian, American, Czech and British) add problems.” (Respondent 35).

“Way of doing business. Attitude to safety, quality etc. Less thought to planning.” (Respondent 65).

Others provided fairly detailed explanations of the cultural differences to which they were referring and what it was about those cultural factors that made their job difficult. As an example, the following comments were given:

“Culture differences primarily, e.g. the time to action things; the structure of management (too many); the slowness to change...” (Respondent 24).

“Different perceptions and expectations. Language barrier. Corruption. Different standards of integrity and professionalism.” (Respondent 107).

“Coping with and mediating between differing cultural habits and customs.” (Respondent 139).

It can be seen from the quotations that the type of cultural issues mentioned varied quite considerably, from ideas of language, habits and customs to lies, bribery and corruption. In fact, of the 74 respondents who mentioned cultural differences, 15 made specific mention of ideas of corruption, differences in ethical standards and differences in professional integrity. Other factors were also used to explain working overseas as being more difficult. 55 respondents thought that conditions of the *working environment* itself were important:

“Lack of experience from local clients and colleagues. Lack of technical information and knowledge. Poor supply of building products and trade information.” (Respondent 11).

The other factors mentioned were: *logistical difficulties* (n=15), such as difficulties with “communications and distances” (Respondent 34); *personal issues* (n=11) such as keeping in touch with friends and money problems; pressures related to their *company* (n=10) such as “Greater expectations. Heavier workload” (Respondent 1); and *family pressures* (n=7), for example:

“Family life can suffer due to fears for security and/or lack of leisure facilities for children and consequent inability to be as mobile as in the UK.” (Respondent 121).

Thus, it can be seen that while culture was by far the most important factor making working overseas more difficult for construction expatriates, other factors also made working and living overseas difficult, with many respondents mentioning more than one issue.

Of the 46 respondents who thought that working outside the UK was neither more difficult nor easier than working in the UK, the majority again mentioned issues relating to *cultural differences* (n=19). In some instances, they thought the effect of those cultural differences could be reduced through management:

“Overseas working involves educating people in the culture of equitable working to contract whilst maintaining records.” (Respondent 51).

In other instances, they saw the advantages of working overseas as outweighing the difficulties imposed by cultural differences:

“Whilst initially there are linguistic and cultural difficulties, the pros and cons effectively even each other out. The UK can be very rigid with less opportunity.” (Respondent 77).

A further 6 respondents mentioned the fact that the environment in which they worked was culturally very similar to the UK and, therefore, was not an issue affecting them. These respondents mainly worked in Australia and the USA. There were many other factors mentioned here that were similar to those mentioned by the previous tranche. However, these tended to be perceived differently. They included the *working environment* (n=14):

“In certain aspects there are less problems, particularly technical and work related.” (Respondent 32).

*logistics* (n=3):

“Remote from head office, information sources, etc. but modern communications mitigate this.” (Respondent 104).

*company related* factors (n=3), such as “ [the] company ensures we are well prepared” (Respondent 28) and 1 person who mentioned *personal issues*. Even where these issues were seen as being negative, they tended to be mitigated by positive factors, such as *good lifestyle* (n=2) and *job satisfaction* (n=1). However, the overwhelming impression from this group of respondents was that they felt that working overseas was, in some way, *just different* (n=17). For example, the following comments were made:

“Problems are always different – but skills and difficulties of resolving problems are similar.” (Respondent 16).

“Problems associated with working overseas are no more numerous but tend to be different in nature...” (Respondent 41).

“Not more difficult than the UK but very different...” (Respondent 104)

Related to these responses were those who mentioned *contextual* issues (n=3), such as:

“Everywhere has it’s own challenges. Hong Kong has very tight programmes and high inflation but is less contractually minded [than the UK] and has an expanding economy to date!” (Respondent 2).

Finally, 2 respondents said that, although there were problems initially, these became less important as they gained in experience over *time*.

Although, only 11 respondents said that working outside the UK was easier than in the UK, even this small number was surprising. Intuitively, it would seem that working overseas would *have* to be more difficult than working in your domestic environment. However, a glance at these respondents’ explanations provided understanding of the surprising results. For this group, again *time* was an important factor (n=3). For example:

“Not worked in UK since 1979 so it would be very problematic for me to work *there*.” (Respondent 5)

*Cultural differences* were also mentioned (n=3) but, this time, in the context of “less formality” (Respondent 125). Another culturally related factor was *relationships* (n=4). The respondents preferred personal contact and less formality. Other categories were an improved *lifestyle* (n=1), an *interest* in the country in which they were working (n=2) and the esteem in which British *professional integrity* was held (n=1).

In summary, the responses showed that the respondents were keenly aware of cultural differences and the effect these had on their working lives overseas, refuting the first of the secondary orientation hypotheses. This was the case even for those who found working overseas ‘about the same’ or ‘less difficult’ than working in the UK.

### 7.3.2 Important Factors in Working Overseas in Construction

Question 27 comprised 12 separate factors, requiring the respondents to rank them in order of importance to their job as a construction professional working outside the UK (see Chapter 6). The range of possible rankings was from 1 to 12. Thus, the hypothetical mean average for each factor across the entire sample would be 6.5. The mean average for each factor was either above or below the hypothetical average. The purpose of the statistical test was to determine whether this difference in the mean averages was significant. If it was significant, that factor would either be significantly important (i.e. below the hypothetical mean) or significantly unimportant (i.e. above the hypothetical mean). The results are presented in Table 7.3 below. The calculations for these results can be found in Appendix 3.

| Ref. | Factor  | Mean | Test Statistic |
|------|---|------|----------------|
| A    | Technical ability                             | 4.30 | -8.03 *        |
| B    | Good language skills                          | 8.79 | 7.85 **        |
| C    | Flexibility of management style               | 3.94 | -10.39 *       |
| D    | Knowledge of company systems and organisation | 8.52 | 8.14 **        |
| E    | Tolerance of ambiguity                        | 7.30 | 2.79 **        |
| F    | Treating people in a non-judgmental way       | 6.41 | -0.35          |
| G    | Ability to relate to different cultures       | 4.11 | -9.52 *        |
| H    | Interest in specific host-country             | 8.31 | 6.49 **        |
| I    | Willingness to learn from others              | 6.61 | 0.42           |
| J    | Administrative competence                     | 6.32 | -0.71          |
| K    | Interest in overseas experience               | 8.88 | 9.14 **        |
| L    | Ability to communicate intuitively            | 4.50 | -8.19 *        |

**Table 7.3** Significance of Factors Comprising Question 27

\* significantly important at  $P=0.01$

\*\* significantly unimportant at  $P=0.01$

From Table 7.3, it can be seen that, at the 1% level, four management skills were considered to be significantly important by the respondents as a whole. They were, in order of importance:

1. Flexibility in management style (item C).
2. The ability to relate to different cultures (item G).
3. Technical ability (item A).
4. The ability to communicate intuitively (item L).

A further five of the management skills were considered to be significantly unimportant by the respondents as a whole. These were, in order of decreasing unimportance:

1. Possessing an interest in overseas experience (item K).
2. A knowledge of their organisation's systems and procedures (item D).
3. Language skills (item B).
4. Interest in the specific country in which they were based (item H).
5. Tolerance of ambiguity (item E).

The remaining three management skills were found to be neither very important nor very unimportant. The findings would generally appear to support the findings from analysis of Questions 22 and 23, in that they refute the first secondary orientation hypothesis. British construction professionals working overseas did see cultural differences as an important issue – so much so that they valued the specific managerial skills required to deal with those cultural differences. Furthermore, personal issues and competence factors were either viewed neutrally or seen as been unimportant in relation to those cultural management skills. Thus, although these findings alone do not give an indication of whether the construction expatriates in the sample were ethnocentric or otherwise, they do show that those expatriates were not parochial in their attitude to the cultural differences which they were encountering. In other words, they were keenly aware of the importance and influence that cultural differences had in their respective working environments and daily lives. These statistical findings can be further supported by the written comments. The respondents were asked to explain the four most important factors they had indicated in Question 27, in Question 29.

With regard to 'flexibility of management style', the respondents who thought this was most important (n=78) interpreted it as meaning to deal with the unknown and handle new situations. These were often related to cultural differences, which meant switching from a British management style to one that was more appropriate to local environment. The main idea was *adapting to the local environment* (n=54). Nearly all these comments mentioned the idea of adapting to account for local culture. Typical comments in this regard included:

"Flexible to cope with different logics/ways of doing things." (Respondent 20).

"Flexible to work in a local environment and respect local culture." (Respondent 23)



“Ethnic barriers/differences can cause problems [...] flexibility [...] is very important to achieve results.” (Respondent 85)

“When one commences work on an overseas project one is often working in partnership with groups or individuals from different countries and languages, with different qualifications and experience. It is essential that one tailors ones management style to recognise group and individual strengths and weaknesses.” (Respondent 97)

The other categorisations also concerned culturally related ideas, such as:

- *Respect* (n=2) e.g. “Adapting to peoples expectations of who you are and what you represent to them” (Respondent 139).
- *Co-operation* (n=4) e.g. “Due to varying cultural backgrounds, management flexibility gets ‘the best out of others’” (Respondent 36).
- *Leadership* (n=7) e.g. “I have staff from many cultures who look for different types/styles of leadership” (Respondent 117).
- *Relationships* (n=4) e.g. “75% of success depends on personal relationships” (Respondent 51).

With respect to the second significantly important factor, the ‘ability to relate to different cultures’ (n=76), as expected, some themes arising were very similar to those mentioned under ‘flexibility of management style’. Categories such as the need to build *relationships* (n=1), *adjust to different cultures* (n=10) and for *leadership* (n=2), were all discernible. Typical among these comments were:

“It is arrogant to believe that the way to manage people from (say) the UK is the same as your new host country. It should always be remembered that you are (in almost all cases) only going to be a visitor, albeit for a few years rather than days and that you are going to have to do more adaptation to their methods than they are to yours.” (Respondent 33).

“Understanding how one’s staff ‘ticks’ enables one to get the best results...” (Respondent 116)

Other themes, however, were unique to this factor. These included:

- *Communication* (n=14), e.g. “True communication depends on understanding others’ approach” (Respondent 3).
- *Understanding* (n=19), e.g. “Relate does not mean adoption but an understanding is essential” (Respondent 4).
- *Avoiding conflict* (n=16), e.g. “Unless other culture is respected, no impact is possible except for confrontation” (Respondent 78).
- *An interest in culture* (n=1), e.g. “Relating to cultures - Interest in the people you work with” (Respondent 11).

- *Learning and sharing* (n=4), e.g. “All the cultures in the world have something to give an organisation. Learning and sharing are critical” (Respondent 31).

In light of these two factors and their accompanying comments, it was somewhat surprising to find one of the job-related factors as being significantly important. ‘Technical ability’ was seen as being important by 73 of the respondents. Among the comments relating to this factor, there were six notable categories. By far the largest of these was that this was seen as a *basic requirement* (n=33). By this, the respondents meant that their basic ability in the job was an important reason for their being overseas in the first instance. Another, comment was that some respondents felt unable to rely on their local colleagues – they felt isolated and left very much to their own devices. Another, related category was *reason for being there* (n=13). However, it was not the same as *basic requirement* as, in this case, the respondents saw the factor as being a *justification* for the need for expatriates. Comments in these categories included:

“Working in Asia involves guiding and advising highly educated, intelligent and commercially astute people. British expatriates must match this and be able to add flexibility, imagination and management skills.” (Respondent 29).

“Asian clients are very demanding and becoming ‘more educated’.” (Respondent 40).

“Must have confidence in technical decisions without support from others.” (Respondent 137).

“Your technical ability has to get you the position to start with – if no better than the locals, why is an expat needed?” (Respondent 49).

The next most important categorisation, however, was the issue of *respect* (n=15). This was interesting as it related to idea of being able to communicate – locals would respect technical ability and understand this basic role regardless of culture. Respect also included the idea of being trusted by locals and commanding the respect of clients.

“Exhibited professional ability will lead to respect and will generate more work.” (Respondent 6).

“If the people you are working with perceive that you lack technical ability they will not respect you. It is important to have something they can learn from you.” (Respondent 133).

Thus, surprisingly, where this category applied, the factor ‘technical ability’ was related to the cultural differences that the respondents were encountering. Other categories included the role of *leadership* (n=8):

“Essential to ensure subordinates acknowledge that the manager’s technical abilities are sound.” (Respondent 107).

and the role of ‘technical ability’ in *innovation* (n=3), which concerned the development and improvement of the service to maintain a competitive edge.

The final significantly important factor was the ‘ability to communicate intuitively’ (n=65). The familiar themes of the other culturally related categories re-emerged: *leadership* (n=11); *relationships* (n=6); *understanding of other cultures* (n=10); and *commanding respect* (n=1). However, there were two new categories which were more important. The first was *motivation and success* (n=20), where the respondents saw intuitive communication as a way of conveying their goals and encouraging their colleagues and subordinates to meet those goals. Some quotations from this category were:

“Comprehension equals commitment.” (Respondent 62).

“Setting oneself high targets and achieving them usually gains respect from people of any culture. This enables the development of intuitive communication and breaks down language barriers.” (Respondent 96).

Clearly, this factor served, in part, as a proxy for direct communication i.e. ‘good language skills’, which were found to be significantly unimportant. This is reflected by the other category that emerged, *language substitute* (n=17). Here, the respondents saw intuition as going beyond ‘mere’ language, especially as, in some cases, the language skills of locals were too poor for the respondent to fully project and the local to understand the message being conveyed and, in other cases, a lot of communication occurred ‘outside’ language. This led to comments such as:

“There are many interpretations in the English language. You need to be able to read between the lines.” (Respondent 31).

“Communicating with those whose mother tongue is not English requires intuition to extract their real meaning.” (Respondent 75).

The respondents were also asked, in Question 28, whether there were any factors not listed in Question 27 that they felt were important enough to mention. Many factors were listed but these could be separated into nine broad categories. Few were management skills as such – they primarily related to character traits, which were considered important if expatriates were to be successful. The largest categorisation was of characteristics relating to what could broadly be called *personal traits* (n=57). These included qualities such as patience, diplomacy, stamina, punctuality and so on. Many of these were in relation to coping with cultural differences in one form or another. Thus, for example, the following remarks were made:

“Patience and interest in and ability to create order from chaos.”  
(Respondent 35).

“Patience. Ability and willingness to mix business and leisure. Willingness to work flexibly: at any hour of the day or any day of the year.”  
(Respondent 75).

“Ability to listen and learn from others viewpoint.” (Respondent 107).

“Political knowledge of host country and ability to develop right contacts.”  
(Respondent 143).

*Adaptation to environment* (n=27) also related to cultural factors. Observations such as the following typified this category:

“Willingness to change and adapt to local way of working and not try to change it and not try to keep working as if you were ‘back home’.”  
(Respondent 6).

“Must be able to relate to and communicate with staff on a much closer basis than required in the UK.” (Respondent 58).

Other categories included the following:

- *Leadership* (n=17) e.g. “Knowledge of how to motivate people from varying backgrounds and cultures” (Respondent 58).
- *Sense of humour* (n=15).
- *Professionalism* (n=15) e.g. “The ability to encourage what you know to be successful working practices without belittling your local colleagues” (Respondent 39).
- *Versatility* (n=15) e.g. “The key component is flexibility. However, this equally applies wherever you work. The modern market is continually changing. Therefore attitudes must reflect this” (Respondent 63)

- *Experience* (n=4) e.g. “Long-term experience of working overseas” (Respondent 129).
- *Conveying company ‘line’* (n=3) “Ability to transmit parent company goals to the local staff in a positive manner (putting into culturally acceptable perspective)” (Respondent 5).

| Flexible management style |    | Relate to different cultures |    | Technical ability      |    | Intuitive communication |    | Other factors            |    |
|---------------------------|----|------------------------------|----|------------------------|----|-------------------------|----|--------------------------|----|
| Adaption to environment   | 54 | Understanding cultures       | 19 | Basic requirement      | 33 | Motivation and success  | 20 | Personal traits          | 57 |
| Leadership                | 7  | Avoiding conflict            | 16 | Respect                | 15 | Language substitute     | 17 | Adaption to environment  | 27 |
| Gaining cooperation       | 4  | Communication                | 14 | Reason for being there | 13 | Leadership              | 11 | Leadership               | 17 |
| Relationships             | 4  | Need to adjust               | 10 | Leadership             | 8  | Understanding cultures  | 10 | Sense of humour          | 15 |
| Respect                   | 2  | Basic requirement            | 7  | Innovation             | 3  | Relationships           | 6  | Professionalism          | 15 |
|                           |    | Learning and sharing         | 4  |                        |    | Respect                 | 1  | Versatility              | 15 |
|                           |    | Leadership                   | 2  |                        |    |                         |    | Experience               | 4  |
|                           |    | Relationships                | 1  |                        |    |                         |    | Conveying company ‘line’ | 3  |
|                           |    | Interest                     | 1  |                        |    |                         |    | Self-sufficiency         | 1  |

**Table 7.4** Coding for Significantly Important Factors in Question 27

Table 7.4 summarises the categories coded from the comments and remarks made by the respondents in answer to Questions 28 and 29. Against each coding is an indication of the number of times it was mentioned. In summary, the evidence discussed above indicates that the respondents as a whole generally saw cultural differences as an important potential problem. Good management skills were required to mitigate the effects that such cultural influences might have on their businesses. This would reflect an ethnocentric view of cultural differences. In some instances, however, there is evidence of attempts to approach culture more synergistically. For example, many of the categories of ideas contained in the factor ‘ability to relate to different cultures’ demonstrated this perspective. So, from this evidence, it could be said that the pattern emerging is one of a group of professionals well aware of the environment in which they are working and, in particular, aware of the cultural differences they encounter, and on the cusp of treating these differences in a synergistic manner.

### 7.3.3 Important Cultural Indicators in Managing Internationally

Question 30 asked the respondents to rank 10 cultural indicators in order of importance depending on how important they were seen to be when working among different cultures. In this instance, the hypothetical average was 5.5. The results are presented in Table 7.5, and the supporting calculations can be found in Appendix 4.

| Ref. | Factor                                      | Mean | Test Statistic |
|------|---|------|----------------|
| A    | Language differences                        | 6.09 | 2.08           |
| B    | Difference in ethical standards of business | 3.87 | -6.62 *        |
| C    | Attitudes to time and punctuality           | 5.39 | -0.48          |
| D    | Personal contact in business                | 3.86 | -7.47 *        |
| E    | Interpretation of contracts and law         | 5.55 | 0.20           |
| F    | Emotional involvement in business dealings  | 6.66 | 4.98 **        |
| G    | Willingness to work without supervision     | 5.34 | -0.66          |
| H    | Differences in construction standards       | 5.65 | 0.61           |
| J    | Observance of religious practices           | 8.29 | 12.98 **       |
| K    | Willingness to take decisions in meetings   | 4.42 | -4.60 *        |

**Table 7.5** Significance of Factors Comprising Question 30

\* significantly important at P=0.01

\*\* significantly unimportant at P=0.01

With regard to specific cultural differences, Table 7.5 indicates that, for the respondents as a whole, three factors were considered to be significantly important at the 1% level. They were, in order of importance:

1. 'Personal contact in business dealings' (item D).
2. 'Differences in ethical standards' (item B).
3. 'Decisiveness in meetings' (item K).

On the other hand, the following items were considered to be significantly unimportant:

1. 'Religious practices' (item J).
2. 'Emotions in business' (item F).

In statistical terms, the remaining five cultural indicators were considered by the sample as a whole to be neither very important nor very unimportant. The statistical tests provide a somewhat confusing picture of the response of British construction industry expatriates to cultural differences. Ostensibly, the second and third most significant cultural indicators are rooted in value systems and, therefore, would be expected to be important. Ethical standards are a high profile issue, particularly in the construction

industry and related to the individualist/collectivist dimension in Hofstede's multidimensional model (see Figure 3.1). Similarly, 'decisiveness in meetings' is a factor closely related to the uncertainty avoidance dimension of that same model. 'Religious practices' can be regarded as being symbolic within culture (see Figure 3.3), consequently not relating directly to value systems and being less of a concern. In the case of the three most important factors, the respondents were asked to explain their grading within Question 32. These responses can be used to explain and illustrate the statistical analysis.

With regard to 'personal contact in business' (n=61), several identifiable themes became apparent from the remarks made by the respondents. The most notable of these was the importance of the development and maintenance of *personal relationships* (n=27). While many of the respondents noted that personal contacts were important anywhere in the world, they saw these types of relationships being even more important in some overseas locations, and particularly where the 'community' was relatively small and parochial. Thus, the following comments were typical:

"Local networks can exclude foreigners." (Respondent 27).

"Always essential, especially overseas." (Respondent 30).

"Personal contacts and recommendations are very important in less sophisticated markets." (Respondent 77).

Beyond this idea of the development and maintenance of personal contacts, however, was the notion that business did not rely as much on what you knew as *who you knew* (n=16). This view contrasts with the importance of 'technical ability' found in analysis of Question 27. Comments made in regard to this category included:

"Personal contact is very important - who you know rather than what you know is of greater importance in smaller communities." (Respondent 26).

"In Hong Kong, personal relationships and the 'network' are very important." (Respondent 106).

"Business in Africa is a very personal business." (Respondent 122).

Another important category was the importance of the theme of *building trust* (n=7). Showing that this factor was interpreted by several respondents as relating to value

systems, the focus here was on creating confidence. Confidence among business contacts was important where uncertainty avoidance was high. This reflects a high sensitivity to cultural issues and can be seen, for example, in the following comments:

“Japanese have confidence from personal and long-term business and personal relationships.” (Respondent 29).

“Asian business partners must be comfortable with all contacts prior to doing business. If they don’t ‘like’ you the partnership will never work.” (Respondent 107).

There were a number of other less frequently mentioned themes that arose in analysis of the reasons for the grading of this factor. These were:

- *Combining social life and business* (n=3) e.g. “You must be prepared to devote a considerable time to social talk prior to business” (Respondent 42).
- The *difficulty in adapting* to this type of business (n=3) e.g. “Developing personal relationships takes up much time” (Respondent 65).
- The importance of *maintaining professional integrity* (n=2).
- The idea that personal dealings are *corrupt* (n=1).
- The *emotional involvement of people* (n=1) i.e. “Decisions are not always rational (either technically or financially) by European standards. The emotional involvement of personal contacts and relationships [...] often predominates and leads to inefficiency” (Respondent 9).
- And, in one instance, that there is *less personal contact* (n=1).

The factor of ‘different ethical standards’ (n=74) is, as has been mentioned, a highly emotive issue. This is borne out by the relative importance of this factor among the sample responding to the questionnaire. Looking through the comments and remarks made by the respondents to this issue, five categories could be identified. Interestingly, the most important category that resulted from the analysis of the comments made by the respondents was that ethical differences did not necessarily equal corruption but were simply *different* (n=27) and, perhaps, somewhat ‘dubious’, from a British perspective. The following remarks reflect this theme:

“Practices frowned upon under a strict UK system (e.g. in tendering) are regarded as absolutely normal.” (Respondent 10).

“When in Rome, etc. If one tries to be dogmatic jobs can grind to a halt – try to see their side.” (Respondent 19).



“Many projects fail to reach full potential because people are unaware of or refuse to accept differing practices, i.e. must learn to swim with the tide before trying to divert it.” (Respondent 58).

The next most common theme was the reaction that respondents’ took to ethical differences in order to maintain their own *professional ethical integrity* (n=16). The comments in this regard focused on an uncompromising attitude to practices that they considered to be unethical, such as:

“It is necessary to maintain very clear and high ethical standards – regardless of local practice.” (Respondent 12).

“Bribes are often demanded, particularly in the public sector (i.e. customs officials). This causes delay to most projects as payment of bribes cannot be encouraged or accepted.” (Respondent 103).

“Understanding differences (not, however, necessarily accepting them) is fundamental to being able to negotiate as well as understanding exactly what is required – and getting paid a fair price.” (Respondent 121).

This led to the next theme which was the issue of ethical differences being the same as *corruption* (n=14). The respondents in this category were unequivocal in their interpretation of the factor – a combination of corruption, bribery and deceit, as the following examples illustrate:

“Nepotism and favour-currying prevail.” (Respondent 23).

“Corruption – simple and crippling.” (Respondent 46).

“Bribes, unfair lack of respect for certain local people, poor or fictitious training.” (Respondent 78).

Rather than take a dogmatic stance on the issue of ethical differences, a minority of the respondents sought to *understand the differences* (n=12) as a way of dealing with them within a business context. The following comments were indicative of this view:

“Not understanding local ethics can lead to some apparently naïve trusting of standards of behaviour.” (Respondent 39).

“In order to operate in a different business environment it is important to understand the standards and behaviour which are acceptable.” (Respondent 134).

Finally, relating to this factor, the issue of *trust* (n=5) was mentioned once again. In this instance, however, the remarks focused on how ethical differences could lead to a lack of trust and that through professional integrity, trust could be engendered.

With regard to the third most significant cultural indicator, 'decisiveness in meetings' (n=54), the most important category of remarks from the respondents was the issue of an *unwillingness to accept responsibility* (n=16) among their business contacts, and the consequential exasperation experienced in trying to get important decisions made. This is epitomised by the following quotations:

"Wasted management expertise (the consultant) because the client authority cannot or will not make strong decisions when required." (Respondent 46).

"Chinese are very reluctant to take the initiative. Therefore, sometimes decisions have to be made for them." (Respondent 61).

"If one is not extremely careful it is very easy to get drawn into making decisions that others should be making. This destroys the tool of delegation." (Respondent 127).

One aspect of decision making that appeared to be of some concern to the respondents was the *time related* (n=12) dimension. The comments reflected a clear contrast between the relatively short-term perspective of the respondents compared with the more long-term perspectives their hosts often held:

"Decisions are taken by consensus, often resulting in delays/inefficiencies." (Respondent 33).

"Enormous waste of time in this situation." (Respondent 39).

"Decision making being delayed causes frustration which can have negative effects." (Respondent 65).

Perhaps arising from this difference, another theme that emerged was the propensity for some respondents to take *personal responsibility* (n=8) for decision making, either as a reaction to the seeming inability of locals to do so, or as a specific skill:

"Generally, the Asian culture does not encourage decision making. The Western ability to make a decision and stick by it is admired and necessary!" (Respondent 112).

Themes mentioned by fewer respondents included:

- The *requirement for consensus* (n=5) among locals, reflecting a collectivist culture.
- The *need to be decisive* (n=5) in other situations.
- The possible *lack of delegation* (n=3) that can be encountered, e.g. “Certain people who represent the company are not allowed to make decisions due to their cultural background” (Respondent 59).
- The *secretive* nature (n=2) of decision making in some cultures, e.g. “Often experience a desire by others to make decisions behind closed doors” (Respondent 63).
- Again, the issue of trust – this time the *need to trust* (n=2) locals and allow them the opportunity to make decisions.
- The *seeming illogicality* (n=1) of decision making in other cultures.

Similar to Question 28, the respondents were again asked to list any additional factors that they considered important in Question 31. The replies were also similar, in that they focused once again on characteristics that were necessary to succeed in an overseas environment, this time in response to cultural differences. Thus, *personal traits* (n=19) once more prevailed. Ideas of patience, tolerance and restraint were most common, as the following quotations illustrate:

“Ability to bite ones tongue when necessary - often!!” (Respondent 9).

“You must be interested in them and their methods and their history and culture.” (Respondent 35).

“Ability to listen and not prejudge.” (Respondent 89).

“Keeping one's views to a non-aggressive, non-bigoted or non-intrusional stance.” (Respondent 123).

Another common motif arising from the comments was one of specific *local differences* (n=18) and that these should be recognised. Thus adaptation and allowances were important to these respondents:

“Class and wealth differences (actual and perceived). Willingness to comprehend and not be restricted by fundamental understandings of right and freedoms, Western ideas etc.” (Respondent 67).

“Personally speaking, I don't think I treat HK people any differently at all from UK people except that I have a respect for any local cultural differences.” (Respondent 87).

“Ones own personal like/dislikes of a culture – it cannot help but influence your attitude.” (Respondent 106).

Other culturally related issues that could be categorised were ones of:

- *Leadership* (n=10) and how this differed in different cultural contexts
- *Relationships* (n=10) and how these can take on a new meaning outside the UK.
- *Globalisation* (n=4).
- *Sense of humour* (n=2) once again.

| Personal contact in business  |    | Differences in ethical standards |    | Decisiveness in meetings         |    | Other factors     |    |
|-------------------------------|----|----------------------------------|----|----------------------------------|----|-------------------|----|
| Personal relationships        | 27 | Differences in ethical standards | 27 | Unwilling to take responsibility | 16 | Personal traits   | 19 |
| Who you 'know'                | 16 | Professionalism                  | 16 | Time related                     | 12 | Local differences | 18 |
| Building trust                | 7  | Corruption                       | 14 | Personal responsibility          | 8  | Leadership        | 10 |
| Combining social and business | 3  | Understand differences           | 12 | Consensus required               | 5  | Relationships     | 10 |
| Difficult to deal with        | 3  | Trust                            | 5  | Need to be decisive              | 5  | Globalisation     | 4  |
| Professional integrity        | 2  |                                  |    | Lack of delegation               | 3  | Sense of humour   | 2  |
| Corruption                    | 1  |                                  |    | Secretive                        | 2  |                   |    |
| Emotions in business          | 1  |                                  |    | Need to trust locals             | 2  |                   |    |
| Less personal contact         | 1  |                                  |    | Seemingly illogical              | 1  |                   |    |

**Table 7.6** Coding for Significantly Important Factors in Question 30

The coding of the ‘other factors’ identified in Question 31 is shown in Table 7.6, together with the instances of coding for the most significant cultural indicators identified in Question 30 and discussed in Question 32. In summary, the responses to these questions revealed that the respondents recognised cultural indicators representative of values as being important and indicators that were more symbolic of culture as being unimportant. Perhaps more revealing, however, was the fact that the respondents tended not to see the cultural differences that they encountered as being negative. They seemed to recognise that things were different in other countries but that was something for them to adapt and adjust to rather than berating their hosts as ‘ignorant foreigners’. However, while there were attempts to understand cultural differences where those were encountered, this was important to the respondents in order that they might better work in the overseas environment in which they found

themselves. There seemed to be little attempt to use those cultural differences in a way that might be called ‘synergistic’. Thus, cultural differences were seen primarily as a barrier or obstacle to the respondents carrying out their work and running their businesses successfully, rather than an opportunity for them to capitalise on the differences. In this respect, then, the respondents could be regarded as ‘ethnocentric’ in their response to cultural differences, although less ethnocentric than might have been expected and certainly not ‘parochial’.

### ***7.3.4 Policy Environment for Overseas Working***

Questions 24a and 24b asked the respondents to describe any policies that their company adopted when working overseas that were designed to allow for the different demands of working outside Britain. The choices were both official policy differences (24a) and unofficial or informal policy differences, perhaps instigated by the respondent (24b). The respondents were asked to explain their responses to these questions. Tables 7.7 and 7.8 below show the responses to these questions.

|              | Number | Percentage |
|--------------|--------|------------|
| Yes          | 20     | 13.8       |
| No           | 67     | 46.2       |
| Don't Know   | 16     | 11.0       |
| Not Answered | 42     | 29.0       |
| Totals       | 145    | 100.0      |

**Table 7.7** Official Policy Differences

|              | Number | Percentage |
|--------------|--------|------------|
| Yes          | 39     | 26.9       |
| No           | 50     | 34.5       |
| Don't Know   | 14     | 9.7        |
| Not Answered | 42     | 29.0       |
| Totals       | 145    | 100.0      |

**Table 7.8** Informal Policy Differences

It can be seen that, in both cases, 29% of the respondents simply failed to answer the question. Thus, the responses that were received have to be considered in light of this non-response. Some of the non-respondents were working for organisations that were based wholly overseas or were non-British companies. The tables indicate that the majority of respondents worked for companies that operated in a very similar way overseas to the way they did in the UK. This was especially true in terms of official policy although there were more companies that had unofficial and informal policy differences for their overseas activities. The respondents who did work for companies which operated differently overseas when compared with the UK, mentioned a number of ways in which those operations were different. Some of these differences were prosaic. For example, employment conditions were mentioned by several respondents (n=11). Among these comments were:

“Local conditions of employment, perks, pension, cars, etc.” (Respondent 52)

“There are different conditions of employment for short term (i.e. contract) employees than for permanent employees. I think that the majority of overseas appointments are short term contracts.” (Respondent 124)

Other differences of a more mundane nature that were mentioned by the respondents included work practices (n=21):

“Less investment/emphasis on quality assurance, staff.” (Respondent 10)

“UK policy is structured to partners requirements while overseas is structured to the needs of clients and means of making profit - quite different!!” (Respondent 29)

“Technical standards limited by financial constraints due to highly competitive tendering, high personnel costs, high marketing costs and poor local infrastructure and communications.” (Respondent 82)

contractual and legal arrangements (n=9):

“Differs in procedure (quantity surveying in the UK for example) as well as contractual construction documentation.” (Respondent 13)

“Because of local (French) labour laws.” (Respondent 123)

and factors such as insurance arrangements (n=4) and local associations (n=1). However, a lot of the differences mentioned showed that the companies that did make policy changes for overseas conditions, did so to account for the cultural dimension (n=17):

“Business ethics dealings, i.e. senior staff are expected to rapidly acquaint themselves with the particular cultures' approach.” (Respondent 58)

“Differences of currency, local laws, work practices and culture make this essential. Eid is not a recognised holiday in the UK.” (Respondent 73)

“It appreciates and 'accommodates' the religious, cultural, ethical etc standards and habits of this country.” (Respondent 109)

“Willing to commence work without formal contract in place (i.e. long-term relationships – particularly with Japanese clients).” (Respondent 114)

This would suggest that, while the people who work overseas within the construction industry are aware of and make allowances within their managerial and business approaches for cultural differences, the companies they work for adopt a far more ‘parochial’ approach. The majority of companies make no allowance for differences in the international environment and, where they do, these are often related to employment

and work arrangements. Only a few attempt to allow for cultural differences within their policies and procedures, either on a formal or informal basis.

### ***7.3.5 Preparation for Working Overseas in Construction***

Section D of the questionnaire asked a selection of questions relating to the preparation in terms of training and information that the respondents received or acquired prior to working in a foreign environment. Thus, this section related directly the tertiary orientation hypothesis in Section 5.2. Tables 7.9 and 7.10 summarise responses to Questions 35 and 37 respectively and show that the respondents received very little in the way of any training or information prior to moving to their overseas postings.

|                | Number | Percentage |
|----------------|--------|------------|
| Yes            | 13     | 9.0        |
| No             | 121    | 83.4       |
| Not Applicable | 11     | 7.6        |
| Totals         | 145    | 100.0      |

**Table 7.9** Training or Information Received Prior Current Posting

|                | Number | Percentage |
|----------------|--------|------------|
| Yes            | 18     | 12.4       |
| No             | 105    | 72.4       |
| Not Applicable | 22     | 15.2       |
| Totals         | 145    | 100.0      |

**Table 7.10** Training or Information Received to Prior to Previous Postings

Of those few that did receive some form of preparation, this tended to be technical (e.g. business skills and safety), company related or very general in nature. Several respondents received some form of language training. There were only five mentions of training and information which related to cultural differences and only three which involved some kind of preliminary visit or secondment. Thus, the hypothesis regarding little or no training prior to placement overseas would appear to be confirmed.

This finding is put into perspective when the respondents were asked whether they considered training and information to be of importance and whether they would have found it useful (Question 39). The results are shown in Table 7.11.

|            | Number | Percentage |
|------------|--------|------------|
| Yes        | 74     | 51.0       |
| No         | 57     | 39.3       |
| Unanswered | 14     | 9.7        |
| Totals     | 145    | 100.0      |

**Table 7.11** Importance of Training Internationally

A sizeable number (n=57) thought preparation would have been of little benefit to them. This group seemed to focus on the importance of personal characteristics as the most

important factor in being successful in an overseas environment. Typically, they made comments to the following effect:

“Not really. It's best to learn what you can but go in with an open mind.”  
(Respondent 53)

“Not really. One must travel with eyes open and be prepared to adapt and learn the local culture.” (Respondent 73)

“As long as you're technically competent you should be okay. You can't teach people to have an open mind.” (Respondent 89)

Of those who identified some form of preparation as being important, some thought this should take the form of technical training and information of, for example, different construction standards and practices (n=8), business skills (n=13) and general information or knowledge about regions, countries and places, particularly in terms of practical issues such as health, visas and so forth (n=16). Others mentioned how it would have been useful to have some form of support and training for families (n=6).

However, many mentioned that some form of cultural training, information or preparation would have been useful to them. Language training was a priority for many of the respondents (n=28), while others were concerned about cultural issues more generally (n=21), in the form of information, briefings or direct training relating to culture and business culture in particular. For example, the following comments were made by some of the respondents:

“Cultural induction course for country concerned.” (Respondent 12)

“Further understanding and respect for the ‘non-UK’ way things are done in the international market.” (Respondent 16)

“Introduction to local networks and routines.” (Respondent 78)

“Particularly for senior postings language and cultural training for say 3 months before travelling to the assigned country would be of major benefit. Japanese companies do it. British companies never to my knowledge.”  
(Respondent 96)

Thus, while preparation of one sort or another was of a low priority for British construction enterprises working internationally, it was found that the respondents thought it to be important and that preparation for cultural differences was a large element of this. In their answers, many respondents seemed to think that a 'realistic' assessment of the posting would have been useful.



Finally, Question 40 asked the respondents for any other comments they wished to make regarding preparation for overseas postings. Several (n=13) remarked on the importance of experience: either that their own experience was important or that newcomers were often in an environment where they could draw on the experience and advice of others in the expatriate community. A minor issue but important for those who mentioned it was help for family related issues (n=6). Others (n=13) mentioned the nature of the people who generally chose to go overseas in the first instance:

“Must be open-minded but, most of all, be ready to encounter and deal with alien concepts. Nothing beats being there.” (Respondent 58)

However, the majority answering this question (n=19) provided their opinions of company policy generally with regard to the issue of preparation. These were either that too little training was provided and that it was a serious weakness of British construction companies, or that those companies need not provide any preparation as this would be largely worthless.

## **7.4 Multiple Comparisons**

While the results discussed in Section 7.3 revealed some very interesting facts about the way British construction professionals respond to cultural differences when they work internationally, within the survey population there were a number of differences across a variety of indicators. In certain instances, these differences led to significantly different outcomes when correlated against the dependent variables contained in Questions 27 and 30. These internal differences provided further interesting findings in that they showed how expatriates varied in their responses to cultural indicators depending on, among other things, their profession, their experience, the location in which they were based, their seniority, the degree of diversity among their staff and workforce and their role in the location in which they were based.

The following sections identify where internal variations were statistically significant and attempt to explain the findings by drawing on the qualitative data provided by the respondents. Where subdivisions of the survey population were too small to provide meaningful findings, these subgroups are excluded. In other instances, subdivisions within the questionnaire questions have been combined to produce larger groupings so

that the numbers included in the respective tests resulted in valid findings. In cases where the hypotheses are supported, more detailed analysis was merited. The statistical tests for the multiple comparisons were conducted using the one-way analysis of variance (ANOVA). Details of this test can be found in Appendix 2, while the specific multiple comparisons can be found in Appendices 5 (relating to Question 27) and 6 (relating to Question 30) respectively.

#### ***7.4.1 Differences between Contractors and Consultants***

The first detailed analysis was designed to test whether the responses for the dependent variables contained within Questions 27 and 30 varied depending on whether the respondents worked for contractors or consultants. This is because there is a likelihood that contractor's managers would have different interactions with people from different cultures in other countries compared with people working for consultants. For example, a contractor's engineer or surveyor would deal with subcontractors and a relatively large workforce which would be less likely for those engineers and surveyors working for consultants. Question 1 revealed the type of company for which each respondent worked.

It transpired that there was no significant difference in response to the dependent variables between those expatriates working for consultants compared with those working for contractors. Thus, the hypothesis that contractors and consultants would respond differently due to the different managerial demands their jobs entailed could be refuted.

#### ***7.4.2 Differences by Years of Experience Working Overseas***

This section explored the hypothesis that the dependent variables contained in Questions 27 and 30 would be effected by the length of time the respondent had spent overseas. Thus the independent variable was the data contained in Question 9. It was found that the divisions in Question 9 were too fine to yield meaningful results. Therefore, the categories were aggregated into three divisions:

- a 'short' period of time (6 or less years);
- a 'medium' period of time (7 to 12 years);
- and a 'long' period of time (more than 13 years).

These divisions were then correlated with each of the items contained in Questions 27 and 30. Surprisingly, it was found that, at the 1% level, there was *no* significant difference between the different divisions for any of the factors contained in Question 27 and of those contained in Question 30, the only instance where any significant difference was identified was for ‘Language differences’ (item A), which was neither a significantly important or unimportant item for the population as a whole in any case. Table 7.12 shows the difference for the dependent variable against the two independent variables, indicating that for those who had worked overseas a short period of time, the issue was not significantly unimportant (although it was not significantly important either).

| Ques. | Ref. | Dependent Variable   | Independent Variable  | Mean | Test Statistic |
|-------|------|----------------------|-----------------------|------|----------------|
| 30    | A    | Language differences | Short period of time  | 4.33 | -2.18          |
|       |      |                      | Medium period of time | 7.41 | 3.93 **        |

**Table 7.12** Significant Differences for Years of Experience Working Overseas

\*significantly important at P=0.01

\*\*significantly unimportant at P=0.01

For the only item where a significant difference was found, the difference was between those who had worked overseas for a ‘short’ period of time and those who had worked overseas for a ‘medium’ period of time. On an analysis of the comments of those from these two groups that thought language to be an important factor, it was found that most of the comments from the former group related to difficulties in trying to form *clear communication* while those from the second group were more concerned with the need *to better understand* the people with whom they were associating. However, the findings were inconclusive beyond this difference.

The findings would largely support the null hypothesis, i.e. that the number of years a British construction professional had worked overseas had little or no effect on either their approach to management of people from different cultures, or their response to different cultural factors.

#### ***7.4.3 Differences in Level of Management***

This section addressed the hypothesis that differences in seniority of the respondents would lead to differences in their responses to the variables in Questions 27 and 30. The

data for the independent variable on this occasion was contained within Question 10. Three main categories were evident:

- director or partner level people, including ‘country managers’;
- people in senior management positions;
- and people at project and operational level.

Again, very few significant differences were found at the 1% level. Thus, for this analysis, the null hypothesis is again largely supported. However, there were two instances where significant differences were identified. The first was ‘Administrative competence’ (item J) in Question 27, where project managers considered this to be significantly more important than senior managers. However, the item was neither significantly important or unimportant for the population as a whole and Table 7.13 shows that this was also the case for the two categories of management. On an analysis of the comments made, the project managers seemed particularly concerned with their lack of *managerial skills*, which they saw as a potential problem in dealing with staff.

| Ques. | Ref. | Dependent Variable           | Independent Variable   | Mean | Test Statistic |
|-------|------|------------------------------|------------------------|------|----------------|
| 27    | J    | Administrative competence    | Project management     | 5.27 | -2.20          |
|       |      |                              | Senior management      | 7.19 | 1.65           |
| 30    | D    | Personal contact in business | Directors and partners | 3.50 | -7.45 *        |
|       |      |                              | Project management     | 5.00 | -1.01          |

**Table 7.13** Significant Differences for Level of Management

\*significantly important at P=0.01

\*\*significantly unimportant at P=0.01

The second was ‘Personal contact in business’ (item D) in Question 30, where directors and partners thought the variable was significantly more important than project managers. This item was significantly important for the population as a whole. In this instance, the project managers interpreted this item as being about building and maintaining *personal relationships*, presumably when managing people on site. However, Table 7.13 shows that directors and partners were extremely concerned with this issue, their interest being more about *who you know* rather than what you know as being important in securing contracts and business, as one might expect at this level of managerial responsibility.

#### **7.4.4 Differences by Profession**

For this section, the analysis sought to confirm the hypothesis that there would be a significant difference in responses to the variables of Questions 27 and 30 depending on

differences in profession. In this instance, the independent variable was provided by the data from Question 11. The architects were combined with 'others' to provide sufficient numbers for meaningful analysis. Thus, the results involving this latter grouping should be viewed with caution.

The analysis revealed that, for three of the twelve variables in Question 27 there were significant differences. This would suggest that, in relation to managerial factors, the hypothesis is supported. The differences (illustrated in Table 7.14) were:

1. 'Technical ability' (item A), which was found to be significant for the entire sample, and where surveyors found the item significantly more important than civil engineers. While other issues were important, in general the most important issues for the surveyors were that their 'technical ability' was an important element for gaining *respect* and was seen as their *reason for being there* in the first instance. While these issues were also important for the civil engineers, they mainly saw 'technical ability' as a *basic requirement*. Perhaps an explanation for the significant difference is that surveyors offer a service that could be regarded as 'unique' outside the UK. Therefore, technical excellence is essential for them. Engineers, on the other hand, offer a service found the world over. Thus, technical excellence might be seen as a given for them, with the focus being on other skills they possessed.
2. 'Tolerance of ambiguity (item E), which was insignificantly important for the entire population. Table 7.14, however, indicates that civil engineers and surveyors were more neutral on the issue compared with architects and others who found the issue to be significantly unimportant. Unfortunately, the additional comments revealed little to explain this difference.
3. 'Willingness to learn from others' (item I), which was neither significant or insignificant generally. However, it was significantly more important for architects and others (who were neutral on the issue) than for civil engineers. Again, the comments revealed little to elucidate this finding.

| Ques. | Ref. | Dependent Variable               | Independent Variable  | Mean | Test Statistic |
|-------|------|----------------------------------|-----------------------|------|----------------|
| 27    | A    | Technical ability                | Surveyors             | 3.27 | -9.63 *        |
|       |      |                                  | Engineers             | 5.08 | -2.99 *        |
| 27    | E    | Tolerance of ambiguity           | Surveyors             | 7.14 | 1.43           |
|       |      |                                  | Engineers             | 6.65 | 0.33           |
|       |      |                                  | Architects and others | 9.04 | 4.48 **        |
| 27    | I    | Willingness to learn from others | Architects and others | 5.46 | -1.85          |
|       |      |                                  | Engineers             | 7.45 | 2.60 **        |
| 30    | C    | Attitude to time and punctuality | Engineers             | 4.60 | -2.78 *        |
|       |      |                                  | Surveyors             | 5.88 | 1.21           |

**Table 7.14** Significant Differences due to Differences in Profession

\*significantly important at P=0.01

\*\*significantly unimportant at P=0.01

With regard to cultural indicators (Question 30), the only area of significant difference was where civil engineers found ‘Attitudes to time and punctuality’ (item C) to be significantly more important than surveyors. For both sets of respondents, the most important issue was *conceptual*, in that the fundamental concept of time was different for other peoples. Civil engineers simply saw this as being more important than surveyors. As this item was neither significant nor insignificant for the sample as a whole, it would appear that, for Question 30, the null hypothesis was largely supported. Differences in the professions of the respondents made little impact on the way they reacted to cultural differences.

#### 7.4.5 Differences in Nature of Job

The analysis for this section addressed the hypothesis that the specific location (e.g. project or office based) of the respondents would effect their responses to the dependent variables. Thus, the independent variable for this test was Question 12. In order to ensure sufficient numbers, the respondents based on multiple projects were combined with the respondents based on a single project.

When the differences in nature of job were compared across the variables contained in Question 27, the only variable that revealed any significant difference between the groupings was ‘Good language skills’ (item B). In this instance, those based on both projects and in an office considered this issue to be significantly more important than those based wholly in the office, with the former grouping being neutral with regard to the variable, as shown in Table 7.15. As this item was, in any case, insignificant for the sample as a whole, there were very few comments available to account for this finding. However, those based in both the office and on projects would probably serve as liaison between the two, where communication becomes an important issue at a tactical level.

Meanwhile, those based wholly in the office would more likely be communicating at a strategic level, where English is more likely to be widely spoken. In any case, as this was the only significant difference, it is reasonable to say that the nature of the job has little impact on the respondents' views of the managerial factors contained within Question 27.

| Ques. | Ref. | Dependent Variable                    | Independent Variable | Mean | Test Statistic |
|-------|------|---------------------------------------|----------------------|------|----------------|
| 27    | B    | Good language skills                  | Projects and office  | 7.58 | 1.77           |
|       |      |                                       | Wholly in office     | 9.55 | 7.38 **        |
| 30    | D    | Personal contact in business          | Wholly in office     | 3.15 | -7.52 *        |
|       |      |                                       | Project based        | 4.74 | -1.80          |
| 30    | H    | Differences in construction standards | Project based        | 4.73 | -1.90          |
|       |      |                                       | Wholly in office     | 6.53 | 3.15 **        |

**Table 7.15** Significant Differences due to Differences in Nature of Job

\*significantly important at P=0.01

\*\*significantly unimportant at P=0.01

By contrast, two of the variables in Question 30 revealed significant differences, with one of those variables being significant for the sample as a whole (see Table 7.15). The first was 'Personal contact in business' (item D) where those respondents who were wholly office based considered the issue to be significantly more important than those who were project based. In this instance, the differences in the comments could be clearly discerned. For those who were wholly office based, the factor related to gaining new business for their respective organisations. This was in contrast to those who were project based, where besides being a less important factor in any case, the focus was on progressing construction-related work rather than a more generic marketing issue. Neither of these two categories emerged during the initial analysis and it is only when this comparison was made that these differences became apparent.

The second factor was related to 'Differences in construction standards' (item H). On this occasion, those that were project based thought the issue to be significantly more important than those who were wholly office based. In this case the reasons are self-evident: those working on construction projects are naturally going to be more concerned with standards of construction work than those based away from projects and concerned with more strategic business matters, and as much is reflected in the comments made by the respondents to this item.

#### ***7.4.6 Differences in Regional Location of Posting***

Of all the differences that might be expected to effect the findings for the sample as a whole, perhaps the most obvious is the location of the respondent. Assuming that cultural differences are a significant factor for British construction professionals working outside the UK, then their responses should vary depending on the closeness of their own culture to that of the host country. Thus, the hypothesis is that responses to the dependent variables in the questionnaire were dependent on the respondent's location.

The respondents were based worldwide. The independent variable was contained within Question 14. The countries listed by the respondents were grouped into cultural regions based on those identified in various literature. Although this is an admittedly crude approach and there are acknowledged differences within the regions identified, the difference between the regions is substantially greater than within the regions. The groupings selected were:

- Asia Pacific, which included Japan, Korea and Hong Kong;
- Europe, which includes a few countries from Eastern Europe;
- Middle East, which includes the Arabic nations from North Africa;
- North American and Australia, which were grouped together due to their cultural similarity to the UK and;
- Africa, which excludes Mediterranean Africa.

The comparisons across Question 27 served to confirm the hypothesis. Significant differences were found for the following managerial factors:

1. 'Good language skills' (item B) where the issue was significantly more important for those respondents based in Europe compared with those based in both Asia Pacific and the Middle East. This would be expected where English the 'language of business' almost everywhere in the world apart from Mainland Europe, where all the respondents noted the need for language proficiency, although Table 7.16a shows that even here, they did not consider the variable to be significantly important. The only surprise here was that Europe was not significantly different to Africa and, in particular, North America and Australia.



2. 'Flexibility of management style' (item C) where the respondents based in Europe varied significantly in their reactions compared with those in the Middle East and Africa. In this instance, those based in Europe considered the variable to be less of an issue than those based in either Africa or the Middle East, where the variable was regarded as being significant. This may reflect the relative familiarity with which British construction professionals regard Europeans, while the peoples encountered in Africa and the Middle East are regarded as being extremely different, thereby demanding more flexibility from the construction professional based there.
3. 'Knowledge of company systems and organisation' (item D) where the expatriates based in Africa saw the issue as being significantly more important than those based in Europe, although Table 7.16a shows that even those respondents based in Africa were neutral on the issue. The explanation for this finding is the relative physical isolation expatriates felt when based in Africa. To compensate for this isolation, they felt that having appropriate support systems in place, providing a sense of stability, was important.
4. 'Ability to relate to different cultures' (item G) where the expatriates based in Africa thought the issue to be significantly less important than those based in either Europe or Asia Pacific. Clearly, both Europe and Asia Pacific comprise a variety of cultures represented by complex social and value-based norms, which are difficult for the British construction professional to relate with and yet are clearly apparent. Therefore, the 'Ability to relate to different cultures' becomes a very important management skill. On the contrary, in Africa, where stereotyping of African people abounds, there is a tendency for people to see this continent of great diversity as being something of a monoculture.

| Ques. | Ref. | Dependent Variable              | Independent Variable | Mean  | Test Statistic |
|-------|------|---------------------------------|----------------------|-------|----------------|
| 27    | B    | Good language skills            | Europe               | 6.63  | 0.16           |
|       |      |                                 | Asia Pacific         | 10.00 | 9.73 **        |
|       |      |                                 | Middle East          | 9.45  | 4.72 **        |
| 27    | C    | Flexibility of management style | Africa               | 2.80  | -8.11 *        |
|       |      |                                 | Middle East          | 3.38  | -7.66 *        |
|       |      |                                 | Europe               | 5.42  | -1.56          |
| 27    | D    | Knowledge of company systems    | Africa               | 7.45  | 1.35           |
|       |      |                                 | Europe               | 9.84  | 6.29 **        |
| 27    | G    | Relate to different cultures    | Asia Pacific         | 3.34  | -8.72 *        |
|       |      |                                 | Europe               | 3.11  | -7.74 *        |
|       |      |                                 | Africa               | 5.45  | -1.37          |

**Table 7.16a** Significant Differences based on Regional Posting (Question 27)

\*significantly important at  $P=0.01$

\*\*significantly unimportant at  $P=0.01$

The comparisons across Question 30 also served to confirm the hypothesis. Significant differences were found for the following cultural indicators:

1. 'Personal contact in business' (item D) where the respondents based in North America and Australia considered the issue to be more significant than those based in the Middle East. This difference is difficult to explain, as the qualitative responses suggested that personal contact was also an important issue in the Middle East, although the statistic in Table 7.16b does not bear out this impression. However, it must be stressed that the responses given were relative to the UK. What this finding indicates is that, when in Australia, attention must be given to what one respondent called "mate-ship". In the Arab World, relative to the UK other items were more important.
2. 'Interpretation of contracts and law' (item E) where the respondents based in North America and Australia considered the issue more significant than those based in Africa. This item can be explained by the fact that the North Americans and Australians are culturally very close to the British. In the UK, contractual and legal issues are important. They are similarly important in Australia and more important in North America. In contrast, and in relative terms, they are far less important in Africa.
3. 'Observance of religious practices' (item J) where those expatriates based in the Middle East perceived the issue to be significantly more important than those based in Europe, although Table 7.16b shows that even here the variable was significantly unimportant. The difference can be largely explained by the fact that the Middle East is dominated by the highly visible Islamic religion, where many countries in the region incorporate facets of the religion within their secular societies.

| Ques. | Ref. | Dependent Variable                | Independent Variable        | Mean | Test Statistic |
|-------|------|-----------------------------------|-----------------------------|------|----------------|
| 30    | D    | Personal contact in business      | North America and Australia | 2.93 | -4.48 *        |
|       |      |                                   | Middle East                 | 4.96 | -1.10          |
| 30    | E    | Interpretation of contracts       | North America and Australia | 4.13 | -2.99 *        |
|       |      |                                   | Africa                      | 6.47 | 2.20           |
| 30    | J    | Observance of religious practices | Middle East                 | 7.04 | 2.77 **        |
|       |      |                                   | Europe                      | 9.53 | 17.20 **       |

**Table 7.16b** Significant Differences based on Regional Posting (Question 30)

\*significantly important at P=0.01

\*\*significantly unimportant at P=0.01

Based on the findings shown in Tables 7.16a and 7.16b, it is reasonable to say that the location of the respondent is an important factor in determining their response to

cultural differences and their use of management techniques in culturally diverse circumstances.

#### 7.4.7 Differences in Experience of Previous Countries

A further hypothesis, tested in this section, is that the respondents' reactions to cultural differences and management approaches would differ depending on the number of different countries in which they had previously worked. This used the responses to Question 15 as the independent variable, with those stating six or more different countries being grouped together. Table 7.17 shows that, in the event, there were few significant differences in the reactions of the respondents when correlated by the number of countries they had previously had working experience of against the dependent variables contained in Questions 27 and 30.

For Question 27, there was a significant difference between those who had worked in only one different country with those who had worked in three with regard to 'Interest in specific host country' (item H). Unfortunately, the comments offered were unable to provide an explanation for this result.

The other item in Question 27 for which a difference was found was with regard to 'Ability to communicate intuitively' (item L) which, incidentally, was significantly important to the sample as a whole. In this instance, it was found that those respondents who had worked in only one different country previous to their current posting considered this item to be significantly more important than those that had previously worked in none, four and five. Again, however, the comments made by the respondents were unable to support any explanation for this finding.

| Ques. | Ref. | Dependent Variable                 | Independent Variable      | Mean | Test Statistic |
|-------|------|------------------------------------|---------------------------|------|----------------|
| 27    | H    | Interest in specific host country  | One different country     | 7.00 | 0.54           |
|       |      |                                    | Three different countries | 9.89 | 8.12 **        |
| 27    | L    | Ability to communicate intuitively | One different country     | 7.00 | 0.54           |
|       |      |                                    | Four different countries  | 8.08 | 1.87           |
|       |      |                                    | Five different countries  | 8.69 | 2.92 **        |
|       |      |                                    | No different countries    | 8.55 | 3.08 **        |
| 30    | A    | Language differences               | No different countries    | 4.43 | -1.44          |
|       |      |                                    | Two different countries   | 7.41 | 3.40 **        |
|       |      |                                    | Three different countries | 7.11 | 2.77 **        |

**Table 7.17** Significant Differences based on Experience of Other Countries

\*significantly important at P=0.01

\*\*significantly unimportant at P=0.01

When the independent variable was correlated against Question 30, the only significant difference found was for 'Language differences' (item A). Table 7.17 shows that this variable was seen as being more important by those who had not worked in a different country previously when compared against those who had experience of two and three different countries. In this instance, the explanation was that those who had never worked overseas previously were particularly sensitive to the fact that English was not the first language of the people with whom they were working. While English was generally used in business, they seemed acutely aware of nuances and subtle differences in interpretation and use of language.

#### ***7.4.8 Differences in Diversity Among Subordinate Staff***

Within this section, the hypothesis being explored was that the degree of cultural diversity to which the respondents were exposed within their working environment would effect their responses to the variables contained in Questions 27 and 30. Degree of diversity was measured as the number of direct subordinates the respondent had who were of a different nationality. This measure was taken from comparing Questions 16, 17 and 18. The numbers were then aggregated into three categories to produce the independent variables:

- Little diversity, meaning less than 33% of the respondent's subordinates were from a different culture.
- Medium diversity, where between 34-66% of the respondent's subordinates were from a different culture.
- Large diversity, where more than 67% of the respondent's subordinates were from a different culture.

On conducting the analysis, it was found that the hypothesis was largely unsupported for both sets of dependent variables. In the case of Question 27, the only significant difference was found with respect to 'Interest in specific host country' (item H). Here, those experiencing medium diversity thought the issue to be significantly more important than those experiencing a large diversity, although Table 7.18 shows that the former grouping were only neutral on the issue. However, there was no adequate explanation for this difference. In any case, the sample as a whole considered the item to be significantly unimportant when managing overseas.

| Ques. | Ref. | Dependent Variable                | Independent Variable | Mean | Test Statistic |
|-------|------|-----------------------------------|----------------------|------|----------------|
| 27    | H    | Interest in specific host country | Medium diversity     | 7.08 | 0.85           |
|       |      |                                   | Large diversity      | 7.19 | 6.66 **        |
| 30    | B    | Difference in ethical standards   | Large diversity      | 3.72 | -5.18 *        |
|       |      |                                   | Medium diversity     | 4.25 | -2.12 *        |

**Table 7.18** Significant Differences as a result of Diversity Among Subordinate Staff

\*significantly important at P=0.01

\*\*significantly unimportant at P=0.01

In the case of the dependent variables contained within Question 30, the only significant difference to be identified was for ‘Differences in ethical standards of business’ (item B), where, while Table 7.18 shows that both groups thought the issue to be significantly important, those respondents experiencing a large diversity thought the issue to be significantly more important than those experiencing medium diversity. This would appear to be caused by the fact that the respondents were coming into contact with so many people of different cultures, that ethical standards became very apparent. In particular, the respondents seemed concerned with *corruption*, which would suggest that they were suspicious of their subordinates participating in what they considered to be corrupt acts.

#### ***7.4.9 Differences in Perception of General Problematic Nature of Working Overseas***

There would seem to be a clear relationship between the degree to which people found working overseas to be problematic and their reaction to cultural differences in those overseas locations. This section examines this hypothesis, comparing the responses for those respondents finding working overseas to be ‘more problematic’ or ‘about the same’ as working in the UK (taken from Question 22) across the dependent variables contained in Questions 27 and 30. There were insufficient numbers who found working overseas to be ‘less problematic’ than working in the UK to make a correlation against this factor.

Surprisingly, the independent variable had no effect whatsoever on the responses for approaches to management in culturally diverse settings. Thus, in this case, the null hypothesis was entirely supported. However, the same can not be said of the respondents reactions to the cultural variables contained in Question 30, where there were significant differences for three of the ten items, two of which were significant for the sample as a whole. These are explained below.

1. 'Differences in ethical standards of business' (item B). There was a clear difference in the comments made by the two groupings, reflected in the significant difference shown in Table 7.19. The respondents who found working overseas more problematic found *corruption* and bribery and *different practices* to be a major problem compared to the other group and differed in this reaction more than in any other area of coding.
2. 'Personal contact in business' (item D). This item was considered significantly important by both groups, although Table 7.19 shows that those who thought working overseas was about the same as working in the UK considered the issue to be significantly more important than those who found working overseas more problematic. While both groups found building *personal relationships* to be an important issue, this was cited by far more that thought working overseas to be about the same as working in the UK. In relative terms, the other group thought it was merely an issue of *who you know*. This difference in emphasis could explain the significant difference exhibited between the two groups for this variable.
3. 'Differences in construction standards' (item H). Although this item was not significant for either group, Table 7.19 shows that those who found working overseas more problematic were neutral with regard to the variable while those that found working overseas about the same as working in the UK thought the issue to be insignificant. The former group found that *poor standards* were very evident in the first instance, requiring increased vigilance. They also found teaching, learning and training to be important issues for their workforces.

| Ques. | Ref. | Dependent Variable                    | Independent Variable | Mean | Test Statistic |
|-------|------|---------------------------------------|----------------------|------|----------------|
| 30    | B    | Differences in ethical standards      | More problematic     | 3.19 | -8.52 *        |
|       |      |                                       | About the same       | 4.97 | -1.22          |
| 30    | D    | Personal contact in business          | About the same       | 3.15 | -7.35 *        |
|       |      |                                       | More problematic     | 4.29 | -4.24 *        |
| 30    | J    | Differences in construction standards | More problematic     | 5.05 | -1.47          |
|       |      |                                       | About the same       | 6.66 | 2.78 **        |

**Table 7.19** Significant Differences due to Perception of Problematic Nature of Working Overseas

\*significantly important at P=0.01

\*\*significantly unimportant at P=0.01

The analysis across this independent variable shows that managerial skills are unaffected by how problematic the overseas environment is perceived to be by the respondent. However, of the ten cultural indicators in Question 30, significant differences were found in three. This indicates that cultural issues are a key factor in determining a person's response to working internationally.

## 7.5 Summary

In response to the questionnaire, a total of 145 responses were received. This was a response rate of 30 percent, adequate for statistical analyses to be conducted. The respondents came from a variety of disciplines, including architects, surveyors and engineers. However, they could also be described by a variety of other variables. These were:

- Their level of education
- The total number of years they had worked overseas
- Their managerial level
- Where they were based in the world
- Their experience of other places
- The level of diversity among their workforce
- The nature of their job
- The total number of years they had worked in the construction industry

They could also be identified in terms of the organisation for which they worked. Some worked for consultants and others for contractors. Some worked for companies operating in many regions and others in few regions around the world. Some companies carried out much of their workload overseas while others did very little overseas. Finally, some had been working overseas for many years and others had little experience of working internationally.

The survey responses were analysed across both statistical and qualitative data. The statistical analyses were primarily comparisons of mean differences using parametric statistics. A coding and pattern matching approach was used to handle the large amounts of qualitative data collected by the open questions. The data were initially analysed for the entire sample before focusing of specific differences between the respondents.

In the first instance, it was established, largely through the qualitative data, that cultural issues were a very important issue for the respondents regardless of whether they found working overseas to be more problematic, less problematic or about the same as working in the UK (Question 22).

Of the twelve managerial dependent variables listed in Question 27, four were found to be significantly important. These were:

- Flexibility in management style (item C).
- The ability to relate to different cultures (item G).
- Technical ability (item A).
- The ability to communicate intuitively (item L).

The other issues were found to be either significantly unimportant or neutral by the respondents. Most of the respondents thought that good management skills were an important means of minimising or mitigating the effects of the cultural differences which they encountered. While this showed that these individuals were aware of the cultural diversity within their working environment, their response was largely ethnocentric. However, there were a minority of respondents who reacted in what could be described as a synergistic way to the management of cultural differences. While 'technical ability' was the one variable that was not directly related to the cultural environment of the respondents, for a minority, this too was related to underlying cultural differences.

Of the ten cultural indicators listed in Question 30, three were found to be significantly important. These were:

- 'Personal contact in business dealings' (item D).
- 'Differences in ethical standards' (item B).
- 'Decisiveness in meetings' (item K).

The respondents found the most important cultural indicators to be those that were fundamentally value-related, with those that were more symbolic of culture being less important to them. However, the most interesting finding was that the respondents did not see cultural issues as being negative. While cultural differences made their work more difficult, they did not see those differences as a fault with their hosts. Rather, they treated cultural differences as a given. However, this did not mean they approached these cultural differences in a synergistic manner. Rather, culture was seen as a barrier or obstacle to their successful management the business.

However, the data reported in response to Questions 24a and 24b showed that while the respondents took at worst an ethnocentric approach to the cultural differences they encountered and, in a number of cases, showed particular enlightenment and sensitivity to those differences, they thought the companies for whom they worked took an almost



parochial approach to the cultural differences that were present in the locations where they had operations. In the opinion of the respondents, their companies made little or no allowance for the differences of working internationally, this in light of the fact the majority of those companies worked in many different locations and had been working internationally for many years. This lack of a strategic approach was reflected in the fact that most respondents received little training or information prior to their overseas postings.

In analysing various subgroups represented within the survey, comparisons were made against the dependent variables contained in Questions 27 and 30. The findings of these analyses can be divided into two groups. The first group were those variables that were found to have little effect on the respondents' reactions to culture and the management of cultural differences. These were:

1. Differences between contractors and consultants.
2. Differences due to the number of years respondents had worked overseas.
3. Difference as a result of managing at different levels.
4. Differences based on experience of other countries.
5. Differences based on the level of diversity within the respondents' workforces.

The second group were those variables that were found to cause many significant differences in respondents' reactions to culture and the management of cultural differences. These were:

1. Differences as a result of having a different *professional background*. This was primarily significant in terms of the management approaches adopted by the respondents (Question 27).
2. Differences depending on the *location of the respondents*. There were found to be significant differences for several of the dependent variables in both Questions 27 and 30.
3. Differences as a result of a general *perception of the problematic nature of working overseas*. In this instance, there were found to be significant variations only with respect to cultural indicators (Question 30).

The survey was able to provide an indication of the importance of cultural differences to the respondents. The sample size and response rate were sufficiently large and comprehensive to generalise the findings to the population of British construction

expatriates at large (approximately 30,000 – see Table 6.3). Finally, the additional comments and remarks made by the respondents provided elucidation of their responses and enabled the findings to be explained and understood. The survey also gave an limited insight into the policy and approach of the companies employing the respondents to their international workload. It is this theme that is developed in Chapters 8 and 9.

## CHAPTER EIGHT

I don't hold with abroad and think that foreigners speak English when our backs are turned.

Quentin Crisp  
*The Naked Civil Servant, Ch. 4*

Without the aid of prejudice and custom, I should not be able to find my way across the room.

William Hazlitt

## **8.0 CASE STUDY INTERVIEWS – THEORY AND DESIGN**

### **8.1 Aims of the Case Studies**

The case studies constitute a major contribution to the overall empirical data gathering process. The aim was to elicit the views of influential company decision-makers through the medium of semi-structured (or ‘focused’) interviews, contained within a case study format. The interviewees were asked to express their company’s strategic approach to their international construction activities, their approach to dealing with cultural differences at a strategic level and how they communicated this strategy to their staff operating overseas. In this way, the interviewees represented the ‘voice of the company’. A variety of companies were selected as specific cases. Within each case, a number of interviews were conducted to establish a consensus regarding the policy that their company adopted for its overseas activities, particularly with respect to cultural differences.

### **8.2 Components of Case Study Designs**

Yin (1994, pp. 29-35) posits five components that require special attention when designing case study research. These are:

1. *The Study Question.* Case study research strategies are appropriate where the study is seeking to answer ‘how’ and ‘why’ questions. The focus of this particular project is on the greater understanding of how cultural differences effect the performance of British construction enterprises working internationally and why those enterprises adopt their chosen strategy to deal with cultural differences.
2. *The Study Propositions.* These roughly equate to hypotheses in that they articulate the study questions in a theoretical form. The primary, secondary and tertiary hypotheses already established (see Chapter 5) can also be regarded as propositions for the case studies in this project.
3. *The Unit(s) of Analysis.* The definition of the ‘unit of analysis’ is related to the way the initial research question has been framed. For this project, the focus, as indicated

by the title, is on British construction enterprises operating in the international construction industry. Clearly, the enterprises are the main units of analysis. A problem of definition occurs where the international division of such an enterprise forms an internal, autonomous (or semi-autonomous) 'company-within-a-company'. Should the case concentrate on the internal division or on the company as a whole? Miles & Huberman (1994) suggest that, in an instant such as this, the researcher must carefully 'bound the case'.

4. *The Linking of Data to Propositions.* This area of case study methodology relates to the internal validity of the research. A useful approach in the methodology of case studies is the notion of "pattern-matching" (Yin, 1994). This entails relating several pieces of information from each case to the theoretical propositions.
5. *The Criteria for Interpreting Findings.* It is important that, where the method of analysis is non-statistical, other criteria can be applied to the research findings in order to validate the propositions. In some situations, one would have to rely on the fact that the data were sufficiently contrasting that the findings could be interpreted in terms of comparing at least two rival propositions.

### 8.3 Theory in Case Studies

An important difference between case study research and other ethnographic forms of data collection is the role of theory. Typically, other methods deliberately avoid specifying any theoretical propositions at the outset. Contrary to these other methods, Yin (1994, pp. 35-36) recommends that *a priori* theory development in advance of the collection of any data is an essential step in conducting case studies. According to Yin, the goal of theory in case studies is to provide a "sufficient blueprint" (or theoretical framework) for the study through theoretical propositions. This enables the complete research design to provide strong guidance for determining what data to collect and strategies for analysing that data. Furthermore, appropriately developed theory is the 'level' at which generalisation of case study results can occur. The role of theory is characterised by Yin as "analytic generalisation", as opposed to the other common way of generalising results, 'statistical generalisation' (pp. 38).

In common with other data collection techniques, the quality of case study designs can be judged by a number of factors (see Chapter 5 for a fuller description of these factors). Approaches that can be adopted in order to satisfy each of these criterion when conducting case study research are shown in Table 8.1:

| Criterion          | Case Study Approach                                | Phase of Study to Which Approach Applies |
|--------------------|--|--|
| Construct Validity | Use multiple sources of evidence                   | Data collection                          |
|                    | Establish chain of evidence                        | Data collection                          |
|                    | Have key informants review draft case study report | Composition                              |
| Internal Validity  | Pattern matching                                   | Data analysis                            |
|                    | Explanation Building                               | Data analysis                            |
|                    | Time series analysis                               | Data analysis                            |
| External Validity  | Use of replication logic in multiple case studies  | Research design                          |
| Reliability        | Use of case study protocol                         | Data collection                          |
|                    | Develop a case study data base                     | Data collection                          |

**Table 8.1** Approaches to Satisfy the Research Method Design Tests when Conducting Case Studies (Yin, 1994)

## 8.4 Types of Case Study Design

Yin (1994) distinguishes between a number of generic case study designs. The type chosen should depend on two factors: the number of cases involved (one or more than one); and the number of units of analysis (one or more than one). The four basic types of design are:

- single-case holistic designs,
- single-case embedded designs,
- multiple-case holistic designs,
- and multiple-case embedded designs.

### 8.4.1 Single- and Multiple-Case Designs

Single-case designs are appropriate in a number of situations. In that each case is analogous to an experiment, a single case can be treated as a ‘critical case’, when testing well-formulated theory. Where there is more than a single case in a study, a multiple-case design is required. According to Yin (1994) whereas at one time single- and multiple-case designs had different methodologies, today, no methodological distinction is made between the two. However, evidence from multiple-case designs is often

considered more compelling and the overall study can, therefore, be regarded as more robust (Kirk & Miller, 1986).

Each case should fulfil a specific purpose within the overall scope of enquiry. Yin (1994) suggests considering multiple cases as multiple experiments and following the same 'replication' logic advocated in experimental designs.

#### ***8.4.2 Replication Logic in Case Study Methodology***

Each case must be selected so that it either: predicts similar results (a literal replication); or produces contrary results but for predictable reasons (a theoretical replication). Thus, in pursuing multiple cases within the study design, the researcher might choose some cases to demonstrate literal replication and others to illustrate different patterns of theoretical replication. If the cases turn out as predicted, there would be compelling support for the initial set of propositions.

An important step in replication procedures is to develop a rich, theoretical framework. The framework needs to state the conditions under which it is likely to be found (a literal replication) as well as the conditions when it is not likely to be found (a theoretical replication). The theoretical framework later becomes the tool for generalising to new cases, similar to the role played in cross-experimental designs (Cook & Campbell, 1979).

#### ***8.4.3 Holistic versus Embedded Case Studies***

The same case study may involve more than one unit of analysis. This occurs when, within a single case, attention is given to sub-units. If this is so, then the design is termed an 'embedded case study design'. In contrast, where there are no sub-units involved, the design is termed a 'holistic (global) case study design' (Yin, 1994). These variations of case study design are applied to both single- and multiple-case designs and, in each instance, convey different strengths and weaknesses to the overall research design.

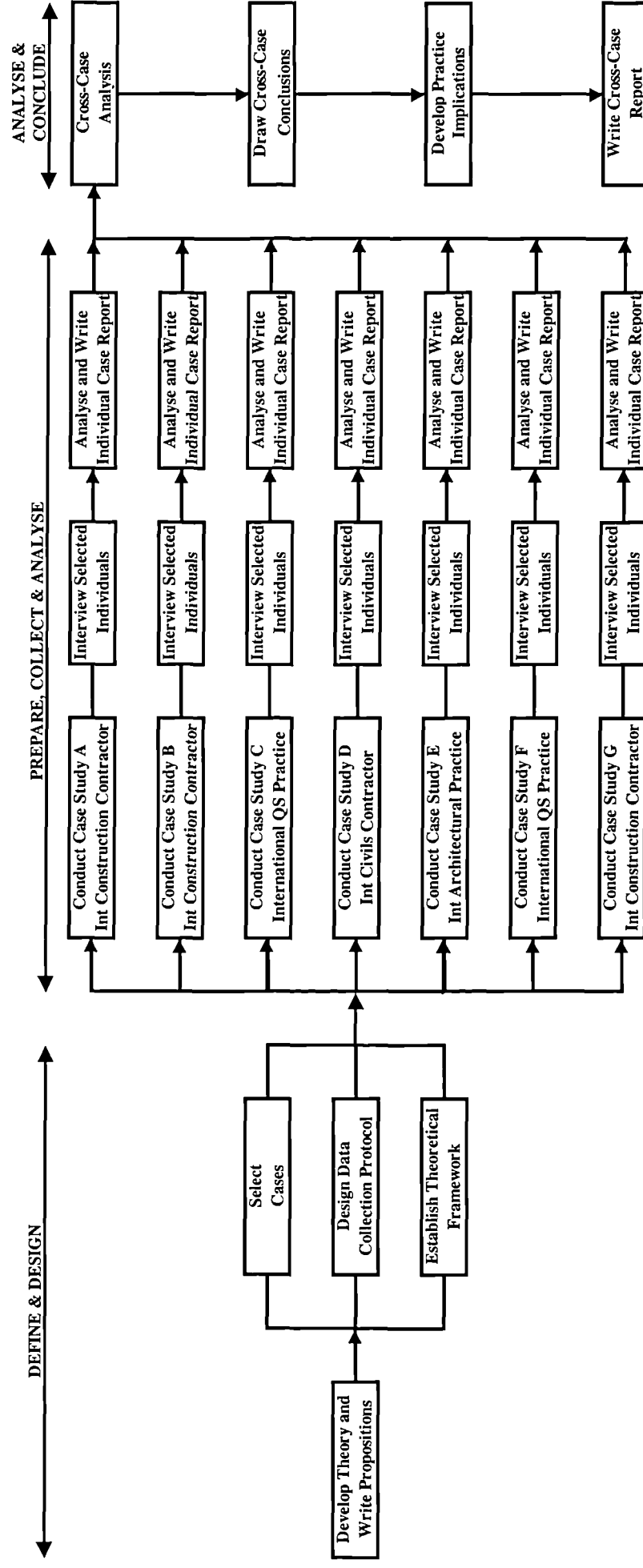
The holistic design is useful where no logical sub-units exist or where the underlying theory is, itself, of an holistic nature. However, a holistic design can tend to lead to the case study being conducted at an abstract level, lacking any clear measures or data. Another problem, associated with a holistic-type design, is that the collected evidence may not answer the original research question and, thus, the orientation of the research shifts. This can be a major issue as the original research design may no longer be appropriate to the research questions being asked. Thus, it tends to be one of the greatest criticisms of the case study approach.

An embedded design can prove a useful tool in preventing this shift in research orientation occurring as the sub-units serve to focus the inquiry. However, embedded designs carry their own dangers. A common one is that the research starts to focus on one, or more, of the sub-units and fails to return to the larger unit of analysis. In this case, the original research question becomes the context, and not the target, of the research.

#### ***8.4.4 Implications for this Research Project***

The nature of the research question and aims of the case study research mean that a multiple-case design would be appropriate. Each 'case' is an individual 'international construction enterprise', based in the UK. Consequently, these can be viewed as the key units of analysis. However, there remains a potential problem in defining these 'units of analysis'. The orientation hypotheses require information from a variety of sources within each enterprise. This will entail, where possible, interviewing a variety of individuals (e.g. the personnel manager, commercial manager, company director, etc.). The question then arises as to whether the individuals, their respective departments or the type of information being sought become the 'sub-units of analysis'. Thus, a 'multiple-case embedded' case study design is being adopted. The multiple-case design will endow the data with greater authority while the application of replication logic will improve the validity of the empirical work. The case study strategy is illustrated in Figure 8.1.





**Figure 8.1** The Case Study Design (adapted from: Yin, 1994).

## 8.5 Preparation for Case Study Data Collection

From the point of view of gathering research data, Yin (1994) suggests the focus should lie in two domains: the preparation for data collection; and the data collection technique itself. Preparation for data collection for case studies consists of the development of a case study 'protocol' and the undertaking of a pilot case study.

### 8.5.1 *Developing a Case Study Protocol*

Yin (1994, pp. 70) defines the case study protocol as both the data gathering instrument and the procedures and rules to be followed in using that instrument. A clear protocol is of particular importance when conducting a multiple-case design (such as the one to be used in this study), as it is one of the main methods of increasing the reliability of that study (see Table 8.1). A good protocol is important because it reminds the researcher what the case study is about and the preparation of the protocol helps to anticipate problems, such as how the case study reports might be completed. Key elements of the protocol are discussed below and presented in Appendix 7.

#### *(1) Overview of the case study project.*

The overview covered the background information about the project (the context and theoretical concerns). The following elements required detailed consideration:

- Case Study Selection Criteria
  1. The cases as a whole reflect a range of experience across the industry.
  2. Qualitative sampling issues – Strauss & Corbin (1990) term sampling in qualitative research as 'theoretical sampling'.
- The Research Propositions – the case studies principally sought to develop on two propositions arising from the theory. These were the primary orientation hypothesis, (see Section 5.2.1) and the tertiary orientation hypothesis (see Section 5.2.3). However, the other propositions, outlined in Section 5.2.2, were also explored. The variables arising from these propositions supported the development of the interview guide while the overall thrust of the case studies was directed by the propositions.

## *(2) Field procedures.*

This aspect of the protocol is vital, as the data were being collected within their real-life context. The focus became one of attempting to integrate real-world events with the needs of a data collection plan. Well-planned and explicit field procedures highlighting 'coping' behaviours and guidelines were necessary to implement this integration. The field procedures stressed the major data collection tasks within this context, those being:

- Gaining access to organisations and individuals: This was the most difficult part of arranging the case studies. Strategies employed to redress the problems of case study recruitment included assuring the participants of confidentiality, clearly outlining the aims and goals of the research, including a follow-up question in the survey and offering a report of the findings. Advice from Buchanan *et al* (1988) was also heeded.
- Provision of sufficient field resources.
- Producing a schedule of the required data collection activities, contributing to a 'chain of evidence' (Yin, 1994, pp. 102) and demonstrating the iterative nature of the analysis.
- Providing for unanticipated events.

## *(3) Case study questions.*

The basis of the protocol was a set of questions forming the structure of the research project. Essentially, these questions tied the needs of the research with the nature and context of the specific case: they articulated the research goals as data needs for the case. The interview questions were derived from them.

## *(4) Guide for the case study report.*

This stage of the protocol did not require a great deal of detail: merely some consideration of the outline, format and audience for the case study report. Some of the issues that were given consideration included:

- The case study audience.
- Case study report approaches.
- Case study report structures.

### **8.5.2 Piloting the Case Study Design**

A pilot case study was considered to be vital, as it helped to refine the data collection plans with regard both to the content of the data and the collection procedures. In

general, convenience, access and geographic proximity were the main criteria for selection of a pilot case study (Yin, 1994). The inquiry for the pilot case study was broader and less focused than the planned data collection scheme. Furthermore, the pilot research covered both theoretical and methodological issues. The pilot case study yielded a number of benefits that, in turn, improved the progress of, and eventual outcomes of the project. It:

- ensured that the right protocol and propositions were in place;
- ensured that adequate preparations were made prior to data collection;
- provided practice in conducting semi-structured interviews, while assuring the adequacy and relevance of the interview guide;
- provided the opportunity to undertake preliminary transcriptions and give an indication of the time required in this respect;
- and verified the approach to be used in analysing the interviews and drawing conclusions to the case.

## **8.6 Collection of Case Study Data**

Case study methodology does not provide a technique for the actual collection of data. Instead, it provides a context, and guiding methodology within which other data collection techniques can occur. Procedures and methodology specific to semi-structured interviews are considered in section 8.7. However, there are a number of overriding aspects important to any data collection effort when that data collection is contained within the domain of case study methodology (Hamel *et al*, 1993).

### *(1) The Case Study Database*

Every case study project should strive to develop a formal, retrievable database of the 'raw data' so that the evidence can be reviewed directly. This is an important element in establishing the reliability of the overall project, as identified in Table 5.2. The only essential characteristics of the database are that it is complete, organised, categorised and available for later access. In this instance, the original cassette recordings were archived and the transcriptions maintained on the NUD\*IST database (see Appendix 9).

### *(2) Maintaining a Chain of Evidence*

To increase the construct validity (see Table 5.2), and also the reliability, of the overall project, a clear chain of evidence must be maintained. The principle is to allow the

reader to see how the evidence for the final report derives from initial research questions through to the final conclusions.

## **8.7 Interview Methodology**

In practical terms, an interview is merely a conversation that has a structure and a purpose. Kvale (1996, pp. 5-6) defines a semi-structured research interview as:

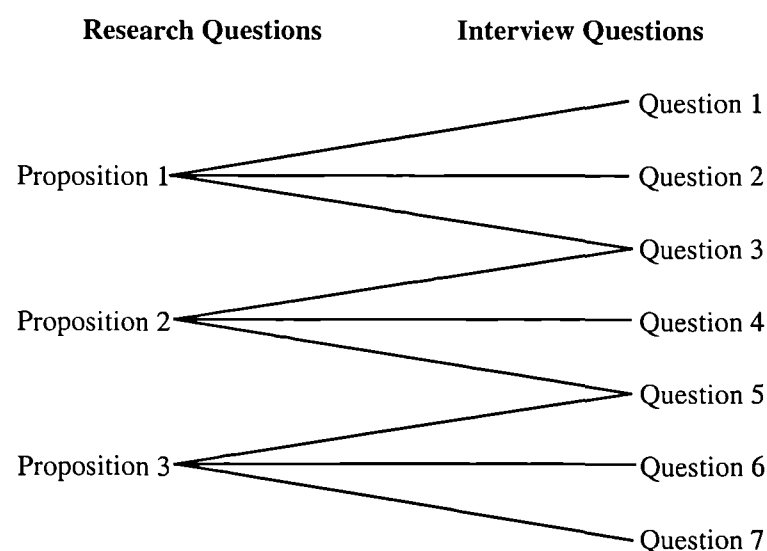
“... an interview whose purpose is to obtain descriptions of the life world of the interviewee with respect to interpreting the meaning of the described phenomena”

Kvale (1983) identified some key features of semi-structured interview technique. The purpose of the interview is to describe and understand the central themes the interviewee experiences. Thus, the interview should be theme-orientated, not personality-orientated. In conducting the interview “[i]t is ... necessary to listen to the directly expressed descriptions and meanings as well as what is said ‘between the lines’, and then to formulate the implicit message and ‘send it back’ to the interviewee.” (Kvale, 1983, pp. 175). In this way, the interview can receive confirmation or refutation of their interpretation of what the interviewee is saying. Neither in the interview phase, nor in the latter analysis phase, is the purpose to collect primarily quantifiable responses. Precision in description and rigour in meaning interpretation in qualitative interviews correspond to exactness in quantitative measurements. A traditional requirement of the scientific method is the concept of replication. However, during the course of an interview, the interviewee has the opportunity to reflect upon a subject he or she may not even have previously considered. Thus, the interviewee’s opinion is liable to change through the course of the interview and, consequently, different data could be gathered in subsequent interviews. This problem in the methodology of semi-structured interviews can be overcome for this particular project, as the interviews will be contained within a case-study format. It is at this level that replication will occur. Finally, sensitivity to and foreknowledge about, the topic of the interview is a key requirement for the interviewer. However, this contrasts with the requirement for the interviewer to approach the interview free from presuppositions. The tension between these two results in the interviewer having to adopt a “deliberate, conscious naïveté” (Kvale, 1983, pp.178).

An interview guide indicates the topics and their sequence for the interview. The guide can vary from just some rough topics to a list of carefully worded questions. According to Kvale (1996), each interview question can be evaluated in terms of its 'thematic' and its 'dynamic' dimension. Thematically, the questions relate to the theoretical conceptions at the root of the investigation, and to the subsequent analysis. Dynamically, the questions should promote a positive interaction, allowing the conversation to flow and encouraging the interviewees to talk about their experiences and opinions. Thus, the questions should be easy to understand, short and free from academic jargon. One research question can be explored through several interview questions, thus, obtaining rich and varied information. Equally, one interview question might provide answers to a number of research questions.

## 8.8 The Interview Guide Design

Kvale (1996) uses the following model (Figure 8.2) to illustrate how the research questions and interview questions may be inter-related. This model demonstrates that, while a number of questions may be required in order to adequately explore each proposition, more than one proposition may be addressed by a single question.



**Figure 8.2** Relationship between research questions and interview questions (Kvale, 1996).

### ***8.8.1 Case Specific Questions***

#### *Question 1a:*

To what extent does the case study organisation consider cultural differences with regard to its corporate structure, policies and organisation-wide standards?

#### *Question 1b:*

Where cultural differences are considered in this respect, how are they implemented?

#### *Question 2a:*

Are cultural management techniques employed in the application of the various elements of global strategy?

#### *Question 2b:*

Where cultural management techniques are employed, how are they implemented?

#### *Question 3a:*

Is cultural diversity and difference given any consideration in the execution of human resource management practices and policies?

#### *Question 3b:*

Where cultural diversity and difference are given consideration in this respect, how is this achieved?

#### *Question 4a:*

To what degree are cultural management practices incorporated into the human resource development function?

#### *Question 4b:*

Where cultural management techniques are incorporated in this respect, in what ways is this accomplished?

### ***8.8.2 The Interview Schedule Questions***

Although the study propositions and case study questions outline the nature of the data which need to be gathered during the interviews, these must be articulated in a form that enables that data to be collected in as unassuming a manner as possible. Specifically, what is required from the research participants are answers to the following questions:

- What input do they have into their company's/organisation's decision making at policy and strategic levels – what areas are they specifically responsible for?
- What do they understand by the term “international construction management”?
- What do they see as the most important aspects of managing internationally – and why?
- Do they see international management of construction, both at a project level and an organisational level, as being more complex than management of the same domestically?
- Why, in their opinion, does their company choose to operate internationally?
- What future plans do they envisage for the company internationally?
- Where do they see the role of training in their company's overseas strategy?

The questions subordinate to those asked of the case, form the interview guide (or schedule). As the interviews were to be semi-structured, the interview guide bears similarities with the case-study questions. The interview guide was not be a rigid list but, instead, identified topics that should be covered during the course of the interview. The sources for these topics included:

- those derived from the literature;
- those arising from the responses to the questionnaire;
- and those based on personal experience and knowledge.

The interview guide had to be a flexible document (King in Cassell & Symon, 1994) which was modified through use, and through successive interviews. Probes (and even whole topics) could be added after initial interviews had been completed, as they emerged spontaneously from the discourse. Similarly, those areas that were incomprehensible to the interviewees, or consistently failed to elicit useful or relevant responses, were dropped or reformulated. Seidman (1991) provides a typology for interview questions that was adopted for the interview guide.

### ***8.8.3 The Interview Guide (or Schedule)***

The interview guide is presented in Appendix 8. The guide outlined the key question areas and gave some consideration to individual question wording. The guide had a structure comprising four sections within which the questions were placed. Each section



served a specific purpose within the scheme of the interview: both thematic and dynamic.

*(1) Section One – Interviewee's Background*

It was important to establish the context of the interview at an early stage. These questions were designed to confirm the position and seniority of the interviewee. As has been previously stated, the interviews were aimed at managers and directors with responsibility and knowledge of strategic policy issues with regard to their company's international activities. Preferably, these individuals were responsible for, or involved in, strategic decision-making. The manager's specific area of responsibility had an impact on the shape and direction of the subsequent interview. For example, Personnel managers had a greater knowledge of recruitment issues than Commercial managers who, in turn, had a better knowledge of legal and financial issues. Thus, while this section did not directly address the research propositions or case study questions, it did indicate which of those propositions and questions would best be addressed by the interviewee.

*(2) Section Two – The Interviewee's General Understanding of International Construction Issues*

These questions were designed in order to allow the interviewees to volunteer information regarding what they considered to be the key issues in international construction. It was expected that their perspective would be influenced by their professional interest. However, the purpose was to see if the interviewees mention cultural factors as a concern to them, from their strategic perspective, without prompting. A number of areas of consideration were listed as clarification points and probes in case these were required. They covered some of the key aspects of strategic business management which can be effected by cultural differences (and have been identified in the literature) such as marketing, partnering, logistics, finance, etc. However, the aim was to allow the interviewees to volunteer information freely rather than be prompted. The questions in this section of the interview guide addressed, in part, the first two orientation hypotheses (see Section 5.2), namely:

*Cultural Diversity, at a national level, effects the management and business activities of British construction enterprises operating internationally.*

and

*Managers operating internationally for British construction enterprises adopt an ethnocentric/parochial approach in response to cultural diversity.*

It was anticipated that these orientation hypotheses would be explored, during this stage of the interview, with respect to the interviewees' experiences and opinions, as the tenor of the questions was geared to establishing the interviewees' view of the important issues in international construction management from their own, personal perspective. As a consequence, Case Study Questions 1a and 2a were answered for this particular element of the case study, together with their associated questions, 1b and 2b, regarding subsequent implementation (see Section 8.8.1 and Appendix 7):

*To what extent does the company consider cultural differences with regard to its corporate structure, policies and organisation-wide standards?*

and

*Are cultural management techniques employed in the application of the various elements of global strategy?*

### *(3) Section Three - The Interviewee's Perception of Their Company's International Workload*

While the former section related directly to the individuals' views, this section aimed to see how those views translated into company policy. The section began with direct, factual questions, which established the interviewee's knowledge of some key aspects of their company's international workload. Where possible, this was supported by prior research into the company's current and historical international profile, either from a published history or from annual accounts. Questions followed aimed at establishing how the company developed its policy with regard to international construction management and, in doing so, completed the understanding of the research propositions mentioned above.

### *(4) Section Four - The Interviewee's Knowledge of Personnel Issues*

This section of the interview guide was specifically directed to addressing the fourth orientation hypothesis (see Section 5.2.3), namely:

*As part of their international company policy, British construction enterprises provide little or no training and education in cross-cultural issues for their managers who are working in a culturally diverse environment*

and, consequently, addressed Case Study Questions 3a and 4b, i.e.:

*Is cultural diversity and difference given any consideration in the execution of human resource management practices and policies?*

*To what degree are cultural management practices incorporated into the human resource development function?*

## **8.9 Interview Transcription**

The usual approach to analysing interviews is to transcribe the oral conversation (recorded on cassette and supplemented by notes) to written text. Structuring the material into texts facilitates an overview and is, in itself, a beginning analysis. Rather than standard rules for transcription, the procedure involves a series of choices from such factors as the nature of the material, the purpose of the investigation and the time and money available (Kvale, 1996).

Kvale (1996) notes that written transcriptions are “artificial constructions” of the oral interview, the production of which involves a series of judgements and decisions. Consequently, there are important issues of reliability and validity involved in the transcription procedure. With regard to reliability, there is almost always going to be differences between the transcripts of the same taped conversation when produced by different transcribers. This will inevitably result in slightly different interpretations of the same passage. Ascertaining the validity of interview transcripts is more complex. Transcripts are ‘out-of-context’ conversations. As such, they can be represented in many different ways. Consequently, there is no such thing as a ‘correct transcript’. A more useful approach was to transcribe the interview in a form that is most appropriate to the research in hand.

The interpretative basis of transcripts is often forgotten in the analysis, where the transcripts tend to become the ‘rock-bottom basis’ for the ensuing interpretations.

However, the complexities of transcription from oral to written language required serious consideration.

“Not being able to rely on a conception of a stable, universal, noncontextual and transparent relation between representation and reality, and between language and meaning, confronts researchers with serious and difficult theoretical and methodological problems.” (Mishler, 1991, pp. 278).

Kvale (1996) considers that ignoring these complexities implies a philosophy of naïve realism when what is required is a post-modernist conception of knowledge with an emphasis on the contextual nature of meaning.

### **8.10 Summary**

The aim of the case studies was to provide a perspective on the strategic approach of international construction enterprises to their overseas workload, with specific reference to the cultural dimension. In designing case studies, there are five components requiring specific attention. These are: the study question; the study propositions; the units of analysis; linking the data to the propositions; and the criteria for interpreting the findings. In case study designs, theory plays an important role in allowing analytic generalisation as opposed to statistical generalisation found in surveys. Finally, case study quality is measured in terms of its validity and reliability. Different case study types meet the various criteria to differing degrees and this should be recognised in designing case study research.

The types of case study design available are either single or multiple case and either holistic or embedded. Rather than relying on the sampling logic of surveys (see Chapter 6) case studies use replication logic, seeking cases which either allow literal replication or theoretical replication. In the instance of this study, the multiple-embedded design was chosen as being the most suitable. The case studies will consist of several different construction enterprise (multiple), each comprising one or more interviews (embedded). The case study design can be shown diagrammatically.

A key administrative element in conducting case study research is the case study protocol. The protocol comprises four principle aspects: the overview of the case study

project; the field procedures; the case study questions; and the guide for the study report. Another key element in conducting case study research is the piloting strategy. This enables checks to be made of the protocol and proposition appropriateness, the procedures for data collection and allowed practice of interviewing and data analysis.

The case study method does not provide a specific means of data collection. Rather, it provides a context within which other forms of data collection and analysis can occur. This data and the resultant findings can then be referred back to the case. However, two points relevant to all case studies, irrespective of the form of data collection adopted are the case study database and the chain of evidence. These are important to enhancing the reliability of the resultant data.

The data collection method chosen for this study were semi-structured, or focused, interviews. While they contain only partial structure, thereby enabling the research participants to give a relatively free and unbiased account of their company's strategy, a certain degree of structure is necessary, manifested in the interview guide. This provides the dynamic and thematic dimensions for each interview through a series of loose, open questions. There are also strategies that may be employed to improve the quality of the interviews. The interview guide design comprised a series of question falling into four sections dealing with different issues. The questions were carefully selected to relate to the case study propositions which, in turn, related back to the orientation hypotheses outlined in Section 5.2 of Chapter 5. The four sections of the interview guide referred to:

- the interviewee's personal background,
- the interviewee's general understanding of international construction issues,
- the interviewee's perception of their company's international workload
- and the interviewee's knowledge of personnel issues.

Finally, interview transcription is an issue rarely given much consideration but which has an important influence on the approach to the analysis of the interview data.

## CHAPTER NINE

'Tis our true policy to steer clear of permanent alliances with any portion of the foreign world.

George Washington

## **9.0 CASE STUDY ANALYSIS**

### **9.1 Case Study Descriptions**

The case studies comprised a total of 13 semi-structured interviews of between one and two hour's duration. The interviews were conducted within seven case studies, with different numbers of interviews in each of the separate case study organisations. Confidentiality was assured to all the participants. Thus, each case study organisation is referred to as a letter, i.e. Case Study A, Case Study B, etc. Similarly, each interviewee is referred to by a number, i.e. Interviewee 1, Interviewee 2, etc. Each description begins with details of the case study organisation itself, including an indication of its turnover and the proportion of its work carried out internationally, together with an indication of its experience of overseas work. Within each case study are embedded a number of sub-units of analysis, which are the interviews conducted with key personnel. The interviewees are described in terms of their role in the organisation and involvement in overseas work. There is also a summary of their experience, both within the industry generally and overseas in particular.

#### ***9.1.1 Case Study Organisation A***

The first case study organisation was a subsidiary of the UK division of an extremely large, American-owned AEC company, involved in technical, management, and directly related services to develop, manage, engineer, build, and operate installations for customers worldwide. The subsidiary was involved in the construction, operation and provision of public utilities in the UK. The subsidiary operated in a joint venture with the parent company to represent their joint interests in pursuing privatized, concession, and Build-Operate-Transfer (BOT) type water and wastewater treatment projects outside North America. In 1998, the parent firm had an approximate turnover of US\$12.6 billion, of which US\$7.8 billion was derived from activities outside North America. The organisation, as a whole, employed approximately 30,000 people worldwide. Despite its size, the company was still family-owned, and had been working internationally since the 1940s. The joint venture arrangement contributed approximately £10 million to the subsidiary's overall turnover, employing 90 people. The joint venture organisation only had a relatively small turnover, as it had not been operating internationally for very long.

The case study comprised one embedded unit: an interview with the Manager of International Operations for the joint venture organisation (Interviewee 3). The interviewee had worked for the organisation for 25 years, of which 23½ had been directly for the parent company in their London office rather than for the subsidiary joint venture. The interviewee had previously been involved in petroleum and other industrial-type projects. The interviewee had a broad experience of overseas work, having formerly worked in the Middle East and Far East, as well as travelling extensively in Southern Africa, the Middle East and Europe whilst working in a business development role.

### ***9.1.2 Case Study Organisation B***

The second case study organisation was a medium-to-large British-based multinational construction contractor. The approximate total turnover of the construction group, in 1996, was £321 million, with its overseas operations accounting for approximately £175 million. The company's activities were primarily confined to 'traditional' construction contracting operations. Its main overseas operations were based in the Middle East, Far East and Africa. It had a long history of working overseas (carrying out major international construction projects in the 1930s) but developed a more significant overseas presence in the 1960s, since when it has been able to accumulate a great pedigree in this respect. The company employed around 9,500 people, approximately two-thirds of whom were based overseas.

This detailed case study comprised five embedded units of analysis. These consisted of interviews with the following individuals.

- The UK/international Liaison (Interviewee 8). He had worked in the construction industry for 34 years as a quantity surveyor. He had worked for about 20 years in civil engineering in the UK, although that had involved some overseas work in Greece, Cyprus and Turkey in the early to mid-1980s. After working on several major projects in the UK, he was transferred to the International division of his company in the early 1990s, working on a major construction project in the Middle East. He became commercial director of the Middle East and took on additional responsibilities for South East Asia, primarily in the UK liaison role. When



interviewed, he was the only person representing the company's overseas business interests from the UK, being based in the UK but travelling overseas regularly.

- A Senior Quantity Surveyor from the company's Malaysian subsidiary (Interviewee 7). He had previously worked in the UK as a quantity surveyor for a number of years before taking a placement to the Middle East. He was a project surveyor there for a time before moving to Hong Kong for a short spell. Finally, he took a position as senior quantity surveyor in the company's Malaysian subsidiary. He had recently returned to the UK to work on a major PFI (Private Finance Initiative) bid with members from a European partner company.
- The Managing Director of the Middle East division (Interviewee 1). He had worked internationally from 1975 until 1989, before returning to the UK for 7 years. He had recently returned to international work by becoming managing director for the Middle East division of the company. Thus, the majority of his working experience had been overseas, mainly in West Africa and the Middle East.
- The Head of Human Resources for the construction group (Interviewee 11). He had previously worked for various companies within other industries before joining the group eight years earlier. He was initially recruited for his experience of manufacturing companies, where he had been involved in introducing initiatives such as total quality management (TQM). He had also had some fairly extensive experience of working in an international environment, particularly in Europe. He moved into an overseas role as the company were trying to improve their overseas personnel practices.
- A Manager responsible for Business Strategy Development (Interviewee 13). He had recently been involved in advising the company's executive board with regard to international strategy formulation.

### ***9.1.3 Case Study Organisation C***

The third case study organisation was a large, UK-based international quantity surveying consultancy. Their total fee turnover in 1997 was £37 million and they employed around 750 people in 28 countries. The turnover from overseas activities represented about 15% of the total turnover. The organisation's main areas of activities outside the UK were in Central Europe, Asia Pacific and Central and Southern Africa.

The case study contained two embedded units of analysis. They were interviews with:

- The Equity Partner responsible for international operations (Interviewee 10). He joined the organisation 11 years earlier when they acquired the small international quantity surveying practice for which he had worked. He was brought in to develop their international business as they did not have a formal international structure at that time. Prior to joining the case study organisation, the interviewee had lived and worked in Saudi Arabia for 6 years, thereby gaining a knowledge of the Middle East market place. On joining the company, he had two functions: one was to develop an overall strategy for the international business; and the other was to continue to develop his Middle East contacts.
- A Senior Quantity Surveyor working in the international division (Interviewee 5). He had only recently joined the company, having previously worked for a smaller consultancy which, although it was based in the UK, worked almost exclusively overseas. One of his roles was to deal with claims and disputes arising internationally, another being to provide advice to colleagues based overseas.

#### ***9.1.4 Case Study Organisation D***

The fourth case study organisation was a small, UK civil engineering subsidiary of a large, European-owned construction contracting business. The UK company had a turnover of approximately £225 million, to which only £14 million was contributed from overseas activities. The parent company had a turnover of approximately £3.5 billion and contained a division specifically assigned to pursuing international construction work. The majority of the UK company's international work was conducted in association with this parent company division.

This case study comprised one embedded unit of analysis, this being an interview with the International Business Development Manager (Interviewee 2). He had recently joined the company, having previously worked for the international division of another, much larger contractor. He was the only person based in the UK but involved in overseas work, with the role of bringing British funding and involvement to projects undertaken within the group.

### ***9.1.5 Case Study Organisation E***

The fifth case study organisation was a small, British-based, international architectural and consultancy practice. Its turnover in 1996 was approximately US \$10 million. The company was founded in the 1970s and, in the 1980s established offices across Europe. In the 1990s, it opened offices in Australia and North America. It was recently acquired by a management consultancy, which is now its parent company.

The case study comprised two embedded units of analysis. These consisted of two interviews.

- The first interviewee was an Equity Partner (Interviewee 4). He was the chairman of the company and one of the founding partners (founded in 1971), bringing his expertise in office design. His involvement was at a senior strategic level, building the organisation from its early internationally-based roots into a global organisation.
- The second interview was jointly with both the Managing Director and the Financial Director (Interviewee 12). The Managing Director had been with the practice for 11 years. He had joined as a consultant looking at strategic facilities planning. Prior to joining the company, he was with an international computer company, managing their UK corporate real estate. However, his background was not in construction. He had been managing director of the London office for the last three years. That was still the his role but his office now sat alongside the other offices as equal operations. The Financial Director came from the management consultancy which had acquired the case study company. His role had now expanded to being finance director of both companies in the UK. Both participants were involved with the European Management Team (EMT) – a European operations group that examined the way the company worked together across Europe. Thus, the Managing Director became heavily involved in European affairs even though his main concern was UK activities. The Financial Director was less involved in Europe and more involved internationally, as the international companies were smaller. He was involved in helping them to formalise themselves, putting the systems and finances in place.

### ***9.1.6 Case Study Organisation F***

The sixth case study organisation was another large, British-based cost and property management consultancy, with 22 partners and an approximate fee income, in 1997 of £20 million. Of this turnover, just over 25% was earned outside the UK, primarily in the Asia Pacific region. They employed nearly 500 people worldwide and had a presence in 19 countries outside the UK.

This case study contained one embedded unit of analysis, an interview with an Equity Partner (Interviewee 6). He was the managing partner on behalf of the practice's international business. He had been with the practice for 15 years, previously having spent 6 years overseas on three different tours of duty. He spent about 20% of his time in UK operations so as to stay in touch with current UK practice and transfer that practice overseas.

### ***9.1.7 Case Study Organisation G***

The seventh case study organisation was a very large, UK-based international construction contractor and aggregates organisation. It had an annual turnover approaching £3 billion, employing around 24,000 people in total and about 6,000 internationally. It had operations or offices in some 30 countries, particularly in mainland Europe, Southeast Asia, the Middle East, Canada and the Caribbean. Its construction related turnover was approximately £1.9 billion, of which £284 million (15%) was outside the UK. It had maintained interests in overseas activities for about 20 years.

The case study comprised one embedded unit of analysis, which was an interview with the former Chairman and Chief Executive of the company (Interviewee 9). He was responsible for the international operations in the sense that issues such as overseas profit and loss were ultimately reported to him and he had a role in developing and directing strategic thinking internationally. He was required to agree any major strategic decision which would then be finalised at local level.

## **9.2 Analysis Approach for the Case Studies**

The best preparation for conducting case study analysis is to have a general analytic strategy. This can either rely on the theoretical propositions or begin with a descriptive approach to the case. The reason that such a strategy is necessary is because the data (especially where cases include embedded units) must be analysed both for the unit of analysis and also across the case. Furthermore, where the research uses a multiple case design, the analysis of the individual cases must be drawn across the cases in general (Yin, 1994). This is because the sub-units (in this instance, semi-structured interviews) have to be analysed in the context of the case study design (Hartley in Cassell & Symon, 1994). As these conditions apply to the case study design for this study, (multiple-embedded design) such a strategic approach is necessary. In the instance of this research project, as the case study design is rooted in the orientation hypotheses outlined in Section 5.2 and developed in Chapter 8, the theoretical proposition strategy has been used.

### ***9.2.1 A Review of Specific Case Study Analysis Techniques***

Within the analysis strategy, and overlaying the analysis of the interviews, an approach to analysing the cases is required. Yin (1994, pp. 106-119) identifies four dominant modes of analysis for case studies. Pattern Matching logic entails the comparison of an empirically based pattern with a predicted one. The patterns may be related to the dependent and/or independent variables of the propositions. If that identical result is found across a number of cases, literal replication across the cases can be claimed. Explanation-Building is a special form of pattern matching, the goal of which is to analyse the data by building an explanation about the case. This entails stipulating a set of causal links, which are similar to the independent variables in pattern matching. Time-Series Analysis, also known as time-ordered analysis (Miles & Huberman, 1994) aims to relate the findings of the empirical work to a sequence of events (or time-series). If each of the events is met, in the correct order, by the findings of the case, the hypothesis is proved (Cook & Campbell, 1979). Finally, Programme Logic Models are a combination of pattern matching and time-series analysis, the analysis stipulates a series of events over time.

Because of the exploratory, non-time related nature of the case studies undertaken for this project, the most appropriate of the dominant modes described by Yin is pattern matching. Thus, this is the approach that was adopted.

### ***9.2.2 Analysis Approach for the Semi-Structured Interviews***

The case studies contained a variable number of embedded units of analysis (between one and five). These units of analysis were the semi-structured interviews carried out with the research participants. Interview analysis requires a distinct approach, which occurs within the case study analysis over-arching the interviews. Kvale (1983, 1996) notes a series of issues that should be considered in carrying out analysis of semi-structured (or focused) interviews. Some of these are mentioned below:

- The method of analysis should be planned prior to conducting the interviews and should, to varying degrees, be built into the interview situation. This was achieved by asking frequent clarification questions (see Chapter 8).
- In deciding how to analyse the data, the researcher should not put too much emphasis on the 'method' as a reliable technique. The skill in analysis is the application knowledge and interpretative expertise through the medium of a method in order to build meaning and understanding of the data.
- Interviews are not transcripts. The transcript is a hybrid of an oral discourse in a real situation and a written text created for a general, distant, readership. They are a convenient way of representing the interview.

The analysis of qualitative data can be seen as comprising three interrelated components (Miles & Huberman, 1994). In conducting qualitative research, these dimensions of analysis are interwoven as part of an intricate, iterative process. This is in contrast to quantitative research, where the process of data analysis is far more sequential. Hartley (in Cassell & Symon, 1994) notes that this feature of qualitative research analysis is a methodological strength as it "allows for theory development which is grounded in empirical evidence" (pp. 220).

#### **1. Data Reduction**

This referred to the process of selecting, focusing, simplifying, abstracting and transforming the data that appeared in the interview transcriptions. Data reduction occurred continuously throughout the life of the project. Even prior to data collection, decisions were made as to which conceptual framework, which cases, which research questions and which data collection approaches to choose, all of which conspired, in anticipation, to 'reduce' the eventual collected data. Tesch

(1990) notes that all the activities of 'data condensation' are analytical choices. It is a process "that sharpens, sorts focuses, discards and organises data in such a way that final conclusions can be drawn and verified" (Miles & Huberman, 1994, pp. 175).

## 2. Data Display

This "is an organised, compressed assembly of information that permits conclusion drawing and action" (Miles & Huberman, 1994, pp. 176). Put simply, it required some form of diagram or figure designed to assemble the reduced data in a way that is compact and easily accessible, both to the researcher and the final reader. Miles & Huberman assert that good displays "are a major avenue to valid qualitative analysis".

## 3. Drawing of Conclusions

This stage began at the start of data collection. During the interviews, patterns, explanations and causal flows were noted. Initially, they were vague and rudimentary but, over time, they became increasingly explicit as they became 'grounded' (Strauss & Corbin, 1990) in the data. As the conclusions were formed, verification occurred, wherein the truth and utility of the conclusions was established – that is, their validity.

### ***9.2.3 Analysis Procedure***

The interviews were recorded and transcribed. Initially, the transcripts were read in conjunction with the recordings and analysis notes made where appropriate. The data gathered and contained in the transcripts was then deconstructed and divided into an analysis structure using the NUD\*IST computer-aided analysis package (see Appendix 9). This structure comprised categories within which relevant segments of the interview transcripts were collected. These categories represented key themes and issues. It was found necessary to divide many of the categories into sub-categories to allow for finer coding of the themes and allow for a fuller understanding of their meaning and the research participants' understanding of the issues. The 'demographic' details of the interviewees and their companies were held elsewhere in the coding structure. This allowed the discussion within the interviews to be matched across various case-based characteristics to see where patterns were emerging.

The categorisation structure arose partly from the predetermined interview structure that was used as a guide throughout the interviews (see Section 8.8.3 and Appendix 8). However, the interviews were semi-structured in nature and, consequently, a number of unanticipated categories emerged, through an inductive process, both during the interviews themselves and during reflection upon the interviews. Where these were found to be both interesting and relevant, in that they related to the research questions, they were incorporated into the data structure.

#### ***9.2.4 Data Structure***

The data was structured into three primary sections: general issues, workload policy and strategy and human resources issues. Within each of these sections there were a number of categories arranging the ideas arising from the analysis of the interview transcripts. These categories are not ranked in any order of importance or relevance. Indeed, their importance arises from the understanding and appreciation of them expressed by the research participants during the interviews. The main categories within each section are listed and briefly described below.

##### ***(1) General issues***

- 1 Marketing: how the company goes about marketing itself internationally. Within this category there were 20 subdivisions, dealing with, among other factors, the problems the companies faced when marketing, their client base and why they had that client base, their general approach to marketing internationally, and the importance of cultural differences within their marketing strategies.
- 2 Partnerships and joint ventures: issues relating to establishing and maintaining partnerships and joint venture relationships with other companies and within their own companies. This category contained 13 sub-categories concerning the need for partnerships, types of arrangements, benefits and difficulties involved and, again, the relevant culturally-related issues within this theme.
- 3 Overseas offices: the procedures and policies involved in setting up and maintaining overseas offices. Within this category there were 10 sub-categories, dealing with the reasons for having overseas offices and the benefits and difficulties entailed in maintaining overseas offices.
- 4 Human resourcing: aspects relating to the staffing and resourcing policies and practices internationally. There were 8 sub-divisions within this category



- concerning the relative merits of staffing with expatriates or locals and the importance of cultural issues in staffing and resourcing decisions.
- 5 Technical issues: the relevance of technology within the industry internationally. There was only one sub-category concerning the relative ability of local construction industries vis-à-vis the technical expertise that the case study companies, as internal organisations, could bring to overseas projects.
  - 6 Logistical issues. There were no sub-divisions of this category.
  - 7 Commercial aspects: the policies and strategies employed to ensure commercial viability of international operations. There were four sub-categories, relating to the problems of maintaining cashflow and financial control of far-flung interests and approaches to capitalisation and procurement.
  - 8 Technology transfer: the relative importance of technology transfer within an international construction context. There were two sub-categories, concerning the concept of managerial/conceptual 'technologies' and the use of technology transfer within the organisation's marketing policy.
  - 9 The most important issue: the factor or factors that were, for the participants, without prompting, the most important when working overseas. There were 10 issues coded within this theme, relating to a wide variety of different issues mentioned elsewhere. Thus, many of the items coded in this category were also coded in others.
  - 10 Quantity surveying: bearing in mind a large number of quantity surveyors were interviewed, they made a number of remarks regarding the changing nature of this uniquely British discipline in the international construction market. There were no sub-categories referring to this theme.
  - 11 Culture: exploring the impact that culture, at the national level, has on the operations and activities of the case study organisations. Clearly, within the context of the research question, this is the most important category and this was reflected in the presence of 23 sub-divisions of the theme. The sub-categories addressed issues such as the specific effects of cultural differences, policies and procedures the organisations implemented to deal with or manage those differences, their general effect on conducting business internationally, the influence of specific facets of culture on working overseas, and some drawbacks and advantages presented by culture in different contexts. There was also coding of reactions and responses to the cultural differences the organisations encountered.

- 12 Ethics: although it can be argued that ethical differences are merely a manifestation of culture, there was so much discussion of this issue that it warranted a separate category. Within this category, interview transcriptions were coded at 10 sub-categories. These dealt with the impact and nature of ethical differences, the responses and policies in place to cope with these differences where they were confronted, and the advantage of British 'professionalism' in some environments.
- 13 Viability: an issue which was often mentioned was the viability of working internationally in light of the difficulties often expressed by the participants. There were no sub-categories for this theme.
- 14 Parent company involvement: it emerged that the involvement of parent companies could have a considerable effect on how organisations approached their overseas activities. This topic is coded here, with no sub-coding.
- 15 Corporate culture: another important influence on the way companies devised and implemented strategy was the relative importance of the organisational culture and how this could be maintained internationally. No sub-categories were necessary.
- 16 Sources of information: some interviewees mentioned sources of information that they drew upon in order to help them develop and implement their strategy when working overseas. No sub-divisions were required for this theme.
- 17 Governmental support: a minor issue was the degree of support and assistance offered by governmental sources in encouraging and aiding construction enterprises to work internationally.

|                         |  |
|-------------------------|--|
| 1. Marketing            | Follow clients/International Clients/Proactive/Reactive/Focus/marketing objectives/Hot-spots/Follow Project/Going in from scratch/Local clients/Relationships/Procurement/ Expertise/Exploiting Culture/Business Culture/Sophistication required/Local partners/Expensive/From UK/Prequalification   |
| 2. Partnerships         | Means of Entry/Don't compete/Legal Requirement/Difficulties/Different types/Cultural need/Cultural constraints/Collaborative partnership/Share Risk/Careful Selection/Cost effective/Associations/Share Resources  |
| 3. Offices              | Hierarchy/Beachhead/People/Overheads/Adapting Company/Other part of company/Local Ownership/Shows commitment/Legal Requirements/Permanent Set-up   |
| 4. Human Resources      | Cultural staffing/Training of locals/Expense of expats/expat-local variation/Local content requirement/Importance of expats/Tax Relief/Resourcing  |
| 5. Technical Issues     | Ability of locals  |
| 6. Logistics            |  |
| 7. Commercial           | Cash flow/International clients/Cultural basis/Regional basis/Expat expenses/Marketing expenses/Procurement/Level of risk/Financial Control  |
| 8. Technology Transfer  | Managerial 'technology'/Marketing tool   |
| 9. Most Important       | Client Management/Staff Management/UK management expertise/Technical expertise/Business ethics/Commercial/Cultural issues/Flexibility/Local Partner  |
| 10. Quantity Surveyors  |  |
| 11. Culture             | Speed of business/Language/Relationships/Constraints/Lifestyle/No effect on business/Minimise effects/Policy/Subsumed by/ Environment/Seek to Manage/ Politics/Benefits/Drawbacks/Using Cultural/Differences/Requires Sensitivity/Hofstede/Decision Making/Effect on Business/Closeness/Synergies/Dangers of ignoring culture/Learning/White superiority |
| 12. Ethics              | UK integrity/Business environment/Retaining standards/Have to be flexible/Policy Constraints/Participation/Reducing/Effect on Business/Type of Work/Avoid  |
| 13. Viability           |  |
| 14. Parent Company      |  |
| 15. Corporate culture   |  |
| 16. Information Sources |  |
| 17. Government Support  |  |

**Table 9.1** Matrix of Coding for General Issues

*(2)Workload Policy and Strategy*

1. Expansion overseas: how the case study companies approached expansion in international markets, in which regions they were expanding why they were expanding where they were.
2. Overseas workload strategy: general strategic approach to working overseas and dealing with a fluctuating workload and disparate operations, including how their international work was contained within their general portfolio.
3. Expansion factors: factors driving expansion overseas that were seen as important by the interviewees.
4. Importance of working overseas: the relative importance of working internationally to the company as a whole.

|                           |  |
|---------------------------|--|
| 1. Expansion Overseas     |  |
| 2. Overseas Strategy      |  |
| 3. Expansion Factors      |  |
| 4. Importance of Overseas |  |

**Table 9.2** Matrix of Coding for Workload Policy and Strategy

### *(3) Personnel and Human Resources*

1. Isolation: the instances where the respondents remarked on the difficulties faced by their organisations due to the relative isolation of their expatriates when working in a foreign environment.
2. Recruitment policy: the policies and procedures for recruitment of expatriates to work in organisations' overseas locations. There were 4 sub-categories within this theme addressing the difficulties of finding and placing people overseas.
3. Required qualities: the qualities and characteristics that the respondents identified as making their expatriates effective in an overseas and culturally different working environment.
4. Training: the policies and procedures construction enterprises had in place to prepare and provide appropriate training and information for prospective and current expatriates. There were five sub-codings that emerged in the analysis of this issue. These concerned the relative importance of training to the organisations, the difficulties of providing it and approaches adopted to overcome these difficulties.
5. Human resources policy: a more general topic concerning the policies in place within the case study organisations designed to ensure that human resources were properly maintained for their international divisions.

|                          |   |
|--------------------------|---|
| 1. Isolation             |   |
| 2. Recruitment Policy    | Ease people in/Difficult to find people/Family pressures/Wrong person dangers |
| 3. Expatriate Advantages |   |
| 4. Required Qualities    |   |
| 5. Training              | Lack of time/Risks/Peer support/Importance/Preparation                        |
| 6. HR Policy             |   |

**Table 9.3** Matrix of Coding for Personnel and Human Resources

### **9.3 Within Case Analysis and Findings**

Because the theoretical proposition strategy was adopted for analysis of the case studies, direct reference had to be made to the case study questions that guided the interviews (see Chapter 8). These were articulations of the orientation hypotheses (see Chapter 5), which represented the patterns against which the individual case studies could be compared. Thus, the case study questions not only guided the creation of a schedule of interview questions but also guided the direction of the case study analyses. It was found that the questions could be expressed as analysis questions. These questions provided the basis with which the coding of interview transcripts could be gathered and emerging patterns explicated. The analysis questions were:

- To what extent did the interviewees recognise and consider culture and cultural differences to be an issue of importance at the strategic level for their organisations?
- In light of this recognition, to what extent were cultural issues dealt with and reflected in the strategic policies and procedures of the organisation?

The main way in which the findings are depicted is with the use of a 'conceptual chart diagram', which identifies the main categories that were important to each interviewee within each theme and lists the subcategories that were discussed during the interviews relating to those categories. It was decided that issues of particular importance were those to which it was possible to allocate 2½% or more of the transcript. This is an admittedly arbitrary figure. It was selected because, in the instance of this particular research, it seemed that it was at this point that the participants began to have interesting things to say on any given topic. Within the conceptual charts, where it was possible to code 2½% or more of a transcript to a category or subcategory, that category is identified. The categories are given an asterisk while the subcategories appear in boxes. However, the '2½% rule' was not applied strictly within the analysis but was merely used as a guide to highlight those issues, topics and ideas that were most likely to yield interesting tracts of conversation. An example of where the rule rarely applied was with the category 'Most Important'. The coding within this category referred to the direct question within the interview schedule asking the respondent for their opinion of what the most important factor or issue was at a strategic level where their business was working overseas. Clearly, this was an important issue to the participants yet they generally mentioned it only briefly before explaining it with reference to more specific issues as it tended to be an overarching concept. Thus, the conceptual charts can only give part of the picture. They provided the basis for discussion of the specific interview in the first instance, making use of illustrative quotations from the transcripts. In the second instance, findings for the case generally are discussed in light of the findings for each interview.

### ***9.3.1 Findings for Case Study A***

Within this case study, access was only possible to one participant (Interviewee 3). However, the participant was in a very senior, general position and was able to provide a complete overview of the organisation's policies and strategies and the thinking behind them. Thus, in this instance, the findings for the case study were the same as the findings from analysis of the interviewee's transcript.

The interviewee regarded the 'Most Important' factor in working overseas to be 'business ethics' (see Figure 9.1):

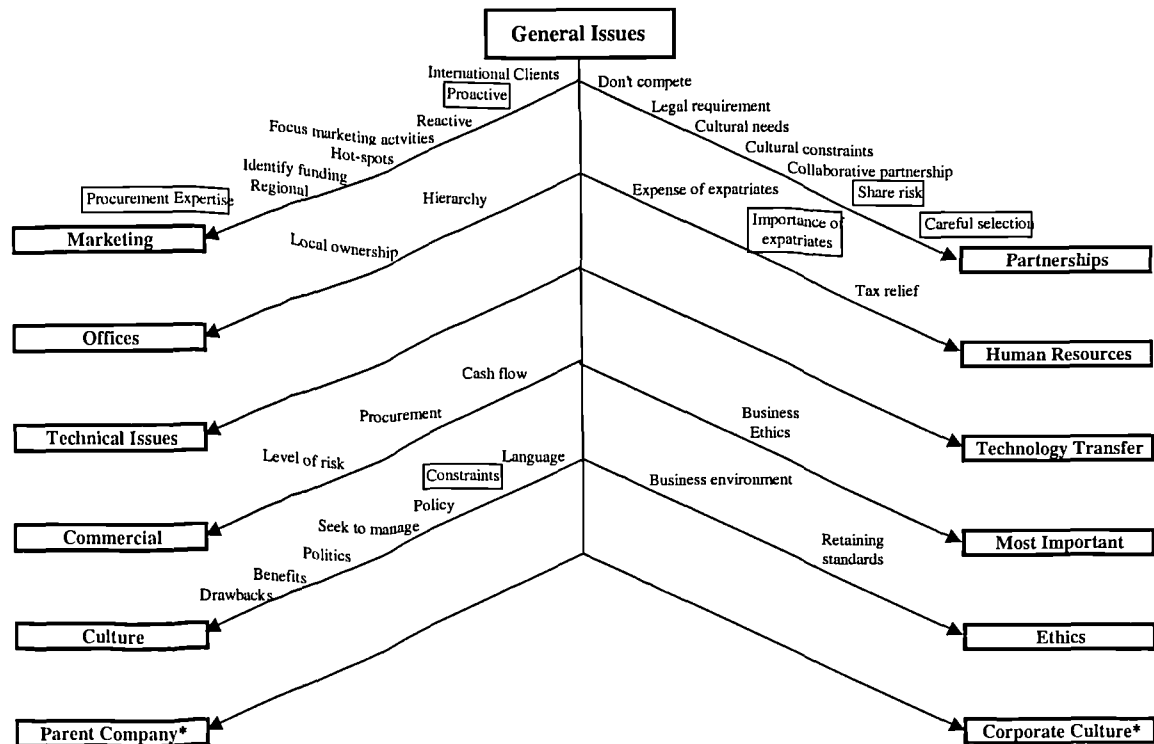
"Well, every country has its own particular way of doing business. The business ethics ... [are] ... a key issue, which we have to understand, work with, struggle with and sometimes seek to neutralise." (Interviewee 3)

Bearing in mind that business ethics were, in this sense, a manifestation of cultural differences, culture was clearly an important issue for the interviewee. Part of the reason 'business ethics' were seen as such an important issue by the interviewee was due to the nature of the parent company of the organisation for which he worked; family-owned and American.

"Going back to the fact that [company name] is family owned, there is a high ethical standard here. We insist that all our joint venture partners sign up to the US Foreign and Corrupt Practices Act. And so we don't do some of the things that other companies do who don't have the same moral standards that we have. And so, in certain countries where that's a fact of life, and without which you're not going to win work, then it's an issue, to the point where sometimes we've walked rather than stay. If it's a fact of doing business that you've got to throw a lot of brown envelopes about then that's a factor for us, which generally turns us off." (Interviewee 3)

Other evidence of the interviewee's awareness of cultural differences and their impact on his organisation's international business could be found in the 'Constraints' sub-category of 'Culture'. In discussing his organisation's attempts to improve its safety record internationally, he said:

"We try, where possible, to put safety regimes in on sites, particularly in places like the Middle East and India, where they don't care. Generally, life is basically cheap, they say. We try to put proper safety standards ... but if the local people are not interested and don't follow you then it gets more and more difficult. ... It's a battle. We have a project in India which has got 40 to 50 thousand people on the site. There are a few people who die there. But you find a lot of the people on the site aren't working [for us]. They're the families and the hangers-on of the itinerant workers. They get in the way and they get knocked down and things like that. It's very difficult." (Interviewee 3)



**Figure 9.1** Conceptual Chart Diagram of 'General Issues' for Interviewee 3

However, his view of the impact of cultural differences was not entirely that they were a problem. On the issue of safety, he saw their attempts to ensure a good safety record in a cultural environment where safety was given a different priority to the UK as being beneficial:

"It has spin-offs. It helps with your insurance policies – our premiums are lower than other people. And it's good PR exercise. We don't go around with a reputation for killing and maiming people and so people will come and work with us and know that its generally safe to work with us – those who care! ... you feel that we're welcomed because we're okay and we're safe to work with ..." (Interviewee 3)

However, there seemed to be little manifestation elsewhere of the importance of cultural differences within his organisation's strategic approach to overseas activities. Within the 'Marketing' category, for example, the most important subcategories can be seen as being 'Proactive' and his organisation's 'Procurement expertise'. The former concerned a focused approach to marketing the organisation internationally through the implementation of a business plan, rather than "waiting for an opportunity to come through the door." However, this business plan did not include any explicit reference to culture, beyond searching for some mechanism whereby different peoples' attitudes to their main business, the provision of public utilities, could be overcome. In this respect, the following comments were revealing. They indicated how the approach that the

organisation took to marketing itself overseas was related to fundamental differences in values.

“Well. Being honest, a lot of people don’t know they’ve got a problem with their water until we tell them they’ve got a problem. They’ve been drinking this water for hundreds of years. I think that improving the quality of water is not just a good idea, its not just something that’s nice to have, its almost like a creed! “This is something you’ve got to have, it must be good for you”. And a lot of people don’t necessarily agree with that, and certainly when you ask them to pay a lot more money for it, they don’t see the added value. When they’re only getting paid peanuts and you want half of their peanuts to provide them with something they’ve already got, all be it of dubious quality, it’s a hard sell.” (Interviewee 3)

With reference to their ‘Procurement expertise’, the interviewee revealed how his organisation was able to exert their predominant, family-oriented, American-based value-system within foreign markets.

“... its sad to say that sometimes, companies such as ours are deemed to be a better bet for loans than some countries are. So we can get the money at a better rate than some countries. So it is attractive to them to have companies like us actually going in and taking these burdens off them. It sometimes comes down to who can get the cheapest loan. The technology is pretty well known throughout the world. Operating and maintenance follows well-worn paths. And so if everybody is at the same [technological level], it’s the smart ideas and perhaps the innovative financing that will win you the day.” (Interviewee 3)

With regard to the organisation’s approach to forming and using partnerships internationally, ‘Cultural need’ and ‘Cultural constraint’ were mentioned, although discussion of them was limited. Beyond the common legal requirement to partner or joint venture with local companies, they needed foreign partners overseas to help in interpreting the “different norms and procedures for doing actual construction work.” However, while they recognised a need for partners at the cultural level, they also saw those partners as a potential threat. For example, when talking of South America, the interviewee made the following comments.

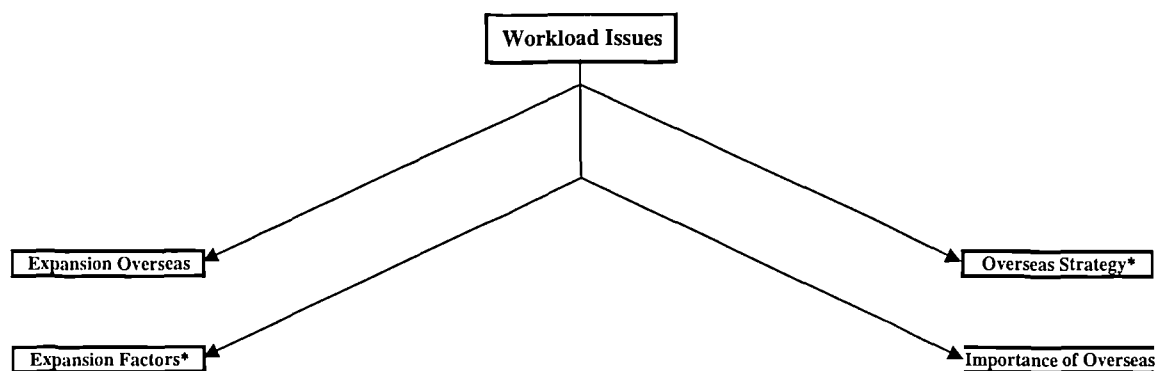
“... it’s a place where you really need local partners. And the local partners want to get onto the work, enhance their capability and all the rest of it and so they are seeking to try and carve out big chunks of the action for themselves which doesn’t always fit our own aspirations.” (Interviewee 3)

The interviewee’s attitude to associations with foreign companies appeared to be summed up by his saying:



“As I say, no matter how much you think you know or how good you are at it you still are required to have these partners. And, if you’ve got them you may as well use them.” (Interviewee 3)

This attitude is, perhaps the cause of his considering the two most important subcategories of the general category of ‘Partnerships’ to be ‘careful selection’ of prospective partners and the need to ‘share risk’ with them in an appropriate manner. Furthermore, his attitude should be considered in context. His view appeared to be that an organisation of the size and experience of his did not really have much of a need for partners in many parts of the world as it had developed its capability and knowledge over time.



**Figure 9.2** Conceptual Chart Diagram of ‘Workload Issues’ for Interviewee 3

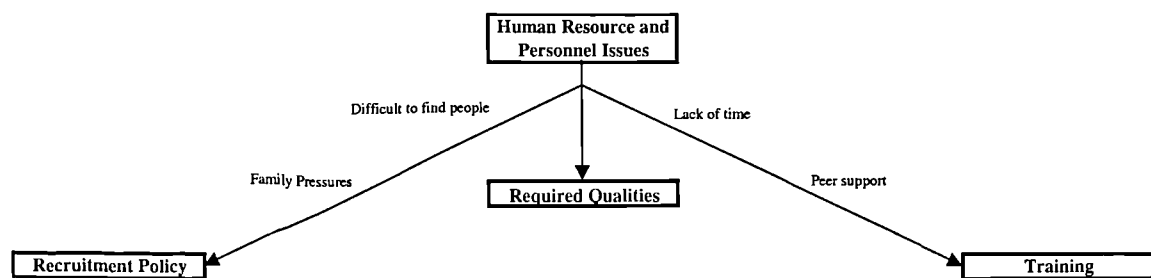
With regard to the more general *Workload Issues* (see Figure 9.2), the cultural dimension did not figure very highly in the conversation. The main reference was only obliquely related to culture within ‘Expansion Factors’.

Question: “So to summarise, is it the ethical issue and the politics which are the main issues you take into account when you decide where you’re going to work?” (Interviewee 3)

Answer: “The ethics, politics and the prospects for the economy. And, with water, whether there is the political will to let us go in and build the plants and take over their operation. If that political will is not there, which is a philosophical issue, and leads to a policy decision, then there is no point in us working there.”

Finally, in *Human Resources and Personnel Issues* (see Figure 9.3), culture again did not seem to be specifically considered within the organisation’s overall strategic approach. The cultural dimension was recognised as a constraint. For example, in their ‘Recruitment Policy’ concerning ‘Difficult to find people’, part of the problem was that many possible expatriate candidates were not prepared to go to countries that they

thought had cultural practices they found unacceptable. However, there seemed to be little or no attempt to take measures to compensate for cultural differences in the corporate approach, beyond an informal recognition that ‘Peer support’ was the main means of passing on experience and knowledge once expatriates arrived in an overseas environment. Presumably, this would include some element of dealing with and working in a culturally different environment.



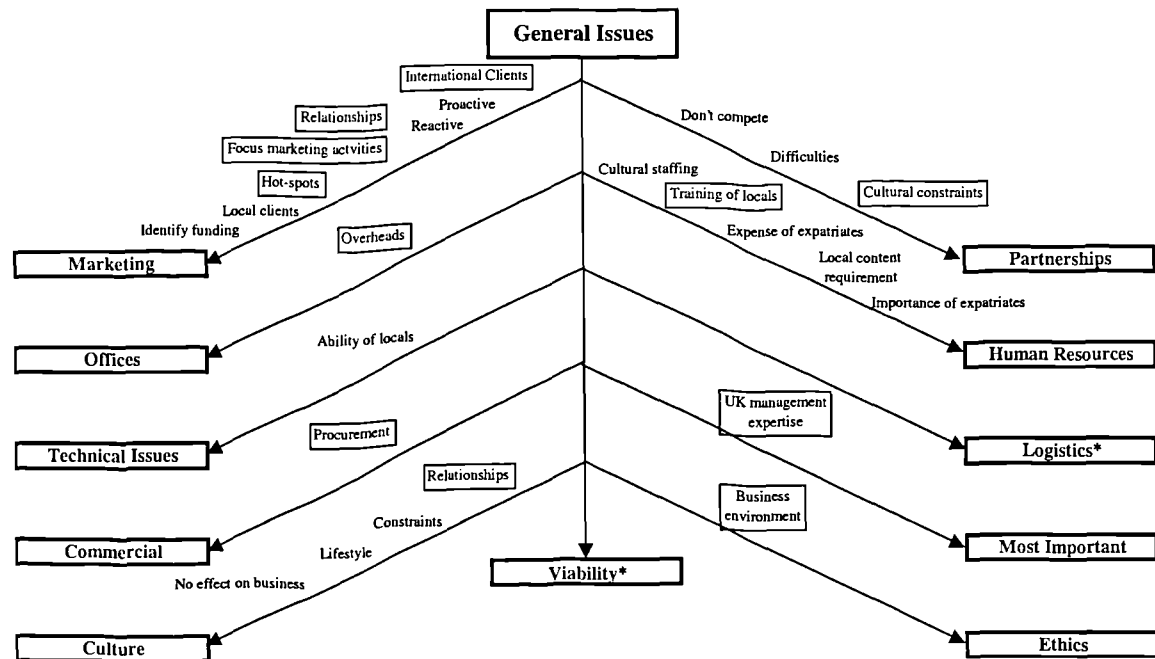
**Figure 9.3** Conceptual Chart Diagram of ‘Human Resource and Personnel Issues’ for Interviewee 3

In summary, the interview revealed that the organisation, Case Study A, recognised the cultural dimension as an important issue at the strategic level when operating internationally. However, the development and implementation of that strategy across a number of indicators did not seem to be informed by the recognition of the importance of culture at this level. Certainly, they did not appear to have any structured approach to dealing with culture. The only allowance for cultural differences within the strategic approach of the organisation was at an implicit level where, for instance, their marketing strategy was structured in part to overcome the different value-systems they encountered. Perhaps the greatest influence on their overseas strategy was the prevailing influence of the ‘Parent company’ and its impact in imposing a ‘Corporate culture’ on their overseas activities. This corporate culture manifested itself as a rigid, almost dogmatic, approach to all markets, no matter where they may have been. Where this may have caused friction between the organisation’s staff and the people with whom they were interacting, this was easily overcome by their commercial power and financial strength.

### **9.3.2 Findings for Case Study B**

This case study was the most developed. Interviews were conducted with five people in senior positions representing different aspects of the corporation’s overseas interests. The coding indicated that Interviewees 7 and 11 had a keen awareness of the impact of

cultural differences on the international construction business, while for the other interviewees, this factor was of less concern. However, all the interviewees demonstrated some appreciation of the role cultural differences played in effecting their organisation's working environment.



**Figure 9.4** Conceptual Chart Diagram of 'General Issues' for Interviewee 1

Interviewee 1 saw 'UK management expertise' as the 'Most Important' factor when working overseas (see Figure 9.4). This concerned his perception of his organisation's ability to work within sophisticated Western construction project procurement frameworks in an international environment. He did, however, link this advantage to cultural differences, in the classical sense of Max Weber (see Section 3.4.5), in that he saw the cultural structure in the overseas environment (particularly the Middle East, where he was his company's Managing Director) as containing a relationship-basis and social hierarchy that prevented people from those regions from embracing such procurement systems.

"I find working overseas, particularly in Third World type locations, that although the infrastructure and what is being built is, in some ways, probably more advanced than it is in this part of the world where the infrastructure was built a hundred years ago, the actual mechanism and criteria for procuring a major construction project lags behind a considerable way. There are old ways of working that die hard in those parts of the world, even though they like to think that they are fairly well developed. So, the techniques that we use are as advanced, in terms of the construction itself,

but the total procurement of the construction project lags some way behind.” (Interviewee 1)

Although Interviewee 1 made a number of references to cultural differences throughout the conversation, these almost universally referred to culture as a difficulty in the business environment. For example, in the discussion of ‘Relationships’, he referred to his company’s historic policy of creating long-term relationships with locals and how he saw that as impeding his organisation’s strategic development, which was to ‘Focus marketing activities’, target regional ‘Hot-spots’ and focus more on ‘International clients’ and move away from ‘Local clients’.

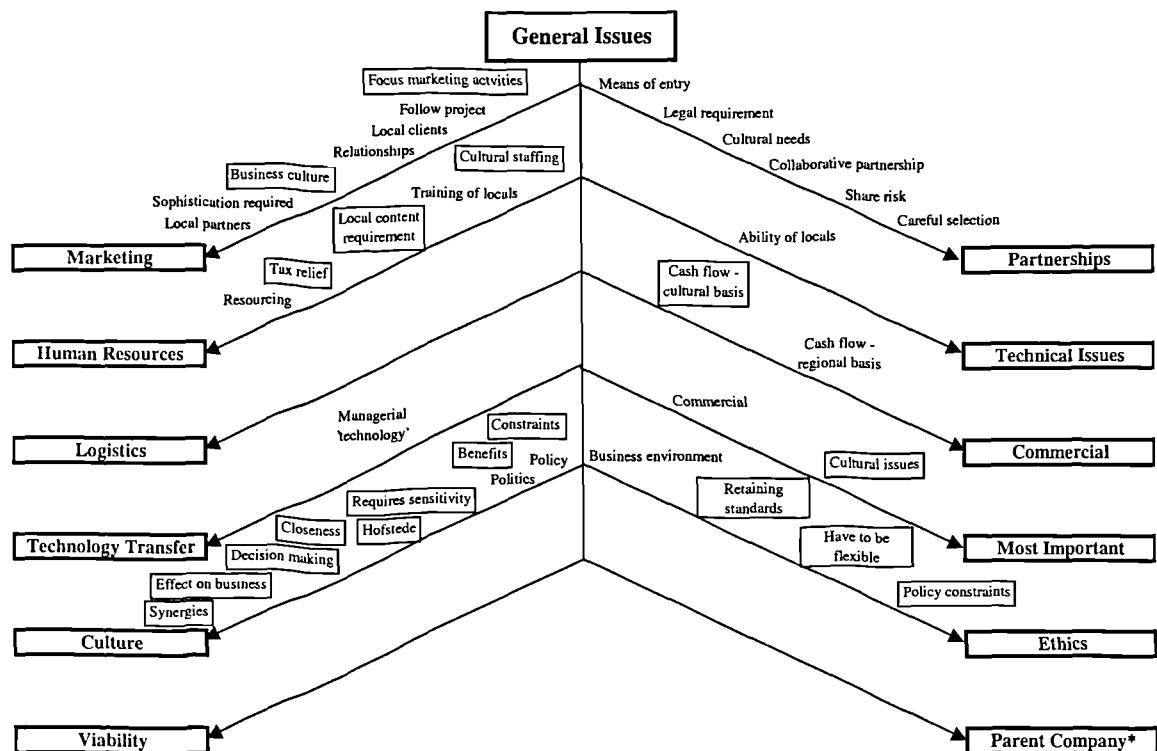
“We are constrained by what we've built in the past. These vehicles that we built years ago are difficult to dismantle, because of the Arab mentality, in the Middle East, where they like long-term relationships and the same people for a long time. They don't like change in that respect, from a business aspect. So, in some ways, we are constrained by the businesses that we formed.” (Interviewee 1)

Elsewhere, the interviewee was concerned with aspects of a technical nature, such as ‘Logistics’ and ‘Commercial’ issues rather than cultural issues. Where these ‘Technical Issues’ were mentioned, they contained little reference to the impact of culture. Although he saw an advantage to increasing levels of local staffing of overseas offices and projects while reducing the company’s reliance on expatriates, these advantages were associated with the increasing cost of expatriates and the difficulty in finding people to fill expatriate posts rather than any cultural synergies that may be gained. The only cultural advantage of local staffing, in his opinion, was that such a policy demonstrated that they took their presence in certain countries seriously. Fundamentally, while Interviewee 1 did see culture as an issue his attitude to the cultural dimension from a business perspective can be summed up by the following comment:

“I think business is business, wherever you go. On the surface, business is business. We go there to make a profit, people expect you to make a profit and they try hard for you not to make a profit. So, I think, from a business point of view, it is the same. ... As far as making money is concerned, it is the same anywhere in the world.” (Interviewee 1)

Interviewee 7 had a somewhat different attitude. For him, the ‘Most Important’ factor in working in the construction industry overseas was ‘Cultural issues’ and the way these impacted on conducting business (see Figure 9.5). For example, he made the following comments.

“I think, in Malaysia, it was making the process work, commercially. Because, the structure of business over there is very different – there is a very different style of business. It's not as open and there are a lot more things going on in the background. ... And the other biggest thing was patience. It is not really a responsibility but that is what you have to have because of the way they worked. They are very different in their decision making processes.” (Interviewee 7).



**Figure 9.5** Conceptual Chart Diagram of ‘General Issues’ for Interviewee 7

This theme can be found throughout the interview. There were numerous mentions by the interviewee of how culture directly impinged upon strategy and ways in which this could be mitigated, primarily at an informal level. The reason for this view was that the Interviewee was in a more junior position than the other interviewees in this case study. Rather than being responsible for devising and developing strategic thinking for the international operations of the organisation, he was responsible for the implementation of that strategy in an overseas environment. His perspective was one of receiving strategic direction and finding ways to make that strategy work in a different country.

Beyond the interviewee’s recognition of culture as a major issue effecting all the strategic aspects of operating the business internationally, there was a view that the strategy of the organisation inadequately allowed for those cultural issues. As a

consequence, the onus was placed on local managers and directors to find ways of making allowances for the cultural dimension while remaining within the strategic framework dictated from the 'Parent Company' in the UK. For example, in 'Retaining standards' of 'Ethics', the interviewee found that you 'Have to be flexible'.

Question: "To what extent do you find the ethical differences in where you're working, compared to your own set of UK values, causing a problem when you're working overseas. And is there any support structure or procedures within the organisation that help to mitigate that?"

Answer: "The problem with this is that the organisation says that I must have ethics and that there are things that I should not do. But when you're overseas you cannot necessarily follow the company rules. So we have to get guidance from the directors of the company or the Group for permission to do the things that we're doing. At the lower level you don't have time to do that and you have to make your own mind up. So there is a contradiction there. At the higher level, on the expensive stuff, you have to come back for Group approval. But there are no limits or anything; it's more about the judgement of the managers in the place at the time. But it is quite difficult to do the explaining to the auditors. They are there to sort these things out. They are pretty good: they understand the way business is done out there but you've got to try to back-up that sort of thing as much as you can – I'm talking about paying people money! I've personally never had a problem with it. I've been able to adapt and can see the merit of both ways. But it is not necessarily easy. You have to be very careful what you do. Because you could be going against company policy and your job could be on the line. You do have to give it some thought but I've never had a problem resolving that one way or another." (Interviewee 7)

There were no culturally related comments coded within *Workload Issues* for Interviewee 7. The comments here mainly related to the organisation's survival as a contractor with an international presence. This was achieved primarily through their association with a major European international contractor. It was in this association that there seemed to be the greatest scope for something that might be identified as cultural synergy:

"... what they are bringing to the table is a non-traditional approach. To a certain degree it's value engineering but it has to be listened to so it's bringing a nice, non-UK approach to the building and design process. I think that's where they will help us because they will make us more innovative. If they can do that it will make our products better." (Interviewee 7)

Similarly, with regard to *Human Resource and Personnel Issues*, there was no mention of the cultural dimension beyond the view that expatriates need to be especially adaptable and flexible. This was explicitly due to the increased levels of responsibility and reduced support the expatriate could expect to receive. However, in the context of

an interview where the issue of cultural differences were at the forefront, it can be inferred that such adaptability would include the ability to adjust and deal with cultural differences. The Interviewee lamented the lack of training provision for expatriates. He thought that the importance of the expatriate role, together with their expense demanded a more rigorous selection and induction procedure, including a preliminary visit and more information to enable them to make better informed choices. Referring to his recollections of working in the Middle East, he made the following remarks:

“I remember when [new expatriates] were coming in day-in and day-out. There seemed to be a new person everyday and they would say "I don't like the desert". Well, you don't blame them for that but surely they knew they were going to be in the desert!” (Interviewee 7)

Interviewee 8 was involved in more of a strategic development role than the previous interviewees. For Interviewee 8, the ‘Most Important’ issue was ‘Flexibility’. By this, he meant the ability to adapt to changing international markets. The *General Issues* elaborate on this view (see Figure 9.6).

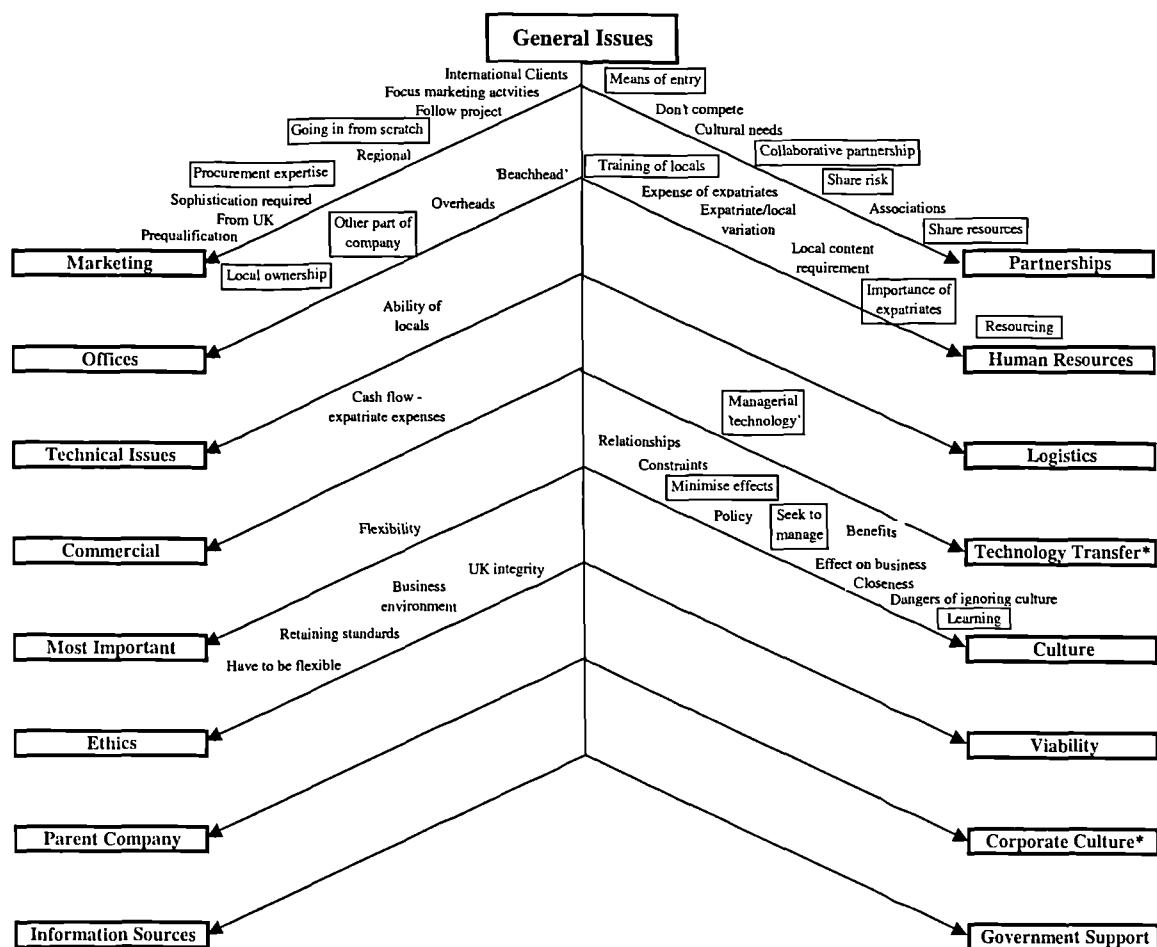


Figure 9.6 Conceptual Chart Diagram of ‘General Issues’ for Interviewee 8

Interviewee 8's perception of 'Culture', its importance for the international construction industry generally and for his company specifically, was that it was important but mainly in terms of causing difficulties and problems for the company. As a consequence, he saw the goal of strategy to be to 'Minimise the effects' of culture through 'Seeking to manage' those effects. In other words, the goal of strategy, in his opinion, was one of containing culture – as far as possible, preventing the effects from impinging upon the activities of the organisation. The main tool in achieving this was by the organisation engaging in a process 'Learning' and dissemination of knowledge and understanding. For this to be effective required the company to identify 'Information Sources' and form links and associations with those sources:

“...learning from others who have been there before and taking advice... There are plenty of organisations that will give it to you. We're members of the Middle East Association and we're just joining a similar organisation for Southeast Asian affairs. These are learned organisations that have members from those countries as well. So, we cross-fertilise, and we learn a lot from the talks and discussions that we have. There are books and publications that are available. The Foreign and Commonwealth Office have an advisory service. There is the in-country mission that you can visit if you are going to a country for the first time. ... We find that in most countries where there is a British presence, then there's a British businessmen's forum and you can get in contact with them. So, you get plenty of help and advice on what to do and what not to do. Very often, it's what not to do! It's not very often we go to totally new countries with totally new cultures. But I spent some time yesterday afternoon reading a report done jointly by some of my colleagues in the Middle East of their visit to Baku in Azerbaijan. We do those things jointly. For example, there was a mission organised by the British government to Turkey, with a match-making service with the Turkish to meet with people from Central Asia. People from [company division] went on that but we bore some of the cost and have received some cross-fertilisation as a result. So we end up with a wealth of information about the economy, the culture and social and legal aspects that we need to know about. Before we can bid in a new country we have to get approval and there are various categories of information that have to be obtained and are reviewed before the Group board allows us to go ahead and submit a tender in that country. But I think that, one way or another, we have encountered most of the primary cultures that one is likely to deal with. Probably the most difficult to deal with is the American one because we take it for granted. You will make the effort with the Chinese, the Arabs and the Japanese. They all have their unique things and you will consciously make an effort there. But, with the Americans we tend not to and it's dangerous because they are different. We tend not to do a lot with the Americans but they are there and we need to sometimes so it's important to stay alert.”  
(Interviewee 8)

The effect of cultural differences within *Workload Issues* was mainly through ethical differences. In terms of the organisation's strategic approach as to where they chose to



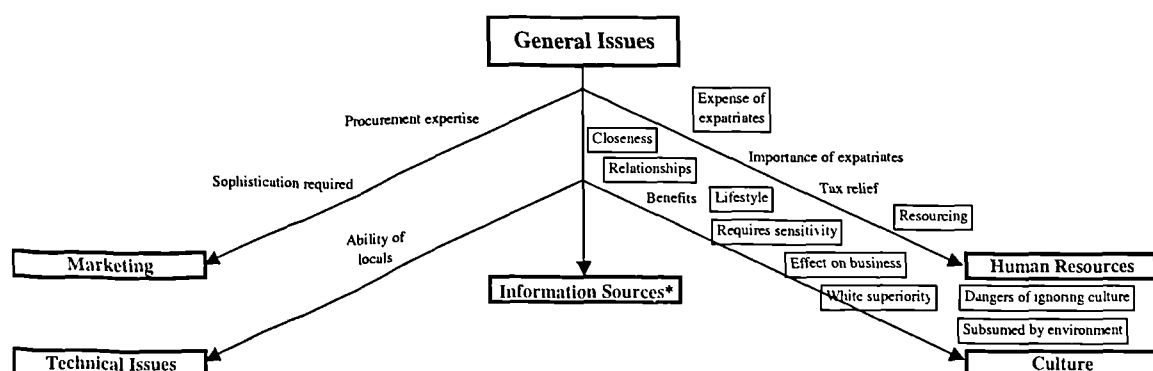
operate, where the ethical and moral differences were seen as being too large an issue, then the organisation would avoid that particular location. Interviewee 8 also mentioned the organisation's association with the European contractor and the scope this gave them to operate more widely and aim for a larger and more diverse project range.

Finally, with regard to *Human Resource and Personnel Issues*, Interviewee 8 indicated that, in the selection of potential expatriates, the issue of culture was recognised as an important one.

“They have to have the confidence to be able work in that environment – a strange country with different cultures, sometimes with language problems. So the temperament of the person is as important as their technical and professional skills.” (Interviewee 8)

This being said, he admitted that provision of ‘Training’ and support had historically been lacking in the organisation's International Division. He confirmed that there were efforts being made in this area but made no mention of how, if at all, the issue of culture and cultural differences might be included within the renewed emphasis.

A fuller picture of the organisation's approach to *Human Resource and Personnel Issues* was gained through a conversation with Interviewee 11, the Head of Human Resources. Naturally, the discussion addressed *General Issues* in far less detail than previous interviews for this case (see Figure 9.7), although the coding to categories within this group indicated the prominence of culture and cultural differences within his area of responsibility. For this Interviewee, the potential impact of cultural differences on the way people worked in a foreign environment and their relative effectiveness, was a key concern. He placed an emphasis on the ability of expatriates to adjust to different cultural norms and mores, accommodating the demands of different cultures within their managerial styles.

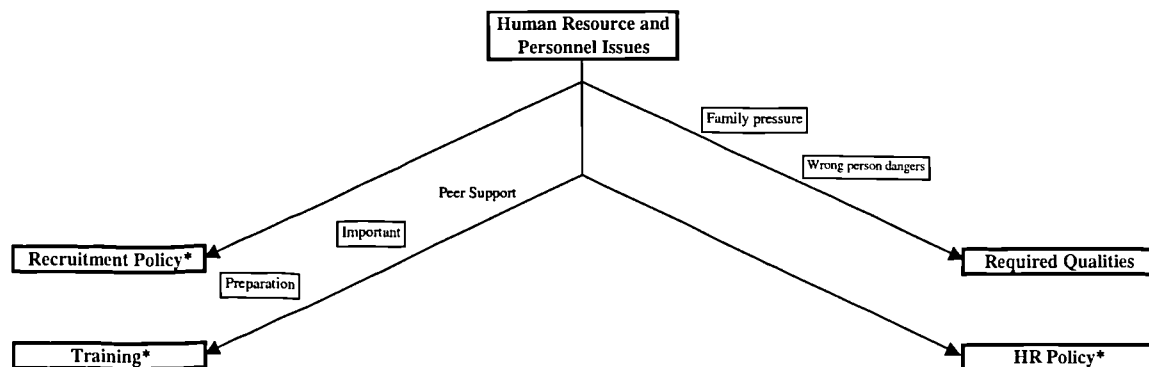


**Figure 9.7** Conceptual Chart Diagram of ‘General Issues’ for Interviewee 11

This interviewee saw the goal of the company's strategy in the international arena to be a long-term one:

"My view is that it doesn't just work from gut feeling and instinct: there are structured ways of approaching things. What's the best way to get a problem resolved with an Arab? It may not be to go to the Arab himself. It may be to understand what the family connections are and to go to someone else, not to ask them to do you a favour but actually to do them a small kindness... You do something to try to build a relationship and to try to build confidence and mutual respect. Then you do a deal. What we are trying to do in each of the countries where we are working is to build lasting relationships, to understand those cultures and the nature of expatriate management has to change, and is changing." (Interviewee 11)

As might be expected, this interviewee's chief interest was with *Human Resource and Personnel Issues* (see Figure 9.8).



**Figure 9.8** Conceptual Chart Diagram of 'Human Resources and Personnel Issues' for Interviewee 11

He stressed the damage that the 'Wrong person' could do on a project in an overseas location, especially if they were insensitive to the cultural differences they could expect to encounter, and particularly if those individuals held a view of 'White superiority'.

"It is necessary to have humility about your own culture as opposed to the culture in which you are going to work. I've heard some people be very abusive of the culture in which they are going to work. If you ask someone who is going to work in Cairo what he thinks about Egyptians and he tells you that they are a load of wogs who don't know what they are doing (which is unfortunately what you would hear from many of them) and if you ask them where the Egyptians were in cultural terms against the UK, they would say it was a backward culture. ... Expatriates can either be extremely effective or extremely ineffective and dangerous. If they go with no respect for the culture and environment in which they are going to work, they are a waste of space." (Interviewee 11)

However, he was realistic about what was expected of expatriates. For example, he was aware that cultural sensitivity might not always be appropriate.

“That doesn't mean that people who go with that view are not necessarily going to be effective. In some environments I would say it is probably right and proper. If you have a specialist group of people who are setting up camp in a remote location you don't necessarily want them to build long lasting relationships with people; you want them to get the camp established as quickly as possible, and that may well suit the traditional, macho, construction individual of days gone by.” (Interviewee 11)

While he was aware of and attempted to emphasise these issues, his approach could not be regarded as being synergistic. He still saw expatriates as being an essential albeit expensive resource internationally, and seemed to have little concern for the development and training of locals, and their promotion to senior positions within the company in other countries. Interviewee 11 confirmed the company's renewed interest in providing training and information for people working overseas. He acknowledged the minimal efforts in the past and saw this as an important strategic aim that he was taking responsibility to develop. He recognised the difficulties caused by limited resources and time constraints and was attempting to devise the training strategy within these constraints.

Interviewee 13 was able to provide a fuller description of the strategic direction of the organisation, particularly with regard to its association with the European contractor. Ironically, he saw the relationship with them as being so successful due to the fact that they were different yet complimentary. In this sense, the relationship seemed to be an example of how different cultures working together could achieve synergies, although not, in this case, through design.

“I've worked on various joint ventures with UK contractors but what I notice, working with the [European contractor's name] people, is that their culture, or their attitude, is not the same as ours, it's different - they're much more almost laid back than we are... They are compatible with our culture. They're not rubbing against it all the time, unlike when you work with other UK contractors. ... There is this thing that we find they bring a different perspective to things. Our cultures are compatible but we find they ask different questions. And they bring different ways of working.” (Interviewee 13)

He also noted the efforts the organisation was making, mainly due to commercial pressures, to provide its overseas companies with more autonomy. This was an interesting development only mentioned indirectly by other interviewees in this case study. The example he gave was their Zimbabwean subsidiary:

“It was 100% owned until I became head of strategic development. Then the Chief Executive and I, together with the Managing Director out there, pushed something into this group that a lot of people resisted. ... Basically, it goes back to the local route. We were a 100% owned UK Zimbabwe based contractor. We had about 40 expats and over 2000 locals. We found that, over the last four or five years we were struggling to compete out there. Because the local contractors, instead of actually needing international expertise, were able to do some of the jobs themselves, because they had learnt from the past. ... So we just couldn't compete. What we have done out there over the last four or five years is to reduce the expat force to about 12, and promoted locals: there is a local plant manager and local commercial director (we had a real struggle getting him to that position but he may be deputy MD now). We then looked at how we could make it even more indigenous. ... It's also helped us to springboard from Zimbabwe into Botswana, Mozambique, Tanzania and we're trying to get into South Africa. ... Its hard because you have to send expats home and there is always the concern as to whether the local can do it. Unless we train them to do it they probably can't. And there is also the other concern that they come and work for us and we promote them and train them and then they leave for another local contractor and we have done all the investment and hard work. ... But others have done it. There [are] examples ... of people who were growing their local businesses: [competing contractor's name] have a company in Hong Kong that isn't called [the company's name]. That's part of the process of going local: we need to get away from the [company name] name and call ourselves whatever will get us the premier position in the market.” (Interviewee 13)

In summary, the case study demonstrated that this particular organisation's general strategic approach to overseas work could be characterised as ethnocentric. There was a great deal of recognition of cultural diversity, and the way that facets of culture could effect and impact on their business, but the interviewees primarily saw cultural differences as a source of problems and difficulties rather than an opportunity to develop and improve their competitiveness internationally. The message seemed to be one of developing strategies to contain and control the cultural differences they were encountering rather than emphasising those differences and seeking ways to work in a more harmonious and concordant fashion. Even Interviewee 11, who demonstrated the most awareness of cultural differences, appeared to be directing his efforts to developing policy that dealt with the differences between cultures rather than seeking to find areas where differing perspectives could be brought together in a synergistic way.

The clear exception to this general picture was in the association the organisation had formed with the major European international contractor. The benefits that were emerging from this relationship were unexpected and certainly not planned. However, they were, nevertheless, evident. This was partly due to the other company's strong

balance sheet and abilities in different forms of procurement, but all the interviewees mentioned aspects that they were also associated with cultural differences and emphasised these benefits also. The success of this relationship appeared to be in the fact that while the differing cultures brought differing perspectives and outlooks together, the cultures were close enough that the cultural differences were not extreme or exceptional in any way. For example, when the two national cultures represented by the two organisations are compared along Hofstede's cultural indicators, distinct but slight differences along each of the dimensions can be seen. This can be compared against an ill-fated, but similar, relationship with a Southeast Asian contractor. In this instance, there was no evidence of shared learning or development apart from access to new markets.

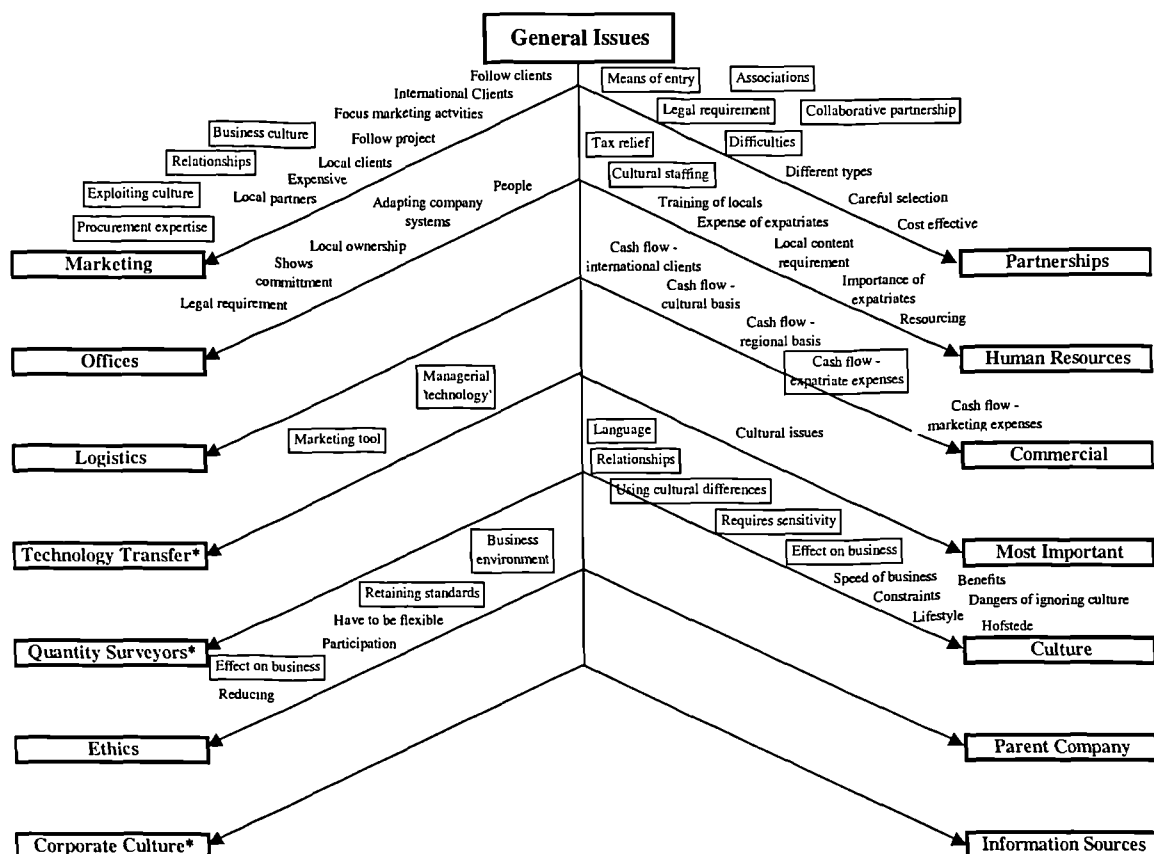
All the interviewees mentioned a renewed emphasis on training and development for staff and a reduction in the number of expatriates required for international activities. This indicated that the organisation was beginning to see its expatriates as fulfilling different roles, which was demonstrated by the changing status of their Zimbabwean subsidiary. However, there was little appreciation of the importance or relevance of cultural elements within staff training and development plans. Furthermore, while it was seen that expatriates needed to have a more sensitive and adaptable attitude to the different cultural environments within which they would be working, the recruitment and selection procedures showed little structure to reflect this need.

### ***9.3.3 Findings for Case Study C***

This case study organisation was the first consultancy. The case study comprised two interviews, the first with a senior manager responsible for the implementation of strategy in the field and the second with a very senior individual directly responsible for developing that strategy.

Interviewee 5 considered the 'Most Important' aspect of working internationally to be 'Cultural issues' (see Figure 9.9). Specifically, his perspective was the interpretation of the client's needs, which he saw as being particularly difficult in the context of different nationalities. Consequently, his view of his business in an international environment was to focus on sensitivity to cultural differences in delivering a service. The implications for his business were that things were conducted at a slower pace than in

the UK, and that, where long-term relationships were being formed, language might be an issue, particularly in certain locations. The interviewee often stressed the importance of building long-term relationships based on trust, in many overseas regions. Consequently, it was important for the organisation to find ways to prove its commitment to clients. For example, it might be necessary to establish an office in a given location, even though this might be very costly to the organisation.



**Figure 9.9** Conceptual Chart Diagram of 'General Issues' for Interviewee 5

The interviewee disclosed that the organisation had developed a niche activity by representing Japanese contractors in what were, for them, foreign markets. The relationship they had developed with their Japanese clients had been built through their ability to 'Exploit culture'.

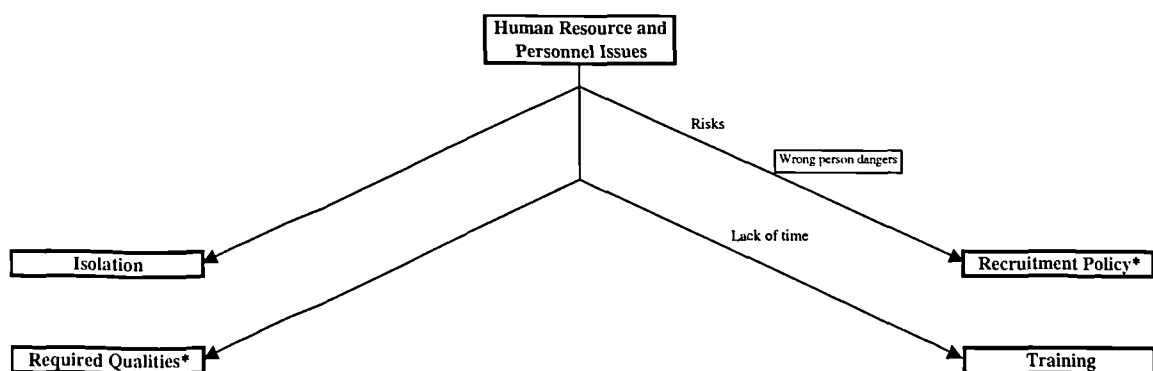
"So they [the Japanese] are quite interesting but they have a very different understanding and I think that now they are beginning to learn that there are too many of 'us' – there's Europe, America – and we will never adjust to them and, particularly now that they've taken a fall financially, they're no longer going to be the massive power house that they have been so they now realise that they must try to understand a little more about the way we work, particularly when they're working overseas (it doesn't matter in Japan). So, where there are opportunities for English consultants is we tell them how we work and they'll meet 'fire with fire'. But I still don't understand them fully -

they still do things which surprise me after working with them for five years.” (Interviewee 5)

This way of ‘Using cultural differences’ ‘Required sensitivity’. The consultants working in this role had to be able to adjust and understand what was expected of them if they wished to maintain their relationship with this particular set of clients. Thus, the ‘Required Qualities’ of expatriates had to be very carefully considered. The ‘Wrong person’ could cause a great deal of damage to the relationship.

For example, with the Japanese we had a quite able QS but he would come in at 8.00 a.m. and leave at 5.00 p.m. He always did all his work and did it quite well but the Japanese complained because he left his desk at 5.00 p.m. and they expected him to go a little bit further. So I had to ask him to stay until 6.00 p.m. and look busy! That was nothing to do with the guy's capability. Then there are other people who are too brusque or commit some diplomatic faux pas. They say something which gives insult or they're not flexible. Flexibility is the key thing.” (Interviewee 5)

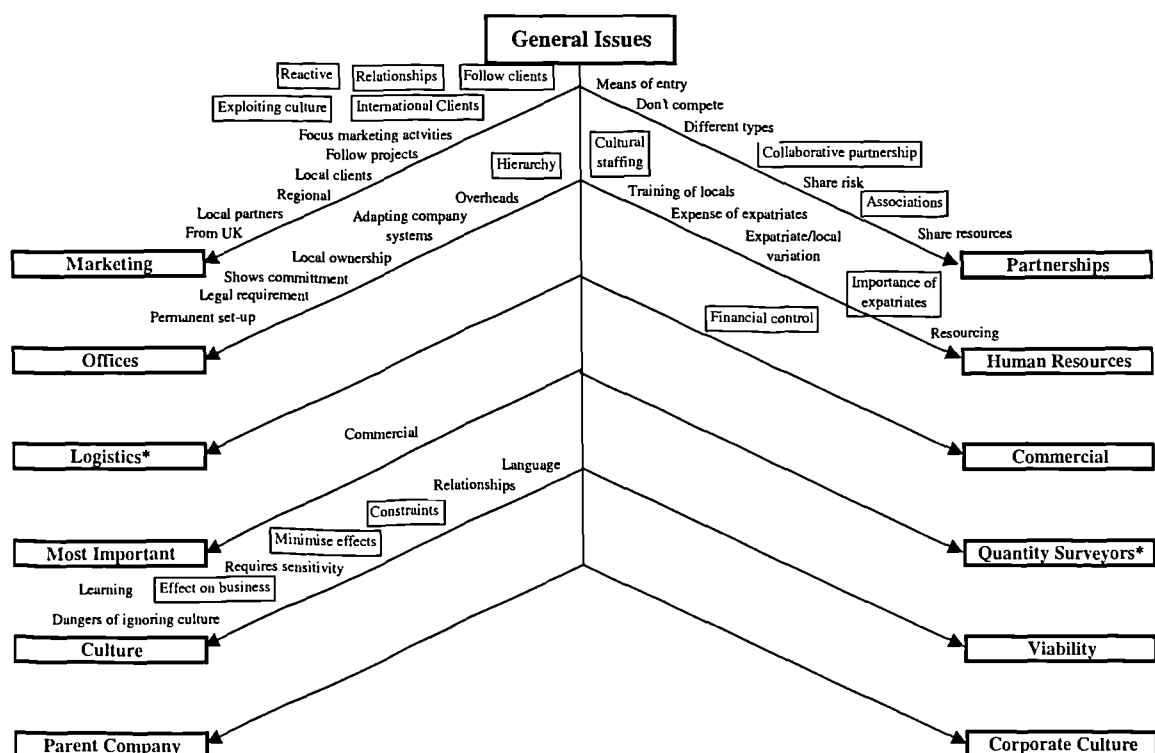
Thus, it is clear that, in their business, this interviewee felt that attention to cultural differences was a key requirement. The interviewee felt that this was particularly the case as his business was consultancy, which relied entirely on people, compared with a contractor that produced a product. In light of this, training and preparation of people did not appear to be a high priority for the interviewee. Rather, his focus was on the careful selection of the right person for any given post (see Figure 9.10).



**Figure 9.10** Conceptual Chart Diagram of ‘Human Resource and Personnel Issues’ for Interviewee 5

Interviewee 10 had a somewhat different perspective. For him, the most important aspect of working internationally was the importance of making the operations viable commercially in what was a highly competitive market. This meant that he was particularly concerned with good ‘Commercial’ and ‘Financial control’ in international activities (see Figure 9.11). Given this, his focus was on identifying clients and

developing relationships but less on a cultural basis than on the basis of his company's UK portfolio of work. Consequently, he saw 'International clients' as their most important market – those organisations that operated on an international or multinational basis rather than 'Local clients' in overseas locations. In many respects, he saw his organisation's international marketing strategy as being a 'Reactive' one; waiting for UK clients who happened to have an overseas interest to approach his company with a proposition. He saw this as ensuring a 'safer' source of revenue from their international work, partly because it meant they were dealing with a familiar culture, thereby 'Minimising the effects' of cultural differences. This did not alter the fact that the consultants employed by his organisation were often in contact with different cultures. However, beyond pursuing 'International clients' more vigorously than 'Local clients', the organisation did not appear to have any structured or organised strategy for dealing with those differences.



**Figure 9.11** Conceptual Chart Diagram of 'General Issues' for Interviewee 10

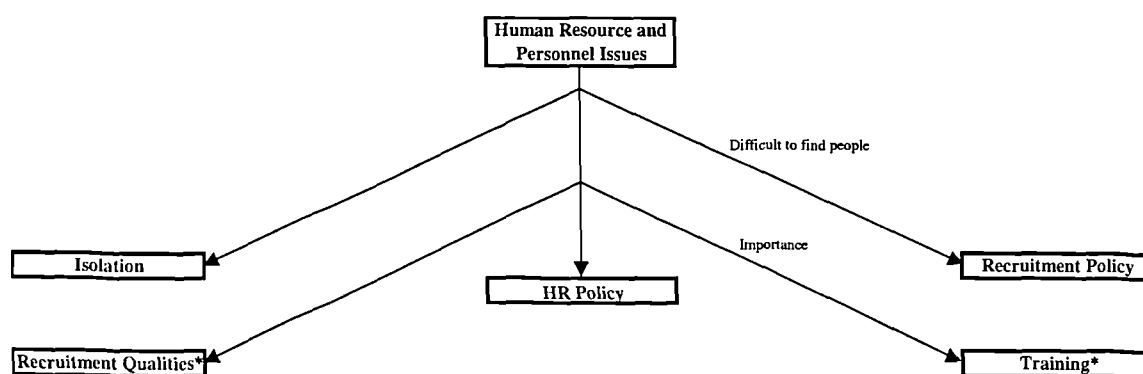
Perhaps the clearest strategic approach to handling cultural differences was in relation to the establishment of overseas 'Offices'. Their 'Offices' formed a distinct 'Hierarchy'. If they had an interest in a region they would establish an office or form an association with a local company that was already established in that region. As their knowledge



and experience in that region grew, additional offices might be spawned from their regional office.

“Poland, a recent thing, is because our knowledge of the region is growing and we can manage it and deal with it from Budapest rather than out of London because we’ve got an equity partner there who can take decisions, so it becomes that much easier.” (Interviewee 10)

Another strategy was to seek for locals to take senior positions within their overseas offices, thereby developing a form of ‘Cultural staffing’. Although these individuals were, in many cases unlikely to be ‘Quantity Surveyors’, the Interviewee went to some pains to stress that he saw their business as no longer being quantity surveying *per se*: that this role was becoming increasingly irrelevant in their international business, with their decreasing emphasis on ex-colonial locations.



**Figure 9.12** Conceptual Chart Diagram of ‘Human Resource and Personnel Issues’ for Interviewee 10

Furthermore, he saw the provision of ‘Training’ for these locals as a high priority. In fact, training and general *Human Resource and Personnel Issues* were a concern for the Interviewee (see Figure 9.12). He pointed to his practice’s strategic plan that aimed for a wholesale revision of the human resources provision in line with their increasingly international status and a move away from traditional quantity surveying. However, there was no mention of any policies specifically aimed at addressing the issue of culture at a strategic level. It appeared that this would remain an issue for those in the field to tackle on an ad-hoc basis. Fundamentally, the interviewee failed to see cultural issues as a strategic problem, as the following quote illustrates:

“You find other ways of dealing with disagreements and each and every one has to be based on the experience that our people get in dealing with these people. So there’s no specific way of dealing with given situations because it’s always so different.” (Interviewee 10)

Interviewee 10 also referred to his organisation's association with the Japanese contractors. This relationship was not based on any planned policy beyond the Japanese having a need which the UK quantity surveying practice was able to fulfil. The relationship depended on the ability of the people involved to adapt to and be sensitive to the Japanese way of doing things. Effectively, they acted as a buffer between the Japanese style of business, rooted in their unique culture, and a world where that style of business was either not understood or, worse, exploited by cultures where such actions are perfectly acceptable. For example, Interviewee 5 noted how his role manifested itself in this respect.

One thing that comes through is the lack of sincerity on the part of some American and English companies who go to Japanese companies saying the right things and the Japanese would think it all sounded very encouraging. But I'd know that whoever was saying these things was just saying it until the contract was signed, after which it would be a different story. I found that a bit embarrassing because I'd have to tell the Japanese that these people were lying whereas the Japanese would take them at their word." (Interviewee 5)

In summary, cultural differences were seen by both interviewees as having a potentially important effect on their business, particularly as the company's 'product' was the service offered by its employees as opposed to a construction project. The 'Dangers of ignoring culture' were considered to be serious while employing people without the right attitude and ability to adapt could also be the cause of problems. Yet, despite this, there was little in the way of a strategic approach to culture, beyond an attempt to minimise their exposure to cultural differences through careful selection of 'International clients'. The capability and adaptability of the people employed overseas was seen by both interviewees as being crucial to their success internationally. Also, both interviewees considered their involvement in international work to be vital to the practice's status as a major player in the marketplace. However, there was no structured approach to selecting suitable people apart from recognition of the qualities required. Further, while training was seen as being important, this lacked any element dealing with the cultural dimension – it was seen as being too difficult and specific to tackle at a strategic level. Thus, where working internationally, culture was clearly an issue, more so for the interviewee charged with implementing strategy than the interviewee devising that strategy. However, the issue was not seen as a strategic one, with the closest approach to some form of cultural synergy coming from their relationship with a

number of Japanese contractors. This relationship was more by chance and good fortune than any planned or structured approach to their marketing.

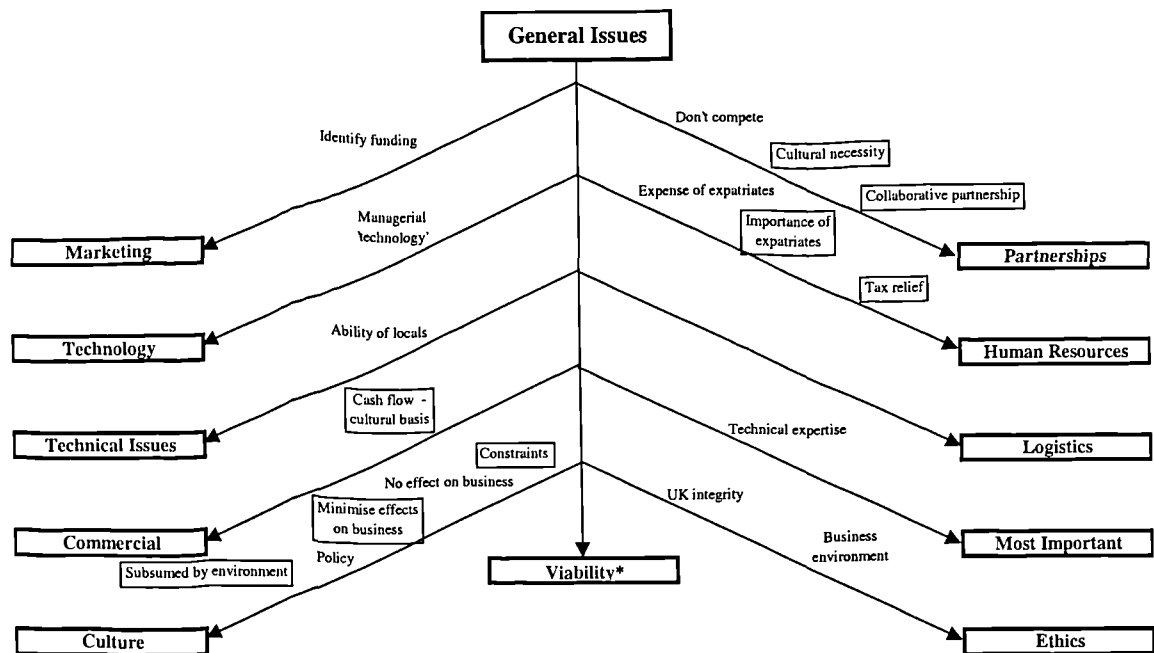
### ***9.3.3 Findings for Case Study D***

This case study comprised only one interview (Interviewee 2). However, the company, a contractor, was quite small, with only a small overseas turnover, with the Interviewee being the only representative of their overseas interests resident in the UK. Consequently, the Interviewee was able to give a complete overview of the company's strategic approach to its international construction activities.

The interviewee thought that, for his organisation, the 'Most Important' aspect of working overseas was their 'Technical expertise' (see Figure 9.13). He freely acknowledged that, due to their small interest in international work, his company had very little knowledge of other parts of the world. Instead, they were engaged not for their ability in international construction but for certain specialist skills that they were able to export. The Interviewee recognised that local contacts were important when working internationally but did not seem to see culture as an issue for his business at the strategic level except for certain circumstances. This was due to his organisation's relationship with its parent company, a large, multinational European contractor. The parent company had a division that specialised in international work and Case Study Organisation D carried out most of its international operations in association with this division. The organisation relied on its partner to support its overseas forays in terms of cultural understanding while it concentrated on providing technical expertise. Thus, its partner division fulfilled a 'Cultural necessity'.

A category that the interviewee did identify as being effected by cultural differences was 'Commercial'. In a number of instances, his company's international contracts had suffered 'Cash flow' difficulties that the interviewee attributed to problems with different cultures.

"I think it is more important to have political strength in those places than it is here. Here, if you build a bridge and can prove that the reason it's cracking is because of excess loading you will be alright. But, in many places where we work overseas, its not as straightforward as that."  
(Interviewee 2)



**Figure 9.13** Conceptual Chart Diagram of 'General Issues' for Interviewee 2

Where the interviewee talked of 'politics', he really meant culture because, while there are 'politics' in the UK the issues that Interviewee 2 was talking of were something different. Thus, as the politics were different, where people-related issues were also different in different countries, this was because they were culturally related. This view was supported by the following comment.

“Often, when things go wrong overseas it isn't because of deficiencies in technical knowledge, its more often due to political things.” (Interviewee 2)

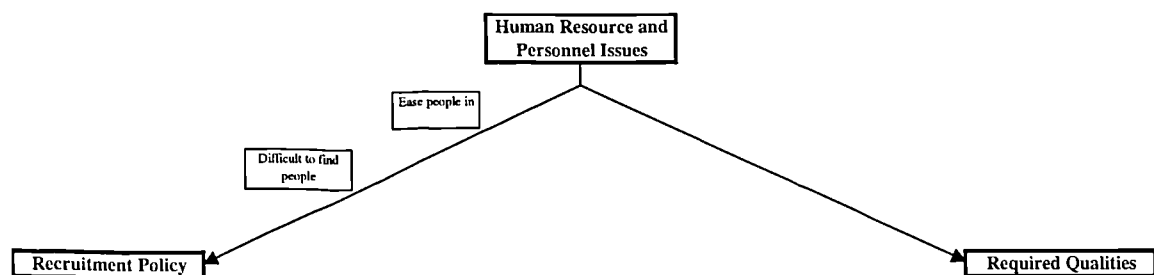
The interviewee's explanation of this statement showed that he associated 'political' issues with cultural issues. Incidentally, this comment was associated with the ways culture could be a 'Constraint' when working internationally. The UK management saw his organisation's international performance as being highly successful. This had led them to form the view that, if their organisation had a technical advantage in the UK, this advantage could be exercised anywhere in the world. The Interviewee went to great lengths to assure them that this was not a 'sound' hypothesis, due to the political (or cultural) constraints. This being said, he also believed that culture was sometimes a non-issue in that it might be 'Subsumed by the environment' in which the company was working.

“...I think what happens on the larger projects in lousy places is that everyone works for the project. ...we have all sorts of nationalities because we have people who have come through [company name] with different backgrounds, we have people who have come through [partner company's

name] who are from the former ... colonies, so we have all sorts of people. It's like the French football team! It doesn't matter because people are there because they have the right skills and everybody has regard for their colleagues' skills and everybody works for the project. If you're in the jungle working on building something, then the concentration is on getting it built properly. And I think the issues which might come up here don't come up in the jungle.” (interviewee 2)

What the interviewee was describing here was a situation of the environment subsuming cultural differences, but he was also describing incidences of cultural synergy. Context could be important. The company's technical specialism was in civil engineering, a service often required in remote locations. Additionally, due to the high levels of competition in some overseas locations, such as the Middle East, which limited their 'Viability', the company targeted locations that were more 'difficult'. An example was Angola, which at the time was recovering from a civil war because, “when you go to easier places there are more people so the advantage of going to difficult places is that you don't have much competition” (Interviewee 2).

With regard to *Human Resources and Personnel Issues*, the company saw its expatriate workforce to be vital (see Figure 9.14). This really related back to the importance of the company's technical expertise, which it saw as being ensured by appropriate supervision that could only be provided by its UK workforce. In order to minimise the risks associated with business overseas, the company ensured that it staffed key positions on overseas contracts with expatriates. These individuals would be technically skilled but, also, they reduced the cultural differences associated with those key positions.



**Figure 9.14** Conceptual Chart Diagram of 'Human Resource and Personnel Issues' for Interviewee 2

The Interviewee did not mention training and support. He saw the most important strategic approach to management of his expatriate resources to be 'Easing people in'. In this respect, the organisation was fortunate to have a long-standing contract in North Africa. This contract had been running for 12 years and would continue into the

foreseeable future. A “solid organisation” had been established supporting the contract, including a large tranche of experienced expatriates. This provided the perfect environment in which to allow a new expatriate to become accustomed to working in a strange environment. In time, new expatriates could be moved to more “difficult” places with less support, having gone through the culture shock stage and having proved their ability to work outside the UK.

To summarise this case study, culture was of a low strategic priority for the organisation for particular, contextual reasons. These were the company’s type of business, its volume of international work, the presence of a division of its parent company able to provide support in culturally difficult locations and its policy of targeting locations where cultural differences became of secondary importance to the physical environment in which it was working. Where culture might have an effect on its business, measures were taken to reduce these risks. For example, the problem of ‘Cash flow’ was being resolved by increasingly seeking non-risky sources of funding for its international activities, primarily British government funding, perhaps in tied aid to developing countries. Cultural differences existed between the company and its principle partner, the overseas division of the parent company. This organisation was based in Northern Europe. However, relationships between the people of the two organisations were good, perhaps reflecting Hofstede’s contention of cultural distance. Expatriates, an important element of their competitive advantage as well as a means of minimising risks associated with culture, were able to become accustomed to working internationally with a spell on their long-established contract in North Africa, where the risk of early failure was reduced due to the support mechanisms in place.

### ***9.3.3 Findings for Case Study E***

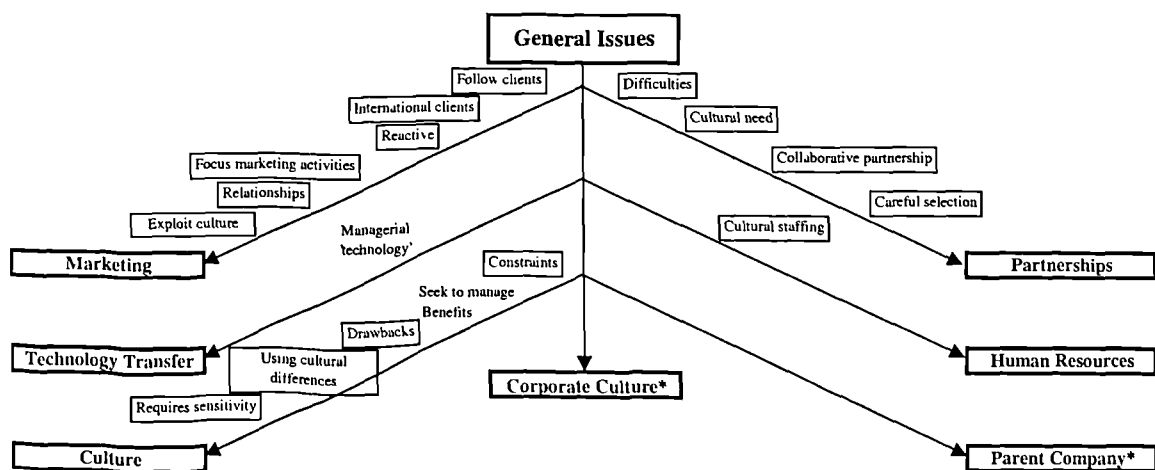
This case study of an architectural practice consisted of two interviews (Interviewee 4 and Interviewee 12) with three individuals. These individuals were directors at positions of highest seniority within the practice. This ensured that the strategic approach of the practice to international activities was successfully captured by the interviews.

For Interviewee 4, cultural issues generally were of importance to the business. This operated at both the national level and the corporate level, with the two being interrelated. The organisation had formed a large number of associations with

companies across Europe. Over time, these companies had become firstly subsidiaries and then divisions of the practice. While these practices across Europe were part of the company, they retained their own national character, with their directors being from those countries. This meant that the company contained an inherent cultural diversity while offering a common service. This characteristic was seen by the interviewee as being essential to its business as its main customers were American ‘International clients’ seeking architectural services in Europe. The organisation marketed itself as being able to provide these multinational corporations with a high standard of service that was tailored to the specific requirements of the country in which they were seeking to locate (see Figure 9.15):

“American clients, particularly in the ‘70’s were encountering differences. The States are 20 years ahead of (maybe even 30) of the European Union so that difference has been quite useful to us. They had a lot to learn about diversity, particularly in the area of restrictive practices which are based on national differences, which they find quite strange.” (Interviewee 4)

Thus, the organisation positioned itself, and continues to position itself to take advantage of the difficulty American’s have in understanding and relating to the complex cultural diversity they find in Europe. The Interviewee thought that Americans (in particular) attempted to ‘bulldozer’ their schemes onto a locality. This was because the US system was such that there was a degree of homogeneity across the country, as large as it is. While this approach was successful to a point, it has its drawbacks, which clients found very quickly. Interviewee 4 attributed his company’s success to their ability to adopt a ‘global/local’ attitude. It was in this way that the Interviewee demonstrated his organisation’s approach to ‘Exploiting culture’ in their marketing strategy.



**Figure 9.15** Conceptual Chart Diagram of ‘General Issues’ for Interviewee 4

However, because of this ‘Cultural need’ for ‘Partners’ across Europe, the Interviewee felt that ‘Careful selection’ of organisations joining the company was important. In light of the inevitable national cultural differences, Case Study Company E’s approach was to seek other areas of commonality. Consequently, the company invested a great deal of time and effort in identifying their own organisational cultural values and where forming relationships with practices in different countries, they would ensure these organisations shared those corporate values.

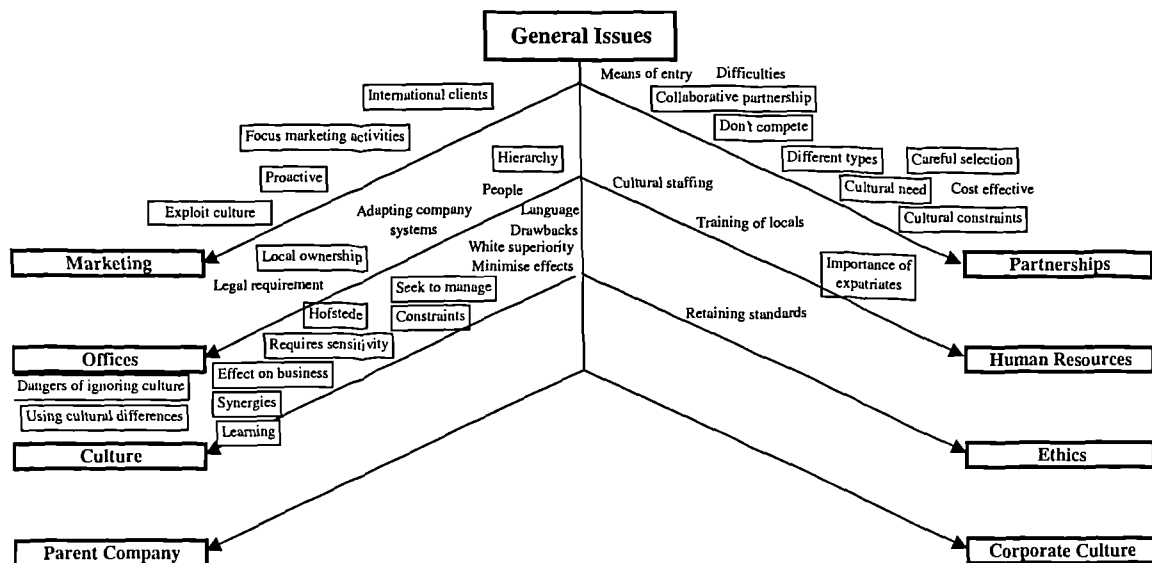
The organisation’s strategy dictated many of its other policies. Thus, much of its strategy was rooted in its cultural diversity. This feature also had drawbacks. The Interviewee observed that it was difficult to achieve consensus across the organisation on issues such the house design style, client focus and so forth and that they shared this problem with their clients. A particular concern for his company were differences in office architectural practice between, for example the UK, France and Germany, making design less transportable.

The participants of Interview 12 also considered ‘Culture’ to be one of the most important issues in their company’s business (see Figure 9.16). The participants were able to demonstrate a sophisticated understanding of cultural issues, which was reflected in the development of corporate strategy. They confirmed their organisation’s reliance on understanding and interpreting culture in satisfying many of its clients’ requirements. They were able to illustrate how the organisation depended on cultural differences and their position as an interface between organisation’s and local cultural differences for their competitive edge. For example, the Interviewees were able to discuss management literature regarding cultural differences. The following quotation from the interview reflects their approach to cultural differences and mirrors the views of Interviewee 4.

“Look at North America and there is a very aggressive business environment (I’m generalising now) which is very myopic: it’s all about “here’s the way WE do things”. They have no hesitation in saying they’re the best. But when they look outwards they see Europe as a kind of amorphous blob – ‘the European Union’ – which, of course, it isn’t. And then they begin to think that Europe is somewhat more difficult because some of them don’t speak American – or they do but very badly! But they want to deliver something very similar throughout Europe and don’t know how to achieve that. That is when [company name] enters the scene. They see that we’re in London and Milan and Madrid and Paris, and what we do is we tell them that we don’t do the same thing in every country – that’s distinctly what we don’t do. What we do is say we can offer the same level



of service in each country, modified for the culture of that country. So, if they want to achieve something, [company name] will help them achieve it in Italy. It may not be the same as what they did in France or the UK because, if they did the same, it wouldn't work." (Interview 12)

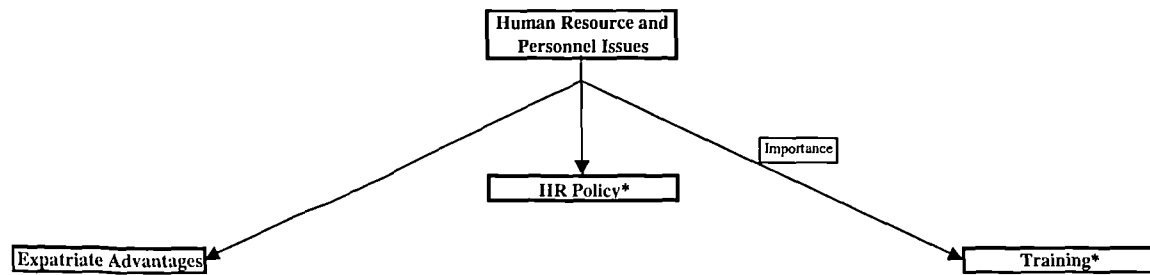


**Figure 9.16** Conceptual Chart Diagram of 'General Issues' for Interviewee 12

To reinforce the corporate culture across an organisation of people representing a huge diversity, the company encouraged exchanges. People from its offices across Europe spent extended periods in the company's London headquarters while people from the UK lived and worked for periods in those countries, creating a form of cross-fertilisation. At a strategic level, the organisation held regular strategic meetings with directors from the European offices while 'Training', in the sense of education for staff at all levels was treated with the utmost seriousness. A feature of this training was in cultural understanding and sensitivity. Another important feature in the company's efforts to harmonise corporate culture, while emphasising national cultural differences, was in transfer of knowledge throughout the organisation to achieve cultural 'Learning'.

"On the learning days it is actually about getting people to understand culture and cultural differences. Because, as you will gather from our earlier comments, globalism is the key. So these days are much more about cultural understanding than they are about anything else." (Interview 12)

This 'Learning' forms an integral part of the company's 'HR policy', showing how culture is incorporated into the strategic policy in all areas (see Figure 9.17).



**Figure 9.17** Conceptual Chart Diagram of ‘Human Resource and Personnel Issues’ for Interviewee 3

Another aspect of this picture is the recent incorporation of the company into a larger, European organisation. This relationship has promoted the development of cultural understanding and development to an even greater degree.

In summary, Case Study Organisation E revealed a construction industry company making use of cultural differences. The company actually emphasised those differences rather than seeking to minimise or remove them. Through this emphasis, it was able to find synergies that allowed the company to offer its client-base a distinct and special service. As such, the policy of embracing and using cultural differences relied on its marketing strategy. While the company had limited activity outside Europe, the interviewees stressed their identity as members of a global organisation.

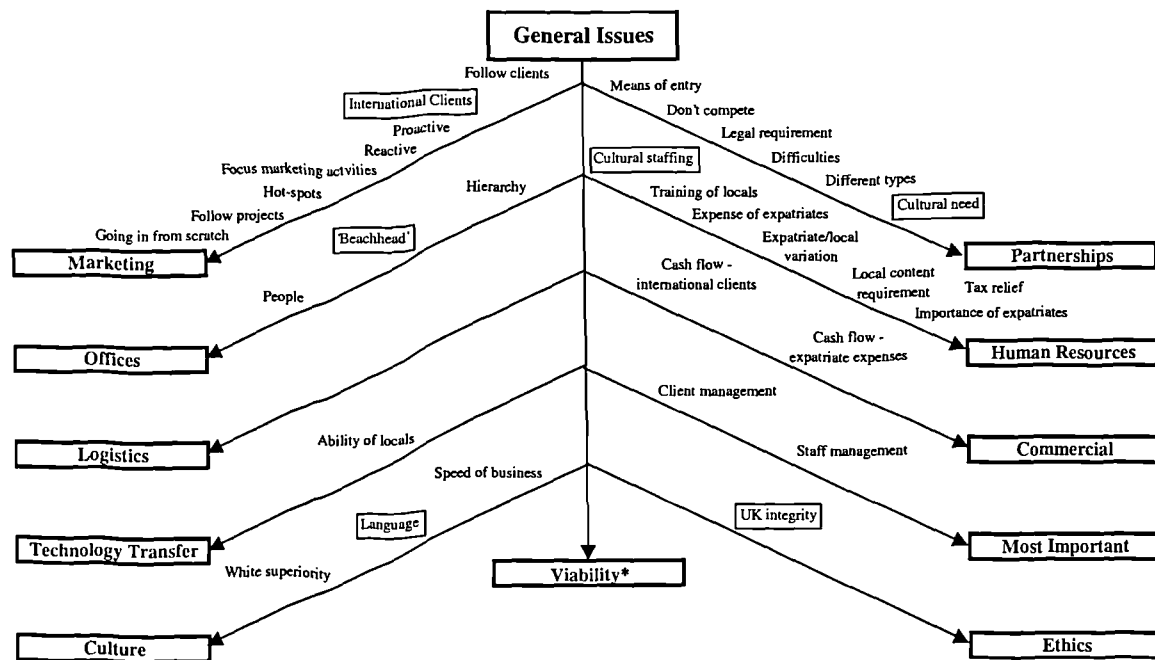
“The first thing I would say is that ‘global’ doesn’t mean you operate in every area of the world. Being in every country in the world may mean you’re an international organisation but it doesn’t mean you’re a global organisation. To be global and work globally is actually about thinking and about a whole approach to business and the changing nature of business – that’s the difference between global and international.” (Interview 12)

The organisation gained benefits from cultural synergies. These synergies were planned and managed at a strategic level. Thus, for this company, culture was at the heart of its strategy.

### **9.3.3 Findings for Case Study F**

This case study comprised only a single interview (Interviewee 6). However, as the equity partner responsible for his practice’s overseas activities, the Interviewee held an important strategic position and was able to give a complete account of his organisation’s approach in this respect.

For the interviewee, the ‘Most Important’ aspects of working overseas for his practice were ‘Client management’ and ‘Staff management’ (see Figure 9.18). Because the organisation was a consultancy, its business was provision of a service, which explained the importance of managing its staff; the service providers. Meanwhile, by ‘Client management’, the interviewee simply meant the activity of acquiring and maintaining clients for its services overseas. These aspects would not differ from the most important issues for its UK business.



**Figure 9.18** Conceptual Chart Diagram of ‘General Issues’ for Interviewee 6

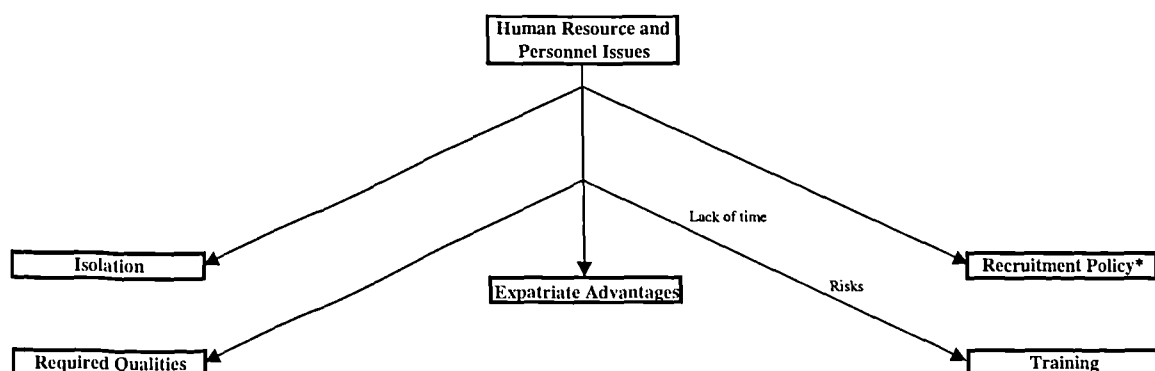
Fundamentally, the interviewee did not consider cultural issues to be of much importance in themselves. Where ‘Culture’ was seen as being important, this was in terms of its overseas ‘Partnerships’ and its overseas ‘Human Resources’ policy. The key to minimising the impact of different cultures where the organisation operated was to identify individuals, either within partner organisations or who it could employ, who would then provide them with cultural credibility. Credibility was important in political terms in that they were seeking both to satisfy potential local requirements as well as satisfying ‘International clients’, their main source of work. A requirement of many countries in which they were working was to employ a specific proportion of locals. This regulation would also apply to their client companies, who would insist that the company helped them to meet this requirement. This, often legal, stipulation, was seen as a hindrance to their overseas performance. In certain locations, where quantity surveying (their main service) was not unusual, such as Singapore and Nigeria, they

were able to find locals to fill senior positions. These individuals helped to insulate the practice from the risks associated with the cultural differences they might encounter in those locations. The individuals were relied upon to adapt both to the predominant culture of the company as well as presenting an acceptable (credible) face locally.

The Interviewee thought an important aspect of his company's overseas success was the perception of British consultants as being non-corruptible. This idea of 'UK integrity' was particularly important in certain locations such as Nigeria but was considered to be an important issue generally overseas. 'Partners' were essential to protect the organisation from the difficulties that ethical differences might pose for the organisation. On the question of 'Ethics', the interviewee responded with the following comment:

"In a way, it works for us. One of the reasons people like to have Brits more is that we do export integrity. There's still the view that if a British quantity surveyor tells you that is what it is, then that is what it is. Clearly in the Middle East particularly (most of the countries outside the UK in fact) there's a different kind of ethics, commercially. We manage to steer clear of it professionally but we're aware that it goes on. Sometimes it goes on at the highest level – government to government or international oil company to international oil company right down to "if you want a work permit I've got it here"! But that's why you have local partners, to deal with these matters."  
(Interviewee 6)

The organisation was working in what were, for quantity surveying practices, unusual locations, such as Norway and Canada. However, the locations in which they worked were largely determined by where their clients happened to be operating. There was certainly no specific policy in order to allow for the cultural differences they were likely to encounter in those locations.



**Figure 9.19** Conceptual Chart Diagram of 'Human Resource and Personnel Issues' for Interviewee 6

Predictably, *Human Resource and Personnel Issues* failed to allow for the cultural dimension (see Figure 9.19). However, the interviewee regarded postings internationally as providing the company with staff who became more resourceful and experienced and, from this perspective, felt that his staff should be encouraged to work outside the UK:

“The firm has seen a hidden benefit from that in later years which is a roundness to the individual that you don’t get if you just work in the UK. People have to be more switched on if they’re going to succeed overseas and that’s of benefit to the firm.” (Interviewee 6)

In summary, Case Study Organisation F presented an almost parochial attitude to cultural differences. Working internationally was recognised as being more difficult in terms of logistics but, from a cultural perspective, the firm appeared to have developed a series of strategies that enabled it to avoid any notable encounters with cultural differences. Its clients were multinational organisations which presented few problems from a national cultural viewpoint, while it managed to insulate itself from cultural problems elsewhere by employing appropriate staff or entering into partnerships with overseas companies who could act as an interface between itself and the cultural environment in which it worked.

### ***9.3.3 Findings for Case Study G***

Case Study Organisation G also comprised only a single interview. However, while the organisation was a very large construction contractor, the Interviewee, being the former chief executive, was able to provide a complete, albeit historical, overview of the organisation’s policy and strategic approach to its international markets and business.

For the Interviewee, the ‘Most Important’ aspect of working internationally was the presence of a good ‘Local partner’. In fact, Figure 9.20 illustrates the level of importance attributed to the various aspects of ‘Partnerships’, with four of the seven categories being talked about by the interviewee at length. The issues regarding the forming and maintenance of ‘Partnerships’ tended to relate directly to cultural issues. Where the company was working outside the UK, the Interviewee was aware that they were encountering cultural differences at a variety of levels: operational, tactical and strategic. Among the more strategic issues of overseas construction, the Interviewee was

most concerned with winning work – what he chose to call differences in trading culture, and coded as ‘Constraints’ of ‘Culture’:

“The Middle Eastern nations will always want to bargain. I mean, whatever the price is, they’ll want to bargain it down so they’re culture is to haggle and trade. Our culture here is to quote the price and it’s either accepted or rejected and that’s the price. We don’t think in terms of this continuous kneading away. ... So, I think that the trading culture of the places where you are working is a very important feature of whether you enjoy it or not, however much money they appear to have.” (Interviewee 9)

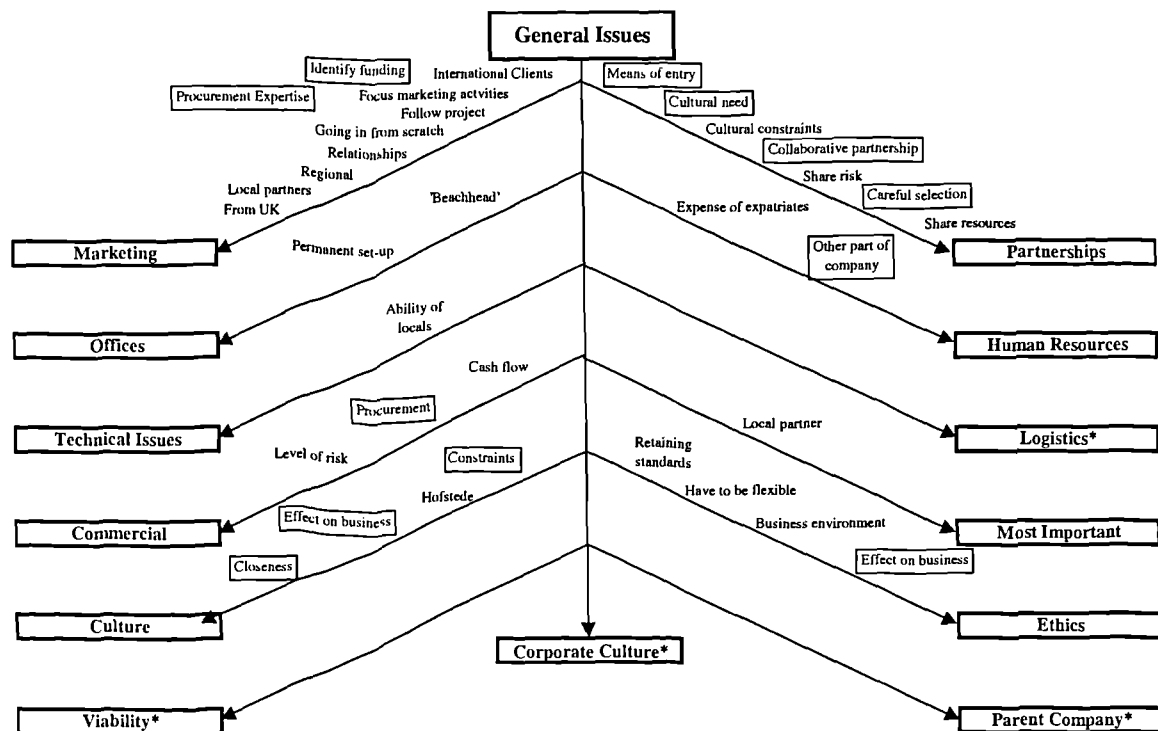
At the operational level, culture was an issue primarily in the form of differences in ‘Ethics’. The Interviewee described how such differences could effect the company’s activities internationally.

“I mean, the tragedy of some of these places, and Nigeria was, perhaps, the worst, is that you have a good guy in UK, you send him over to Nigeria and before he’s been there a year he’s either broken by resisting – ‘dash’ is the word they use for bribery – either resisting ‘dash’ or receiving it. And, you know, you can ruin bloody marvellous guys by sending them out to some of these awful places. And that was the tragedy of Nigeria for us (apart from the loss) was the good guys – we ruined them by sending them out to Nigeria. You have to be very brave, you know, when you’re an office manager on a contract out in the wilds, you have to be very brave to resist the pressures or very upright to resist corruption. It’s dreadful.” (Interviewee 9)

The reason the interviewee considered ‘Partnerships’ to be so important was that he thought that partners would be able to ‘shield’ the company from many of the problems they encountered that were related to cultural differences. The Interviewee stressed the need to find the ‘right’ partner to act for them overseas and fulfil the ‘Cultural need’.

“Well, I think we relied very much on our local partner – this is the point about getting a partner with substance and reputation – to tell us what we had to do. And, after a time you get to know him and you trust him enough to take his judgement. And, you hope to hell that you are, in fact, doing the right thing and that he’s guiding you correctly. But, certainly as far as Egypt was concerned, there were obviously agent fees to be paid but [partner company’s name] helped us through those. And, as far as I know, we got it right. ... and it does come back to having somebody of substance. The little guy whose well connected, the King’s brother (the usual thing) and can get you this job on payment of half a million quid or whatever, you can’t rely on him. Once he’s got his half a million quid or whatever, or its gone through him to the King, you’ve got nothing left. You can’t say “well, we’ve paid you, what are you going to do?” And so, he may get you the job but then

what, where's the help coming from? Because, you need him and he doesn't need you anymore, because he's got the money. So, it's back to where your power is, you're very much stronger if you're in bed with a good partner who will suffer or enjoy the profit or loss of the whole job. (Interviewee 9)



**Figure 9.20** Conceptual Chart Diagram of 'General Issues' for Interviewee 9

Another issue that the Interviewee identified as being important, and which was related to cultural differences, was the need to 'Identify funding' in the 'Marketing' category. This issue related back to the many problems associated with obtaining work and ensuring payment. The Interviewee saw cultural and ethical differences as effecting these in a number of ways. If the funding could be secured from a 'reliable' source, i.e. a European government (and preferably the British government) in the form of tied aid or some similar arrangement, this would make the prospect of working internationally far more attractive.

To an extent, the interviewee also considered *Workload Issues* to be impacted by cultural differences (see Figure 9.21). For example, he saw the 'Importance of Overseas' construction activity as being reduced in part due to the problems a company encountered in foreign environments.

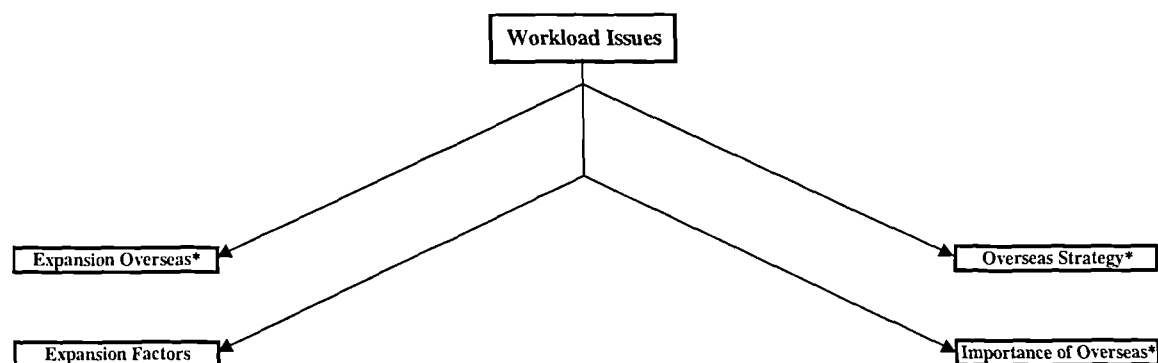
Question: "So this idea you mentioned about, I suppose, the different culture, and that aspect – things like bribery, corruption, bureaucracy – how

important do you think that was in dissuading you from working internationally?”

Answer: “Very much so. Because it wasn’t fun particularly. You didn’t really enjoy what you were doing and if you did a good job, you didn’t necessarily get paid for it, or you ruined a few good guys on the way through.” (Interviewee 9)

In fact, many of the overseas *Workload Issues* were spoken of in broadly negative terms. Working overseas was seen by the Interviewee as being so problematic, and the impact of cultural differences were such a large factor in this, that he commented:

“Quite frankly, if we’d never left Dover, we’d have made a lot more money. There were some jobs that made huge sums of money but there were some jobs that lost huge sums of money and the management hassle you get for overseas is quite a lot. It would have been a lot better if we had just stuck at home.” (Interviewee 9)



**Figure 9.21** Conceptual Chart Diagram of ‘Workload Issues’ for Interviewee 9

While the Interviewee recognised the effect of culture on the business of the company internationally, and had specifically noted the possible detrimental effect of ethical differences on the organisation’s employees, he did not see cultural issues as being an important part of *Human Resource and Personnel Issues*. Rather, the focus was on finding and retaining people who were able to ensure that the ‘Corporate Culture’ was safeguarded. However, he did recognise this as a failing.

In summary, Interviewee 9 indicated that Case Study Organisation G had been aware of culture and that this had been taken into account within their strategic approach. However, this strategy could be characterised as being ethnocentric, in that culture was seen purely as a source of problems and constraints to conducting business internationally. The policies and approaches adopted when working internationally



failed to accommodate cultural and, in particular, ethical differences. Instead, the policies were directed at minimising the company's exposure to those differences, either through developing partnerships with local companies who would manage those differences, or through linking the financing of overseas projects to 'safe' and 'reliable' sources of revenue, thereby removing the commercial concern from the execution of those projects and commensurately reducing the level of risk.

#### **9.4 Cross Case Analysis**

On an individual level, the cases show that the people responsible for developing and implementing strategic decisions for the international operations of their construction organisations have a varying appreciation and understanding of the potential impact of cultural differences and, consequently, respond to the issue in different ways. Case Study Organisations B and C show that their relative influence on how the organisation accommodates the differences in culture that they encounter when they work outside their domestic markets seems to be dependent on their position within their organisation. Additionally, the way strategic decisions are implemented in relation to this issue appears to be modified as the responsibility for implementation of those decisions is delegated down the hierarchy. Managers in fairly senior positions have a great deal of control over the interpretation of strategy, once they find themselves on overseas postings. If they find culture to be of importance to them, they can act in a sensitive and accommodating manner or not as they deem appropriate, often without feeling restricted by corporate strategy and policy. An explanation for this could be that, in most of the cases, there was little strategy or policy, as such, that addressed the issue of culture. Although most of the interviewees recognised it as an issue they could not identify many specific policy and strategic activities designed to allow for cultural differences. Where company policy and strategy did allow for cultural differences, this was implicit rather than explicit. Thus, examples of implicit strategy would include policies such as pursuing work that was funded by 'reliable' sources, engaging local companies as 'partners' in the knowledge that they would be able to deal with any local cultural difficulties or by pursuing 'international' clients governed by familiar, supra-cultural policies of their own.

The clear exception was Case Study Organisation E, the architectural practice, where the three research participants interviewed were able to indicate a variety of strategies

that not only allowed for cultural differences within their activities, but positively embraced them as a means of marketing the organisation and creating a learning environment within the organisation. Indeed, for this organisation, cultural differences, both within the organisation itself, and within the environments in which it worked, contributed to its competitive advantage.

The other case studies involving consultants, both quantity surveying practices (Case Study Organisations C and F), indicated that neither had any specific policies in order to accommodate the cultural differences they faced. Bearing in mind that, more than the contractors case studied, these organisations were people-based, it was surprising that, in particular, they had failed to instigate a structured and planned policy of recruitment and placement of expatriates. For both organisations, training while important, was based on technical and professional issues rather than allowing for softer, people-based issues. The Interviewees of Case Study C thought that such training was too difficult to implement, while Case Study Organisation F had developed a set of procedures that enabled it to minimise and avoid encounters in culturally difficult scenarios. In many ways, these organisations differed little from the contractors participating in the research. The Interviewees of these organisations all recognised cultural differences as being of importance to their international operations, with some seeing the associated problems as being more important than others. Again, they considered expatriates to be strategically and tactically important to their business overseas, many citing the importance of expatriates in protecting the organisation's interests while promoting the organisation's corporate culture. However, they were unable to see how training or other support could be provided to these individuals in any structured or systematic way to enable them to better cope with the cultural differences they would encounter.

With regard to recruitment and posting of expatriates, the basic policy of all the organisations in the study, apart from Case Study Organisation E, was to initially seek for someone within the company who would be both suitable and interested in the posting. Where such an individual was not available, they would then advertise for someone to fill the post. This 'hit-and-miss' 'policy' almost universally relied upon the ability of the person recruiting the postholder to identify the 'right' person for the post. This decision would inevitably be subjective.

One aspect that was of importance to many Interviewees was that of ethical differences. Here, the distinction between contractors and consultants was more marked. For the consultants, the issue of lowered ethical standards was unconscionable – so much so that their responses were muted at best when asked about the topic. When they were drawn on the subject, their only comments were that the reputedly high ethical standards of British construction professionals were of benefit in their overseas business dealings: clients readily trusted them and where ethical integrity was of importance, they had a competitive advantage compared to consultants from some other countries. For contractors, the issue of ethical differences was more complex. While they were required to exhibit the same high ethical standards demanded of construction professionals working for consultants, the contractors Interviewees tended to express more ambivalence where the topic was discussed. Perhaps, contractors' staff are more exposed to ethical differences. Certainly, Interviewee 7 suggested that the ethical standards of contractor's staff were far from immutable when they were in the field, despite the dictates of head office (indeed, this was one area where contractors appeared to have a clear policy with regard to cultural differences). Interviewee 9 was outspoken in his exasperation with the difficulties that ethical differences presented, both to his organisation as a whole and to the individual staff representing his company overseas. The problems of reconciling a company with ethical standards reflecting UK cultural norms, with those one could expect to encounter internationally, were so intractable, that he was led to see international work as being too problematic – so much so that, prior to his retirement, he had considered withdrawing Case Study Organisation G from international work altogether. Similarly, the ethical standards demanded by Case Study Organisation A were such that they were prepared to eschew certain locations around the world on the basis of the prevailing ethical standards of those locations.

Other common themes that emerged from analysis of the case studies included a focus on the specific client base that have been referred to as being international, i.e. blue-chip, multinational conglomerates. Even those companies that had traditionally focused their attention on local clients (such as Case Study Organisation B) were refocusing. A number of reasons for this were given: their ability and willingness to pay; their appreciation of higher levels of service offered by UK construction organisations; and the ability of local competitors to provide many of the basic services that local clients might require. However, a by-product of this strategic approach was to reduce the respective organisations' exposure to the risks presented by cultural differences. While

it would be overstating the findings to say that this was a specific aim of the policy of targeting international clients, it was certainly an element in the overall goal of reduction in risk exposure internationally.

Another commonality that emerged was the desire by all the organisations to project a corporate identity in their activities overseas. The interviewees considered their corporate culture to be an important element of their corporate identity. Their main tool in achieving this was the expatriate and, hence, despite the high, almost prohibitive, cost of expatriates, they remained an important element of the international activities of all the companies participating in the research apart from Case Study Organisation E. For the consultants in the study, expatriates were also important as they represented their company's service. Clients were buying the service they, as individual expatriates, were providing, as opposed to the constructed product that the contractors produced through what were, as many of the Interviewees stressed, well understood techniques and procedures. In this sense, the consultants had a distinct competitive advantage over their contracting colleagues in that they had more opportunity to add-value to their services. Consequently, they would gain more from understanding culture at the strategic level than the contractors in the study.

Finally, niche activities seemed to be important to most of the organisations. For example, Case Study Organisation A saw its ability to capitalise projects as being important. Similarly, Case Study Organisation D focused on its technical excellence in civil engineering. For these organisations, their niche skills subsumed cultural differences. Meanwhile, Case Study Organisation C was actually exploiting cultural differences in its association with Japanese contractors.

## **9.5 Summary**

The purpose of the case studies was to explore and examine the approaches and strategies of a range of British construction enterprises that operated internationally. There were seven case study organisations with interviewees in each ranging from between one key individual up to five individuals representing different departmental functions within the organisation. There were a total of 13 interviews with 14 individuals.

The case studies organisations were as follows:

- A. A joint venture utilities developer operating as a subsidiary of a very large, US owned, very large AEC company.
- B. A medium-to-large sized British-based international contractor.
- C. A large, UK-based international quantity surveying practice.
- D. A small, UK-based civil engineering contractor with only limited overseas interests but which was part of a very large, European-based contracting conglomerate.
- E. A small, British-based international architectural practice.
- F. A large, British-based cost and property management consultancy.
- G. A very large, UK-based international construction contractor and aggregates organisation.

A pattern matching approach within a strategy of theoretical propositions was adopted for the analysis of the case studies. Within the case studies, the semi-structured interviews were analysed through a process of data reduction. The interviews were recorded and transcribed. The transcriptions were coded and categorised, using the NUD\*IST computer-aided analysis software as a tool for manipulation of the data fragments. A structure common to the interviews was developed from a predetermined scheme that was supplemented with unexpected issues, codes and categories that emerged during the analysis process.

There were three main categories of issues. 'General Issues' was the largest category, containing seventeen sub-categories against which relevant textual passages were coded. 'Workload Policy and Strategy' contained four sub-categories and 'Human Resource and Personnel Issues' comprised five sub-categories. Within each sub-category were a variable number of codes depending on the range and scope of discussion that related to the sub-categories.

Following separate analysis of the interview transcripts, the analyses were brought together to form case studies. A conceptual chart diagram was devised in order to illustrate the findings. Separate diagrams were created for each of the main category headings for each interviewee. The diagrams showed the sub-categories and listed the coded issues that had been identified during analysis of each interview. As many issues were discussed in each interview, a rule-of-thumb was devised to identify the most important issues, which could then be discussed and explored. On a review of the

various codes, it was found that when over 2½% of an interview was dedicated to a specific subject, there was usually something interesting and important to say about that subject. This rule was used to highlight the most important issues within the conceptual chart diagrams, although the rule was purposely flexible so that other issues that were found to be important but did not meet this criterion could, nevertheless be discussed.

The findings on company strategy and policy varied between the organisations studied.

- The interview regarding Case Study Organisation A demonstrated a policy of commercial dominance, with a rigid corporate culture dictating a common approach across national boundaries regardless of the cultural differences they encountered.
- The interviews with decision-makers in Case Study Organisation B revealed an approach that could largely be characterised as ethnocentric. While cultural differences were regarded at the corporate level as being important issues, the response was to develop policies with a view to controlling and containing those differences. Even the personnel policies, that were in the process of being developed and updated, sought to manage the differences between cultures rather than find ways to help their staff appreciate and capitalise on differing cultural perspectives. However, this organisation had been able to develop a synergistic relationship with a European partner organisation where, notably, the cultural differences at the national level were marginal.
- The interviews with participants in Case Study Organisation C demonstrated that there was recognition of cultural differences as being important to the business. However, there was no strategic approach for dealing with those differences. Rather, there was a reliance on ad-hoc relationships and partnerships, and the ability of the individual staff to cope with any difficulties they might encounter.
- Case Study Organisation D had only a small interest in overseas work and focused on technical excellence rather than management. It had a relationship with a partner-subsidary that provided local expertise. Thus, for contextual reasons, culture was a low priority at the strategic level. Such policy as there was focused on approaches to minimise the risks that cultural differences presented.
- Case Study Organisation E revealed a startlingly different attitude to cultural differences. Here, culture was an essential element of their marketing and business strategy. It was an almost implicit element of the company, exhibited by their development of an interlinked series of partner companies across Europe. Indeed,

the differences at the cultural level were purposely emphasised rather than minimised and this was a key element of their competitive advantage.

- Case Study Organisation F adopted perhaps the most parochial approach of the case study organisations. Their approach was one of insulation from cultural differences through a careful selection of partner companies, staff and clients.
- The interview for case study organisation G showed another organisation that took an ethnocentric approach in response to the cultures they encountered by seeking to minimise their exposure to cultural risks.

There were a number of commonalities across the case study organisations. Replication logic within case study theory enables these to be generalised to British international construction enterprises at large. There were also a number of differences that could be attributed to various factors. The cases demonstrated that, on the whole, British construction enterprises operating overseas did not have a strategy or policy for dealing with cultural differences in those overseas environments. Rather, they relied on the individual expatriates they employed in those countries to react in what was hopefully an appropriate and effective manner. This was 'hopeful' because those companies were unable, or unwilling, to provide their prospective expatriate staff with any training, guidance or other preparation for their overseas postings.

Where policy and strategy was identified as incorporating the cultural dimension, this was implicit in nature. They were seeking clients, contracts and commissions, locations and partners that all had the effect of minimising their organisation's exposure to cultural difference. These 'policies' (in practice, they tended to be informal) did not seek to overtly deal with culture but, rather, were unconscious reactions to the difficulties that culture can impose – thus, the relationship of the 'policies' to culture was implicit.

If anything, the quantity surveying practices demonstrated a less structured approach to cultural differences, at a corporate level, than the contractors. This was surprising bearing in mind the more people-oriented nature of consultancy compared with contracting.

The 'hit-and-miss' policy for recruiting and placing prospective expatriates, who were, in turn, identified as being strategically important to their organisation's performance

and success overseas was almost universal. This, linked with the aforementioned lack of training, guidance and support seemed to be a strange approach, particularly for organisations which had such a large interest in international activities. Without fail, the interviewees cited international operations as being an essential part of their companies' business. Furthermore, the expatriate was the main instrument in projecting the company's corporate identity overseas. For all the organisations involved in the study, this was an important part of their competitive advantage and was particularly important to the consultants in the study.

Ethical differences were an important issue for all the interviewees, although the contractors seemed prepared to take a more 'heroic', "when in Rome..." attitude than the consultants, for whom even the contemplation of reduced ethical standards was unconscionable.

Contextual factors modifying the various organisations' response to cultural differences included the proportion of their business conducted overseas, niche activities in which they were involved and the relative experience and ability of partner organisations.

Finally, the main exception to the general picture was Case Study Organisation E (the architectural practice) for which culture was incorporated within their strategy as a key element of their competitive advantage. As a consequence, the interviewees were particularly knowledgeable of the issues involved in managing diverse cultures, both within and external to the organisation, and had a clear strategic approach to incorporating cultural management and manipulation within their marketing and business management. They treated culture in a truly synergistic fashion and were able to identify benefits as a result.



## CHAPTER TEN

Whenever I hear someone use the word 'culture' ... I reach for my revolver.

Hermann Goering

Be England what she will, with all her faults she is my country still.

Randolph Churchill

## **10.0 SUMMARY AND CONCLUSIONS**

### **10.1 Summary of Thesis**

Chapters 2, 3 and 4 provided the theoretical foundations for the thesis. Chapter 2 outlined the nature of the international construction industry at large. It can be seen that international construction activity stems from a rich history of overseas development, epitomised throughout the nineteenth century by the great railway boom promoted by British capitalist-engineers such as Brassey, Peto, Betts and Locke. This mirrored a desire to apply and develop accumulated capital, with the European colonies being the main target of this development. The World Wars saw the relative demise of European international construction power, with the giant construction and engineering companies of North America emerging to dominate a world construction market where countries were rushing for economic growth. This was the foundation for the modern international construction industry – an industry that can, in many ways, be considered as unique.

The modern world in which construction enterprises now operate is far more complex and changeable than that of those early pioneers. To be a major ‘player’ in the industry, a construction enterprise can no longer rely on its domestic market alone but, where it seeks to strike out into the international market it becomes exposed to the numerous currents and cross-currents that characterise globalisation. Thus, British construction companies trying to grow their business, or even maintain their market share, face a dilemma. On the one hand, they can focus on their domestic market, which they know and understand, but where competition is fierce with increasing penetration from overseas competitors. On the other hand, they can strike out into other countries around the world but face unfamiliar risks and, even in relatively underdeveloped areas, increasing competition. Chapter 2 explores these different risks and examines the nature of operating internationally, with specific reference to the construction industry. It shows how, among the different variables facing the international company is the cultural dimension. This forms the background against which the rest of the thesis is set.

It can be seen, from Chapter 3, that the concept of ‘culture’ is a thorny issue. Culture can be interpreted in a number of ways and can be seen from many different perspectives. However, there is no doubt that something we call ‘culture’ exists in the

sense explored in Chapter 3, and that this culture differs for different peoples around the world. This chapter develops the conceptual basis for the thesis by showing how culture can be seen as being comprised of different dimensions. Peoples from different cultures can be positioned along these dimensions relative to those from other dimensions. At the same time, a specific culture can be conceived of as a series of layers. The outside layers represent the observable practices, behaviours and mores of that people and are indicative of the 'core' of culture that are the underlying values. Bringing these two models together enables the forming of a powerful conceptual tool for the investigation of cultural differences (Figure 3.4).

Chapter 4 sought to bring the background of an international construction industry together with the theory of culture. The evidence from the literature and numerous anecdotal sources shows that cultural differences impact on construction organisations working outside their familiar domestic environment in a myriad of ways. When these accounts are seen in light of various researches carried out within the American international construction industry, a compelling case is created for believing cultural issues to be a key, though poorly understood, factor for construction enterprises operating outside their national borders. Research elsewhere indicates ways in which organisations, and the people who work for them, respond to culturally diverse encounters: parochially, ethnocentrically or synergistically. At a more strategic level, management of those differences can form an important part of any corporation's competitive advantage internationally, and this is particularly true for construction enterprises. However, bearing in mind the crucial nature of the cultural dimension within the competitive strategy of international construction enterprises, together with the array of anecdotal observations which make reference to the issue, it is surprising that there is no previous research disclosing the approach that British construction enterprises adopt to cultural differences, or how the expatriates they employ to manage their affairs in overseas locations, respond to the differences in culture with which they must contend. Apart from the American research mentioned previously, which notes the cultural dimension as an important element of competitive advantage for international construction enterprises, there is no research of this nature for the industry generally. For that matter, research conducted in other industries rarely focuses on this specific area of interest. It was this gap in knowledge that the thesis sought to address.

Thus, the empirical aspect of the research was entered into with the following facts seen as a given: cultural differences exist and they have important effects on the way both organisations, and the people who work for those organisations, do business in an international environment. When this is linked to the fact that the international arena for construction work is increasingly competitive, and that that competition is encroaching ever more into those countries with a sophisticated and developed construction market of their own, such as the UK, the need to consider cultural differences at both an individual and corporate level is more important than ever before. The empirical work, comprising a survey and case study interviews, set out to explore the extent to which British construction organisations, and the people working for them in foreign environments, both recognise, and respond to, the cultural differences which they encounter, and to see how important this is to their relative performance in those markets. Although the methodology developed to validate this thesis was devised with the British international construction industry as the focus of concern, that same methodology could be adapted for the international construction industries of other countries as well as being transferred into different industries entirely.

## 10.2 Summary of Methodology

The research question that was explored in Chapters 2, 3 and 4, was expressed as a series of hypotheses in Chapter 5. These hypotheses addressed specific aspects of the research question and were operationalised through an understanding gained from reviewing the literature. The primary hypothesis was that:

*Cultural diversity, at a national level, effects the management and business activities of British Construction Enterprises operating internationally.*

Supplementing this primary hypothesis were two secondary hypotheses. These focused on the expatriates themselves, investigating their response to cultural diversity and the level of support through training and education they were offered, respectively.

*Managers operating internationally for British construction enterprises adopt an ethnocentric/parochial approach in response to cultural diversity.*

***As part of their international company policy and strategic approach, British construction enterprises provide little or no training and education in cross-cultural issues for their managers who are working in a culturally diverse environment.***

Finally, a tertiary hypothesis proposed that British construction enterprises generally failed to approach their international activities in a strategic manner. Naturally, this was to be investigated in light of the cultural dimension being identified as an important element of the international strategy of corporations' generally.

***British construction enterprises do not adopt a strategic approach to their overseas work.***

It was established, in Chapter 5, that hypothesis testing, as such, was not necessarily appropriate to the research questions being addressed for this study. The research questions were more exploratory in nature than attempts to test a proven theory. The aim was to understand the experiences and behaviour of people working internationally, together with a conception of how construction enterprises approach the overseas element of their activities and why they adopt such an approach. Thus, there were to be two components to the empirical work: an analysis of expatriate British construction professionals/managers and an examination of the strategic policy of British international construction enterprises. A review of the relevant philosophical and practical considerations led to the conclusion that the most appropriate approach would be a combined methodology, with a postal survey directed to the expatriates and an investigation of construction companies on a case study basis. While the hypotheses remained unchanged in essence, the largely qualitative nature of the proposed empirical work required the reclassification the hypotheses as 'orientation hypotheses'. The two strands of empiricism were to be contained within a combined methodological strategy.

The survey component of the methodology, explored in Chapter 6, itself contained two approaches: one quantitative, the other qualitative. While the quantitative aspect of the questionnaire allowed generalisation from the sample to the population at large, this would fail to ensure the survey's ecological validity. Consequently, the respondents were asked to elaborate on their answers to questions with written comments. The questionnaire design was rooted in the orientation hypotheses stated in Chapter 5, drawing on the literature to devise a series specific dependent cultural and managerial variables. The validity and reliability of the questionnaire design was improved through

piloting. Finally, the population of British expatriates was estimated to be in excess of 30,000. It was established that, in order to acquire sufficient responses for statistical manipulation, a total response rate of greater than 20 percent was required from 484 questionnaires.

The case study methodology to be adopted for investigation of construction enterprises was outlined in Chapter 8. The aim was to devise a methodology that was appropriate to elicit a perspective on the strategic approaches adopted by the construction enterprises participating in the study. As 'strategic policy' is a difficult concept to ascertain, with many individuals responsible for formulation and implementation of different parts of a given organisation's policy, it was decided to identify individuals who had a good overview of their company's strategic approach to its international workload. These individuals would be able to supply not only details of their organisation's strategic approach but also be in a sufficiently senior position to be able to provide an insight into the decision-making processes behind that approach. Companies were selected that could provide perspectives from both a contractor's and a consultant's standpoint. A case study protocol was created, providing an overview of the case study project, outlining the field procedures and the case study questions and planning the report. The specific data were to be collected using semi-structured interviews. An interview guide was devised that captured the variables contained within the orientation hypotheses identified in Chapter 5.

## **10.3 Summary of Findings**

### ***10.3.1 Summary of Survey Findings***

The analysis of the survey was presented in Chapter 7. The survey achieved a 30 percent response rate, yielding 145 responses. The responses came from countries the world over and from a range of individuals representing the main construction industry professions and both contractors and consultants. The data were analysed using both a statistical approach and qualitative approach. The statistical approach analysed the dependent variables against the entire sample in the first instance, and against portions of the sample determined by independent variables later. Where a statistical significance was identified, the reasons for this significance were discussed by drawing on the comments and remarks made by the respondents in support of their answers. Some

comments and remarks were used to illustrate the statistical findings while they were interpreted as a whole.

The majority of the respondents reported that it was more difficult to work overseas than it was to work in the UK. Although other factors were important, culture and culturally-related issues figured prominently in the respondents' comments. This was found to be true also of the minority of respondents who found working overseas to be 'about the same' or 'less difficult' than working in the UK. In reply to a list of managerial factors, the respondents identified those factors most useful in the management of cultural differences to be significantly more important than other, more prosaic factors, such as 'administrative competence'. 'Technical ability' was an exception to this general finding. While this factor was an important *basic requirement* and *justification* for the need for expatriates in the first instance, for a minority of the respondents, technical ability was linked with the maintenance of *respect* among their subordinates and colleagues. As such, 'technical ability' was seen by some of the respondents as being a means of communicating at a professional level with colleagues of differing cultural backgrounds, despite those cultural differences. Consequently, for these respondents, the factor was linked to cultural issues. When asked about their views regarding a list of cultural indicators, the respondents identified those that were value-related as being more important than more superficial indicators related to cultural practices. Beyond this, however, they also revealed an unexpected sensitivity and understanding of the nature of cultural differences and their effect on business at an international level.

Bearing in mind the widespread recognition of culture among the respondents as an important issue in their everyday experience as expatriates working in the construction industry, it was revealing to discover that, in their opinions, their companies generally failed to make any allowances for working internationally, on either a formal or an informal basis. Where policy and strategy were modified by companies for differences they encountered overseas, these modifications were often in connection with employment and work arrangements for the expatriate workforce. Furthermore, within company policy and strategy, the respondents reported that they had received little if any preparation or training for their postings. While a minority of the respondents failed to see how training or preparation could be provided, particularly for cultural issues,

most thought some form of training or preparation would have been useful, especially in terms of language skills, but also in dealing with cultural differences more generally.

The respondents' answers were explored more carefully to identify whether there were significant differences between the various subgroupings within the sample frame. A number of subgroups were identified. Significant differences were identified between the responses within subgroups when looking at differences in:

- management approaches between the professions;
- attitude to cultural indicators depending on the nature of the respondents job;
- both management approach and response to cultural indicators depending on where in the world the respondents were based;
- attitude to cultural indicators depending on the degree to which working overseas was found to be problematic.

These findings showed that, while there were some differences within the sample of respondents, these were for predictable reasons. One would expect many significant differences in responses from people working, for example, in Asia when compared to those working in Europe. These findings also showed that those findings working overseas 'more problematic' did so for different reasons than those who found the experience 'about the same' but very different. Elsewhere, it was revealed that there were no significant differences in responses from, for example, contractors and consultants.

### ***10.3.2 Summary of Case Study Findings***

The case studies included four organisations that could be broadly described as international construction contractors and three consultancies (two quantity surveying practices and one architectural practice). The data comprised interviews with key decision-makers within the organisations and, where access was provided, other individuals in key strategic posts. These interviews were analysed using a qualitative coding procedure which enabled the identification of the key themes and categories arising during each interview. These data were then compiled using the case study method to draw out the commonalities both within each case and across the cases.

The findings for the different cases varied in some respects. One company adopted a common strategic approach across national boundaries regardless of cultural



differences. The interviewees for two of the contractors revealed that they were aware of cultural differences at the strategic level but failed to introduce any policies to manage those differences beyond containing them. Interviews with decision-makers in the two quantity surveying practices showed that while culture was recognised as an issue, no policies at a strategic level were implemented that were designed to cope with these differences. Any management of them was in terms of ad-hoc responses at a local level, relying on the skills, abilities and sensitivity of staff in the field. The small, civil engineering contractor had no policy for dealing with cultural differences at an international level, but this was due to specific contextual factors: a technical niche and a large, European parent company which acted as a repository for the cultural knowledge and expertise required. The architectural practice, on the other hand, demonstrated how cultural differences could be incorporated within a construction enterprise's strategic profile as a tool for competitive advantage.

When commonalities were sought across the cases, it was discovered that the key strategic 'tool' for all the companies in the study was that of the role of the expatriate. These individuals were responsible for implementation of corporate policy and strategy in overseas locations while disseminating the company's corporate culture. However, despite the importance of expatriates in their general strategic approach to their overseas interests, the lack of strategic consideration given to cultural issues in an international context was reflected in a general malaise in attitude to recruitment, training and support for those expatriates. Where the case study companies did seek to deal with cultural differences at the strategic level, this manifested itself as a reaction to the difficulties and problems imposed by cultural differences that were so important that they could not be ignored. Primarily, these policies had the effect of minimising the company's exposure to cultural differences. The only area of cultural differences for which specific policies had been developed were those designed to deal with ethical differences. However, for the contractors in the study in particular, policy dealing with cultural differences failed to reflect the reality of the expatriate experience and, consequently, was dogmatic and impractical.

#### **10.4 Triangulation of Findings**

An important aspect of the validation of the thesis was that the empirical activities addressed different areas of concern: the experience, opinions and approaches of

expatriate construction professionals on the one hand and the strategic approach adopted by construction enterprises working outside the UK on the other. The purpose of this approach was to investigate both 'sides of the coin'. Both the survey and case studies had as their focus the cultural dimension at the national level. Triangulation of the findings at a methodological level occurred in the findings for the survey analysis in Chapter 7, where qualitative findings were used to elaborate and develop quantitative findings. At this stage, the triangulation concerns the nature of the findings for the two empirical spheres, namely: the survey and case studies. 'Triangulation', in this sense, entails the search for links between the two spheres, essentially seeking connections between the models illustrated in Figures 4.3 and 4.4 in Chapter 4.

The links between the two sets of findings occur in:

1. The extent to which the strategic policy developed by construction enterprises for their overseas activities aids and supports their expatriate staff who are representing those companies in overseas locations.
2. The degree to which policy designed to deal with cultural differences is relevant and appropriate to the cultural environment within which their expatriate staff find themselves.
3. The extent to which expatriate staff consider there to be a need for guidance in respect of cross-cultural issues at the strategic level.

In the first instance, it was found that there was only a tenuous link between the majority of the organisations at the strategic level and their operations in overseas locations. For example, Interviewee 6 from Case Study Organisation F noted the tendency for his staff to consider themselves isolated, both physically and psychologically, from the UK and, likewise, for staff in the UK to consider the overseas operations of the company to be a 'bolt-on', with little relevance to their general operations. This impression persisted despite the organisation earning 25 percent of its fee turnover from its overseas activities. The interviewees recognised the problem of maintaining contact across the large distances involved when operating internationally. They saw information technology (IT) as a key solution to this problem, while many of the interviewees reported that senior management frequently visited foreign offices. The key problem concerned an interchange of knowledge; both technical and cultural. Concerning this latter point, where development in the corporate culture was occurring in the UK, this was only slowly disseminated to the overseas operations. The problem was particularly identified by the interviewees of Case Study Organisation C. Interviewee 10 noted that his organisation was only able to offer a limited service in

many of their overseas locations, while Interviewee 5 personally took on the role of providing overseas support, providing a tangible link between the UK and overseas practices. Meanwhile, Interviewee 8 (who performed a similar role for Case Study Organisation B) noted that improved IT was more useful where employees were able to adopt more flexible working arrangements, both at home and overseas. The solution adopted by Case Study Organisation A was to enforce a common culture upon the organisation by creating a very detailed policy for all their operations, regardless of where those operations occurred. While this reduced the sense of isolation that employees of their overseas companies may have experienced, it also reduced their local flexibility and responsiveness. Thus, within the framework outlined in Section 2.4.2, this approach is a typical 'global strategy'. Another solution, adopted by Case Study Organisation E was to create regular, regionally based learning sessions. These sessions primarily operated throughout Europe with the aim of bringing together the diverse national cultures within their organisation and, through a process of sharing ideas and interacting with each other generally, jointly developing a common and appropriate corporate culture (rather than imposing one from the head office location). This can be interpreted as a 'trans-national strategy' as defined in Section 2.4.2. The two contrasting approaches demonstrated by Case Study Organisations A (command-and-control) and E (empower-and-trust) both led to ostensibly successful international enterprises. However, on closer investigation, it can be seen that Case Study Organisation A relied heavily on its financial strength to capitalise projects which were beyond the means of other competitor organisations and, even, some countries. Thus, they were able to pursue their command-and-control approach, which precluded cultural synergies. By contrast, the far smaller Case Study Organisation E was able to compete at an international level against far larger rivals within its own sector of the construction market, by finding and exploiting cultural synergies.

As has been noted, strategy within the Case Study Organisations rarely addressed cultural differences (with the notable exception of Case Study Organisation E). The main area in which policy was clear was with regard to ethical differences. This would be appropriate as expatriates, in response to the questionnaire mentioned ethical differences as a chief concern (see Table 7.6 in Chapter 7). However, on closer analysis, it would appear that the precise approach of construction companies to different standards of ethics internationally was that there was no scope for relaxing ethical standards in business. This official line did not tally with the majority view of the

expatriates, who predominantly saw differences in ethics to be simply *different*: not necessarily more 'right' or 'wrong'. In light of this they seemed to support a more flexible approach than construction enterprises were seen to adopt. However, there was a sizable minority of expatriates for whom ethical differences were not to be entertained in any way. For these individuals, the almost universal implacability of corporate policy with regard to ethical standards and probity would be appropriate. More detailed analysis of the survey responses from the expatriates in relation to ethical differences showed no significant variation between subgroupings, apart from those who found working overseas to be 'more problematic'. This finding indicates that it would be difficult for construction enterprises to tailor their strategic approach for ethical differences.

Elsewhere, it was identified, from the interviews, that there was very little provision for training in cultural dynamics, even though it was seen as being an important issue by the interviewees, having a potentially important effect on their expatriates' performance. This was in light of the acknowledged importance of expatriates to the performance of their respective overseas businesses. When this is viewed in the context of the survey, it can be seen that the majority of expatriates would prefer more preparation and training for their overseas postings. The additional comments made by the respondents identified a range of options for training and preparation that they thought would be of benefit. Prominent among these were suggestions for training in cultural differences (see Section 7.3.5). However, the interviewees generally seemed at a loss for ideas of how additional training might be provided. One exception was Interviewee 11, the personnel director of Case Study Organisation B, whose ambition for improving the readiness of expatriates to work overseas was limited by lack of resources. The other notable exception was Case Study Organisation E, for whom training was an important strategic issue.

An issue linked to this was the lack of a strategic approach to selection of people for postings. When asked the question, the respondents thought they had been selected primarily due to *experience*. Another important selection criterion was *personal characteristics* that appeared to have been identified. Less important criteria were their technical ability and desire to work overseas. While these factors are undoubtedly important, the interviews showed that companies did not process rigorous and systematic selection procedures for these people who were considered to be very

important. Interviewee 3 noted that people did not come as ready-made expatriates but, equally, failed to identify any specific strategy for selection of new expatriates. Vague hopes that peer support would ensure low staff turnovers were shown to be unreliable by Interviewee 7, who remarked on high expatriate turnover. Similarly, Interviewee 9 observed how ethical differences in Nigeria (noted as being among the worst places in the world for corruption by Interviewees 5 and 6) had “ruined” many good people. All the interviewees agreed that expatriates had to be very resourceful and flexible individuals, and the survey showed that cultural communication issues were more important than other, more general, managerial qualities. Despite this, selection procedures were ‘hit-and-miss’ at best. Perhaps the most successful organisation in tackling these connected issues was Case Study Organisation D. Their policy was to send new expatriates to a very well established location in North Africa, where these individuals could be sure of good support from peers and where the company had established a measure of familiarity and understanding of the local culture. Here, the new expatriate could be ‘eased in’ and difficulties they encountered could be dealt with quickly. If they found that working outside the UK was not an experience they enjoyed, they could return to the UK without causing the local operation too many difficulties, as they would not initially be placed in a vital post.

The attitude of the interviewees responsible for developing policy and the expatriates responsible for implementing that policy tended to coincide in terms of their approach to cultural differences in general terms. The majority of both groups saw cultural differences as a source of difficulties and problems in working internationally. The scale of this recognition among the survey respondents was indicated by the factors they considered to be significantly important, while the interviewees considered it to be less of a generally important factor but one that could, in some instances, have profound effects on the performance of their overseas interests. Both groups saw the main solution to these potential problems to be one of minimising the possible impacts of cultural differences: the interviewees in reduction of their companies’ exposure to cultural risks and the expatriates through efforts directed at reducing sources of cultural barriers and obstacles by ‘good’ management. The only construction enterprise to see cultural differences as a source of competitive advantage was Case Study Organisation E, although most of the other companies had reported benefits derived from culturally diverse situations, even though these had not been planned as such.

The survey showed the respondents felt that few companies made any allowances in policy and strategy for working overseas and where allowances were made, the differences they were designed to deal with were fairly mundane and prosaic. This is in contrast to the expatriates' approaches, where many allowances were required for cultural differences in their management style and general sensitivity. This would imply that there was insufficient attention given by international construction enterprises to policies designed to cope with cultural differences. The fact that the majority of expatriates in the survey found it more difficult working outside the UK and that, for many of these, this was because of the cultural differences they encountered, would suggest that enterprises need to give this aspect more attention. While the interviewees were able to identify many strategies designed to *minimise* their exposure to cultural differences, they failed to identify many procedures or policies that were intended to *accommodate* those cultural differences where they were encountered. Clearly, procedures intended for the domestic market would rarely be appropriate internationally but policy changes tended to be informal 'rules-of-thumb' rather than specific practices.

In summary, areas of convergence and divergence were found between company policy-makers and expatriates in the field. In addressing the three triangulation statements made earlier, it is clear that strategy provides minimal support to expatriates in the field. There is a danger of expatriate staff feeling isolated, ill-prepared and inadequate in foreign placements. They find that there are many additional requirements on their resourcefulness in a place where people (their staff, clients and colleagues) behave in different, often unpredictable ways due, in the main, to differences in culture. The companies sending these people overseas to represent their interests recognise these problems but can offer little in terms of solutions to them. However, many of the policies companies do employ, primarily in reducing their organisation's exposure to cultural differences would be considered appropriate by their expatriates, reflecting a shared ethnocentric attitude. This could be because many of the policy-makers were, at one time, themselves expatriates. Finally, there was a gap between the requirements for policy guidance that staff required and that provided by organisations. Procedures designed to allow for and accommodate cultural differences were rarely employed and where they were, this was on an informal basis. One could see this being a particular problem where the expatriate is working with little support or back-up.

## 10.5 Thesis Validation

The thesis contained a series of orientation hypotheses that were, in turn, expressions of the main research question. The goal of the empirical data gathering exercise was to attempt to validate the hypotheses and, through them, the research thesis. Validation, in this sense, entailed a combination of growing understanding and explanation together with generalisation to the relevant populations, as implied by the combined methodology approach adopted for the study. In each instance, the hypotheses can be validated at both the level of the individual expatriate using the data gathered through the survey, and at the strategic level of the firm, as established in part through the survey but, in the main, through the case study interviews.

### 10.5.1 *The Orientation Hypotheses*

***Cultural diversity, at a national level, effects the management and business activities of British Construction Enterprises operating internationally.***

This hypothesis has been proven. There was clear evidence, both within the expatriate survey and the case study interviews to support the view that, at both the operational/managerial level and at the strategic level, cultural differences have the potential to seriously impact the way construction enterprises operate across a range of indicators. Thus, the models in Figures 4.3 and 4.4 are vindicated. The cultural dimension effects the locations within which construction enterprises choose to operate and the level of resource (in terms of offices and staff) they elect to commit in those locations. At the operational and management level, the cultural dimension makes the job for the expatriate manager much more difficult. The skills that characterise their various professions become a given: other skills and abilities take on far more important. Their jobs are no longer governed by familiar rules, even in locations that are relatively similar to the UK, such as North America and Australia. In fact, as several interviewees remarked, these 'familiar' areas are possibly the most difficult as, although people assume they are culturally similar, there can be surprising differences. One would make allowances for the Japanese because differences would be expected. The similarity of Americans and Australians to the British can lull people into a false sense of security, allowing costly mistakes to be made. Thus, the cultural dimension is an important factor for British construction enterprises no matter where they work. While

the exact cost of the cultural dimension is difficult to establish, the effects are indisputable – the cultural effects discussed in Chapter 4 are only some of the many possible.

***Managers operating internationally for British construction enterprises adopt an ethnocentric/parochial approach in response to cultural diversity.***

The survey found that, although British construction professionals working overseas do, on the whole, adopt an ethnocentric approach in response to cultural diversity (in the sense of the typology outlined in Section 4.3.1), very few were actually parochial in their attitude. Their ethnocentricity was demonstrated by their recognition of the problems that the cultural dimension presented and a desire to find ways to mitigate or minimise those problems. Were they to have been parochial in their approach, they would have failed to recognise the problems presented by cultural differences in the first instance. The analysis of the survey showed statistically that the management of culture is more important than other aspects of management. It also showed that, in the management of culture, the focus was on more than attending to superficial issues at the surface level. Rather, British expatriates endeavour to deal with more fundamental, value-related aspects of culture. The survey also confirmed the ethnocentric element of the hypothesis because expatriates found working overseas to be more difficult than working in the UK. However, closer analysis showed that almost all expatriates found working overseas to be different, largely for reasons of cultural difference. What also emerged from analysis of the survey was that expatriates are on the cusp of moving to a synergistic view of culture. While they primarily saw cultural differences as a source of problems rather than a source of opportunities, they did not tend to hold many negative stereotypes of different peoples around the world. There was a general view, expressed in the additional comments many of the respondents chose to provide, that they were guests in their host countries. The people in those countries had their own way of doing things: their own customs and beliefs, which were as valid as any other. This was both surprising and encouraging. It shows that the old, colonial, cultural-superiority mentality is becoming a thing of the past. As British construction professionals begin to recognise that they do not have all the answers, they may begin to find different ways of working. One solution is to 'indigenise' overseas companies, as some of the Case Study Organisations were in the process of doing. In creating a more trans-national approach to the management of corporations, cultural diversity could be mixed to find unexpected



or novel solutions to management problems, thereby providing construction enterprises with a competitive edge. Case Study Organisation E was moving towards achieving this, and their example showed how closely interlinked were corporate and national cultures. The lesson from this case study is that it is only when a corporate culture has developed sufficiently to recognise the value and worth of national cultural diversity that one is able to use that national cultural diversity in some kind of international strategic approach.

The fact that the expatriate managers in the survey showed signs that they were almost ready to move from ethnocentricity to synergism led to another discovery – that, in sociological research of this nature, hypotheses are difficult to ‘prove’ or ‘disprove’. While this hypothesis was proven, the full picture is far more complex and dynamic than this would suggest. Thus, the decision to use orientation hypotheses/propositions is also vindicated.

***As part of their international company policy and strategic approach, British construction enterprises provide little or no training and education in cross-cultural issues for their managers who are working in a culturally diverse environment.***

The findings of both the survey and case studies confirmed this hypothesis. However, the hypothesis was found to be incomplete. Beyond training, preparation and education lie the issues of the selection of overseas managers in the first instance and of support for those managers on a prolonged basis. It was discovered that these issues were interlinked.

It was clear, from the responses to the survey, that expatriates felt that they received too little preparation and training, particularly where working in non-European countries, and that support from company head offices was poor in this respect. The interviewees responsible for strategic decision-making confirmed this view. They all felt that training and preparation was important but had many reasons why it was ‘impossible’ to provide: someone was needed urgently; it was too expensive; it would not be practical; etc. However, it is doubtful whether companies will be able to take such a blasé approach in future. In Section 4.1.1, it was noted how poor preparation, particularly for cultural differences, has been found to be responsible for high expatriate turnovers. This had also been the experience of some organisations participating as case studies. As the

expatriate construction professional becomes both an increasingly strategic, and increasingly expensive, resource relative to indigenous staff, filling vital positions with far fewer fellow British expatriates to support him (it is almost always a 'him'), construction enterprises will simply be unable to afford mistakes. The response to this change in the status of expatriates is already observable. Several interviewees reported increased levels of investment in cultural training programmes and support materials. However, only for Case Study Organisation E was cultural training regarded as a strategic issue. In fact, they went beyond mere training by developing systematic approaches to cultural learning, in an attempt to 'grow' the corporate culture of the organisation. In this way, they sought to reinforce the link between corporate and national cultures.

Linked to the issue of training is the one of selection. The 'strategic' approach of all the organisations studied was to initially to attempt to select new expatriate staff internally. If this search failed to find any suitable candidates, they would then advertise externally. While this approach may be suitable for domestic appointments, the argument about training applies equally to selection. The position of the expatriate manager has become so important, and the process of his or her appointment so expensive, that companies cannot afford to select someone who is unsuitable. A particular danger, in this respect, is for someone to apply for an overseas posting because they simply wish to earn lots of money. At one time, overseas postings were extremely lucrative and, in some locations, they can be still. If a person were to become an expatriate simply to increase their income, it is unlikely that they would be very successful. Removing this 'mercenary' attitude from expatriate selection may be a major step in moving towards a more synergistic approach to cultural differences. Case Study Organisation A was attempting to create a systematic approach to selection. Interviewee 3 was in the process of compiling a database of expertise within his organisation for use throughout the company, including overseas locations. The advantage Case Study Organisation A had in this respect was a major presence throughout the world and the aforementioned common American-dominated culture, which was enforced wherever the company chose to operate. Thus, for example, people from the UK would find the systems and procedures of the corporation's office in Hong Kong to be instantly familiar. In this respect, Case Study Organisation E was not a paragon of 'best practice'. They had no systematic expatriate recruitment strategy, senior management relying rather on instinct as to who would be appropriate. However, being a smaller organisation their need for

expatriates was reduced compared to the other case study organisations. Additionally, many of their overseas organisations were indigenous. Reducing head office control over their international operations allowed them to minimise their need for expatriate input – they retained a common culture throughout the organisation via their cultural learning sessions.

***British construction enterprises do not adopt a strategic approach to their overseas work.***

This hypothesis was difficult to confirm or refute. Both in general terms, and with specific regard to the cultural dimension, the construction enterprises participating in the study possessed a strategic approach, but that approach was inadequate in many respects. The respondents to the survey were unable to identify many policies and strategies that their respective employing companies applied in overseas locations that differed to those applied in the UK. This was because the focus of strategy was not at the project stage. Rather, it was at the pre- and post-project stages. Strategy involved targeting ‘safe’ clients and sources of project funding or fee payment, and on the recovery of those monies after the project. While this is a valid strategic approach, it ignores the additional difficulties that will be encountered on those projects in which the company participates. Despite efforts to minimise exposure to cultural risks prior to entering into contract or taking on a commission, cultural differences will be encountered if the company works outside its domestic environment. Consequently, where cultural difficulties were not adequately dealt with, efforts were required at the post-project stage to recover disputed monies. In many countries less litigious than the UK, good relationships with key individuals are far more effective in getting payment than devising complex, legally-based claims.

In terms of their general approach to working outside the UK, the construction enterprises participating in the study could not easily be categorised in terms of the model illustrated in Figure 2.11. They tended towards being ‘international’, in that head office retained tight control over strategy, with overseas work being a small part of overall turnover. However, Case Study Organisations A and E were more ‘global’ and ‘trans-national’ in nature respectively, while Case Study Organisations B and G exhibited tendencies of being multi-domestic (Case Study Organisation B was pursuing a policy of creating semi-autonomous overseas subsidiaries). Thus, while the model

generally held for the construction industry, it was found to be far more dynamic than the diagram and definitions would imply.

The case study organisations broadly adopted the approaches in the models illustrated in Section 2.4.3, which aim to position the cultural dimension within strategic posture and the strategic frame. However, the cultural dimension is less easily identified than these models would suggest. The cultural dimension is intangible but all pervading. Rather than being easily isolated and suppressed, as the organisations seemed to be attempting, culture tends to more pervasive and less amenable to control. This could be seen both in the reported experiences of many of the survey respondents and from a number of the interviews. Thus, in this sense, while the Case Study Organisations adopted a broadly orthodox approach to the management of their overseas businesses, it could be argued that this approach is, itself, flawed. For the management of construction enterprises at a strategic level in the global environment discussed in Section 2.3.1, a more holistic approach to the cultural dimension is required – one that incorporates it (or at least addresses it) as a key element of the firm's competitive advantage as indicated in Section 4.3.2.

### ***10.5.2 The Research Thesis***

***Cultural diversity, at a national level, effects the management and business activities of British construction enterprises operating internationally.***

The statement above was an articulation of the research thesis. It was always broad-ranging, covering the wide variety of aspects entailed in 'management and business activities'. But the focus, throughout the study, has been on cultural differences at the national level and this focus has ensured that the aims of the project were achievable. The extent to which the research thesis has been validated lies in the growing understanding of the cultural dimension as a variable within the context of the international construction industry. Additionally, it lies in the extent to which the findings of the empirical work support the theoretical basis upon which the propositions and hypotheses are based.

It can be seen, from the analysis of the expatriate survey, that culture is clearly a major issue for British construction professionals working outside the UK. For expatriates in

the construction industry, cultural issues are dominated by differences in peoples' attitudes to personal relationships and trust, decisiveness and responsibility. These facets broadly correspond with dimensions identified by Hofstede in his model: relationships equates to the collectivism/individualism dimension and decisiveness equates to the tolerance of uncertainty dimension. However, another major, culturally-related issue was peoples' different attitudes to ethics and corruption. This facet fits less neatly into Hofstede's model, demonstrating its shortcomings. In truth, ethical differences are related to the interaction of the dimensions, as are many other facets of culture. While the thesis was never intended as a validation of Hofstede's model (this has been done by others as mentioned in Section 3.6), one could conclude that, while the model is a useful tool for interpretation of data such as that gathered in the course of this project, its use is limited by its relatively simplistic nature.

In terms of the response that cultural differences demand of construction professionals, it seems that personal character plays an important part. These individuals claimed that they needed to be more flexible and adaptable in their style of management, they needed to be able to relate to the different cultures they worked with in order to understand and avoid conflict, and they needed to be able to communicate intuitively to motivate their foreign staff and colleagues. In light of this, technical skills and abilities which were, incidentally, still significantly important, were less of a key aspect than they would have been in the UK.

A number of variables modified these basic findings. For example, their responses were different depending on where they were based. This finding tended to support Hofstede's basic premise of relative cultural distance. Responses designed to deal with the level cultural diversity in, for example Japan were different to those required to deal with culturally closer Australia. While this is not particularly surprising, it was somewhat surprising to find that civil and building engineers had different responses to culture than did surveyors who, in turn, responded differently to architects. An explanation for this could be the distinct differences in occupational culture between the professions. This explanation would support another of Hofstede's propositions: the acquisition of culture, illustrated in Figure 3.4. The differences in the responses of the major professions represented in the survey would imply that their reactions were determined as much by their common backgrounds as they were by the cultural differences with which they were faced. That is not to say that one group of construction

professionals is better or more successful in culturally diverse circumstances – the data are unable to confirm or refute such a hypothesis. Rather, due to the different forms of education and different skill requirements needed to be a member of their respective profession, the different groups consequently acquire different sensitivities, attitudes and capabilities.

At the strategic level, the case studies showed that while cultural differences clearly effected construction enterprises working overseas, their responses were less than adequate. The primary reason for this would appear to be a misunderstanding, or underestimating of the nature of culture in business. Among the consequences are higher costs in expatriate failures, difficulties in resolving disputes and paralysis and inertia when confronted with corruption and ethical differences. The interviews confirmed the view that the cultural dimension is all-pervading: that for each major area of strategic activity in the international arena, the firm's decisions are, in part, influenced by cultural differences. Decisions are based primarily on the firm's capability in tackling the problems culture presents. The inadequacy of corporate knowledge in the domain of cultural differences, together with an indifferent corporate culture leads to risk aversion where cultural differences are involved and policies of cultural risk avoidance and minimisation rather than management and understanding. Although the data are unable to support a hypothesis of underperformance by these specific organisations internationally, the data presented in Section 2.3.3 shows that British construction contractors do not perform overseas in terms of turnover as well as their major competitors (apart from the Americans) and their inability to incorporate culture meaningfully within their strategic approach is, in part, the explanation. Although similar data are unavailable for consultancy, the fact that the two quantity surveying practices in the study were, if anything, less capable of dealing with culture at the strategic level than the contractors would allow one to infer that, here too, organisations underperform as a consequence of poor skills in management of cultural differences. This is an example of being able to generalise using theoretical replication logic (see Section 8.4.2).

Winch (1998, pp. 269) described the construction industry is a “complex systems industry”. Essentially, the delivery of its product (a building or other constructed facility) brings all the resources required for production together as a “temporary multi-organisation” (Koskela, 1993, pp. 7), much like that shown in Figure 4.4, until the

product is completed, at which time, the organisation disbands and seeks new opportunities, often involving new parties. Thus, a cycle of creating and disbanding the temporary multi-organisations, that are construction sites, emerges. The people working for each party to a contract are often technically competent. The success of the project relies on the ability of those people to form and reform effective working relationships, as each new project begins. This pattern is common to the construction industry (indeed, most project-based industries) whether they are in a domestic or an overseas environment. However, because the 'factory-floor' of construction lacks the long-term stability of the factory-floor in any other production industry, personal and organisational relationships become key. These relationships are difficult enough to form in domestic environments, but the added complexity of cultural differences at the national level will make this even more the case. If the different parties to a contract are thought of as the different elements of an engine, when they 'get on', the parts can be seen to mesh, each fulfilling its individual role and enabling other parts to fulfil their roles. An engine requires oils and transmission fluids throughout to reduce friction and abrasion between the parts and allow them to move more freely and interact more effectively. In this analogy, cultural management is synonymous with the oils and transmission fluids in an engine. If cultural differences are managed the relationships are lubricated, reducing friction and abrasion between organisations and people on the construction project. Strategic management has a role in ensuring that the right 'cultural oil' is put into the engine of construction in the first place, and that the right oil is chosen.

## **10.6 Implications for Policy and Practice**

The main implication of the findings for British construction enterprises operating internationally, lies in the alignment of strategic approaches with professional practice with regard to cultural differences. The review of the orientation hypotheses has shown that while expatriates recognise cultural issues as being an important factor in conducting construction activities internationally, demanding specific managerial and personal skills, the recognition of this fact is less clear at head office level. This disparity between experience 'in the field' and perception 'at home' manifests itself in non-strategic approaches to handling cultural diversity within the overseas operations of international construction enterprises. The result is ethnocentricity overseas and parochialism at home. British construction enterprises (and particularly contractors) are

finding it increasingly difficult to compete overseas. If they are to maintain a significant presence in the international arena, they can no longer rely on reputation and historical connections. They need to be able to add value to their service, primarily through the transfer of the knowledge that provides their competitive advantage. However, transfer of knowledge across cultures is difficult and it is only through carefully managing the differences that transfer of knowledge (and, hence, competitive advantage) will be effective. This management of the differences in culture becomes apparent in the implementation of policies designed for that express purpose. Primarily, this would be in terms of the development and building of staff skills and abilities in the context of an appreciation of cultural diversity.

Through the 1980s the UK witnessed a large inward investment from countries the world over. Prominent among these was the establishment of many car manufacturing factories by Japanese firms. Indeed, in many areas of industrial activity, companies based outside the UK and dominated by people from other cultures, have established a presence in Britain. Meanwhile, throughout the 1990s, relaxing of European trading regulations have allowed increasing cross-border trade in construction services. Thus, many French, Scandinavian and German contractors now operate in the UK. These two phenomena mean that many potential clients for construction in Britain will ultimately entail a non-British culture. Similarly, many construction industry competitors and potential joint-venture partners in the UK will also be non-British. This means that the findings of this thesis have implications not only for those companies operating outside Britain but also for those operating on certain projects in Britain. On these projects, there is a good chance that some of the cultural difficulties that were, at one time, confined outside the British construction market, will now be present within the domestic market. For example, the Second Severn Crossing was constructed by an Anglo-French alliance. The contract was reportedly seriously underperforming until the cultural issues were addressed. It was only then, when differing perspectives were appreciated, that the two companies were able to work effectively together, eventually delivering the contract on time and in budget (private conversation with company managing director, 1998). This aspect of the findings is provided with further impetus when the view that people who have worked overseas are generally better, more rounded managers, whether in their own country or elsewhere. This view, expressed recently by Ove Arup (Cavill, 1999) was reflected in comments made by a number of interviewees. Effectively, this means that, not only are construction companies in the



business of transferring knowledge and skills overseas but also should recognise the potential of transferring them back into the UK to be adapted for use in the British construction market.

Hall & Jaggar (1996) noted the differences between the skills and knowledge base processed by construction professionals. Knowledge can be divided into two types: general and domain. Similarly, skills can be divided into those that are innate and those that are acquired. It is evident that domain knowledge and acquired skills become relatively less important than general knowledge and innate skills when construction professionals work in different countries. This insight provides a theoretical foundation for the appointment of expatriates on a basis other than their technical ability and curriculum vitae. It also provides a basis for identifying training gaps and supplying improved education and preparation plans. Focusing training to individuals' needs and circumstances would be a way of reducing the potential cost of training programmes. However, in the first instance, such programmes need to be regarded as not merely personal development for the individuals concerned, but a key element of the firm's strategic profile and competitive advantage.

Remaining with the training theme, a small number of survey respondents worked for governmental agencies such as the Department of Overseas Development and the Foreign Office, as well as Voluntary Services Overseas (VSO). These individuals noted that they were provided with systematic, structured training and preparation prior to their postings and received support on arrival, of which they spoke very highly. Construction enterprises working internationally could adopt some or all of these practices as examples of 'best practice'. Linking this with use of existing training and development organisations, such as Employment Conditions Abroad, could be very beneficial.

In terms of support for expatriates, a number of options became evident. The first was to formalise peer support in overseas locations, thereby reducing the potential impacts of culture shock and offering a structured way of dealing with its 'symptoms'. Many of the respondents to the survey remarked that this was their main form of support once they had arrived at their posting. One option would be to adopt a mentoring approach by identifying established expatriates who have the necessary aptitude and desire to take on such a role. Thinking at a more strategic level, where companies have many overseas

interests, they could look to develop a progression of staff. Initial placements of expatriates might be in locations where cultural differences were less marked, or where the company had a long-established base and had gained local experience and understanding. New expatriates could also be placed in non-vital posts initially, until they had had the opportunity to acclimatise and assimilate to the local cultures. Case Study Organisation D adopted this approach, although it was not a policy as such, rather than lucky happenstance.

A comment made by many of the case study interviewees was the difficulty they had in finding suitable people to be expatriates. The findings of this thesis outline three ways in which this problem might be overcome. The first two are within the scope of the individual firm and the last a case for the construction industry at large. Firstly, while it was clear that organisations considered their expatriates as increasingly strategically important individuals, this was not necessarily reflected in the way people were employed. This was because expatriates were also seen as costly burden. What international construction enterprises need to do is consider the value that expatriates add to their overseas operations and recompense them accordingly. If, by employing British construction professionals on their overseas work, they gain a distinct competitive advantage over other local and international competitors, then the need for cost efficiencies are reduced. An example of inadequate recompense is the increasing insistence on employing expatriates on a 'bachelor' status, increasingly regardless of their marital status. This will reduce the desirability of overseas postings for many individuals – a point mentioned by several of the survey respondents. Secondly, construction enterprises should seek ways of reducing their reliance on expatriates. One way to achieve this is to indigenise local companies, creating more autonomous subsidiaries operated by locals. There was evidence from the data that this was beginning to happen. Case Study Organisation B had achieved this with one of their African subsidiaries, although with a great deal of resistance at head office level and throughout the company generally. Another example of this policy was that of Taylor Woodrow (a company similar to Case Study Organisation B) in Ghana (Carmichael, 1997). In both these arrangements, only a very small number of expatriates are employed in key strategic posts. Meanwhile, Case Study Organisation C was in the process of appointing local directors in certain of its East European practices, despite the profession of 'quantity surveyor' being almost unheard of in that region. Case Study Organisation E employed almost no expatriates among its Continental European

subsidiaries. These were operated at the strategic level by locals, but with a great deal of inter-company interaction to ensure a common strategic direction across the organisation. Finally, there is a role, at the formal education stage of career development, to ensure a cohort with a less parochial skills and knowledge base and with a less narrowly defined outlook. Working overseas needs to be regarded as a learning opportunity and an essential element of professional development. The main professional institutions (RIBA, RICS, ICE and CIOB) together with educational institutions and companies need to collaborate to encourage this change. In doing so, not only will there be a larger number of potential candidates with suitable skills, but these candidates will be more enthusiastic about the prospect of working outside their own, familiar environment.

Finally, throughout Chapters 9 and 10, Case Study Organisation E has been identified as displaying what could be regarded as 'best practice' with respect to their international operations. They have been prepared to loosen central control through close harmonisation of corporate culture throughout the organisation. It is their various cultural enhancement practices that enable them to not only embrace national cultural differences as being appropriate but to use those differences to their own advantage. There is no real reason why other corporations in the study could not emulate some, or all of these practices. The key in doing so is to ensure it adds value to the company offerings/products.

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## **10.7 Implications for Future Research**

In Section 10.5.2, it was mentioned that the validation of the research thesis lay in the development of an understanding of the cultural dimension as a variable within the context of the international construction industry. However, beyond this, the research has implications for business more generally. While the cultural dimension has been well-researched in broad terms, this research has rarely been applied to industry specifically. Indeed, the findings are rarely specifically relevant to business in general terms. This is because much research that has been carried out is rooted in the disciplines of anthropology and sociology. Where these findings are applied to business, they are often presented in the 'guide book' format in order to appeal to the business audience at large. While this aspect is vital if companies are to adopt the lessons that derive from the findings, there is rarely any effort to measure the effect that this has on

those companies, beyond isolated studies of specific aspects as illustrated in Chapter 4. What this study has done is to move beyond those isolated studies to create a more holistic understanding of cultural differences in the realm of business (in this case, the business of construction). This is because it is rooted in the experiences and everyday lives of people both in the field and at home running companies in a complex, global environment. Thus, it is envisaged that the findings from this study can be applied across industries, either as they stand or in terms of replicating the methodology.


One issue that was evidently important, as it ran through many of the interviews and was mentioned in numerous questionnaire responses (see Chapters 7 and 9), was that of ethical differences. This thesis has been unable to satisfactorily resolve the debate over the most appropriate strategic response to ethical differences. What was clear was that most corporate 'official' policy was not to entertain in any way the issues of corruption, bribery and so forth, in any way whatsoever. What was also clear was that this was not always appropriate in practice. This was because ethical differences do not just manifest themselves as big cases of corruption and bribery, but can pervade societies and be seen, at the societal level, as being perfectly acceptable whereas major corruption is not acceptable. Thus, what Western eyes might see as nepotism would be seen in other societies as familial duty rooted in strong cultural, collectivist values. Equally, the giving and receiving of gifts, which might be seen in Britain as bribery, might be seen in other cultures within a wider context of trust and transaction which is entirely appropriate. It was never the purpose of the thesis to resolve how a construction enterprise might account for ethical differences at this level. What the thesis does identify is the mismatch between an almost dogmatic attachment to 'ethical values' on the part of organisations, creating difficulties for the managers of their overseas interests. A more appropriate stance is required, that avoids condemnation in the company's home country while ensuring that the company's expatriate or foreign managers are not placed in the ambiguous situation of ensuring the company's interests while supporting their ethical policy. What such a stance might entail is a question to be resolved elsewhere.

Another aspect that has emerged as a key feature of companies working internationally is the link between corporate (or organisational) culture and national culture. It has been found that to successfully incorporate national cultural differences within corporate competitive advantage first requires a culture within the corporation that is predisposed

to viewing cultural differences as more than a source of problems. Ironically, it seems that only through synchronisation of culture at the organisational level are companies able to transcend national cultural differences and, in so doing take control of the cultural dimension.

## APPENDIX 1

### Questionnaire, Cover Letter, Glossary and Completion Instructions

|  |
|--|
| <div style="text-align: center;"><br/><b>JMU</b><br/>Liverpool John Moores University</div> <p>8th December 1997</p> <p>&lt;Company Name&gt;<br/>&lt;Address 1&gt;<br/>&lt;Address 2&gt;<br/>&lt;Region&gt;<br/>&lt;Postcode&gt;<br/>&lt;COUNTRY&gt;</p> <p>For the attention of &lt;Title&gt; &lt;Name&gt; &lt;Qualifications&gt;</p> <p>Dear Sir</p> <p><b>Questionnaire on International Construction Management</b></p> <p>This questionnaire is part of a survey of British construction professionals working overseas. Your contact details were supplied to me by the &lt;Institution&gt;.</p> <p>As the industry becomes increasingly globalised, the way we work internationally will become more important than ever before. Consequently, the research we are conducting in the Construction Procurement Research Unit (CPRU), here at JMU, will potentially be a crucial part of the future competitiveness of the British construction industry internationally. Your views are vital for this particular piece of research, which is seeking to help us better understand managerial issues in overseas construction activity.</p> <p>I anticipate that no more than 30 minutes will be required to complete the questionnaire. Please be assured that your responses will be treated with the utmost confidentiality.</p> <p>As part of our commitment to transferring the results of research to industry, a report, summarising the survey findings, will be sent to each respondent who indicates that they would like to receive this feedback.</p> <p>Finally, if you have any colleagues you think might also like to participate in the research, please feel free to copy the questionnaire and distribute as appropriate. I look forward to receiving your response by whatever means is most convenient (e.g. fax, post, etc.) in due course. In the meantime, if you have any questions, either about the survey, or the research generally, please do not hesitate to contact me.</p> <p>Yours Faithfully</p> <p><b>Mark Hall</b><br/>Researcher - Construction Procurement Research Unit</p> <p>Tel: +44 (0)151 231 3137<br/>Fax: +44 (0)151 709 4957<br/>Email: bltmhall@livjm.ac.uk</p> <p>encs.</p> <div style="text-align: right;"><p><b>School of the Built Environment</b><br/><b>Deputy Director Professor David M. Jaggar</b> MPhil, FRICS, MACostE<br/>Clarence Street, Liverpool L3 5UG Telephone +44 (0)151-231-3137 Facsimile +44 (0)151-709-4957<br/>D.M.Jaggar@Livjm.ac.uk</p></div> |
|--|



### Questionnaire Summary and Completion Directions

The questionnaire is divided into four sections.

**Section A** is called “**About the Company You Work For**”, and asks questions about the type of company and what it does internationally. **Section B** is called “**About Yourself**”, and asks questions to find out about your background and what you currently do. These two sections are important as they help to put the rest of your answers into context.

**Section C, “Working Internationally”** focuses on the way you manage in a multicultural environment. The questions aim to establish what you see as obstacles and what approaches you adopt to overcome those obstacles. Our pilot survey indicates that this section is quite challenging. However, please do not let that put you off completing the questionnaire as your views are vital to make the survey representative.

**Section D, Preparation for International Posting**” aims to establish the extent of training and information you received prior to your overseas placement and whether you thought this was adequate.

Where a question asks for your opinions or views, please give as full an answer as possible. **If you wish to say more about a particular subject, please feel free to continue on the reverse or on a separate sheet** with the question number indicated.

Please be as accurate as you can with your answers. The glossary (overleaf) gives you some definitions to clarify what we mean by certain words.

The questionnaire should comprise 10 pages. If any are missing, or if you have any other queries please do not hesitate to contact me:

Mark Hall  
Construction Procurement Research Unit  
School of the Built Environment  
Liverpool John Moores University  
Clarence Street  
Liverpool. L3 5UG  
UK

Facsimile: +44 (0)151 709 4957  
Telephone: +44 (0)151 231 3137 (and voice mail)  
Email: bltmhall@livjm.ac.uk

### Glossary

The glossary below tells you what we mean by certain words used for the purposes of this questionnaire. If you need further clarification, please do not hesitate to contact me.

Construction Industry - Includes new build and renovation in civil engineering, building and the process industries. It does not include mining or construction component manufacture.

Contractor - (Also subcontractor). Organisation which mobilises the resources in order to construct a facility.

Consultant - Organisation who provides design, cost or engineering services, either to a client or a contractor.

International - For the purposes of this questionnaire, anywhere outside the UK.

Nationality - Country from where people originate (similar to cultural heritage).

Organisation - The company or firm who employs you. This may be a contractor, consultancy, subcontractor or some other employer such as a government body.

Overseas - See international.

Problematic - To cause problems or difficulties.

Profession - Not necessarily the same as your job title. This means the occupation you see yourself as having.

Policy - Course of action or stated strategy of the company for whom you work.

Subordinate - Person or people who report directly to you. They could well have subordinates of their own, who you should not include.



# International Construction Management Questionnaire



**JMU**

**Liverpool John Moores University**

## INTERNATIONAL CONSTRUCTION MANAGEMENT QUESTIONNAIRE

### Section A - About the Company You Work For

*(If you run out of space on any question, please continue on a separate sheet)*

**Question 1** For what sort of organisation do you work?

Contractor [    ]

Consultant [    ]

Other (please state) .....

**Question 2** Internationally, in which of the following areas of construction does your company operate?

Industrial [    ]

Residential [    ]

Commercial [    ]

Infrastructure [    ]

Health/welfare [    ]

Defense [    ]

Other (please specify) .....

**Question 3** In which regions of the world does your company operate?

Western Europe (not UK) [    ]

Asia (other) [    ]

Eastern Europe [    ]

Africa [    ]

Former Soviet Republic [    ]

North America [    ]

Asia Pacific (incl Hong Kong) [    ]

Central/South America [    ]

China [    ]

Australasia [    ]

Middle East [    ]

Elsewhere [    ]

**Question 4** Thinking about your company in its entirety, including the parent company, all subsidiaries and UK operations, approximately how much of its work is carried out internationally?

1 - 10 % [    ]

41 - 50 % [    ]

11 - 20 % [    ]

51 - 60 % [    ]

21 - 30 % [    ]

61 + % [    ]

31 - 40 % [    ]

don't know [    ]

**Question 5** Approximately, how long has your company been working internationally?

|                 |                 |
|-----------------|-----------------|
| 1-5 years [ ]   | 16-20 years [ ] |
| 6-10 years [ ]  | 21+ years [ ]   |
| 11-15 years [ ] | don't know [ ]  |

**Question 6** Are there any other comments you would like to make about the company you work for?

.....

.....

**Section B - About Yourself**

*(If you run out of space on any question, please continue on a separate sheet)*

**Question 7** What is your highest level of formal education?

|                                  |                                       |
|----------------------------------|---------------------------------------|
| No formal qualifications [ ]     | BSc/BA or equivalent professional [ ] |
| 'O' level/CSE or equivalent [ ]  | qualification                         |
| 'A'/'AS' level or equivalent [ ] | Postgraduate qualification [ ]        |
| HND/HNC or equivalent [ ]        |                                       |

Other qualifications (please state) [ ]

.....

**Question 8** How many years have you worked in the construction industry?

|                 |                 |
|-----------------|-----------------|
| 1-5 years [ ]   | 16-20 years [ ] |
| 6-10 years [ ]  | 21+ years [ ]   |
| 11-15 years [ ] |                 |

**Question 9** Of that period, how many years (in total) have you worked overseas?

|               |                 |
|---------------|-----------------|
| 1-2 years [ ] | 9-10 years [ ]  |
| 3-4 years [ ] | 11-12 years [ ] |
| 5-6 years [ ] | 13-14 years [ ] |
| 7-8 years [ ] | 15+ years [ ]   |

**Question 10** What is your job title?

.....

**Question 11** Of what profession would you regard yourself as being part?  
e.g. Quantity Surveyor, Architect, Civil Engineer, General Foreman etc.

.....

**Question 12** Where are you based in your job?

Based on a single project [ ☐ ]      Wholly office based [ ☐ ]  
Based on more than one      Partly project and partly  
project [ ☐ ]      office based [ ☐ ]

Other (please state) .....

**Question 13** How would you describe your cultural heritage? (e.g. British, English etc.)

.....

**Question 14** In which country(ies) do you currently work?

.....

**Question 15** Other than in the UK, in which countries have you previously worked?

.....

.....

**Question 16** How many direct subordinates do you have? By 'subordinate', I mean people who report directly to you.

.....

|                    |  |
|--------------------|--|
| <b>Question 17</b> | Of your subordinates, how many do not come from the UK?<br><br>.....   |
| <b>Question 18</b> | What nationality(ies) are they? Where appropriate, please indicate the numbers of each.<br><br>.....<br><br>.....  |
| <b>Question 19</b> | Thinking about your other immediate colleagues, are any of them of a different nationality? If so, what nationality(ies) are they? Again, where appropriate, please indicate the numbers of each.<br><br>.....<br><br>.....  |
| <b>Question 20</b> | Thinking of your dealings with representatives from <u>outside</u> your company (e.g. clients, other consultants, other contractors and sub-contractors, etc.) what are the main nationalities represented by them?<br><br><div style="margin-left: 40px;">Clients: .....</div> <div style="margin-left: 40px;">Consultants: .....</div> <div style="margin-left: 40px;">Contractors: .....</div> <div style="margin-left: 40px;">Subcontractors and others: .....</div> |
| <b>Question 21</b> | Are there any other aspects about your international experience and your current position that you would like to mention?<br><br>.....<br><br>.....  |
| Page 4 of 10       |  |

**Section C - Working Internationally**

*(If you run out of space on any question, please continue on a separate sheet)*

**Question 22**      In your experience, do you think working outside the UK is more or less problematic than working in the UK?

more problematic [    ]  
about the same [    ]  
less problematic [    ]

**Question 23**      What reasons would you give for your answer to question 22 (above)?

.....

.....

.....

.....

.....

**Question 24**      To your knowledge, does your company have a different policy for working in your particular region, compared with its policy when working in the UK? If so, is it official or informal?

| Officially        | Informally        |
|-------------------|-------------------|
| yes [    ]        | yes [    ]        |
| no [    ]         | no [    ]         |
| don't know [    ] | don't know [    ] |

**Question 25**      If you answered 'yes' to either, or both parts of question 24 (above) please briefly describe how you think your company's overseas policy differs from it's UK policy for your particular region.

.....

.....

.....

**Question 26**

When thinking of people from different countries or different parts of the world, how would you define the word 'culture'?

.....

.....

.....

.....

**Question 27**

It has been suggested that the success of a manager working overseas depends on that manager having certain characteristics. As a manager in the international construction industry, how important are the following 12 characteristics to you in your current job? Please rank the importance of each characteristic using the grading system shown below.

1 = most important down to 12 = least important

Item Ref.

|   |   |  |   |  |
|---|---|--|---|--|
| A | Technical ability                             |  | Ability to relate to different cultures |  |
| B | Good language skills                          |  | Interest in specific host-country       |  |
| C | Flexibility of management style               |  | Willingness to learn from others        |  |
| D | Knowledge of company systems and organisation |  | Administrative competence               |  |
| E | Tolerance of ambiguity                        |  | Interest in overseas experience         |  |
| F | Treating people in a non-judgmental way       |  | Ability to communicate intuitively      |  |

Item Ref.

G  
H  
I  
J  
K  
L

**Question 28**

Question 27 (above) lists some of the characteristics which you may think make you a good overseas manager. In your experience, are there any other characteristics which you feel effect your success as an overseas manager in construction? If so, please list those characteristics below.

.....

.....

**Question 29**

Taking the top 4 factors (Nos. 1, 2, 3 & 4) that you have indicated in question 27 (above) as having the most important effect on the way you work with people from different cultures, please state why you think each factor is important.

.....

.....

.....

.....

.....

.....

**Question 30**

People from different cultural backgrounds often have different ways of working. From your experience, to what extent, if at all, do differences in the following cultural factors effect the way you work with them in your current job. Please rank the 10 factors in order of importance, using the grading system shown below.

1 = most important down to 10 = least important

Item Ref.

|   |  |  |  |  |
|---|--|--|--|--|
| A | Language differences                         |  | Emotional involvement in business dealings |  |
| B | Differences in ethical standards in business |  | Willingness to work without supervision    |  |
| C | Attitudes to time and punctuality            |  | Differences in construction standards      |  |
| D | Personal contact in business                 |  | Observance of religious practices          |  |
| E | Interpretation of contracts and law          |  | Willingness to take decisions in meetings  |  |

Item Ref.

F

G

H

J

K

**Question 31**

In your experience, are there any other factors that effect the way you work with people of different cultures? If so, please list those factors below.

.....

.....



**Question 32** This time, taking the top 3 factors (Nos. 1, 2 & 3) that you have indicated in question 30 (above) as having the most important effect on the way you work with people from different cultures, please state why you think each factor is important.

.....

.....

.....

.....

.....

**Question 33** Are there any comments about the international environment you work in that you would like to make?

.....

.....

**Section D - Preparation for International Posting**  
*(If you run out of space on any question, please continue on a separate sheet)*

**Question 34** What sort of criteria do you think were used in deciding to select you for your current posting?

.....

.....

**Question 35** When you were selected for your current posting, did you receive special training or information that you would not otherwise have received?

yes [    ]  
no [    ]

**Question 36** If you answered 'yes' for question 35 (above), what form did that training or information take?

.....

.....

**Question 37** Have you received special overseas training or information prior to placement on any previous postings?

yes [    ]  
no [    ]  
not applicable [    ]

**Question 38** If you answered 'yes' for question 37 (above), what form did that training or information take?

.....

.....

**Question 39** In hindsight, is there any kind of special training or education that you think would have prepared you better for your posting overseas, or would help you in your day-to-day business?

.....

.....

**Question 40** Are there any additional comments you would like to make about the preparation you received for your overseas posting?

.....

.....

***THAT CONCLUDES THE QUESTIONNAIRE  
I HOPE YOU FOUND IT INTERESTING AND ENJOYABLE  
THANK YOU FOR YOUR INTEREST AND PATIENCE***

**Please return your completed questionnaire to:**

|   |
|---|
| Mark Hall<br>Construction Procurement Research Unit<br>School of the Built Environment<br>Liverpool John Moores University<br>Clarence Street<br>Liverpool L3 5UG<br>UK<br><br>Facsimile: +44 (0)151 709 4957<br>Telephone: +44 (0)151 231 3137 (and voice mail)<br>Email: bltmhall@livjm.ac.uk |
|---|

**I would like to provide you with a report summarising the main findings of this survey. In order to provide this feedback, I need you to identify yourself. However, once again, I would like to stress that your identity will remain strictly confidential. If you would like to receive the report please supply your name and a contact address below.**

**Name:**

**Address:**

**Ideally, I would like to talk to you in person about the issues raised in this questionnaire. Unfortunately, limited funds mean I am unable to travel around the world conducting Interviews! However, should you find yourself in the UK over the next 12 months, would you be prepared to meet me to talk about the research? Of course, this would be entirely at your convenience.**

**If you would like to talk with me about the issues raised in this questionnaire, please supply a contact address or number below and approximate dates when you will next be in the UK.**

**Contact Details:**

## **APPENDIX 2**

### **Statistical Analysis Basis**

The main statistical test used in the thesis was the *z test*, wherein the mean average of the sample was compared against the hypothesised population mean average. The *z test* is a parametric test. Strictly speaking, ordinal data such as that gathered in response to Questions 27 and 30, should not be tested using parametric statistics. However, the validity of this argument has been challenged as a consequence of various experiments. Furthermore, it can be accepted that parametric tests apply to numbers, not what those numbers signify. Therefore, it is now widely accepted that parametric tests can be applied to ordinal data as well as interval and ratio data and this has become a routine practice (Bryman & Cramer, 1994).

The *z test* is used to test hypotheses about the difference between two means. In the analyses of the dependent variables contained within Questions 27 and 30 (see Appendices 3 and 4), the hypothesis is that the sample mean is equal to the hypothetical population mean. Thus, for the variables in Question 27, the sample should have a mean of 6.5 while, for Question 27, the sample mean should be 5.5. Where there is a significant difference between the sample mean and the hypothesised mean (at  $P=0.01$ ) this has been indicated on the tables in Chapter 7. The *z test* calculates the differences between the mean values using the following formula:

$$z = \frac{\text{sample mean} - \text{hypothesised sample mean}}{\text{standard error of difference between sample means}}$$

The *z test* relies on an assumption of normal (or near normal) distribution. The tests for Sections 7.3.2 and 7.3.3 were calculated manually.

Section 7.4 compares the mean differences between mean results for unrelated samples across the dependent variables. The statistical test required confirming or refuting the hypotheses in this instance in the one-way analysis of variance (ANOVA). This is, essentially, an analysis of variance in which an estimate of the between-groups variance (otherwise known as mean-square) is compared against an estimate of the within-groups variance by dividing the former with the later. The following formula was used to

calculate the ANOVA results that can be found in Appendices 5 and 6, the significant results of which are explicated in Section 7.4 using the *z test* described above.

$$\text{ANNOVA} = \frac{\text{between-groups estimated variance}}{\text{within-groups estimated variance}}$$

The tables found in Appendices 5 and 6 show the large number of complex calculations required to find the significant differences for the multiple comparisons. These were carried out using SPSS (Statistical Package for Social Scientists), widely used for statistical tests such as these.

## Appendix 3

### z-test Results for Question 27

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 6.5 (mean of 1 to 12) |             |       |        |
|--|-------------|-------|--------|
| Ranking (x)  | Ranking (f) | fx    | (fx^2) |
| 1  | 29          | 29    | 29     |
| 2  | 13          | 26    | 52     |
| 3  | 21          | 63    | 189    |
| 4  | 17          | 68    | 272    |
| 5  | 7           | 35    | 175    |
| 6  | 5           | 30    | 180    |
| 7  | 10          | 70    | 490    |
| 8  | 9           | 72    | 576    |
| 9  | 2           | 18    | 162    |
| 10   | 7           | 70    | 700    |
| 11   | 3           | 33    | 363    |
| 12   | 2           | 24    | 288    |
| Totals   | 125         | 538   | 3476   |
| Sample mean ranking = 4.304  |             |       |        |
| Sample variance ranking = 9.283584   |             |       |        |
| Sample sd ranking = 3.046897438  |             |       |        |
| Standard Error estimate = 0.273619467                                      |             |       |        |
| Test Statistic = (mean - 6.5)/se = -8.025744737                            |             |       |        |
| Critical Values:   |             |       |        |
| Two Tailed   | One Tailed  |       |        |
| 10%  | 1.645       | 1.282 |        |
| 5%   | 2.326       | 1.645 |        |
| 1%   | 2.576       | 2.326 |        |
| Two tailed - +/-   |             |       |        |
| One tailed - + OR -, depending on expected direction of bias               |             |       |        |

**Table A3-1. z-test for Dependent Variable A**

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 6.5 (mean of 1 to 12) |             |       |        |
|--|-------------|-------|--------|
| Ranking (x)  | Ranking (f) | fx    | (fx^2) |
| 1  | 3           | 3     | 3      |
| 2  | 7           | 14    | 28     |
| 3  | 3           | 9     | 27     |
| 4  | 4           | 16    | 64     |
| 5  | 8           | 40    | 200    |
| 6  | 5           | 30    | 180    |
| 7  | 4           | 28    | 196    |
| 8  | 11          | 88    | 704    |
| 9  | 12          | 108   | 972    |
| 10   | 18          | 180   | 1800   |
| 11   | 17          | 187   | 2057   |
| 12   | 33          | 396   | 4752   |
| Totals   | 125         | 1099  | 10983  |
| Sample mean ranking = 8.792  |             |       |        |
| Sample variance ranking = 10.564736  |             |       |        |
| Sample sd ranking = 3.250343982  |             |       |        |
| Standard Error estimate = 0.291889506                                      |             |       |        |
| Test Statistic = (mean - 6.5)/se = 7.852286399                             |             |       |        |
| Critical Values:   |             |       |        |
| Two Tailed   | One Tailed  |       |        |
| 10%  | 1.645       | 1.282 |        |
| 5%   | 2.326       | 1.645 |        |
| 1%   | 2.576       | 2.326 |        |
| Two tailed - +/-   |             |       |        |
| One tailed - + OR -, depending on expected direction of bias               |             |       |        |

**Table A3-2. z-test for Dependent Variable B**

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 6.5 (mean of 1 to 12) |             |       |        |
|--|-------------|-------|--------|
| Ranking (x)  | Ranking (f) | fx    | (fx^2) |
| 1  | 35          | 35    | 35     |
| 2  | 15          | 30    | 60     |
| 3  | 10          | 30    | 90     |
| 4  | 18          | 72    | 288    |
| 5  | 12          | 60    | 300    |
| 6  | 12          | 72    | 432    |
| 7  | 8           | 56    | 392    |
| 8  | 5           | 40    | 320    |
| 9  | 4           | 36    | 324    |
| 10   | 4           | 40    | 400    |
| 11   | 2           | 22    | 242    |
| 12   | 0           | 0     | 0      |
| Totals   | 125         | 493   | 2883   |
| Sample mean ranking = 3.944  |             |       |        |
| Sample variance ranking = 7.508864   |             |       |        |
| Sample sd ranking = 2.740230647  |             |       |        |
| Standard Error estimate = 0.246079977                                      |             |       |        |
| Test Statistic = (mean - 6.5)/se = -10.38686705                            |             |       |        |
| Critical Values:   |             |       |        |
| Two Tailed   | One Tailed  |       |        |
| 10%  | 1.645       | 1.282 |        |
| 5%   | 2.326       | 1.645 |        |
| 1%   | 2.576       | 2.326 |        |
| Two tailed - +/-   |             |       |        |
| One tailed - + OR -, depending on expected direction of bias               |             |       |        |

**Table A3-3. z-test for Dependent Variable C**

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 6.5 (mean of 1 to 12) |             |       |        |
|--|-------------|-------|--------|
| Ranking (x)  | Ranking (f) | fx    | (fx^2) |
| 1  | 2           | 2     | 2      |
| 2  | 1           | 2     | 4      |
| 3  | 6           | 18    | 54     |
| 4  | 3           | 12    | 48     |
| 5  | 9           | 45    | 225    |
| 6  | 9           | 54    | 324    |
| 7  | 9           | 63    | 441    |
| 8  | 12          | 96    | 768    |
| 9  | 17          | 153   | 1377   |
| 10   | 25          | 250   | 2500   |
| 11   | 14          | 154   | 1694   |
| 12   | 18          | 216   | 2592   |
| Totals   | 125         | 1065  | 10029  |
| Sample mean ranking = 8.52   |             |       |        |
| Sample variance ranking = 7.6416   |             |       |        |
| Sample sd ranking = 2.764344407  |             |       |        |
| Standard Error estimate = 0.248245456                                      |             |       |        |
| Test Statistic = (mean - 6.5)/se = 8.137107652                             |             |       |        |
| Critical Values:   |             |       |        |
| Two Tailed   | One Tailed  |       |        |
| 10%  | 1.645       | 1.282 |        |
| 5%   | 2.326       | 1.645 |        |
| 1%   | 2.576       | 2.326 |        |
| Two tailed - +/-   |             |       |        |
| One tailed - + OR -, depending on expected direction of bias               |             |       |        |

**Table A3-4. z-test for Dependent Variable D**

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 6.5 (mean of 1 to 12)       |             |             |            |
|--|-------------|-------------|------------|
| Ranking (x)  | Ranking (f) | fx          | (fx^2)     |
| 1  | 3           | 3           | 3          |
| 2  | 8           | 16          | 32         |
| 3  | 13          | 39          | 117        |
| 4  | 2           | 8           | 32         |
| 5  | 8           | 40          | 200        |
| 6  | 14          | 84          | 504        |
| 7  | 17          | 119         | 833        |
| 8  | 13          | 104         | 832        |
| 9  | 12          | 108         | 972        |
| 10   | 11          | 110         | 1100       |
| 11   | 7           | 77          | 847        |
| 12   | 17          | 204         | 2448       |
| Totals   | 125         | 912         | 7920       |
| Sample mean ranking =  |             | 7.296       |            |
| Sample variance ranking =  |             | 10.128384   |            |
| Sample sd ranking =  |             | 3.182512215 |            |
| Standard Error estimate =  |             | 0.285798034 |            |
| Test Statistic = (mean - 6.5)/se =   |             | 2.785183612 |            |
| Critical Values:   |             | Two Tailed  | One Tailed |
| 10%  |             | 1.645       | 1.282      |
| 5%   |             | 2.326       | 1.645      |
| 1%   |             | 2.576       | 2.326      |
| Two tailed - +/-<br>One tailed - + OR -, depending on expected direction of bias |             |             |            |

**Table A3-5. z-test for Dependent Variable E**

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 6.5 (mean of 1 to 12)       |             |              |            |
|--|-------------|--------------|------------|
| Ranking (x)  | Ranking (f) | fx           | (fx^2)     |
| 1  | 3           | 3            | 3          |
| 2  | 10          | 20           | 40         |
| 3  | 11          | 33           | 99         |
| 4  | 14          | 56           | 224        |
| 5  | 12          | 60           | 300        |
| 6  | 14          | 84           | 504        |
| 7  | 17          | 119          | 833        |
| 8  | 10          | 80           | 640        |
| 9  | 11          | 99           | 891        |
| 10   | 10          | 100          | 1000       |
| 11   | 9           | 99           | 1089       |
| 12   | 4           | 48           | 576        |
| Totals   | 125         | 801          | 6199       |
| Sample mean ranking =  |             | 6.408        |            |
| Sample variance ranking =  |             | 8.529536     |            |
| Sample sd ranking =  |             | 2.920536937  |            |
| Standard Error estimate =  |             | 0.262271959  |            |
| Test Statistic = (mean - 6.5)/se =   |             | -0.350780923 |            |
| Critical Values:   |             | Two Tailed   | One Tailed |
| 10%  |             | 1.645        | 1.282      |
| 5%   |             | 2.326        | 1.645      |
| 1%   |             | 2.576        | 2.326      |
| Two tailed - +/-<br>One tailed - + OR -, depending on expected direction of bias |             |              |            |

**Table A3-6. z-test for Dependent Variable F**

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 6.5 (mean of 1 to 12)       |             |              |            |
|--|-------------|--------------|------------|
| Ranking (x)  | Ranking (f) | fx           | (fx^2)     |
| 1  | 24          | 24           | 24         |
| 2  | 22          | 44           | 88         |
| 3  | 18          | 54           | 162        |
| 4  | 14          | 56           | 224        |
| 5  | 12          | 60           | 300        |
| 6  | 13          | 78           | 468        |
| 7  | 4           | 28           | 196        |
| 8  | 4           | 32           | 256        |
| 9  | 6           | 54           | 486        |
| 10   | 4           | 40           | 400        |
| 11   | 4           | 44           | 484        |
| 12   | 0           | 0            | 0          |
| Totals   | 125         | 514          | 3088       |
| Sample mean ranking =  |             | 4.112        |            |
| Sample variance ranking =  |             | 7.795456     |            |
| Sample sd ranking =  |             | 2.792034384  |            |
| Standard Error estimate =  |             | 0.250732089  |            |
| Test Statistic = (mean - 6.5)/se =   |             | -9.524110001 |            |
| Critical Values:   |             | Two Tailed   | One Tailed |
| 10%  |             | 1.645        | 1.282      |
| 5%   |             | 2.326        | 1.645      |
| 1%   |             | 2.576        | 2.326      |
| Two tailed - +/-<br>One tailed - + OR -, depending on expected direction of bias |             |              |            |

**Table A3-7. z-test for Dependent Variable G**

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 6.5 (mean of 1 to 12)       |             |             |            |
|--|-------------|-------------|------------|
| Ranking (x)  | Ranking (f) | fx          | (fx^2)     |
| 1  | 4           | 4           | 4          |
| 2  | 2           | 4           | 8          |
| 3  | 5           | 15          | 45         |
| 4  | 9           | 36          | 144        |
| 5  | 6           | 30          | 150        |
| 6  | 10          | 60          | 360        |
| 7  | 7           | 49          | 343        |
| 8  | 12          | 96          | 768        |
| 9  | 18          | 162         | 1458       |
| 10   | 10          | 100         | 1000       |
| 11   | 21          | 231         | 2541       |
| 12   | 21          | 252         | 3024       |
| Totals   | 125         | 1039        | 9845       |
| Sample mean ranking =  |             | 8.312       |            |
| Sample variance ranking =  |             | 9.670656    |            |
| Sample sd ranking =  |             | 3.109767837 |            |
| Standard Error estimate =  |             | 0.279265396 |            |
| Test Statistic = (mean - 6.5)/se =   |             | 6.488451585 |            |
| Critical Values:   |             | Two Tailed  | One Tailed |
| 10%  |             | 1.645       | 1.282      |
| 5%   |             | 2.326       | 1.645      |
| 1%   |             | 2.576       | 2.326      |
| Two tailed - +/-<br>One tailed - + OR -, depending on expected direction of bias |             |             |            |

**Table A3-8. z-test for Dependent Variable H**

|  |                |            |        |
|--|----------------|------------|--------|
| Z-test analysis:<br>Null Hypothesis: Mean ranking is 6.5 (mean of 1 to 12) |                |            |        |
| Ranking<br>(x)   | Ranking<br>(f) | fx         | (fx^2) |
| 1  | 3              | 3          | 3      |
| 2  | 8              | 16         | 32     |
| 3  | 12             | 36         | 108    |
| 4  | 8              | 32         | 128    |
| 5  | 15             | 75         | 375    |
| 6  | 13             | 78         | 468    |
| 7  | 16             | 112        | 784    |
| 8  | 15             | 120        | 960    |
| 9  | 13             | 117        | 1053   |
| 10   | 10             | 100        | 1000   |
| 11   | 7              | 77         | 847    |
| 12   | 5              | 60         | 720    |
| Totals   | 125            | 826        | 6478   |
| Sample mean ranking = 6.608  |                |            |        |
| Sample variance ranking = 8.158336   |                |            |        |
| Sample sd ranking = 2.856280098  |                |            |        |
| Standard Error estimate = 0.256501525                                      |                |            |        |
| Test Statistic = (mean - 6.5)/se = 0.421050128                             |                |            |        |
| Critical Values:   | Two Tailed     | One Tailed |        |
| 10%  | 1.645          | 1.282      |        |
| 5%   | 2.326          | 1.645      |        |
| 1%   | 2.576          | 2.326      |        |
| Two tailed - +/-   |                |            |        |
| One tailed - + OR -, depending on expected direction of bias               |                |            |        |

**Table A3-9. z-test for Dependent Variable I**

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 6.5 (mean of 1 to 12) |                |            |            |
|--|----------------|------------|------------|
| Ranking<br>(x)   | Ranking<br>(f) | fx         | (fx^2)     |
| 1  | 4              | 4          | 4          |
| 2  | 9              | 18         | 36         |
| 3  | 9              | 27         | 81         |
| 4  | 14             | 56         | 224        |
| 5  | 15             | 75         | 375        |
| 6  | 14             | 84         | 504        |
| 7  | 18             | 126        | 882        |
| 8  | 12             | 96         | 768        |
| 9  | 11             | 99         | 891        |
| 10   | 6              | 60         | 600        |
| 11   | 11             | 121        | 1331       |
| 12   | 2              | 24         | 288        |
| Totals   | 125            | 790        | 5984       |
| Sample mean ranking = 6.32   |                |            |            |
| Sample variance ranking = 7.9296   |                |            |            |
| Sample sd ranking = 2.815954545  |                |            |            |
| Standard Error estimate = 0.252880183                                      |                |            |            |
| Test Statistic = (mean - 6.5)/se = -0.711799547                            |                |            |            |
| Critical Values:   |                | Two Tailed | One Tailed |
| 10%  |                | 1.645      | 1.282      |
| 5%   |                | 2.326      | 1.645      |
| 1%   |                | 2.576      | 2.326      |
| Two tailed - +/-   |                |            |            |
| One tailed - + OR -, depending on expected direction of bias               |                |            |            |

**Table A3-10. z-test for Dependent Variable J**

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 6.5 (mean of 1 to 12) |                |            |        |
|--|----------------|------------|--------|
| Ranking<br>(x)   | Ranking<br>(f) | fx         | (fx^2) |
| 1  | 1              | 1          | 1      |
| 2  | 2              | 4          | 8      |
| 3  | 7              | 21         | 63     |
| 4  | 5              | 20         | 80     |
| 5  | 6              | 30         | 150    |
| 6  | 5              | 30         | 180    |
| 7  | 8              | 56         | 392    |
| 8  | 11             | 88         | 704    |
| 9  | 13             | 117        | 1053   |
| 10   | 16             | 160        | 1600   |
| 11   | 29             | 319        | 3509   |
| 12   | 22             | 264        | 3168   |
| Totals   | 125            | 1110       | 10908  |
| Sample mean ranking = 8.88   |                |            |        |
| Sample variance ranking = 8.4096   |                |            |        |
| Sample sd ranking = 2.899931034  |                |            |        |
| Standard Error estimate = 0.260421495                                      |                |            |        |
| Test Statistic = (mean - 6.5)/se = 9.13903057                              |                |            |        |
| Critical Values:   | Two Tailed     | One Tailed |        |
| 10%  | 1.645          | 1.282      |        |
| 5%   | 2.326          | 1.645      |        |
| 1%   | 2.576          | 2.326      |        |
| Two tailed - +/-   |                |            |        |
| One tailed - + OR -, depending on expected direction of bias               |                |            |        |

**Table A3-11. z-test for Dependent Variable K**

|  |                |              |            |
|--|----------------|--------------|------------|
| Z-test analysis:<br>Null Hypothesis: Mean ranking is 6.5 (mean of 1 to 12) |                |              |            |
| Ranking<br>(x)   | Ranking<br>(f) | fx           | (fx^2)     |
| 1  | 14             | 14           | 14         |
| 2  | 28             | 56           | 112        |
| 3  | 10             | 30           | 90         |
| 4  | 17             | 68           | 272        |
| 5  | 15             | 75           | 375        |
| 6  | 11             | 66           | 396        |
| 7  | 7              | 49           | 343        |
| 8  | 11             | 88           | 704        |
| 9  | 6              | 54           | 486        |
| 10   | 4              | 40           | 400        |
| 11   | 1              | 11           | 121        |
| 12   | 1              | 12           | 144        |
| Totals   | 125            | 563          | 3457       |
| Sample mean ranking =  |                | 4.504        |            |
| Sample variance ranking =  |                | 7.369984     |            |
| Sample sd ranking =  |                | 2.714771445  |            |
| Standard Error estimate =  |                | 0.243793673  |            |
| Test Statistic = (mean - 6.5)/se =   |                | -8.187251039 |            |
| Critical Values:   |                | Two Tailed   | One Tailed |
| 10%  |                | 1.645        | 1.282      |
| 5%   |                | 2.326        | 1.645      |
| 1%   |                | 2.576        | 2.326      |
| Two tailed - +/-   |                |              |            |
| One tailed - + OR -, depending on expected direction of bias               |                |              |            |

**Table A3-12. z-test for Dependent Variable L**



## Appendix 4

### *z*-test Results for Question 30

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 5.5 (mean of 1 to 10) |                |             |            |
|--|----------------|-------------|------------|
| Ranking<br>(x)   | Ranking<br>(f) | fx          | (fx^2)     |
| 1  | 16             | 16          | 16         |
| 2  | 5              | 10          | 20         |
| 3  | 11             | 33          | 99         |
| 4  | 6              | 24          | 96         |
| 5  | 12             | 60          | 300        |
| 6  | 6              | 36          | 216        |
| 7  | 12             | 84          | 588        |
| 8  | 14             | 112         | 896        |
| 9  | 20             | 180         | 1620       |
| 10   | 17             | 170         | 1700       |
| Totals   | 119            | 725         | 5551       |
| Sample mean ranking =  |                | 6.092       |            |
| Sample variance ranking =  |                | 9.529       |            |
| Sample sd ranking =  |                | 3.087       |            |
| Standard Error estimate =  |                | 0.284       |            |
| Test Statistic = (mean - 5.5)/se =   |                | 2.084746872 |            |
| Critical Values:   |                | Two Tailed  | One Tailed |
| 10%  |                | 1.645       | 1.282      |
| 5%   |                | 2.326       | 1.645      |
| 1%   |                | 2.576       | 2.326      |
| Two tailed - +/-   |                |             |            |
| One tailed - + OR -, depending on expected direction of bias               |                |             |            |

**Table A4-1.** *z*-test for Dependent Variable A

|  |                |            |            |
|--|----------------|------------|------------|
| Z-test analysis:<br>Null Hypothesis: Mean ranking is 5.5 (mean of 1 to 10) |                |            |            |
| Ranking<br>(x)   | Ranking<br>(f) | fx         | (fx^2)     |
| 1  | 30             | 30         | 30         |
| 2  | 20             | 40         | 80         |
| 3  | 16             | 48         | 144        |
| 4  | 9              | 36         | 144        |
| 5  | 9              | 45         | 225        |
| 6  | 8              | 48         | 288        |
| 7  | 11             | 77         | 539        |
| 8  | 10             | 80         | 640        |
| 9  | 3              | 27         | 243        |
| 10   | 3              | 30         | 300        |
| Totals   | 119            | 461        | 2633       |
| Sample mean ranking = 3.87394958   |                |            |            |
| Sample variance ranking = 7.118565073                                      |                |            |            |
| Sample sd ranking = 2.668063918  |                |            |            |
| Standard Error estimate = 0.245615192                                      |                |            |            |
| Test Statistic = (mean - 5.5)/se = -6.62031695                             |                |            |            |
| Critical Values:   |                | Two Tailed | One Tailed |
| 10%  |                | 1.645      | 1.282      |
| 5%   |                | 2.326      | 1.645      |
| 1%   |                | 2.576      | 2.326      |
| Two tailed - +/-   |                |            |            |
| One tailed - + OR -, depending on expected direction of bias               |                |            |            |

**Table A4-2.** *z*-test for Dependent Variable B

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 5.5 (mean of 1 to 10) |                |              |            |
|--|----------------|--------------|------------|
| Ranking<br>(x)   | Ranking<br>(f) | fx           | (fx^2)     |
| 1  | 7              | 7            | 7          |
| 2  | 10             | 20           | 40         |
| 3  | 12             | 36           | 108        |
| 4  | 12             | 48           | 192        |
| 5  | 19             | 95           | 475        |
| 6  | 21             | 126          | 756        |
| 7  | 12             | 84           | 588        |
| 8  | 12             | 96           | 768        |
| 9  | 10             | 90           | 810        |
| 10   | 4              | 40           | 400        |
| Totals   | 119            | 642          | 4144       |
| Sample mean ranking =  |                | 5.394957983  |            |
| Sample variance ranking =  |                | 5.717957771  |            |
| Sample sd ranking =  |                | 2.391225161  |            |
| Standard Error estimate =  |                | 0.220130119  |            |
| Test Statistic = (mean - 5.5)/se =   |                | -0.477181484 |            |
| Critical Values:   |                | Two Tailed   | One Tailed |
| 10%  |                | 1.645        | 1.282      |
| 5%   |                | 2.326        | 1.645      |
| 1%   |                | 2.576        | 2.326      |
| Two tailed - +/-   |                |              |            |
| One tailed - + OR -, depending on expected direction of bias               |                |              |            |

**Table A4-3.** *z*-test for Dependent Variable C

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 5.5 (mean of 1 to 10) |                |              |            |
|--|----------------|--------------|------------|
| Ranking<br>(x)   | Ranking<br>(f) | fx           | (fx^2)     |
| 1  | 21             | 21           | 21         |
| 2  | 24             | 48           | 96         |
| 3  | 18             | 54           | 162        |
| 4  | 15             | 60           | 240        |
| 5  | 9              | 45           | 225        |
| 6  | 11             | 66           | 396        |
| 7  | 7              | 49           | 343        |
| 8  | 11             | 88           | 704        |
| 9  | 2              | 18           | 162        |
| 10   | 1              | 10           | 100        |
| Totals   | 119            | 459          | 2449       |
| Sample mean ranking =  |                | 3.857142857  |            |
| Sample variance ranking =  |                | 5.702280912  |            |
| Sample sd ranking =  |                | 2.387944914  |            |
| Standard Error estimate =  |                | 0.219828148  |            |
| Test Statistic = (mean - 5.5)/se =   |                | -7.473370268 |            |
| Critical Values:   |                | Two Tailed   | One Tailed |
| 10%  |                | 1.645        | 1.282      |
| 5%   |                | 2.326        | 1.645      |
| 1%   |                | 2.576        | 2.326      |
| Two tailed - +/-   |                |              |            |
| One tailed - + OR -, depending on expected direction of bias               |                |              |            |

**Table A4-4.** *z*-test for Dependent Variable D

|  |                |             |            |
|--|----------------|-------------|------------|
| Z-test analysis:<br>Null Hypothesis: Mean ranking is 5.5 (mean of 1 to 10)       |                |             |            |
| Ranking<br>(x)   | Ranking<br>(f) | fx          | (fx^2)     |
| 1  | 5              | 5           | 5          |
| 2  | 10             | 20          | 40         |
| 3  | 14             | 42          | 126        |
| 4  | 19             | 76          | 304        |
| 5  | 8              | 40          | 200        |
| 6  | 16             | 96          | 576        |
| 7  | 15             | 105         | 735        |
| 8  | 14             | 112         | 896        |
| 9  | 16             | 144         | 1296       |
| 10   | 2              | 20          | 200        |
| Totals   | 119            | 660         | 4378       |
| Sample mean ranking =  |                | 5.546218487 |            |
| Sample variance ranking =  |                | 6.029376456 |            |
| Sample sd ranking =  |                | 2.455478865 |            |
| Standard Error estimate =  |                | 0.226045152 |            |
| Test Statistic = (mean - 5.5)/se =   |                | 0.204465732 |            |
| Critical Values:   |                | Two Tailed  | One Tailed |
| 10%  |                | 1.645       | 1.282      |
| 5%   |                | 2.326       | 1.645      |
| 1%   |                | 2.576       | 2.326      |
| Two tailed - +/-<br>One tailed - + OR -, depending on expected direction of bias |                |             |            |

**Table A4-5. z-test for Dependent Variable E**

|  |                |             |            |
|--|----------------|-------------|------------|
| Z-test analysis:<br>Null Hypothesis: Mean ranking is 5.5 (mean of 1 to 10)       |                |             |            |
| Ranking<br>(x)   | Ranking<br>(f) | fx          | (fx^2)     |
| 1  | 2              | 2           | 2          |
| 2  | 6              | 12          | 24         |
| 3  | 9              | 27          | 81         |
| 4  | 9              | 36          | 144        |
| 5  | 15             | 75          | 375        |
| 6  | 11             | 66          | 396        |
| 7  | 16             | 112         | 784        |
| 8  | 16             | 128         | 1024       |
| 9  | 16             | 144         | 1296       |
| 10   | 19             | 190         | 1900       |
| Totals   | 119            | 792         | 6026       |
| Sample mean ranking =  |                | 6.655462185 |            |
| Sample variance ranking =  |                | 6.343478568 |            |
| Sample sd ranking =  |                | 2.518626326 |            |
| Standard Error estimate =  |                | 0.231858347 |            |
| Test Statistic = (mean - 5.5)/se =   |                | 4.98348324  |            |
| Critical Values:   |                | Two Tailed  | One Tailed |
| 10%  |                | 1.645       | 1.282      |
| 5%   |                | 2.326       | 1.645      |
| 1%   |                | 2.576       | 2.326      |
| Two tailed - +/-<br>One tailed - + OR -, depending on expected direction of bias |                |             |            |

**Table A4-6. z-test for Dependent Variable F**

|  |                |              |            |
|--|----------------|--------------|------------|
| Z-test analysis:<br>Null Hypothesis: Mean ranking is 5.5 (mean of 1 to 10)       |                |              |            |
| Ranking<br>(x)   | Ranking<br>(f) | fx           | (fx^2)     |
| 1  | 9              | 9            | 9          |
| 2  | 13             | 26           | 52         |
| 3  | 17             | 51           | 153        |
| 4  | 11             | 44           | 176        |
| 5  | 17             | 85           | 425        |
| 6  | 12             | 72           | 432        |
| 7  | 10             | 70           | 490        |
| 8  | 12             | 96           | 768        |
| 9  | 12             | 108          | 972        |
| 10   | 9              | 90           | 900        |
| Totals   | 122            | 651          | 4377       |
| Sample mean ranking =  |                | 5.336065574  |            |
| Sample variance ranking =  |                | 7.403453373  |            |
| Sample sd ranking =  |                | 2.72092877   |            |
| Standard Error estimate =  |                | 0.247357161  |            |
| Test Statistic = (mean - 5.5)/se =   |                | -0.662743806 |            |
| Critical Values:   |                | Two Tailed   | One Tailed |
| 10%  |                | 1.645        | 1.282      |
| 5%   |                | 2.326        | 1.645      |
| 1%   |                | 2.576        | 2.326      |
| Two tailed - +/-<br>One tailed - + OR -, depending on expected direction of bias |                |              |            |

**Table A4-7. z-test for Dependent Variable G**

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 5.5 (mean of 1 to 10)       |                |            |        |
|--|----------------|------------|--------|
| Ranking<br>(x)   | Ranking<br>(f) | fx         | (fx^2) |
| 1  | 9              | 9          | 9      |
| 2  | 8              | 16         | 32     |
| 3  | 10             | 30         | 90     |
| 4  | 16             | 64         | 256    |
| 5  | 14             | 70         | 350    |
| 6  | 15             | 90         | 540    |
| 7  | 14             | 98         | 686    |
| 8  | 12             | 96         | 768    |
| 9  | 11             | 99         | 891    |
| 10   | 10             | 100        | 1000   |
| Totals   | 119            | 672        | 4622   |
| Sample mean ranking = 5.647058824  |                |            |        |
| Sample variance ranking = 6.951062778  |                |            |        |
| Sample sd ranking = 2.636486825  |                |            |        |
| Standard Error estimate = 0.242708285  |                |            |        |
| Test Statistic = (mean - 5.5)/se = 0.605907719                                   |                |            |        |
| Critical Values:   |                |            |        |
|  | Two Tailed     | One Tailed |        |
| 10%  | 1.645          | 1.282      |        |
| 5%   | 2.326          | 1.645      |        |
| 1%   | 2.576          | 2.326      |        |
| Two tailed - +/-<br>One tailed - + OR -, depending on expected direction of bias |                |            |        |

**Table A4-8. z-test for Dependent Variable H**

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 5.5 (mean of 1 to 10) |                |             |            |
|--|----------------|-------------|------------|
| Ranking<br>(x)   | Ranking<br>(f) | fx          | (fx^2)     |
| 1  | 2              | 2           | 2          |
| 2  | 4              | 8           | 16         |
| 3  | 1              | 3           | 9          |
| 4  | 4              | 16          | 64         |
| 5  | 5              | 25          | 125        |
| 6  | 9              | 54          | 324        |
| 7  | 6              | 42          | 294        |
| 8  | 10             | 80          | 640        |
| 9  | 23             | 207         | 1863       |
| 10   | 55             | 550         | 5500       |
| Totals   | 119            | 987         | 8837       |
| Sample mean ranking =  |                | 8.294117647 |            |
| Sample variance ranking =  |                | 5.468116658 |            |
| Sample sd ranking =  |                | 2.338400449 |            |
| Standard Error estimate =  |                | 0.21526721  |            |
| Test Statistic = (mean - 5.5)/se =   |                | 12.9797643  |            |
| Critical Values:   |                | Two Tailed  | One Tailed |
| 10%  |                | 1.645       | 1.282      |
| 5%   |                | 2.326       | 1.645      |
| 1%   |                | 2.576       | 2.326      |
| Two tailed - +/-   |                |             |            |
| One tailed - + OR -, depending on expected direction of bias               |                |             |            |

**Table A4-9. z-test for Dependent Variable J**

| Z-test analysis:<br>Null Hypothesis: Mean ranking is 5.5 (mean of 1 to 10) |                |              |            |
|--|----------------|--------------|------------|
| Ranking<br>(x)   | Ranking<br>(f) | fx           | (fx^2)     |
| 1  | 18             | 18           | 18         |
| 2  | 19             | 38           | 76         |
| 3  | 11             | 33           | 99         |
| 4  | 18             | 72           | 288        |
| 5  | 11             | 55           | 275        |
| 6  | 10             | 60           | 360        |
| 7  | 16             | 112          | 784        |
| 8  | 8              | 64           | 512        |
| 9  | 6              | 54           | 486        |
| 10   | 2              | 20           | 200        |
| Totals   | 119            | 526          | 3098       |
| Sample mean ranking =  |                | 4.420168067  |            |
| Sample variance ranking =  |                | 6.495727703  |            |
| Sample sd ranking =  |                | 2.548671753  |            |
| Standard Error estimate =  |                | 0.234624252  |            |
| Test Statistic = (mean - 5.5)/se =   |                | -4.602388378 |            |
| Critical Values:   |                | Two Tailed   | One Tailed |
| 10%  |                | 1.645        | 1.282      |
| 5%   |                | 2.326        | 1.645      |
| 1%   |                | 2.576        | 2.326      |
| Two tailed - +/-   |                |              |            |
| One tailed - + OR -, depending on expected direction of bias               |                |              |            |

**Table A4-10. z-test for Dependent Variable K**

## APPENDIX 5

### Multiple Comparisons within Dependent Variables for Question 27 Across Various Independent Variables

| Dependent Variable | (I) Years worked Overseas | (J) Years worked Overseas | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|---------------------------|---------------------------|-----------------------|------------|-------|
| <b>A</b>           | 1-6 years                 | 7-12 years                | 0.8954                | 0.799      | 0.264 |
|                    |                           | 13+ years                 | 0.6499                | 0.683      | 0.343 |
|                    | 7-12 years                | 1-6 years                 | -0.8954               | 0.799      | 0.264 |
|                    |                           | 13+ years                 | -0.2455               | 0.675      | 0.717 |
|                    | 13+ years                 | 1-6 years                 | -0.6499               | 0.683      | 0.343 |
|                    |                           | 7-12 years                | 0.2455                | 0.675      | 0.717 |
| <b>B</b>           | 1-6 years                 | 7-12 years                | -0.4678               | 0.85       | 0.583 |
|                    |                           | 13+ years                 | 0.5413                | 0.727      | 0.458 |
|                    | 7-12 years                | 1-6 years                 | 0.4678                | 0.85       | 0.583 |
|                    |                           | 13+ years                 | 1.0091                | 0.718      | 0.163 |
|                    | 13+ years                 | 1-6 years                 | -0.5413               | 0.727      | 0.458 |
|                    |                           | 7-12 years                | -1.0091               | 0.718      | 0.163 |
| <b>C</b>           | 1-6 years                 | 7-12 years                | -0.5184               | 0.718      | 0.472 |
|                    |                           | 13+ years                 | -0.7032               | 0.615      | 0.255 |
|                    | 7-12 years                | 1-6 years                 | 0.5184                | 0.718      | 0.472 |
|                    |                           | 13+ years                 | -0.1848               | 0.607      | 0.761 |
|                    | 13+ years                 | 1-6 years                 | 0.7032                | 0.615      | 0.255 |
|                    |                           | 7-12 years                | 0.1848                | 0.607      | 0.761 |
| <b>D</b>           | 1-6 years                 | 7-12 years                | -0.9276               | 0.723      | 0.202 |
|                    |                           | 13+ years                 | -0.2367               | 0.619      | 0.703 |
|                    | 7-12 years                | 1-6 years                 | 0.9276                | 0.723      | 0.202 |
|                    |                           | 13+ years                 | 0.6909                | 0.611      | 0.261 |
|                    | 13+ years                 | 1-6 years                 | 0.2367                | 0.619      | 0.703 |
|                    |                           | 7-12 years                | -0.6909               | 0.611      | 0.261 |
| <b>E</b>           | 1-6 years                 | 7-12 years                | 1.3356                | 0.83       | 0.11  |
|                    |                           | 13+ years                 | 0.8568                | 0.71       | 0.23  |
|                    | 7-12 years                | 1-6 years                 | -1.3356               | 0.83       | 0.11  |
|                    |                           | 13+ years                 | -0.4788               | 0.702      | 0.496 |
|                    | 13+ years                 | 1-6 years                 | -0.8568               | 0.71       | 0.23  |
|                    |                           | 7-12 years                | 0.4788                | 0.702      | 0.496 |
| <b>F</b>           | 1-6 years                 | 7-12 years                | -0.5506               | 0.763      | 0.472 |
|                    |                           | 13+ years                 | 0.3918                | 0.653      | 0.549 |
|                    | 7-12 years                | 1-6 years                 | 0.5506                | 0.763      | 0.472 |
|                    |                           | 13+ years                 | 0.9424                | 0.645      | 0.147 |
|                    | 13+ years                 | 1-6 years                 | -0.3918               | 0.653      | 0.549 |
|                    |                           | 7-12 years                | -0.9424               | 0.645      | 0.147 |
| <b>G</b>           | 1-6 years                 | 7-12 years                | 0.1563                | 0.725      | 0.83  |
|                    |                           | 13+ years                 | -0.871                | 0.62       | 0.163 |
|                    | 7-12 years                | 1-6 years                 | -0.1563               | 0.725      | 0.83  |
|                    |                           | 13+ years                 | -1.0273               | 0.613      | 0.096 |
|                    | 13+ years                 | 1-6 years                 | 0.871                 | 0.62       | 0.163 |
|                    |                           | 7-12 years                | 1.0273                | 0.613      | 0.096 |
| <b>H</b>           | 1-6 years                 | 7-12 years                | -0.4448               | 0.812      | 0.585 |
|                    |                           | 13+ years                 | -1.0418               | 0.694      | 0.136 |
|                    | 7-12 years                | 1-6 years                 | 0.4448                | 0.812      | 0.585 |
|                    |                           | 13+ years                 | -0.597                | 0.686      | 0.386 |
|                    | 13+ years                 | 1-6 years                 | 1.0418                | 0.694      | 0.136 |
|                    |                           | 7-12 years                | 0.597                 | 0.686      | 0.386 |

| Dependent Variable | (I) Years worked Overseas | (J) Years worked Overseas | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|---------------------------|---------------------------|-----------------------|------------|-------|
| <b>I</b>           | 1-6 years                 | 7-12 years                | -0.8713               | 0.745      | 0.244 |
|                    |                           | 13+ years                 | -1.0167               | 0.637      | 0.113 |
|                    | 7-12 years                | 1-6 years                 | 0.8713                | 0.745      | 0.244 |
|                    |                           | 13+ years                 | -0.1455               | 0.63       | 0.818 |
|                    | 13+ years                 | 1-6 years                 | 1.0167                | 0.637      | 0.113 |
|                    |                           | 7-12 years                | 0.1455                | 0.63       | 0.818 |
| <b>J</b>           | 1-6 years                 | 7-12 years                | 1.3724                | 0.731      | 0.063 |
|                    |                           | 13+ years                 | 0.9906                | 0.625      | 0.116 |
|                    | 7-12 years                | 1-6 years                 | -1.3724               | 0.731      | 0.063 |
|                    |                           | 13+ years                 | -0.3818               | 0.618      | 0.538 |
|                    | 13+ years                 | 1-6 years                 | -0.9906               | 0.625      | 0.116 |
|                    |                           | 7-12 years                | 0.3818                | 0.618      | 0.538 |
| <b>K</b>           | 1-6 years                 | 7-12 years                | 0.169                 | 0.764      | 0.825 |
|                    |                           | 13+ years                 | 0.2811                | 0.653      | 0.668 |
|                    | 7-12 years                | 1-6 years                 | -0.169                | 0.764      | 0.825 |
|                    |                           | 13+ years                 | 0.1121                | 0.646      | 0.862 |
|                    | 13+ years                 | 1-6 years                 | -0.2811               | 0.653      | 0.668 |
|                    |                           | 7-12 years                | -0.1121               | 0.646      | 0.862 |
| <b>L</b>           | 1-6 years                 | 7-12 years                | -0.1483               | 0.715      | 0.836 |
|                    |                           | 13+ years                 | 0.1578                | 0.612      | 0.797 |
|                    | 7-12 years                | 1-6 years                 | 0.1483                | 0.715      | 0.836 |
|                    |                           | 13+ years                 | 0.3061                | 0.604      | 0.614 |
|                    | 13+ years                 | 1-6 years                 | -0.1578               | 0.612      | 0.797 |
|                    |                           | 7-12 years                | -0.3061               | 0.604      | 0.614 |

**Table A5-1.** Significant Differences for Years Experience Working Overseas

| Dependent Variable | (I) Level of Management | (J) Level of Management | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|-------------------------|-------------------------|-----------------------|------------|-------|
| <b>A</b>           | Director/Partner level  | Senior management       | -0.775                | 0.646      | 0.232 |
|                    |                         | Project management      | 0.3695                | 0.685      | 0.59  |
|                    | Senior management       | Director/Partner level  | 0.775                 | 0.646      | 0.232 |
|                    |                         | Project management      | 1.1444                | 0.755      | 0.132 |
|                    | Project management      | Director/Partner level  | -0.3695               | 0.685      | 0.59  |
|                    |                         | Senior management       | -1.1444               | 0.755      | 0.132 |
| <b>B</b>           | Director/Partner level  | Senior management       | -0.6643               | 0.693      | 0.339 |
|                    |                         | Project management      | -0.5254               | 0.735      | 0.476 |
|                    | Senior management       | Director/Partner level  | 0.6643                | 0.693      | 0.339 |
|                    |                         | Project management      | 0.1389                | 0.81       | 0.864 |
|                    | Project management      | Director/Partner level  | 0.5254                | 0.735      | 0.476 |
|                    |                         | Senior management       | -0.1389               | 0.81       | 0.864 |
| <b>C</b>           | Director/Partner level  | Senior management       | 0.2298                | 0.585      | 0.695 |
|                    |                         | Project management      | 0.452                 | 0.621      | 0.468 |
|                    | Senior management       | Director/Partner level  | -0.2298               | 0.585      | 0.695 |
|                    |                         | Project management      | 0.2222                | 0.684      | 0.746 |
|                    | Project management      | Director/Partner level  | -0.452                | 0.621      | 0.468 |
|                    |                         | Senior management       | -0.2222               | 0.684      | 0.746 |
| <b>D</b>           | Director/Partner level  | Senior management       | -2.87E-02             | 0.591      | 0.961 |
|                    |                         | Project management      | 0.4102                | 0.626      | 0.514 |
|                    | Senior management       | Director/Partner level  | 2.87E-02              | 0.591      | 0.961 |
|                    |                         | Project management      | 0.4389                | 0.69       | 0.526 |
|                    | Project management      | Director/Partner level  | -0.4102               | 0.626      | 0.514 |
|                    |                         | Senior management       | -0.4389               | 0.69       | 0.526 |

| Dependent Variable | (I) Level of Management | (J) Level of Management | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|-------------------------|-------------------------|-----------------------|------------|-------|
| <b>E</b>           | Director/Partner level  | Senior management       | -0.4605               | 0.673      | 0.495 |
|                    |                         | Project management      | 0.8729                | 0.714      | 0.224 |
|                    | Senior management       | Director/Partner level  | 0.4605                | 0.673      | 0.495 |
|                    |                         | Project management      | 1.3333                | 0.787      | 0.093 |
|                    | Project management      | Director/Partner level  | -0.8729               | 0.714      | 0.224 |
|                    |                         | Senior management       | -1.3333               | 0.787      | 0.093 |
| <b>F</b>           | Director/Partner level  | Senior management       | 0.5301                | 0.621      | 0.395 |
|                    |                         | Project management      | -0.3588               | 0.659      | 0.587 |
|                    | Senior management       | Director/Partner level  | -0.5301               | 0.621      | 0.395 |
|                    |                         | Project management      | -0.8889               | 0.726      | 0.223 |
|                    | Project management      | Director/Partner level  | 0.3588                | 0.659      | 0.587 |
|                    |                         | Senior management       | 0.8889                | 0.726      | 0.223 |
| <b>G</b>           | Director/Partner level  | Senior management       | -0.5847               | 0.595      | 0.328 |
|                    |                         | Project management      | -0.1181               | 0.631      | 0.852 |
|                    | Senior management       | Director/Partner level  | 0.5847                | 0.595      | 0.328 |
|                    |                         | Project management      | 0.4667                | 0.696      | 0.504 |
|                    | Project management      | Director/Partner level  | 0.1181                | 0.631      | 0.852 |
|                    |                         | Senior management       | -0.4667               | 0.696      | 0.504 |
| <b>H</b>           | Director/Partner level  | Senior management       | 0.3795                | 0.651      | 0.561 |
|                    |                         | Project management      | -1.3316               | 0.69       | 0.056 |
|                    | Senior management       | Director/Partner level  | -0.3795               | 0.651      | 0.561 |
|                    |                         | Project management      | -1.7111               | 0.761      | 0.026 |
|                    | Project management      | Director/Partner level  | 1.3316                | 0.69       | 0.056 |
|                    |                         | Senior management       | 1.7111                | 0.761      | 0.026 |
| <b>I</b>           | Director/Partner level  | Senior management       | 0.5052                | 0.607      | 0.407 |
|                    |                         | Project management      | -0.4559               | 0.643      | 0.48  |
|                    | Senior management       | Director/Partner level  | -0.5052               | 0.607      | 0.407 |
|                    |                         | Project management      | -0.9611               | 0.709      | 0.178 |
|                    | Project management      | Director/Partner level  | 0.4559                | 0.643      | 0.48  |
|                    |                         | Senior management       | 0.9611                | 0.709      | 0.178 |
| <b>J</b>           | Director/Partner level  | Senior management       | -0.8724               | 0.584      | 0.138 |
|                    |                         | Project management      | 1.0554                | 0.619      | 0.091 |
|                    | Senior management       | Director/Partner level  | 0.8724                | 0.584      | 0.138 |
|                    |                         | Project management      | 1.9278*               | 0.683      | 0.006 |
|                    | Project management      | Director/Partner level  | -1.0554               | 0.619      | 0.091 |
|                    |                         | Senior management       | -1.9278*              | 0.683      | 0.006 |
| <b>K</b>           | Director/Partner level  | Senior management       | 0.4553                | 0.619      | 0.463 |
|                    |                         | Project management      | -0.1169               | 0.656      | 0.859 |
|                    | Senior management       | Director/Partner level  | -0.4553               | 0.619      | 0.463 |
|                    |                         | Project management      | -0.5722               | 0.723      | 0.43  |
|                    | Project management      | Director/Partner level  | 0.1169                | 0.656      | 0.859 |
|                    |                         | Senior management       | 0.5722                | 0.723      | 0.43  |
| <b>L</b>           | Director/Partner level  | Senior management       | 1.2858                | 0.565      | 0.025 |
|                    |                         | Project management      | -0.2531               | 0.599      | 0.674 |
|                    | Senior management       | Director/Partner level  | -1.2858               | 0.565      | 0.025 |
|                    |                         | Project management      | -1.5389               | 0.661      | 0.022 |
|                    | Project management      | Director/Partner level  | 0.2531                | 0.599      | 0.674 |
|                    |                         | Senior management       | 1.5389                | 0.661      | 0.022 |

\*The mean difference is significant at P=0.01

**Table A5-2.** Significant Differences for Level of Management

| Dependent Variable | (I) Profession       | (J) Profession       | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|----------------------|----------------------|-----------------------|------------|-------|
| <b>A</b>           | Quantity Surveyor    | Civil Engineer       | -1.7816*              | 0.597      | 0.003 |
|                    |                      | Architect and Others | -1.4692               | 0.718      | 0.043 |
|                    | Civil Engineer       | Quantity Surveyor    | 1.7816*               | 0.597      | 0.003 |
|                    |                      | Architect and Others | 0.3124                | 0.720      | 0.665 |
|                    | Architect and Others | Quantity Surveyor    | 1.4692                | 0.718      | 0.043 |
| <b>B</b>           | Quantity Surveyor    | Civil Engineer       | -0.3208               | 0.660      | 0.628 |
|                    |                      | Architect and Others | 0.2585                | 0.794      | 0.745 |
|                    | Civil Engineer       | Quantity Surveyor    | 0.3208                | 0.660      | 0.628 |
|                    |                      | Architect and Others | 0.5793                | 0.796      | 0.468 |
|                    | Architect and Others | Quantity Surveyor    | -0.2585               | 0.794      | 0.745 |
| <b>C</b>           | Quantity Surveyor    | Civil Engineer       | -1.63E-03             | 0.555      | 0.998 |
|                    |                      | Architect and Others | 0.6569                | 0.667      | 0.327 |
|                    | Civil Engineer       | Quantity Surveyor    | 1.63E-03              | 0.555      | 0.998 |
|                    |                      | Architect and Others | 0.6586                | 0.670      | 0.327 |
|                    | Architect and Others | Quantity Surveyor    | -0.6569               | 0.667      | 0.327 |
| <b>D</b>           | Quantity Surveyor    | Civil Engineer       | 0.1714                | 0.562      | 0.761 |
|                    |                      | Architect and Others | 6.15E-02              | 0.676      | 0.928 |
|                    | Civil Engineer       | Quantity Surveyor    | -0.1714               | 0.562      | 0.761 |
|                    |                      | Architect and Others | -0.1099               | 0.679      | 0.872 |
|                    | Architect and Others | Quantity Surveyor    | -6.15E-02             | 0.676      | 0.928 |
| <b>E</b>           | Quantity Surveyor    | Civil Engineer       | 0.3669                | 0.621      | 0.555 |
|                    |                      | Architect and Others | -2.0185*              | 0.747      | 0.008 |
|                    | Civil Engineer       | Quantity Surveyor    | -0.3669               | 0.621      | 0.555 |
|                    |                      | Architect and Others | -2.3854*              | 0.749      | 0.002 |
|                    | Architect and Others | Quantity Surveyor    | 2.0185*               | 0.747      | 0.008 |
| <b>F</b>           | Quantity Surveyor    | Civil Engineer       | 1.469                 | 0.577      | 0.012 |
|                    |                      | Architect and Others | 0.1738                | 0.694      | 0.803 |
|                    | Civil Engineer       | Quantity Surveyor    | -1.469                | 0.577      | 0.012 |
|                    |                      | Architect and Others | -1.2951               | 0.697      | 0.066 |
|                    | Architect and Others | Quantity Surveyor    | -0.1738               | 0.694      | 0.803 |
| <b>G</b>           | Quantity Surveyor    | Civil Engineer       | 0.7665                | 0.563      | 0.176 |
|                    |                      | Architect and Others | 0.1323                | 0.678      | 0.846 |
|                    | Civil Engineer       | Quantity Surveyor    | -0.7665               | 0.563      | 0.176 |
|                    |                      | Architect and Others | -0.6342               | 0.680      | 0.353 |
|                    | Architect and Others | Quantity Surveyor    | -0.1323               | 0.678      | 0.846 |
| <b>H</b>           | Quantity Surveyor    | Civil Engineer       | -0.3473               | 0.630      | 0.583 |
|                    |                      | Architect and Others | -0.7492               | 0.758      | 0.325 |
|                    | Civil Engineer       | Quantity Surveyor    | 0.3473                | 0.630      | 0.583 |
|                    |                      | Architect and Others | -0.4019               | 0.761      | 0.598 |
|                    | Architect and Others | Quantity Surveyor    | 0.7492                | 0.758      | 0.325 |
| <b>I</b>           | Quantity Surveyor    | Civil Engineer       | -1.069                | 0.560      | 0.059 |
|                    |                      | Architect and Others | 0.9185                | 0.674      | 0.176 |
|                    | Civil Engineer       | Quantity Surveyor    | 1.069                 | 0.560      | 0.059 |
|                    |                      | Architect and Others | 1.9874*               | 0.676      | 0.004 |
|                    | Architect and Others | Quantity Surveyor    | -0.9185               | 0.674      | 0.176 |
|                    |                      | Civil Engineer       | -1.9874*              | 0.676      | 0.004 |

| Dependent Variable | (I) Profession       | (J) Profession       | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|----------------------|----------------------|-----------------------|------------|-------|
| <b>J</b>           | Quantity Surveyor    | Civil Engineer       | -0.1098               | 0.571      | 0.848 |
|                    |                      | Architect and Others | 0.4954                | 0.687      | 0.472 |
|                    | Civil Engineer       | Quantity Surveyor    | 0.1098                | 0.571      | 0.848 |
|                    |                      | Architect and Others | 0.6052                | 0.689      | 0.382 |
|                    | Architect and Others | Quantity Surveyor    | -0.4954               | 0.687      | 0.472 |
|                    |                      | Civil Engineer       | -0.6052               | 0.689      | 0.382 |
| <b>K</b>           | Quantity Surveyor    | Civil Engineer       | 1.0935                | 0.582      | 0.063 |
|                    |                      | Architect and Others | 0.5354                | 0.700      | 0.446 |
|                    | Civil Engineer       | Quantity Surveyor    | -1.0935               | 0.582      | 0.063 |
|                    |                      | Architect and Others | -0.5581               | 0.702      | 0.428 |
|                    | Architect and Others | Quantity Surveyor    | -0.5354               | 0.700      | 0.446 |
|                    |                      | Civil Engineer       | 0.5581                | 0.702      | 0.428 |
| <b>L</b>           | Quantity Surveyor    | Civil Engineer       | -0.2371               | 0.544      | 0.664 |
|                    |                      | Architect and Others | 1.0046                | 0.654      | 0.127 |
|                    | Civil Engineer       | Quantity Surveyor    | 0.2371                | 0.544      | 0.664 |
|                    |                      | Architect and Others | 1.2418                | 0.657      | 0.061 |
|                    | Architect and Others | Quantity Surveyor    | -1.0046               | 0.654      | 0.127 |
|                    |                      | Civil Engineer       | -1.2418               | 0.657      | 0.061 |

\*The mean difference is significant at P=0.01

**Table A5-3. Significant Differences due to Differences in Profession**

| Dependent Variable | (I) Nature of Job    | (J) Nature of Job    | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|----------------------|----------------------|-----------------------|------------|-------|
| <b>A</b>           | Project Based        | Wholly Office Based  | -2.54E-02             | 0.667      | 0.970 |
|                    |                      | Office/Project Based | 1.0556                | 0.710      | 0.140 |
|                    | Wholly Office Based  | Project Based        | 2.54E-02              | 0.667      | 0.970 |
|                    |                      | Office/Project Based | 1.081                 | 0.667      | 0.108 |
|                    | Office/Project Based | Project Based        | -1.0556               | 0.710      | 0.140 |
|                    |                      | Wholly Office Based  | -1.081                | 0.667      | 0.108 |
| <b>B</b>           | Project Based        | Wholly Office Based  | -6.62E-02             | 0.700      | 0.925 |
|                    |                      | Office/Project Based | 1.8611                | 0.745      | 0.014 |
|                    | Wholly Office Based  | Project Based        | 6.62E-02              | 0.700      | 0.925 |
|                    |                      | Office/Project Based | 1.9273*               | 0.700      | 0.007 |
|                    | Office/Project Based | Project Based        | -1.8611               | 0.745      | 0.014 |
|                    |                      | Wholly Office Based  | -1.9273*              | 0.700      | 0.007 |
| <b>C</b>           | Project Based        | Wholly Office Based  | -0.2204               | 0.608      | 0.718 |
|                    |                      | Office/Project Based | -0.6389               | 0.647      | 0.326 |
|                    | Wholly Office Based  | Project Based        | 0.2204                | 0.608      | 0.718 |
|                    |                      | Office/Project Based | -0.4184               | 0.608      | 0.493 |
|                    | Office/Project Based | Project Based        | 0.6389                | 0.647      | 0.326 |
|                    |                      | Wholly Office Based  | 0.4184                | 0.608      | 0.493 |
| <b>D</b>           | Project Based        | Wholly Office Based  | -0.49                 | 0.628      | 0.437 |
|                    |                      | Office/Project Based | 0.1667                | 0.669      | 0.804 |
|                    | Wholly Office Based  | Project Based        | 0.49                  | 0.628      | 0.437 |
|                    |                      | Office/Project Based | 0.6566                | 0.628      | 0.298 |
|                    | Office/Project Based | Project Based        | -0.1667               | 0.669      | 0.804 |
|                    |                      | Wholly Office Based  | -0.6566               | 0.628      | 0.298 |
| <b>E</b>           | Project Based        | Wholly Office Based  | -0.3079               | 0.725      | 0.672 |
|                    |                      | Office/Project Based | -0.1944               | 0.771      | 0.801 |
|                    | Wholly Office Based  | Project Based        | 0.3079                | 0.725      | 0.672 |
|                    |                      | Office/Project Based | 0.1135                | 0.725      | 0.876 |
|                    | Office/Project Based | Project Based        | 0.1944                | 0.771      | 0.801 |
|                    |                      | Wholly Office Based  | -0.1135               | 0.725      | 0.876 |
| <b>F</b>           | Project Based        | Wholly Office Based  | 0.1749                | 0.642      | 0.786 |
|                    |                      | Office/Project Based | -1.3611               | 0.683      | 0.049 |



| Dependent Variable | (I) Nature of Job    | (J) Nature of Job    | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|----------------------|----------------------|-----------------------|------------|-------|
| <b>F</b>           | Wholly Office Based  | Project Based        | -0.1749               | 0.642      | 0.786 |
|                    |                      | Office/Project Based | -1.5361               | 0.642      | 0.018 |
|                    | Office/Project Based | Project Based        | 1.3611                | 0.683      | 0.049 |
|                    |                      | Wholly Office Based  | 1.5361                | 0.642      | 0.018 |
| <b>G</b>           | Project Based        | Wholly Office Based  | -0.2417               | 0.619      | 0.697 |
|                    |                      | Office/Project Based | -1.1944               | 0.659      | 0.072 |
|                    | Wholly Office Based  | Project Based        | 0.2417                | 0.619      | 0.697 |
|                    |                      | Office/Project Based | -0.9527               | 0.619      | 0.126 |
|                    | Office/Project Based | Project Based        | 1.1944                | 0.659      | 0.072 |
|                    |                      | Wholly Office Based  | 0.9527                | 0.619      | 0.126 |
| <b>H</b>           | Project Based        | Wholly Office Based  | 1.4078                | 0.679      | 0.040 |
|                    |                      | Office/Project Based | 5.56E-02              | 0.723      | 0.939 |
|                    | Wholly Office Based  | Project Based        | -1.4078               | 0.679      | 0.040 |
|                    |                      | Office/Project Based | -1.3522               | 0.679      | 0.049 |
|                    | Office/Project Based | Project Based        | -5.56E-02             | 0.723      | 0.939 |
|                    |                      | Wholly Office Based  | 1.3522                | 0.679      | 0.049 |
| <b>I</b>           | Project Based        | Wholly Office Based  | 9.04E-02              | 0.627      | 0.886 |
|                    |                      | Office/Project Based | 0.5278                | 0.667      | 0.431 |
|                    | Wholly Office Based  | Project Based        | -9.04E-02             | 0.627      | 0.886 |
|                    |                      | Office/Project Based | 0.4374                | 0.627      | 0.487 |
|                    | Office/Project Based | Project Based        | -0.5278               | 0.667      | 0.431 |
|                    |                      | Wholly Office Based  | -0.4374               | 0.627      | 0.487 |
| <b>J</b>           | Project Based        | Wholly Office Based  | 6.97E-02              | 0.616      | 0.910 |
|                    |                      | Office/Project Based | 0.4167                | 0.656      | 0.526 |
|                    | Wholly Office Based  | Project Based        | -6.97E-02             | 0.616      | 0.910 |
|                    |                      | Office/Project Based | 0.3469                | 0.616      | 0.574 |
|                    | Office/Project Based | Project Based        | -0.4167               | 0.656      | 0.526 |
|                    |                      | Wholly Office Based  | -0.3469               | 0.616      | 0.574 |
| <b>K</b>           | Project Based        | Wholly Office Based  | -1.60E-02             | 0.644      | 0.980 |
|                    |                      | Office/Project Based | -0.3889               | 0.685      | 0.571 |
|                    | Wholly Office Based  | Project Based        | 1.60E-02              | 0.644      | 0.980 |
|                    |                      | Office/Project Based | -0.3729               | 0.644      | 0.563 |
|                    | Office/Project Based | Project Based        | 0.3889                | 0.685      | 0.571 |
|                    |                      | Wholly Office Based  | 0.3729                | 0.644      | 0.563 |
| <b>L</b>           | Project Based        | Wholly Office Based  | -0.3753               | 0.618      | 0.545 |
|                    |                      | Office/Project Based | -0.3056               | 0.657      | 0.643 |
|                    | Wholly Office Based  | Project Based        | 0.3753                | 0.618      | 0.545 |
|                    |                      | Office/Project Based | 6.97E-02              | 0.618      | 0.910 |
|                    | Office/Project Based | Project Based        | 0.3056                | 0.657      | 0.643 |
|                    |                      | Wholly Office Based  | -6.97E-02             | 0.618      | 0.910 |

\*The mean difference is significant at P=0.01

**Table A5-4.** Significant Differences due to differences in Nature of Job

| Dependent Variable | (I) Country Where Respondent Currently Works | (J) Country Where Respondent Currently Works | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>A</b>           | Asia Pacific                                 | Europe                                       | -0.6063               | 0.887      | 0.496 |
|                    |  | Middle East                                  | 0.3783                | 0.768      | 0.623 |
|                    |  | North America and Australia                  | -1.1619               | 0.944      | 0.221 |
|                    |  | Africa                                       | -7.86E-02             | 0.857      | 0.927 |
|                    | Europe                                       | Asia Pacific                                 | 0.6063                | 0.887      | 0.496 |
|                    |  | Middle East                                  | 0.9847                | 0.918      | 0.286 |
|                    |  | North America and Australia                  | -0.5556               | 1.069      | 0.604 |
|                    |  | Africa                                       | 0.5278                | 0.994      | 0.596 |

| Dependent Variable | (I) Country Where Respondent Currently Works | (J) Country Where Respondent Currently Works | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>A</b>           | Middle East                                  | Asia Pacific                                 | -0.3783               | 0.768      | 0.623 |
|                    |  | Europe                                       | -0.9847               | 0.918      | 0.286 |
|                    |  | North America and Australia                  | -1.5402               | 0.973      | 0.116 |
|                    |  | Africa                                       | -0.4569               | 0.889      | 0.608 |
|                    | North America and Australia                  | Asia Pacific                                 | 1.1619                | 0.944      | 0.221 |
|                    |  | Europe                                       | 0.5556                | 1.069      | 0.604 |
|                    |  | Middle East                                  | 1.5402                | 0.973      | 0.116 |
|                    |  | Africa                                       | 1.0833                | 1.045      | 0.302 |
|                    | Africa                                       | Asia Pacific                                 | 7.86E-02              | 0.857      | 0.927 |
|                    |  | Europe                                       | -0.5278               | 0.994      | 0.596 |
|                    |  | Middle East                                  | 0.4569                | 0.889      | 0.608 |
|                    |  | North America and Australia                  | -1.0833               | 1.045      | 0.302 |
| <b>B</b>           | Asia Pacific                                 | Europe                                       | 3.5*                  | 0.892      | 0     |
|                    |  | Middle East                                  | 0.5517                | 0.772      | 0.476 |
|                    |  | North America and Australia                  | 1.8667                | 0.949      | 0.052 |
|                    |  | Africa                                       | 1.25                  | 0.862      | 0.15  |
|                    | Europe                                       | Asia Pacific                                 | -3.5*                 | 0.892      | 0     |
|                    |  | Middle East                                  | -2.9483*              | 0.923      | 0.002 |
|                    |  | North America and Australia                  | -1.6333               | 1.075      | 0.132 |
|                    |  | Africa                                       | -2.25                 | 0.999      | 0.026 |
|                    | Middle East                                  | Asia Pacific                                 | -0.5517               | 0.772      | 0.476 |
|                    |  | Europe                                       | 2.9483*               | 0.923      | 0.002 |
|                    |  | North America and Australia                  | 1.3149                | 0.978      | 0.182 |
|                    |  | Africa                                       | 0.6983                | 0.894      | 0.436 |
|                    | North America and Australia                  | Asia Pacific                                 | -1.8667               | 0.949      | 0.052 |
|                    |  | Europe                                       | 1.6333                | 1.075      | 0.132 |
|                    |  | Middle East                                  | -1.3149               | 0.978      | 0.182 |
|                    |  | Africa                                       | -0.6167               | 1.05       | 0.558 |
|                    | Africa                                       | Asia Pacific                                 | -1.25                 | 0.862      | 0.15  |
|                    |  | Europe                                       | 2.25                  | 0.999      | 0.026 |
|                    |  | Middle East                                  | -0.6983               | 0.894      | 0.436 |
|                    |  | North America and Australia                  | 0.6167                | 1.05       | 0.558 |
| <b>C</b>           | Asia Pacific                                 | Europe                                       | -1.981                | 0.773      | 0.012 |
|                    |  | Middle East                                  | 0.3064                | 0.669      | 0.648 |
|                    |  | North America and Australia                  | -1.3143               | 0.822      | 0.113 |
|                    |  | Africa                                       | 0.8857                | 0.747      | 0.238 |
|                    | Europe                                       | Asia Pacific                                 | 1.981                 | 0.773      | 0.012 |
|                    |  | Middle East                                  | 2.2874*               | 0.8        | 0.005 |
|                    |  | North America and Australia                  | 0.6667                | 0.932      | 0.476 |
|                    |  | Africa                                       | 2.8667*               | 0.866      | 0.001 |
|                    | Middle East                                  | Asia Pacific                                 | -0.3064               | 0.669      | 0.648 |
|                    |  | Europe                                       | -2.2874*              | 0.8        | 0.005 |
|                    |  | North America and Australia                  | -1.6207               | 0.848      | 0.058 |
|                    |  | Africa                                       | 0.5793                | 0.775      | 0.456 |
|                    | North America and Australia                  | Asia Pacific                                 | 1.3143                | 0.822      | 0.113 |
|                    |  | Europe                                       | -0.6667               | 0.932      | 0.476 |
|                    |  | Middle East                                  | 1.6207                | 0.848      | 0.058 |
|                    |  | Africa                                       | 2.2                   | 0.91       | 0.017 |
|                    | Africa                                       | Asia Pacific                                 | -0.8857               | 0.747      | 0.238 |
|                    |  | Europe                                       | -2.8667*              | 0.866      | 0.001 |
|                    |  | Middle East                                  | -0.5793               | 0.775      | 0.456 |
|                    |  | North America and Australia                  | -2.2                  | 0.91       | 0.017 |

| Dependent Variable | (I) Country Where Respondent Currently Works | (J) Country Where Respondent Currently Works | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>D</b>           | Asia Pacific                                 | Europe                                       | -1.3444               | 0.799      | 0.095 |
|                    |  | Middle East                                  | 0.2552                | 0.692      | 0.713 |
|                    |  | North America and Australia                  | 0.9333                | 0.85       | 0.275 |
|                    |  | Africa                                       | 1.15                  | 0.772      | 0.139 |
|                    | Europe                                       | Asia Pacific                                 | 1.3444                | 0.799      | 0.095 |
|                    |  | Middle East                                  | 1.5996                | 0.827      | 0.056 |
|                    |  | North America and Australia                  | 2.2778                | 0.963      | 0.02  |
|                    |  | Africa                                       | 2.4944*               | 0.895      | 0.006 |
|                    | Middle East                                  | Asia Pacific                                 | -0.2552               | 0.692      | 0.713 |
|                    |  | Europe                                       | -1.5996               | 0.827      | 0.056 |
|                    |  | North America and Australia                  | 0.6782                | 0.876      | 0.441 |
|                    |  | Africa                                       | 0.8948                | 0.801      | 0.266 |
|                    | North America and Australia                  | Asia Pacific                                 | -0.9333               | 0.85       | 0.275 |
|                    |  | Europe                                       | -2.2778               | 0.963      | 0.02  |
|                    |  | Middle East                                  | -0.6782               | 0.876      | 0.441 |
|                    |  | Africa                                       | 0.2167                | 0.941      | 0.818 |
|                    | Africa                                       | Asia Pacific                                 | -1.15                 | 0.772      | 0.139 |
|                    |  | Europe                                       | -2.4944*              | 0.895      | 0.006 |
|                    |  | Middle East                                  | -0.8948               | 0.801      | 0.266 |
|                    |  | North America and Australia                  | -0.2167               | 0.941      | 0.818 |
| <b>E</b>           | Asia Pacific                                 | Europe                                       | -0.9651               | 0.948      | 0.311 |
|                    |  | Middle East                                  | 0.533                 | 0.821      | 0.518 |
|                    |  | North America and Australia                  | -0.2095               | 1.009      | 0.836 |
|                    |  | Africa                                       | 0.2571                | 0.916      | 0.78  |
|                    | Europe                                       | Asia Pacific                                 | 0.9651                | 0.948      | 0.311 |
|                    |  | Middle East                                  | 1.4981                | 0.981      | 0.13  |
|                    |  | North America and Australia                  | 0.7556                | 1.143      | 0.51  |
|                    |  | Africa                                       | 1.2222                | 1.062      | 0.252 |
|                    | Middle East                                  | Asia Pacific                                 | -0.533                | 0.821      | 0.518 |
|                    |  | Europe                                       | -1.4981               | 0.981      | 0.13  |
|                    |  | North America and Australia                  | -0.7425               | 1.04       | 0.477 |
|                    |  | Africa                                       | -0.2759               | 0.95       | 0.772 |
|                    | North America and Australia                  | Asia Pacific                                 | 0.2095                | 1.009      | 0.836 |
|                    |  | Europe                                       | -0.7556               | 1.143      | 0.51  |
|                    |  | Middle East                                  | 0.7425                | 1.04       | 0.477 |
|                    |  | Africa                                       | 0.4667                | 1.117      | 0.677 |
|                    | Africa                                       | Asia Pacific                                 | -0.2571               | 0.916      | 0.78  |
|                    |  | Europe                                       | -1.2222               | 1.062      | 0.252 |
|                    |  | Middle East                                  | 0.2759                | 0.95       | 0.772 |
|                    |  | North America and Australia                  | -0.4667               | 1.117      | 0.677 |
| <b>F</b>           | Asia Pacific                                 | Europe                                       | -0.1873               | 0.861      | 0.828 |
|                    |  | Middle East                                  | -0.467                | 0.746      | 0.532 |
|                    |  | North America and Australia                  | 0.1238                | 0.916      | 0.893 |
|                    |  | Africa                                       | 0.1071                | 0.832      | 0.898 |
|                    | Europe                                       | Asia Pacific                                 | 0.1873                | 0.861      | 0.828 |
|                    |  | Middle East                                  | -0.2797               | 0.891      | 0.754 |
|                    |  | North America and Australia                  | 0.3111                | 1.038      | 0.765 |
|                    |  | Africa                                       | 0.2944                | 0.965      | 0.761 |
|                    | Middle East                                  | Asia Pacific                                 | 0.467                 | 0.746      | 0.532 |
|                    |  | Europe                                       | 0.2797                | 0.891      | 0.754 |
|                    |  | North America and Australia                  | 0.5908                | 0.944      | 0.533 |
|                    |  | Africa                                       | 0.5741                | 0.863      | 0.507 |

| Dependent Variable | (I) Country Where Respondent Currently Works | (J) Country Where Respondent Currently Works | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>F</b>           | North America and Australia                  | Asia Pacific                                 | -0.1238               | 0.916      | 0.893 |
|                    |  | Europe                                       | -0.3111               | 1.038      | 0.765 |
|                    |  | Middle East                                  | -0.5908               | 0.944      | 0.533 |
|                    |  | Africa                                       | -1.67E-02             | 1.014      | 0.987 |
|                    | Africa                                       | Asia Pacific                                 | -0.1071               | 0.832      | 0.898 |
|                    |  | Europe                                       | -0.2944               | 0.965      | 0.761 |
|                    |  | Middle East                                  | -0.5741               | 0.863      | 0.507 |
|                    |  | North America and Australia                  | 1.67E-02              | 1.014      | 0.987 |
| <b>G</b>           | Asia Pacific                                 | Europe                                       | 0.2873                | 0.776      | 0.712 |
|                    |  | Middle East                                  | -1.0709               | 0.672      | 0.114 |
|                    |  | North America and Australia                  | -1.3238               | 0.826      | 0.112 |
|                    |  | Africa                                       | -2.1071*              | 0.75       | 0.006 |
|                    | Europe                                       | Asia Pacific                                 | -0.2873               | 0.776      | 0.712 |
|                    |  | Middle East                                  | -1.3582               | 0.803      | 0.094 |
|                    |  | North America and Australia                  | -1.6111               | 0.936      | 0.088 |
|                    |  | Africa                                       | -2.3944*              | 0.869      | 0.007 |
|                    | Middle East                                  | Asia Pacific                                 | 1.0709                | 0.672      | 0.114 |
|                    |  | Europe                                       | 1.3582                | 0.803      | 0.094 |
|                    |  | North America and Australia                  | -0.2529               | 0.851      | 0.767 |
|                    |  | Africa                                       | -1.0362               | 0.778      | 0.186 |
|                    | North America and Australia                  | Asia Pacific                                 | 1.3238                | 0.826      | 0.112 |
|                    |  | Europe                                       | 1.6111                | 0.936      | 0.088 |
|                    |  | Middle East                                  | 0.2529                | 0.851      | 0.767 |
|                    |  | Africa                                       | -0.7833               | 0.914      | 0.393 |
|                    | Africa                                       | Asia Pacific                                 | 2.1071*               | 0.75       | 0.006 |
|                    |  | Europe                                       | 2.3944*               | 0.869      | 0.007 |
|                    |  | Middle East                                  | 1.0362                | 0.778      | 0.186 |
|                    |  | North America and Australia                  | 0.7833                | 0.914      | 0.393 |
| <b>H</b>           | Asia Pacific                                 | Europe                                       | 1.6683                | 0.908      | 0.069 |
|                    |  | Middle East                                  | 0.5744                | 0.786      | 0.467 |
|                    |  | North America and Australia                  | 1.5238                | 0.966      | 0.118 |
|                    |  | Africa                                       | 0.4571                | 0.878      | 0.603 |
|                    | Europe                                       | Asia Pacific                                 | -1.6683               | 0.908      | 0.069 |
|                    |  | Middle East                                  | -1.0939               | 0.939      | 0.247 |
|                    |  | North America and Australia                  | -0.1444               | 1.095      | 0.895 |
|                    |  | Africa                                       | -1.2111               | 1.017      | 0.236 |
|                    | Middle East                                  | Asia Pacific                                 | -0.5744               | 0.786      | 0.467 |
|                    |  | Europe                                       | 1.0939                | 0.939      | 0.247 |
|                    |  | North America and Australia                  | 0.9494                | 0.996      | 0.342 |
|                    |  | Africa                                       | -0.1172               | 0.91       | 0.898 |
|                    | North America and Australia                  | Asia Pacific                                 | -1.5238               | 0.966      | 0.118 |
|                    |  | Europe                                       | 0.1444                | 1.095      | 0.895 |
|                    |  | Middle East                                  | -0.9494               | 0.996      | 0.342 |
|                    |  | Africa                                       | -1.0667               | 1.069      | 0.321 |
|                    | Africa                                       | Asia Pacific                                 | -0.4571               | 0.878      | 0.603 |
|                    |  | Europe                                       | 1.2111                | 1.017      | 0.236 |
|                    |  | Middle East                                  | 0.1172                | 0.91       | 0.898 |
|                    |  | North America and Australia                  | 1.0667                | 1.069      | 0.321 |
| <b>I</b>           | Asia Pacific                                 | Europe                                       | 0.2841                | 0.81       | 0.726 |
|                    |  | Middle East                                  | -0.9438               | 0.701      | 0.181 |
|                    |  | North America and Australia                  | 2.86E-02              | 0.861      | 0.974 |
|                    |  | Africa                                       | -1.2714               | 0.782      | 0.107 |

| Dependent Variable | (I) Country Where Respondent Currently Works | (J) Country Where Respondent Currently Works | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>I</b>           | Europe                                       | Asia Pacific                                 | -0.2841               | 0.81       | 0.726 |
|                    |  | Middle East                                  | -1.228                | 0.838      | 0.145 |
|                    |  | North America and Australia                  | -0.2556               | 0.976      | 0.794 |
|                    |  | Africa                                       | -1.5556               | 0.907      | 0.089 |
|                    | Middle East                                  | Asia Pacific                                 | 0.9438                | 0.701      | 0.181 |
|                    |  | Europe                                       | 1.228                 | 0.838      | 0.145 |
|                    |  | North America and Australia                  | 0.9724                | 0.888      | 0.276 |
|                    |  | Africa                                       | -0.3276               | 0.811      | 0.687 |
|                    | North America and Australia                  | Asia Pacific                                 | -2.86E-02             | 0.861      | 0.974 |
|                    |  | Europe                                       | 0.2556                | 0.976      | 0.794 |
|                    |  | Middle East                                  | -0.9724               | 0.888      | 0.276 |
|                    |  | Africa                                       | -1.3                  | 0.953      | 0.175 |
|                    | Africa                                       | Asia Pacific                                 | 1.2714                | 0.782      | 0.107 |
|                    |  | Europe                                       | 1.5556                | 0.907      | 0.089 |
|                    |  | Middle East                                  | 0.3276                | 0.811      | 0.687 |
|                    |  | North America and Australia                  | 1.3                   | 0.953      | 0.175 |
| <b>J</b>           | Asia Pacific                                 | Europe                                       | -0.4127               | 0.822      | 0.616 |
|                    |  | Middle East                                  | 0.2118                | 0.711      | 0.766 |
|                    |  | North America and Australia                  | -1.5238               | 0.874      | 0.084 |
|                    |  | Africa                                       | 0.5429                | 0.794      | 0.496 |
|                    | Europe                                       | Asia Pacific                                 | 0.4127                | 0.822      | 0.616 |
|                    |  | Middle East                                  | 0.6245                | 0.85       | 0.464 |
|                    |  | North America and Australia                  | -1.1111               | 0.99       | 0.264 |
|                    |  | Africa                                       | 0.9556                | 0.92       | 0.301 |
|                    | Middle East                                  | Asia Pacific                                 | -0.2118               | 0.711      | 0.766 |
|                    |  | Europe                                       | -0.6245               | 0.85       | 0.464 |
|                    |  | North America and Australia                  | -1.7356               | 0.901      | 0.057 |
|                    |  | Africa                                       | 0.331                 | 0.823      | 0.688 |
|                    | North America and Australia                  | Asia Pacific                                 | 1.5238                | 0.874      | 0.084 |
|                    |  | Europe                                       | 1.1111                | 0.99       | 0.264 |
|                    |  | Middle East                                  | 1.7356                | 0.901      | 0.057 |
|                    |  | Africa                                       | 2.0667                | 0.968      | 0.035 |
|                    | Africa                                       | Asia Pacific                                 | -0.5429               | 0.794      | 0.496 |
|                    |  | Europe                                       | -0.9556               | 0.92       | 0.301 |
|                    |  | Middle East                                  | -0.331                | 0.823      | 0.688 |
|                    |  | North America and Australia                  | -2.0667               | 0.968      | 0.035 |
| <b>K</b>           | Asia Pacific                                 | Europe                                       | 0.7794                | 0.838      | 0.355 |
|                    |  | Middle East                                  | 2.27E-02              | 0.726      | 0.975 |
|                    |  | North America and Australia                  | 0.5905                | 0.892      | 0.509 |
|                    |  | Africa                                       | -4.29E-02             | 0.81       | 0.958 |
|                    | Europe                                       | Asia Pacific                                 | -0.7794               | 0.838      | 0.355 |
|                    |  | Middle East                                  | -0.7567               | 0.867      | 0.385 |
|                    |  | North America and Australia                  | -0.1889               | 1.011      | 0.852 |
|                    |  | Africa                                       | -0.8222               | 0.939      | 0.383 |
|                    | Middle East                                  | Asia Pacific                                 | -2.27E-02             | 0.726      | 0.975 |
|                    |  | Europe                                       | 0.7567                | 0.867      | 0.385 |
|                    |  | North America and Australia                  | 0.5678                | 0.919      | 0.538 |
|                    |  | Africa                                       | -6.55E-02             | 0.84       | 0.938 |
|                    | North America and Australia                  | Asia Pacific                                 | -0.5905               | 0.892      | 0.509 |
|                    |  | Europe                                       | 0.1889                | 1.011      | 0.852 |
|                    |  | Middle East                                  | -0.5678               | 0.919      | 0.538 |
|                    |  | Africa                                       | -0.6333               | 0.987      | 0.523 |

| Dependent Variable | (I) Country Where Respondent Currently Works | (J) Country Where Respondent Currently Works | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>K</b>           | Africa                                       | Asia Pacific                                 | 4.29E-02              | 0.81       | 0.958 |
|                    |  | Europe                                       | 0.8222                | 0.939      | 0.383 |
|                    |  | Middle East                                  | 6.55E-02              | 0.84       | 0.938 |
|                    |  | North America and Australia                  | 0.6333                | 0.987      | 0.523 |
| <b>L</b>           | Asia Pacific                                 | Europe                                       | -1.0222               | 0.801      | 0.204 |
|                    |  | Middle East                                  | -0.3517               | 0.693      | 0.613 |
|                    |  | North America and Australia                  | 0.4667                | 0.852      | 0.585 |
|                    |  | Africa                                       | -1.15                 | 0.774      | 0.14  |
|                    | Europe                                       | Asia Pacific                                 | 1.0222                | 0.801      | 0.204 |
|                    |  | Middle East                                  | 0.6705                | 0.828      | 0.42  |
|                    |  | North America and Australia                  | 1.4889                | 0.965      | 0.126 |
|                    |  | Africa                                       | -0.1278               | 0.897      | 0.887 |
|                    | Middle East                                  | Asia Pacific                                 | 0.3517                | 0.693      | 0.613 |
|                    |  | Europe                                       | -0.6705               | 0.828      | 0.42  |
|                    |  | North America and Australia                  | 0.8184                | 0.878      | 0.353 |
|                    |  | Africa                                       | -0.7983               | 0.802      | 0.322 |
|                    | North America and Australia                  | Asia Pacific                                 | -0.4667               | 0.852      | 0.585 |
|                    |  | Europe                                       | -1.4889               | 0.965      | 0.126 |
|                    |  | Middle East                                  | -0.8184               | 0.878      | 0.353 |
|                    |  | Africa                                       | -1.6167               | 0.943      | 0.089 |
|                    | Africa                                       | Asia Pacific                                 | 1.15                  | 0.774      | 0.14  |
|                    |  | Europe                                       | 0.1278                | 0.897      | 0.887 |
|                    |  | Middle East                                  | 0.7983                | 0.802      | 0.322 |
|                    |  | North America and Australia                  | 1.6167                | 0.943      | 0.089 |

\*The mean difference is significant at P=0.01

**Table A5-5. Significant Differences based on Regional Posting**

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>A</b>           | None   | 1 different country                                  | 7.39E-02              | 0.994      | 0.941 |
|                    |  | 2 different countries                                | -1.1578               | 0.977      | 0.239 |
|                    |  | 3 different countries                                | 1.2416                | 0.948      | 0.193 |
|                    |  | 4 different countries                                | 0.3864                | 1.086      | 0.723 |
|                    |  | 5 different countries                                | -0.3636               | 0.994      | 0.715 |
|                    |  | 6 or more different countries                        | -1.081                | 0.903      | 0.233 |
|                    | 1 different country                                  | None   | -7.39E-02             | 0.994      | 0.941 |
|                    |  | 2 different countries                                | -1.2316               | 1.054      | 0.245 |
|                    |  | 3 different countries                                | 1.1678                | 1.027      | 0.258 |
|                    |  | 4 different countries                                | 0.3125                | 1.156      | 0.787 |
|                    |  | 5 different countries                                | -0.4375               | 1.07       | 0.683 |
|                    |  | 6 or more different countries                        | -1.1549               | 0.985      | 0.244 |
|                    | 2 different countries                                | None   | 1.1578                | 0.977      | 0.239 |
|                    |  | 1 different country                                  | 1.2316                | 1.054      | 0.245 |
|                    |  | 3 different countries                                | 2.3994                | 1.01       | 0.019 |
|                    |  | 4 different countries                                | 1.5441                | 1.141      | 0.179 |
|                    |  | 5 different countries                                | 0.7941                | 1.054      | 0.453 |
|                    |  | 6 or more different countries                        | 7.67E-02              | 0.968      | 0.937 |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| A                  | 3 different countries                                | None   | -1.2416               | 0.948      | 0.193 |
|                    |  | 1 different country                                  | -1.1678               | 1.027      | 0.258 |
|                    |  | 2 different countries                                | -2.3994               | 1.01       | 0.019 |
|                    |  | 4 different countries                                | -0.8553               | 1.116      | 0.445 |
|                    |  | 5 different countries                                | -1.6053               | 1.027      | 0.121 |
|                    |  | 6 or more different countries                        | -2.3227               | 0.938      | 0.015 |
|                    | 4 different countries                                | None   | -0.3864               | 1.086      | 0.723 |
|                    |  | 1 different country                                  | -0.3125               | 1.156      | 0.787 |
|                    |  | 2 different countries                                | -1.5441               | 1.141      | 0.179 |
|                    |  | 3 different countries                                | 0.8553                | 1.116      | 0.445 |
|                    |  | 5 different countries                                | -0.75                 | 1.156      | 0.518 |
|                    |  | 6 or more different countries                        | -1.4674               | 1.078      | 0.176 |
|                    | 5 different countries                                | None   | 0.3636                | 0.994      | 0.715 |
|                    |  | 1 different country                                  | 0.4375                | 1.07       | 0.683 |
|                    |  | 2 different countries                                | -0.7941               | 1.054      | 0.453 |
|                    |  | 3 different countries                                | 1.6053                | 1.027      | 0.121 |
|                    |  | 4 different countries                                | 0.75                  | 1.156      | 0.518 |
|                    |  | 6 or more different countries                        | -0.7174               | 0.985      | 0.468 |
|                    | 6 or more different countries                        | None   | 1.081                 | 0.903      | 0.233 |
|                    |  | 1 different country                                  | 1.1549                | 0.985      | 0.244 |
|                    |  | 2 different countries                                | -7.67E-02             | 0.968      | 0.937 |
|                    |  | 3 different countries                                | 2.3227                | 0.938      | 0.015 |
|                    |  | 4 different countries                                | 1.4674                | 1.078      | 0.176 |
|                    |  | 5 different countries                                | 0.7174                | 0.985      | 0.468 |
| B                  | None   | 1 different country                                  | -0.4318               | 1.087      | 0.692 |
|                    |  | 2 different countries                                | -0.8583               | 1.068      | 0.423 |
|                    |  | 3 different countries                                | -1.2608               | 1.036      | 0.226 |
|                    |  | 4 different countries                                | -0.3485               | 1.187      | 0.77  |
|                    |  | 5 different countries                                | -0.8068               | 1.087      | 0.459 |
|                    |  | 6 or more different countries                        | 0.1443                | 0.986      | 0.884 |
|                    | 1 different country                                  | None   | 0.4318                | 1.087      | 0.692 |
|                    |  | 2 different countries                                | -0.4265               | 1.152      | 0.712 |
|                    |  | 3 different countries                                | -0.8289               | 1.122      | 0.462 |
|                    |  | 4 different countries                                | 8.33E-02              | 1.263      | 0.948 |
|                    |  | 5 different countries                                | -0.375                | 1.169      | 0.749 |
|                    |  | 6 or more different countries                        | 0.5761                | 1.077      | 0.594 |
|                    | 2 different countries                                | None   | 0.8583                | 1.068      | 0.423 |
|                    |  | 1 different country                                  | 0.4265                | 1.152      | 0.712 |
|                    |  | 3 different countries                                | -0.4025               | 1.104      | 0.716 |
|                    |  | 4 different countries                                | 0.5098                | 1.247      | 0.683 |
|                    |  | 5 different countries                                | 5.15E-02              | 1.152      | 0.964 |
|                    |  | 6 or more different countries                        | 1.0026                | 1.058      | 0.345 |
|                    | 3 different countries                                | None   | 1.2608                | 1.036      | 0.226 |
|                    |  | 1 different country                                  | 0.8289                | 1.122      | 0.462 |
|                    |  | 2 different countries                                | 0.4025                | 1.104      | 0.716 |
|                    |  | 4 different countries                                | 0.9123                | 1.219      | 0.456 |
|                    |  | 5 different countries                                | 0.4539                | 1.122      | 0.687 |
|                    |  | 6 or more different countries                        | 1.405                 | 1.025      | 0.173 |
|                    | 4 different countries                                | None   | 0.3485                | 1.187      | 0.77  |
|                    |  | 1 different country                                  | -8.33E-02             | 1.263      | 0.948 |
|                    |  | 2 different countries                                | -0.5098               | 1.247      | 0.683 |
|                    |  | 3 different countries                                | -0.9123               | 1.219      | 0.456 |
|                    |  | 5 different countries                                | -0.4583               | 1.263      | 0.717 |
|                    |  | 6 or more different countries                        | 0.4928                | 1.178      | 0.676 |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>B</b>           | 5 different countries                                | None   | 0.8068                | 1.087      | 0.459 |
|                    |  | 1 different country                                  | 0.375                 | 1.169      | 0.749 |
|                    |  | 2 different countries                                | -5.15E-02             | 1.152      | 0.964 |
|                    |  | 3 different countries                                | -0.4539               | 1.122      | 0.687 |
|                    |  | 4 different countries                                | 0.4583                | 1.263      | 0.717 |
|                    |  | 6 or more different countries                        | 0.9511                | 1.077      | 0.379 |
|                    | 6 or more different countries                        | None   | -0.1443               | 0.986      | 0.884 |
|                    |  | 1 different country                                  | -0.5761               | 1.077      | 0.594 |
|                    |  | 2 different countries                                | -1.0026               | 1.058      | 0.345 |
|                    |  | 3 different countries                                | -1.405                | 1.025      | 0.173 |
|                    |  | 4 different countries                                | -0.4928               | 1.178      | 0.676 |
|                    |  | 5 different countries                                | -0.9511               | 1.077      | 0.379 |
| <b>C</b>           | None   | 1 different country                                  | -0.358                | 0.915      | 0.696 |
|                    |  | 2 different countries                                | -0.2219               | 0.899      | 0.806 |
|                    |  | 3 different countries                                | 0.7967                | 0.872      | 0.363 |
|                    |  | 4 different countries                                | 0.2045                | 0.999      | 0.838 |
|                    |  | 5 different countries                                | 0.3295                | 0.915      | 0.719 |
|                    |  | 6 or more different countries                        | -0.5237               | 0.83       | 0.53  |
|                    | 1 different country                                  | None   | 0.358                 | 0.915      | 0.696 |
|                    |  | 2 different countries                                | 0.136                 | 0.97       | 0.889 |
|                    |  | 3 different countries                                | 1.1546                | 0.945      | 0.224 |
|                    |  | 4 different countries                                | 0.5625                | 1.063      | 0.598 |
|                    |  | 5 different countries                                | 0.6875                | 0.985      | 0.486 |
|                    |  | 6 or more different countries                        | -0.1658               | 0.907      | 0.855 |
|                    | 2 different countries                                | None   | 0.2219                | 0.899      | 0.806 |
|                    |  | 1 different country                                  | -0.136                | 0.97       | 0.889 |
|                    |  | 3 different countries                                | 1.0186                | 0.93       | 0.275 |
|                    |  | 4 different countries                                | 0.4265                | 1.05       | 0.685 |
|                    |  | 5 different countries                                | 0.5515                | 0.97       | 0.571 |
|                    |  | 6 or more different countries                        | -0.3018               | 0.891      | 0.735 |
|                    | 3 different countries                                | None   | -0.7967               | 0.872      | 0.363 |
|                    |  | 1 different country                                  | -1.1546               | 0.945      | 0.224 |
|                    |  | 2 different countries                                | -1.0186               | 0.93       | 0.275 |
|                    |  | 4 different countries                                | -0.5921               | 1.027      | 0.565 |
|                    |  | 5 different countries                                | -0.4671               | 0.945      | 0.622 |
|                    |  | 6 or more different countries                        | -1.3204               | 0.863      | 0.129 |
|                    | 4 different countries                                | None   | -0.2045               | 0.999      | 0.838 |
|                    |  | 1 different country                                  | -0.5625               | 1.063      | 0.598 |
|                    |  | 2 different countries                                | -0.4265               | 1.05       | 0.685 |
|                    |  | 3 different countries                                | 0.5921                | 1.027      | 0.565 |
|                    |  | 5 different countries                                | 0.125                 | 1.063      | 0.907 |
|                    |  | 6 or more different countries                        | -0.7283               | 0.992      | 0.464 |
|                    | 5 different countries                                | None   | -0.3295               | 0.915      | 0.719 |
|                    |  | 1 different country                                  | -0.6875               | 0.985      | 0.486 |
|                    |  | 2 different countries                                | -0.5515               | 0.97       | 0.571 |
|                    |  | 3 different countries                                | 0.4671                | 0.945      | 0.622 |
|                    |  | 4 different countries                                | -0.125                | 1.063      | 0.907 |
|                    |  | 6 or more different countries                        | -0.8533               | 0.907      | 0.349 |
|                    | 6 or more different countries                        | None   | 0.5237                | 0.83       | 0.53  |
|                    |  | 1 different country                                  | 0.1658                | 0.907      | 0.855 |
|                    |  | 2 different countries                                | 0.3018                | 0.891      | 0.735 |
|                    |  | 3 different countries                                | 1.3204                | 0.863      | 0.129 |
|                    |  | 4 different countries                                | 0.7283                | 0.992      | 0.464 |
|                    |  | 5 different countries                                | 0.8533                | 0.907      | 0.349 |



| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>D</b>           | None   | 1 different country                                  | -1.4716               | 0.912      | 0.109 |
|                    |  | 2 different countries                                | -0.4091               | 0.897      | 0.649 |
|                    |  | 3 different countries                                | -0.6722               | 0.87       | 0.441 |
|                    |  | 4 different countries                                | -1.4091               | 0.996      | 0.16  |
|                    |  | 5 different countries                                | -1.7841               | 0.912      | 0.053 |
|                    |  | 6 or more different countries                        | -1.1917               | 0.828      | 0.153 |
|                    | 1 different country                                  | None   | 1.4716                | 0.912      | 0.109 |
|                    |  | 2 different countries                                | 1.0625                | 0.967      | 0.274 |
|                    |  | 3 different countries                                | 0.7993                | 0.942      | 0.398 |
|                    |  | 4 different countries                                | 6.25E-02              | 1.06       | 0.953 |
|                    |  | 5 different countries                                | -0.3125               | 0.982      | 0.751 |
|                    |  | 6 or more different countries                        | 0.2799                | 0.904      | 0.757 |
|                    | 2 different countries                                | None   | 0.4091                | 0.897      | 0.649 |
|                    |  | 1 different country                                  | -1.0625               | 0.967      | 0.274 |
|                    |  | 3 different countries                                | -0.2632               | 0.927      | 0.777 |
|                    |  | 4 different countries                                | -1                    | 1.047      | 0.341 |
|                    |  | 5 different countries                                | -1.375                | 0.967      | 0.158 |
|                    |  | 6 or more different countries                        | -0.7826               | 0.888      | 0.38  |
|                    | 3 different countries                                | None   | 0.6722                | 0.87       | 0.441 |
|                    |  | 1 different country                                  | -0.7993               | 0.942      | 0.398 |
|                    |  | 2 different countries                                | 0.2632                | 0.927      | 0.777 |
|                    |  | 4 different countries                                | -0.7368               | 1.024      | 0.473 |
|                    |  | 5 different countries                                | -1.1118               | 0.942      | 0.24  |
|                    |  | 6 or more different countries                        | -0.5195               | 0.861      | 0.547 |
|                    | 4 different countries                                | None   | 1.4091                | 0.996      | 0.16  |
|                    |  | 1 different country                                  | -6.25E-02             | 1.06       | 0.953 |
|                    |  | 2 different countries                                | 1                     | 1.047      | 0.341 |
|                    |  | 3 different countries                                | 0.7368                | 1.024      | 0.473 |
|                    |  | 5 different countries                                | -0.375                | 1.06       | 0.724 |
|                    |  | 6 or more different countries                        | 0.2174                | 0.989      | 0.826 |
|                    | 5 different countries                                | None   | 1.7841                | 0.912      | 0.053 |
|                    |  | 1 different country                                  | 0.3125                | 0.982      | 0.751 |
|                    |  | 2 different countries                                | 1.375                 | 0.967      | 0.158 |
|                    |  | 3 different countries                                | 1.1118                | 0.942      | 0.24  |
|                    |  | 4 different countries                                | 0.375                 | 1.06       | 0.724 |
|                    |  | 6 or more different countries                        | 0.5924                | 0.904      | 0.513 |
|                    | 6 or more different countries                        | None   | 1.1917                | 0.828      | 0.153 |
|                    |  | 1 different country                                  | -0.2799               | 0.904      | 0.757 |
|                    |  | 2 different countries                                | 0.7826                | 0.888      | 0.38  |
|                    |  | 3 different countries                                | 0.5195                | 0.861      | 0.547 |
|                    |  | 4 different countries                                | -0.2174               | 0.989      | 0.826 |
|                    |  | 5 different countries                                | -0.5924               | 0.904      | 0.513 |
| <b>E</b>           | None   | 1 different country                                  | 0.2102                | 1.068      | 0.844 |
|                    |  | 2 different countries                                | 0.7727                | 1.05       | 0.463 |
|                    |  | 3 different countries                                | 0.5096                | 1.018      | 0.618 |
|                    |  | 4 different countries                                | 0.4394                | 1.167      | 0.707 |
|                    |  | 5 different countries                                | 1.2727                | 1.068      | 0.236 |
|                    |  | 6 or more different countries                        | 0.3379                | 0.97       | 0.728 |
|                    | 1 different country                                  | None   | -0.2102               | 1.068      | 0.844 |
|                    |  | 2 different countries                                | 0.5625                | 1.133      | 0.62  |
|                    |  | 3 different countries                                | 0.2993                | 1.103      | 0.787 |
|                    |  | 4 different countries                                | 0.2292                | 1.242      | 0.854 |
|                    |  | 5 different countries                                | 1.0625                | 1.15       | 0.357 |
|                    |  | 6 or more different countries                        | 0.1277                | 1.059      | 0.904 |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| E                  | 2 different countries                                | None   | -0.7727               | 1.05       | 0.463 |
|                    |  | 1 different country                                  | -0.5625               | 1.133      | 0.62  |
|                    |  | 3 different countries                                | -0.2632               | 1.086      | 0.809 |
|                    |  | 4 different countries                                | -0.3333               | 1.226      | 0.786 |
|                    |  | 5 different countries                                | 0.5                   | 1.133      | 0.66  |
|                    |  | 6 or more different countries                        | -0.4348               | 1.04       | 0.677 |
|                    | 3 different countries                                | None   | -0.5096               | 1.018      | 0.618 |
|                    |  | 1 different country                                  | -0.2993               | 1.103      | 0.787 |
|                    |  | 2 different countries                                | 0.2632                | 1.086      | 0.809 |
|                    |  | 4 different countries                                | -7.02E-02             | 1.199      | 0.953 |
|                    |  | 5 different countries                                | 0.7632                | 1.103      | 0.491 |
|                    |  | 6 or more different countries                        | -0.1716               | 1.008      | 0.865 |
|                    | 4 different countries                                | None   | -0.4394               | 1.167      | 0.707 |
|                    |  | 1 different country                                  | -0.2292               | 1.242      | 0.854 |
|                    |  | 2 different countries                                | 0.3333                | 1.226      | 0.786 |
|                    |  | 3 different countries                                | 7.02E-02              | 1.199      | 0.953 |
|                    |  | 5 different countries                                | 0.8333                | 1.242      | 0.503 |
|                    |  | 6 or more different countries                        | -0.1014               | 1.158      | 0.93  |
|                    | 5 different countries                                | None   | -1.2727               | 1.068      | 0.236 |
|                    |  | 1 different country                                  | -1.0625               | 1.15       | 0.357 |
|                    |  | 2 different countries                                | -0.5                  | 1.133      | 0.66  |
|                    |  | 3 different countries                                | -0.7632               | 1.103      | 0.491 |
|                    |  | 4 different countries                                | -0.8333               | 1.242      | 0.503 |
|                    |  | 6 or more different countries                        | -0.9348               | 1.059      | 0.379 |
|                    | 6 or more different countries                        | None   | -0.3379               | 0.97       | 0.728 |
|                    |  | 1 different country                                  | -0.1277               | 1.059      | 0.904 |
|                    |  | 2 different countries                                | 0.4348                | 1.04       | 0.677 |
|                    |  | 3 different countries                                | 0.1716                | 1.008      | 0.865 |
|                    |  | 4 different countries                                | 0.1014                | 1.158      | 0.93  |
|                    |  | 5 different countries                                | 0.9348                | 1.059      | 0.379 |
| F                  | None   | 1 different country                                  | -0.6477               | 0.974      | 0.507 |
|                    |  | 2 different countries                                | 0.2567                | 0.957      | 0.789 |
|                    |  | 3 different countries                                | 0.8325                | 0.928      | 0.372 |
|                    |  | 4 different countries                                | 0.5606                | 1.063      | 0.599 |
|                    |  | 5 different countries                                | 0.9773                | 0.974      | 0.318 |
|                    |  | 6 or more different countries                        | 0.336                 | 0.884      | 0.705 |
|                    | 1 different country                                  | None   | 0.6477                | 0.974      | 0.507 |
|                    |  | 2 different countries                                | 0.9044                | 1.032      | 0.383 |
|                    |  | 3 different countries                                | 1.4803                | 1.006      | 0.144 |
|                    |  | 4 different countries                                | 1.2083                | 1.132      | 0.288 |
|                    |  | 5 different countries                                | 1.625                 | 1.048      | 0.124 |
|                    |  | 6 or more different countries                        | 0.9837                | 0.965      | 0.31  |
|                    | 2 different countries                                | None   | -0.2567               | 0.957      | 0.789 |
|                    |  | 1 different country                                  | -0.9044               | 1.032      | 0.383 |
|                    |  | 3 different countries                                | 0.5759                | 0.989      | 0.562 |
|                    |  | 4 different countries                                | 0.3039                | 1.117      | 0.786 |
|                    |  | 5 different countries                                | 0.7206                | 1.032      | 0.486 |
|                    |  | 6 or more different countries                        | 7.93E-02              | 0.948      | 0.933 |
|                    | 3 different countries                                | None   | -0.8325               | 0.928      | 0.372 |
|                    |  | 1 different country                                  | -1.4803               | 1.006      | 0.144 |
|                    |  | 2 different countries                                | -0.5759               | 0.989      | 0.562 |
|                    |  | 4 different countries                                | -0.2719               | 1.093      | 0.804 |
|                    |  | 5 different countries                                | 0.1447                | 1.006      | 0.886 |
|                    |  | 6 or more different countries                        | -0.4966               | 0.919      | 0.59  |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| F                  | 4 different countries                                | None   | -0.5606               | 1.063      | 0.599 |
|                    |  | 1 different country                                  | -1.2083               | 1.132      | 0.288 |
|                    |  | 2 different countries                                | -0.3039               | 1.117      | 0.786 |
|                    |  | 3 different countries                                | 0.2719                | 1.093      | 0.804 |
|                    |  | 5 different countries                                | 0.4167                | 1.132      | 0.713 |
|                    |  | 6 or more different countries                        | -0.2246               | 1.055      | 0.832 |
|                    | 5 different countries                                | None   | -0.9773               | 0.974      | 0.318 |
|                    |  | 1 different country                                  | -1.625                | 1.048      | 0.124 |
|                    |  | 2 different countries                                | -0.7206               | 1.032      | 0.486 |
|                    |  | 3 different countries                                | -0.1447               | 1.006      | 0.886 |
|                    |  | 4 different countries                                | -0.4167               | 1.132      | 0.713 |
|                    |  | 6 or more different countries                        | -0.6413               | 0.965      | 0.508 |
|                    | 6 or more different countries                        | None   | -0.336                | 0.884      | 0.705 |
|                    |  | 1 different country                                  | -0.9837               | 0.965      | 0.31  |
|                    |  | 2 different countries                                | -7.93E-02             | 0.948      | 0.933 |
|                    |  | 3 different countries                                | 0.4966                | 0.919      | 0.59  |
|                    |  | 4 different countries                                | 0.2246                | 1.055      | 0.832 |
|                    |  | 5 different countries                                | 0.6413                | 0.965      | 0.508 |
| G                  | None   | 1 different country                                  | -0.1875               | 0.921      | 0.839 |
|                    |  | 2 different countries                                | -0.1176               | 0.905      | 0.897 |
|                    |  | 3 different countries                                | -0.6316               | 0.877      | 0.473 |
|                    |  | 4 different countries                                | 0.9167                | 1.005      | 0.364 |
|                    |  | 5 different countries                                | -1.25                 | 0.921      | 0.177 |
|                    |  | 6 or more different countries                        | 0.5217                | 0.836      | 0.534 |
|                    | 1 different country                                  | None   | 0.1875                | 0.921      | 0.839 |
|                    |  | 2 different countries                                | 6.99E-02              | 0.976      | 0.943 |
|                    |  | 3 different countries                                | -0.4441               | 0.951      | 0.641 |
|                    |  | 4 different countries                                | 1.1042                | 1.07       | 0.304 |
|                    |  | 5 different countries                                | -1.0625               | 0.991      | 0.286 |
|                    |  | 6 or more different countries                        | 0.7092                | 0.912      | 0.438 |
|                    | 2 different countries                                | None   | 0.1176                | 0.905      | 0.897 |
|                    |  | 1 different country                                  | -6.99E-02             | 0.976      | 0.943 |
|                    |  | 3 different countries                                | -0.5139               | 0.935      | 0.584 |
|                    |  | 4 different countries                                | 1.0343                | 1.056      | 0.33  |
|                    |  | 5 different countries                                | -1.1324               | 0.976      | 0.248 |
|                    |  | 6 or more different countries                        | 0.6394                | 0.896      | 0.477 |
|                    | 3 different countries                                | None   | 0.6316                | 0.877      | 0.473 |
|                    |  | 1 different country                                  | 0.4441                | 0.951      | 0.641 |
|                    |  | 2 different countries                                | 0.5139                | 0.935      | 0.584 |
|                    |  | 4 different countries                                | 1.5482                | 1.033      | 0.137 |
|                    |  | 5 different countries                                | -0.6184               | 0.951      | 0.517 |
|                    |  | 6 or more different countries                        | 1.1533                | 0.869      | 0.187 |
|                    | 4 different countries                                | None   | -0.9167               | 1.005      | 0.364 |
|                    |  | 1 different country                                  | -1.1042               | 1.07       | 0.304 |
|                    |  | 2 different countries                                | -1.0343               | 1.056      | 0.33  |
|                    |  | 3 different countries                                | -1.5482               | 1.033      | 0.137 |
|                    |  | 5 different countries                                | -2.1667               | 1.07       | 0.045 |
|                    |  | 6 or more different countries                        | -0.3949               | 0.998      | 0.693 |
|                    | 5 different countries                                | None   | 1.25                  | 0.921      | 0.177 |
|                    |  | 1 different country                                  | 1.0625                | 0.991      | 0.286 |
|                    |  | 2 different countries                                | 1.1324                | 0.976      | 0.248 |
|                    |  | 3 different countries                                | 0.6184                | 0.951      | 0.517 |
|                    |  | 4 different countries                                | 2.1667                | 1.07       | 0.045 |
|                    |  | 6 or more different countries                        | 1.7717                | 0.912      | 0.054 |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>G</b>           | 6 or more different countries                        | None   | -0.5217               | 0.836      | 0.534 |
|                    |  | 1 different country                                  | -0.7092               | 0.912      | 0.438 |
|                    |  | 2 different countries                                | -0.6394               | 0.896      | 0.477 |
|                    |  | 3 different countries                                | -1.1533               | 0.869      | 0.187 |
|                    |  | 4 different countries                                | 0.3949                | 0.998      | 0.693 |
|                    |  | 5 different countries                                | -1.7717               | 0.912      | 0.054 |
| <b>H</b>           | None   | 1 different country                                  | 1.5455                | 1.012      | 0.13  |
|                    |  | 2 different countries                                | 0.8984                | 0.995      | 0.368 |
|                    |  | 3 different countries                                | -1.3493               | 0.965      | 0.165 |
|                    |  | 4 different countries                                | 0.4621                | 1.106      | 0.677 |
|                    |  | 5 different countries                                | -0.142                | 1.012      | 0.889 |
|                    |  | 6 or more different countries                        | 0.502                 | 0.919      | 0.586 |
|                    | 1 different country                                  | None   | -1.5455               | 1.012      | 0.13  |
|                    |  | 2 different countries                                | -0.6471               | 1.073      | 0.548 |
|                    |  | 3 different countries                                | -2.8947*              | 1.046      | 0.007 |
|                    |  | 4 different countries                                | -1.0833               | 1.177      | 0.359 |
|                    |  | 5 different countries                                | -1.6875               | 1.089      | 0.124 |
|                    |  | 6 or more different countries                        | -1.0435               | 1.003      | 0.3   |
|                    | 2 different countries                                | None   | -0.8984               | 0.995      | 0.368 |
|                    |  | 1 different country                                  | 0.6471                | 1.073      | 0.548 |
|                    |  | 3 different countries                                | -2.2477               | 1.029      | 0.031 |
|                    |  | 4 different countries                                | -0.4363               | 1.162      | 0.708 |
|                    |  | 5 different countries                                | -1.0404               | 1.073      | 0.334 |
|                    |  | 6 or more different countries                        | -0.3964               | 0.986      | 0.688 |
|                    | 3 different countries                                | None   | 1.3493                | 0.965      | 0.165 |
|                    |  | 1 different country                                  | 2.8947*               | 1.046      | 0.007 |
|                    |  | 2 different countries                                | 2.2477                | 1.029      | 0.031 |
|                    |  | 4 different countries                                | 1.8114                | 1.136      | 0.114 |
|                    |  | 5 different countries                                | 1.2072                | 1.046      | 0.251 |
|                    |  | 6 or more different countries                        | 1.8513                | 0.955      | 0.055 |
|                    | 4 different countries                                | None   | -0.4621               | 1.106      | 0.677 |
|                    |  | 1 different country                                  | 1.0833                | 1.177      | 0.359 |
|                    |  | 2 different countries                                | 0.4363                | 1.162      | 0.708 |
|                    |  | 3 different countries                                | -1.8114               | 1.136      | 0.114 |
|                    |  | 5 different countries                                | -0.6042               | 1.177      | 0.609 |
|                    |  | 6 or more different countries                        | 3.99E-02              | 1.097      | 0.971 |
|                    | 5 different countries                                | None   | 0.142                 | 1.012      | 0.889 |
|                    |  | 1 different country                                  | 1.6875                | 1.089      | 0.124 |
|                    |  | 2 different countries                                | 1.0404                | 1.073      | 0.334 |
|                    |  | 3 different countries                                | -1.2072               | 1.046      | 0.251 |
|                    |  | 4 different countries                                | 0.6042                | 1.177      | 0.609 |
|                    |  | 6 or more different countries                        | 0.644                 | 1.003      | 0.522 |
|                    | 6 or more different countries                        | None   | -0.502                | 0.919      | 0.586 |
|                    |  | 1 different country                                  | 1.0435                | 1.003      | 0.3   |
|                    |  | 2 different countries                                | 0.3964                | 0.986      | 0.688 |
|                    |  | 3 different countries                                | -1.8513               | 0.955      | 0.055 |
|                    |  | 4 different countries                                | -3.99E-02             | 1.097      | 0.971 |
|                    |  | 5 different countries                                | -0.644                | 1.003      | 0.522 |
| <b>I</b>           | None   | 1 different country                                  | 4.55E-02              | 0.951      | 0.962 |
|                    |  | 2 different countries                                | 0.2513                | 0.935      | 0.788 |
|                    |  | 3 different countries                                | 0.8086                | 0.906      | 0.374 |
|                    |  | 4 different countries                                | -0.2879               | 1.039      | 0.782 |
|                    |  | 5 different countries                                | -0.392                | 0.951      | 0.681 |
|                    |  | 6 or more different countries                        | -0.8024               | 0.863      | 0.354 |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>I</b>           | 1 different country                                  | None   | -4.55E-02             | 0.951      | 0.962 |
|                    |  | 2 different countries                                | 0.2059                | 1.008      | 0.839 |
|                    |  | 3 different countries                                | 0.7632                | 0.982      | 0.439 |
|                    |  | 4 different countries                                | -0.3333               | 1.105      | 0.764 |
|                    |  | 5 different countries                                | -0.4375               | 1.023      | 0.67  |
|                    |  | 6 or more different countries                        | -0.8478               | 0.942      | 0.37  |
|                    | 2 different countries                                | None   | -0.2513               | 0.935      | 0.788 |
|                    |  | 1 different country                                  | -0.2059               | 1.008      | 0.839 |
|                    |  | 3 different countries                                | 0.5573                | 0.966      | 0.565 |
|                    |  | 4 different countries                                | -0.5392               | 1.091      | 0.622 |
|                    |  | 5 different countries                                | -0.6434               | 1.008      | 0.525 |
|                    |  | 6 or more different countries                        | -1.0537               | 0.926      | 0.257 |
|                    | 3 different countries                                | None   | -0.8086               | 0.906      | 0.374 |
|                    |  | 1 different country                                  | -0.7632               | 0.982      | 0.439 |
|                    |  | 2 different countries                                | -0.5573               | 0.966      | 0.565 |
|                    |  | 4 different countries                                | -1.0965               | 1.067      | 0.306 |
|                    |  | 5 different countries                                | -1.2007               | 0.982      | 0.224 |
|                    |  | 6 or more different countries                        | -1.611                | 0.897      | 0.075 |
|                    | 4 different countries                                | None   | 0.2879                | 1.039      | 0.782 |
|                    |  | 1 different country                                  | 0.3333                | 1.105      | 0.764 |
|                    |  | 2 different countries                                | 0.5392                | 1.091      | 0.622 |
|                    |  | 3 different countries                                | 1.0965                | 1.067      | 0.306 |
|                    |  | 5 different countries                                | -0.1042               | 1.105      | 0.925 |
|                    |  | 6 or more different countries                        | -0.5145               | 1.031      | 0.619 |
|                    | 5 different countries                                | None   | 0.392                 | 0.951      | 0.681 |
|                    |  | 1 different country                                  | 0.4375                | 1.023      | 0.67  |
|                    |  | 2 different countries                                | 0.6434                | 1.008      | 0.525 |
|                    |  | 3 different countries                                | 1.2007                | 0.982      | 0.224 |
|                    |  | 4 different countries                                | 0.1042                | 1.105      | 0.925 |
|                    |  | 6 or more different countries                        | -0.4103               | 0.942      | 0.664 |
|                    | 6 or more different countries                        | None   | 0.8024                | 0.863      | 0.354 |
|                    |  | 1 different country                                  | 0.8478                | 0.942      | 0.37  |
|                    |  | 2 different countries                                | 1.0537                | 0.926      | 0.257 |
|                    |  | 3 different countries                                | 1.611                 | 0.897      | 0.075 |
|                    |  | 4 different countries                                | 0.5145                | 1.031      | 0.619 |
|                    |  | 5 different countries                                | 0.4103                | 0.942      | 0.664 |
| <b>J</b>           | None   | 1 different country                                  | 0                     | 0.931      | 1     |
|                    |  | 2 different countries                                | -0.4412               | 0.915      | 0.631 |
|                    |  | 3 different countries                                | 0.3947                | 0.887      | 0.657 |
|                    |  | 4 different countries                                | 1.8333                | 1.017      | 0.074 |
|                    |  | 5 different countries                                | -0.1875               | 0.931      | 0.841 |
|                    |  | 6 or more different countries                        | 0.1522                | 0.845      | 0.857 |
|                    | 1 different country                                  | None   | 0                     | 0.931      | 1     |
|                    |  | 2 different countries                                | -0.4412               | 0.987      | 0.656 |
|                    |  | 3 different countries                                | 0.3947                | 0.962      | 0.682 |
|                    |  | 4 different countries                                | 1.8333                | 1.082      | 0.093 |
|                    |  | 5 different countries                                | -0.1875               | 1.002      | 0.852 |
|                    |  | 6 or more different countries                        | 0.1522                | 0.923      | 0.869 |
|                    | 2 different countries                                | None   | 0.4412                | 0.915      | 0.631 |
|                    |  | 1 different country                                  | 0.4412                | 0.987      | 0.656 |
|                    |  | 3 different countries                                | 0.8359                | 0.946      | 0.379 |
|                    |  | 4 different countries                                | 2.2745                | 1.068      | 0.035 |
|                    |  | 5 different countries                                | 0.2537                | 0.987      | 0.798 |
|                    |  | 6 or more different countries                        | 0.5934                | 0.906      | 0.514 |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>J</b>           | 3 different countries                                | None   | -0.3947               | 0.887      | 0.657 |
|                    |  | 1 different country                                  | -0.3947               | 0.962      | 0.682 |
|                    |  | 2 different countries                                | -0.8359               | 0.946      | 0.379 |
|                    |  | 4 different countries                                | 1.4386                | 1.045      | 0.171 |
|                    |  | 5 different countries                                | -0.5822               | 0.962      | 0.546 |
|                    |  | 6 or more different countries                        | -0.2426               | 0.879      | 0.783 |
|                    | 4 different countries                                | None   | -1.8333               | 1.017      | 0.074 |
|                    |  | 1 different country                                  | -1.8333               | 1.082      | 0.093 |
|                    |  | 2 different countries                                | -2.2745               | 1.068      | 0.035 |
|                    |  | 3 different countries                                | -1.4386               | 1.045      | 0.171 |
|                    |  | 5 different countries                                | -2.0208               | 1.082      | 0.064 |
|                    |  | 6 or more different countries                        | -1.6812               | 1.009      | 0.098 |
|                    | 5 different countries                                | None   | 0.1875                | 0.931      | 0.841 |
|                    |  | 1 different country                                  | 0.1875                | 1.002      | 0.852 |
|                    |  | 2 different countries                                | -0.2537               | 0.987      | 0.798 |
|                    |  | 3 different countries                                | 0.5822                | 0.962      | 0.546 |
|                    |  | 4 different countries                                | 2.0208                | 1.082      | 0.064 |
|                    |  | 6 or more different countries                        | 0.3397                | 0.923      | 0.713 |
|                    | 6 or more different countries                        | None   | -0.1522               | 0.845      | 0.857 |
|                    |  | 1 different country                                  | -0.1522               | 0.923      | 0.869 |
|                    |  | 2 different countries                                | -0.5934               | 0.906      | 0.514 |
|                    |  | 3 different countries                                | 0.2426                | 0.879      | 0.783 |
|                    |  | 4 different countries                                | 1.6812                | 1.009      | 0.098 |
|                    |  | 5 different countries                                | -0.3397               | 0.923      | 0.713 |
| <b>K</b>           | None   | 1 different country                                  | 0.3409                | 0.936      | 0.716 |
|                    |  | 2 different countries                                | 1.0027                | 0.92       | 0.278 |
|                    |  | 3 different countries                                | -0.1459               | 0.893      | 0.87  |
|                    |  | 4 different countries                                | -0.2424               | 1.023      | 0.813 |
|                    |  | 5 different countries                                | 1.5284                | 0.936      | 0.105 |
|                    |  | 6 or more different countries                        | 2.0692                | 0.85       | 0.016 |
|                    | 1 different country                                  | None   | -0.3409               | 0.936      | 0.716 |
|                    |  | 2 different countries                                | 0.6618                | 0.993      | 0.506 |
|                    |  | 3 different countries                                | -0.4868               | 0.967      | 0.616 |
|                    |  | 4 different countries                                | -0.5833               | 1.088      | 0.593 |
|                    |  | 5 different countries                                | 1.1875                | 1.008      | 0.241 |
|                    |  | 6 or more different countries                        | 1.7283                | 0.928      | 0.065 |
|                    | 2 different countries                                | None   | -1.0027               | 0.92       | 0.278 |
|                    |  | 1 different country                                  | -0.6618               | 0.993      | 0.506 |
|                    |  | 3 different countries                                | -1.1486               | 0.951      | 0.23  |
|                    |  | 4 different countries                                | -1.2451               | 1.075      | 0.249 |
|                    |  | 5 different countries                                | 0.5257                | 0.993      | 0.597 |
|                    |  | 6 or more different countries                        | 1.0665                | 0.912      | 0.244 |
|                    | 3 different countries                                | None   | 0.1459                | 0.893      | 0.87  |
|                    |  | 1 different country                                  | 0.4868                | 0.967      | 0.616 |
|                    |  | 2 different countries                                | 1.1486                | 0.951      | 0.23  |
|                    |  | 4 different countries                                | -9.65E-02             | 1.051      | 0.927 |
|                    |  | 5 different countries                                | 1.6743                | 0.967      | 0.086 |
|                    |  | 6 or more different countries                        | 2.2151                | 0.884      | 0.014 |
|                    | 4 different countries                                | None   | 0.2424                | 1.023      | 0.813 |
|                    |  | 1 different country                                  | 0.5833                | 1.088      | 0.593 |
|                    |  | 2 different countries                                | 1.2451                | 1.075      | 0.249 |
|                    |  | 3 different countries                                | 9.65E-02              | 1.051      | 0.927 |
|                    |  | 5 different countries                                | 1.7708                | 1.088      | 0.106 |
|                    |  | 6 or more different countries                        | 2.3116                | 1.015      | 0.025 |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>K</b>           | 5 different countries                                | None   | -1.5284               | 0.936      | 0.105 |
|                    |  | 1 different country                                  | -1.1875               | 1.008      | 0.241 |
|                    |  | 2 different countries                                | -0.5257               | 0.993      | 0.597 |
|                    |  | 3 different countries                                | -1.6743               | 0.967      | 0.086 |
|                    |  | 4 different countries                                | -1.7708               | 1.088      | 0.106 |
|                    |  | 6 or more different countries                        | 0.5408                | 0.928      | 0.561 |
|                    | 6 or more different countries                        | None   | -2.0692               | 0.85       | 0.016 |
|                    |  | 1 different country                                  | -1.7283               | 0.928      | 0.065 |
|                    |  | 2 different countries                                | -1.0665               | 0.912      | 0.244 |
|                    |  | 3 different countries                                | -2.2151               | 0.884      | 0.014 |
|                    |  | 4 different countries                                | -2.3116               | 1.015      | 0.025 |
|                    |  | 5 different countries                                | -0.5408               | 0.928      | 0.561 |
| <b>L</b>           | None   | 1 different country                                  | 0.8807                | 0.864      | 0.31  |
|                    |  | 2 different countries                                | 2.41E-02              | 0.849      | 0.977 |
|                    |  | 3 different countries                                | -0.5239               | 0.824      | 0.526 |
|                    |  | 4 different countries                                | -2.5152*              | 0.944      | 0.009 |
|                    |  | 5 different countries                                | 0.8182                | 0.864      | 0.346 |
|                    |  | 6 or more different countries                        | -0.4644               | 0.784      | 0.555 |
|                    | 1 different country                                  | None   | -0.8807               | 0.864      | 0.31  |
|                    |  | 2 different countries                                | -0.8566               | 0.916      | 0.352 |
|                    |  | 3 different countries                                | -1.4046               | 0.892      | 0.118 |
|                    |  | 4 different countries                                | -3.3958*              | 1.004      | 0.001 |
|                    |  | 5 different countries                                | -6.25E-02             | 0.93       | 0.947 |
|                    |  | 6 or more different countries                        | -1.3451               | 0.856      | 0.119 |
|                    | 2 different countries                                | None   | -2.41E-02             | 0.849      | 0.977 |
|                    |  | 1 different country                                  | 0.8566                | 0.916      | 0.352 |
|                    |  | 3 different countries                                | -0.548                | 0.878      | 0.534 |
|                    |  | 4 different countries                                | -2.5392               | 0.992      | 0.012 |
|                    |  | 5 different countries                                | 0.7941                | 0.916      | 0.388 |
|                    |  | 6 or more different countries                        | -0.4885               | 0.841      | 0.563 |
|                    | 3 different countries                                | None   | 0.5239                | 0.824      | 0.526 |
|                    |  | 1 different country                                  | 1.4046                | 0.892      | 0.118 |
|                    |  | 2 different countries                                | 0.548                 | 0.878      | 0.534 |
|                    |  | 4 different countries                                | -1.9912               | 0.97       | 0.042 |
|                    |  | 5 different countries                                | 1.3421                | 0.892      | 0.135 |
|                    |  | 6 or more different countries                        | 5.95E-02              | 0.815      | 0.942 |
|                    | 4 different countries                                | None   | 2.5152*               | 0.944      | 0.009 |
|                    |  | 1 different country                                  | 3.3958*               | 1.004      | 0.001 |
|                    |  | 2 different countries                                | 2.5392                | 0.992      | 0.012 |
|                    |  | 3 different countries                                | 1.9912                | 0.97       | 0.042 |
|                    |  | 5 different countries                                | 3.3333*               | 1.004      | 0.001 |
|                    |  | 6 or more different countries                        | 2.0507                | 0.937      | 0.031 |
|                    | 5 different countries                                | None   | -0.8182               | 0.864      | 0.346 |
|                    |  | 1 different country                                  | 6.25E-02              | 0.93       | 0.947 |
|                    |  | 2 different countries                                | -0.7941               | 0.916      | 0.388 |
|                    |  | 3 different countries                                | -1.3421               | 0.892      | 0.135 |
|                    |  | 4 different countries                                | -3.3333*              | 1.004      | 0.001 |
|                    |  | 6 or more different countries                        | -1.2826               | 0.856      | 0.137 |
|                    | 6 or more different countries                        | None   | 0.4644                | 0.784      | 0.555 |
|                    |  | 1 different country                                  | 1.3451                | 0.856      | 0.119 |
|                    |  | 2 different countries                                | 0.4885                | 0.841      | 0.563 |
|                    |  | 3 different countries                                | -5.95E-02             | 0.815      | 0.942 |
|                    |  | 4 different countries                                | -2.0507               | 0.937      | 0.031 |
|                    |  | 5 different countries                                | 1.2826                | 0.856      | 0.137 |

**Table A5-6. Significant Differences based on Experience of Previous Countries**

| <b>Dependent Variable</b> | <b>(I) Level of diversity among workforce</b> | <b>(J) Level of diversity among workforce</b> | <b>Mean Difference (I-J)</b> | <b>Std. Error</b> | <b>Sig.</b> |
|---------------------------|---|---|------------------------------|-------------------|-------------|
| <b>A</b>                  | Little diversity                              | Medium diversity                              | -0.8664                      | 0.722             | 0.233       |
|                           |   | Large diversity                               | -0.1795                      | 0.667             | 0.788       |
|                           | Medium diversity                              | Little diversity                              | 0.8664                       | 0.722             | 0.233       |
|                           |   | Large diversity                               | 0.6869                       | 0.656             | 0.297       |
|                           | Large diversity                               | Little diversity                              | 0.1795                       | 0.667             | 0.788       |
|                           |   | Medium diversity                              | -0.6869                      | 0.656             | 0.297       |
| <b>B</b>                  | Little diversity                              | Medium diversity                              | 0.1112                       | 0.774             | 0.886       |
|                           |   | Large diversity                               | 0.5477                       | 0.715             | 0.445       |
|                           | Medium diversity                              | Little diversity                              | -0.1112                      | 0.774             | 0.886       |
|                           |   | Large diversity                               | 0.4365                       | 0.703             | 0.536       |
|                           | Large diversity                               | Little diversity                              | -0.5477                      | 0.715             | 0.445       |
|                           |   | Medium diversity                              | -0.4365                      | 0.703             | 0.536       |
| <b>C</b>                  | Little diversity                              | Medium diversity                              | -0.7181                      | 0.65              | 0.271       |
|                           |   | Large diversity                               | -4.04E-02                    | 0.6               | 0.946       |
|                           | Medium diversity                              | Little diversity                              | 0.7181                       | 0.65              | 0.271       |
|                           |   | Large diversity                               | 0.6777                       | 0.59              | 0.253       |
|                           | Large diversity                               | Little diversity                              | 4.04E-02                     | 0.6               | 0.946       |
|                           |   | Medium diversity                              | -0.6777                      | 0.59              | 0.253       |
| <b>D</b>                  | Little diversity                              | Medium diversity                              | 0.2981                       | 0.658             | 0.651       |
|                           |   | Large diversity                               | -0.2216                      | 0.608             | 0.716       |
|                           | Medium diversity                              | Little diversity                              | -0.2981                      | 0.658             | 0.651       |
|                           |   | Large diversity                               | -0.5196                      | 0.598             | 0.386       |
|                           | Large diversity                               | Little diversity                              | 0.2216                       | 0.608             | 0.716       |
|                           |   | Medium diversity                              | 0.5196                       | 0.598             | 0.386       |
| <b>E</b>                  | Little diversity                              | Medium diversity                              | 0.2486                       | 0.758             | 0.743       |
|                           |   | Large diversity                               | 0.5434                       | 0.7               | 0.439       |
|                           | Medium diversity                              | Little diversity                              | -0.2486                      | 0.758             | 0.743       |
|                           |   | Large diversity                               | 0.2947                       | 0.688             | 0.669       |
|                           | Large diversity                               | Little diversity                              | -0.5434                      | 0.7               | 0.439       |
|                           |   | Medium diversity                              | -0.2947                      | 0.688             | 0.669       |
| <b>F</b>                  | Little diversity                              | Medium diversity                              | -0.8317                      | 0.692             | 0.232       |
|                           |   | Large diversity                               | -0.1121                      | 0.639             | 0.861       |
|                           | Medium diversity                              | Little diversity                              | 0.8317                       | 0.692             | 0.232       |
|                           |   | Large diversity                               | 0.7195                       | 0.629             | 0.255       |
|                           | Large diversity                               | Little diversity                              | 0.1121                       | 0.639             | 0.861       |
|                           |   | Medium diversity                              | -0.7195                      | 0.629             | 0.255       |
| <b>G</b>                  | Little diversity                              | Medium diversity                              | -8.42E-02                    | 0.665             | 0.9         |
|                           |   | Large diversity                               | -0.3402                      | 0.615             | 0.581       |
|                           | Medium diversity                              | Little diversity                              | 8.42E-02                     | 0.665             | 0.9         |
|                           |   | Large diversity                               | -0.256                       | 0.605             | 0.673       |
|                           | Large diversity                               | Little diversity                              | 0.3402                       | 0.615             | 0.581       |
|                           |   | Medium diversity                              | 0.256                        | 0.605             | 0.673       |
| <b>H</b>                  | Little diversity                              | Medium diversity                              | 0.8425                       | 0.715             | 0.241       |
|                           |   | Large diversity                               | -1.1218                      | 0.661             | 0.092       |
|                           | Medium diversity                              | Little diversity                              | -0.8425                      | 0.715             | 0.241       |
|                           |   | Large diversity                               | -1.9643*                     | 0.65              | 0.003       |
|                           | Large diversity                               | Little diversity                              | 1.1218                       | 0.661             | 0.092       |
|                           |   | Medium diversity                              | 1.9643*                      | 0.65              | 0.003       |
| <b>I</b>                  | Little diversity                              | Medium diversity                              | 1.1081                       | 0.672             | 0.102       |
|                           |   | Large diversity                               | 0.1509                       | 0.621             | 0.808       |
|                           | Medium diversity                              | Little diversity                              | -1.1081                      | 0.672             | 0.102       |
|                           |   | Large diversity                               | -0.9572                      | 0.611             | 0.12        |



| Dependent Variable | (I) Level of diversity among workforce | (J) Level of diversity among workforce | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>I</b>           | Large diversity                        | Little diversity                       | -0.1509               | 0.621      | 0.808 |
|                    |  | Medium diversity                       | 0.9572                | 0.611      | 0.12  |
| <b>J</b>           | Little diversity                       | Medium diversity                       | -0.1822               | 0.663      | 0.784 |
|                    |  | Large diversity                        | 0.855                 | 0.612      | 0.165 |
|                    | Medium diversity                       | Little diversity                       | 0.1822                | 0.663      | 0.784 |
|                    |  | Large diversity                        | 1.0372                | 0.602      | 0.087 |
|                    | Large diversity                        | Little diversity                       | -0.855                | 0.612      | 0.165 |
|                    |  | Medium diversity                       | -1.0372               | 0.602      | 0.087 |
| <b>K</b>           | Little diversity                       | Medium diversity                       | 2.39E-02              | 0.692      | 0.972 |
|                    |  | Large diversity                        | 0.1315                | 0.639      | 0.837 |
|                    | Medium diversity                       | Little diversity                       | -2.39E-02             | 0.692      | 0.972 |
|                    |  | Large diversity                        | 0.1076                | 0.629      | 0.864 |
|                    | Large diversity                        | Little diversity                       | -0.1315               | 0.639      | 0.837 |
|                    |  | Medium diversity                       | -0.1076               | 0.629      | 0.864 |
| <b>L</b>           | Little diversity                       | Medium diversity                       | 5.02E-02              | 0.647      | 0.938 |
|                    |  | Large diversity                        | -0.2129               | 0.598      | 0.722 |
|                    | Medium diversity                       | Little diversity                       | -5.02E-02             | 0.647      | 0.938 |
|                    |  | Large diversity                        | -0.2631               | 0.588      | 0.655 |
|                    | Large diversity                        | Little diversity                       | 0.2129                | 0.598      | 0.722 |
|                    |  | Medium diversity                       | 0.2631                | 0.588      | 0.655 |

\*The mean difference is significant at P=0.01

**Table A5-7.** Significant Differences as a result of Diversity Among Subordinate Staff

| Dependent Variable | (I) Level of problems caused by working outside UK | (J) Level of problems caused by working outside UK | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>A</b>           | More Problematic                                   | About the Same                                     | 0.1457                | 0.595      | 0.807 |
|                    | About the Same                                     | More Problematic                                   | -0.1457               | 0.595      | 0.807 |
| <b>B</b>           | More Problematic                                   | About the Same                                     | 0.3792                | 0.629      | 0.548 |
|                    | About the Same                                     | More Problematic                                   | -0.3792               | 0.629      | 0.548 |
| <b>C</b>           | More Problematic                                   | About the Same                                     | -0.9699               | 0.521      | 0.065 |
|                    | About the Same                                     | More Problematic                                   | 0.9699                | 0.521      | 0.065 |
| <b>D</b>           | More Problematic                                   | About the Same                                     | 0.1761                | 0.534      | 0.742 |
|                    | About the Same                                     | More Problematic                                   | -0.1761               | 0.534      | 0.742 |
| <b>E</b>           | More Problematic                                   | About the Same                                     | 0.2271                | 0.621      | 0.715 |
|                    | About the Same                                     | More Problematic                                   | -0.2271               | 0.621      | 0.715 |
| <b>F</b>           | More Problematic                                   | About the Same                                     | 0.7143                | 0.566      | 0.209 |
|                    | About the Same                                     | More Problematic                                   | -0.7143               | 0.566      | 0.209 |
| <b>G</b>           | More Problematic                                   | About the Same                                     | -0.9021               | 0.54       | 0.098 |
|                    | About the Same                                     | More Problematic                                   | 0.9021                | 0.54       | 0.098 |
| <b>H</b>           | More Problematic                                   | About the Same                                     | -0.6246               | 0.604      | 0.303 |
|                    | About the Same                                     | More Problematic                                   | 0.6246                | 0.604      | 0.303 |
| <b>I</b>           | More Problematic                                   | About the Same                                     | -0.1162               | 0.556      | 0.835 |
|                    | About the Same                                     | More Problematic                                   | 0.1162                | 0.556      | 0.835 |
| <b>J</b>           | More Problematic                                   | About the Same                                     | 0.2658                | 0.538      | 0.622 |
|                    | About the Same                                     | More Problematic                                   | -0.2658               | 0.538      | 0.622 |
| <b>K</b>           | More Problematic                                   | About the Same                                     | 0.1286                | 0.567      | 0.821 |
|                    | About the Same                                     | More Problematic                                   | -0.1286               | 0.567      | 0.821 |
| <b>L</b>           | More Problematic                                   | About the Same                                     | 0.5762                | 0.527      | 0.276 |
|                    | About the Same                                     | More Problematic                                   | -0.5762               | 0.527      | 0.276 |

\*The mean difference is significant at P=0.01

**Table A5-8.** Significant Differences due to Perception of Problematic Nature of Working Overseas

## APPENDIX 6

### Multiple Comparisons within Dependent Variables for Question 30 Across Various Independent Variables

| Dependent Variable | (I) Years worked Overseas | (J) Years worked Overseas | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|---------------------------|---------------------------|-----------------------|------------|-------|
| <b>A</b>           | 1-6 years                 | 7-12 years                | -2.7944*              | 0.794      | 0.001 |
|                    |                           | 13+ years                 | -1.7566               | 0.683      | 0.011 |
|                    | 7-12 years                | 1-6 years                 | 2.7944*               | 0.794      | 0.001 |
|                    |                           | 13+ years                 | 1.0378                | 0.666      | 0.122 |
|                    | 13+ years                 | 1-6 years                 | 1.7566                | 0.683      | 0.011 |
|                    |                           | 7-12 years                | -1.0378               | 0.666      | 0.122 |
| <b>B</b>           | 1-6 years                 | 7-12 years                | 0.5453                | 0.718      | 0.449 |
|                    |                           | 13+ years                 | 0.7566                | 0.618      | 0.223 |
|                    | 7-12 years                | 1-6 years                 | -0.5453               | 0.718      | 0.449 |
|                    |                           | 13+ years                 | 0.2113                | 0.603      | 0.726 |
|                    | 13+ years                 | 1-6 years                 | -0.7566               | 0.618      | 0.223 |
|                    |                           | 7-12 years                | -0.2113               | 0.603      | 0.726 |
| <b>C</b>           | 1-6 years                 | 7-12 years                | 0.9374                | 0.638      | 0.144 |
|                    |                           | 13+ years                 | -5.82E-02             | 0.548      | 0.916 |
|                    | 7-12 years                | 1-6 years                 | -0.9374               | 0.638      | 0.144 |
|                    |                           | 13+ years                 | -0.9956               | 0.535      | 0.065 |
|                    | 13+ years                 | 1-6 years                 | 5.82E-02              | 0.548      | 0.916 |
|                    |                           | 7-12 years                | 0.9956                | 0.535      | 0.065 |
| <b>D</b>           | 1-6 years                 | 7-12 years                | 0.5109                | 0.641      | 0.427 |
|                    |                           | 13+ years                 | 0.8042                | 0.551      | 0.147 |
|                    | 7-12 years                | 1-6 years                 | -0.5109               | 0.641      | 0.427 |
|                    |                           | 13+ years                 | 0.2934                | 0.538      | 0.586 |
|                    | 13+ years                 | 1-6 years                 | -0.8042               | 0.551      | 0.147 |
|                    |                           | 7-12 years                | -0.2934               | 0.538      | 0.586 |
| <b>E</b>           | 1-6 years                 | 7-12 years                | 1.2427                | 0.65       | 0.058 |
|                    |                           | 13+ years                 | 1.2646                | 0.559      | 0.025 |
|                    | 7-12 years                | 1-6 years                 | -1.2427               | 0.65       | 0.058 |
|                    |                           | 13+ years                 | 2.19E-02              | 0.545      | 0.968 |
|                    | 13+ years                 | 1-6 years                 | -1.2646               | 0.559      | 0.025 |
|                    |                           | 7-12 years                | -2.19E-02             | 0.545      | 0.968 |
| <b>F</b>           | 1-6 years                 | 7-12 years                | 0.3844                | 0.679      | 0.572 |
|                    |                           | 13+ years                 | 0.6138                | 0.584      | 0.295 |
|                    | 7-12 years                | 1-6 years                 | -0.3844               | 0.679      | 0.572 |
|                    |                           | 13+ years                 | 0.2293                | 0.57       | 0.688 |
|                    | 13+ years                 | 1-6 years                 | -0.6138               | 0.584      | 0.295 |
|                    |                           | 7-12 years                | -0.2293               | 0.57       | 0.688 |
| <b>G</b>           | 1-6 years                 | 7-12 years                | -4.21E-02             | 0.714      | 0.953 |
|                    |                           | 13+ years                 | -0.6032               | 0.614      | 0.328 |
|                    | 7-12 years                | 1-6 years                 | 4.22E-02              | 0.714      | 0.953 |
|                    |                           | 13+ years                 | -0.561                | 0.599      | 0.351 |
|                    | 13+ years                 | 1-6 years                 | 0.6032                | 0.614      | 0.328 |
|                    |                           | 7-12 years                | 0.561                 | 0.599      | 0.351 |
| <b>H</b>           | 1-6 years                 | 7-12 years                | -0.4994               | 0.712      | 0.484 |
|                    |                           | 13+ years                 | -0.5026               | 0.612      | 0.413 |
|                    | 7-12 years                | 1-6 years                 | 0.4994                | 0.712      | 0.484 |
|                    |                           | 13+ years                 | -3.28E-03             | 0.597      | 0.996 |
|                    | 13+ years                 | 1-6 years                 | 0.5026                | 0.612      | 0.413 |
|                    |                           | 7-12 years                | 3.28E-03              | 0.597      | 0.996 |
| <b>J</b>           | 1-6 years                 | 7-12 years                | 0.3512                | 0.632      | 0.579 |
|                    |                           | 13+ years                 | 0.4021                | 0.543      | 0.461 |
|                    | 7-12 years                | 1-6 years                 | -0.3512               | 0.632      | 0.579 |
|                    |                           | 13+ years                 | 5.09E-02              | 0.53       | 0.924 |
|                    | 13+ years                 | 1-6 years                 | -0.4021               | 0.543      | 0.461 |
|                    |                           | 7-12 years                | -5.09E-02             | 0.53       | 0.924 |

| Dependent Variable | (I) Years worked Overseas | (J) Years worked Overseas | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|---------------------------|---------------------------|-----------------------|------------|-------|
| K                  | 1-6 years                 | 7-12 years                | -0.636                | 0.683      | 0.354 |
|                    |                           | 13+ years                 | -0.9206               | 0.588      | 0.12  |
|                    | 7-12 years                | 1-6 years                 | 0.636                 | 0.683      | 0.354 |
|                    |                           | 13+ years                 | -0.2846               | 0.573      | 0.62  |
|                    | 13+ years                 | 1-6 years                 | 0.9206                | 0.588      | 0.12  |
|                    |                           | 7-12 years                | 0.2846                | 0.573      | 0.62  |

\*The mean difference is significant at P=0.01

**Table A6-1. Significant Differences for Years Experience Working Overseas**

| Dependent Variable | (I) Level of Management | (J) Level of Management | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|-------------------------|-------------------------|-----------------------|------------|-------|
| A                  | Director/Partner level  | Senior management       | -1.4488               | 0.667      | 0.032 |
|                    |                         | Project management      | -7.76E-02             | 0.704      | 0.912 |
|                    | Senior management       | Director/Partner level  | 1.4488                | 0.667      | 0.032 |
|                    |                         | Project management      | 1.3712                | 0.786      | 0.084 |
|                    | Project management      | Director/Partner level  | 7.76E-02              | 0.704      | 0.912 |
|                    |                         | Senior management       | -1.3712               | 0.786      | 0.084 |
| B                  | Director/Partner level  | Senior management       | -0.3245               | 0.583      | 0.579 |
|                    |                         | Project management      | 0.6983                | 0.616      | 0.259 |
|                    | Senior management       | Director/Partner level  | 0.3245                | 0.583      | 0.579 |
|                    |                         | Project management      | 1.0227                | 0.688      | 0.14  |
|                    | Project management      | Director/Partner level  | -0.6983               | 0.616      | 0.259 |
|                    |                         | Senior management       | -1.0227               | 0.688      | 0.14  |
| C                  | Director/Partner level  | Senior management       | 0.534                 | 0.525      | 0.311 |
|                    |                         | Project management      | 0.4766                | 0.554      | 0.392 |
|                    | Senior management       | Director/Partner level  | -0.534                | 0.525      | 0.311 |
|                    |                         | Project management      | -5.74E-02             | 0.619      | 0.926 |
|                    | Project management      | Director/Partner level  | -0.4766               | 0.554      | 0.392 |
|                    |                         | Senior management       | 5.74E-02              | 0.619      | 0.926 |
| D                  | Director/Partner level  | Senior management       | -1.52E-02             | 0.508      | 0.976 |
|                    |                         | Project management      | -1.5*                 | 0.537      | 0.006 |
|                    | Senior management       | Director/Partner level  | 1.52E-02              | 0.508      | 0.976 |
|                    |                         | Project management      | -1.4848               | 0.599      | 0.015 |
|                    | Project management      | Director/Partner level  | 1.5*                  | 0.537      | 0.006 |
|                    |                         | Senior management       | 1.4848                | 0.599      | 0.015 |
| E                  | Director/Partner level  | Senior management       | 0.5857                | 0.539      | 0.28  |
|                    |                         | Project management      | -7.39E-03             | 0.569      | 0.99  |
|                    | Senior management       | Director/Partner level  | -0.5857               | 0.539      | 0.28  |
|                    |                         | Project management      | -0.5931               | 0.635      | 0.353 |
|                    | Project management      | Director/Partner level  | 7.39E-03              | 0.569      | 0.99  |
|                    |                         | Senior management       | 0.5931                | 0.635      | 0.353 |
| F                  | Director/Partner level  | Senior management       | 0.499                 | 0.553      | 0.369 |
|                    |                         | Project management      | -0.2229               | 0.584      | 0.703 |
|                    | Senior management       | Director/Partner level  | -0.499                | 0.553      | 0.369 |
|                    |                         | Project management      | -0.7219               | 0.652      | 0.27  |
|                    | Project management      | Director/Partner level  | 0.2229                | 0.584      | 0.703 |
|                    |                         | Senior management       | 0.7219                | 0.652      | 0.27  |
| G                  | Director/Partner level  | Senior management       | -0.1515               | 0.582      | 0.795 |
|                    |                         | Project management      | -0.75                 | 0.614      | 0.224 |
|                    | Senior management       | Director/Partner level  | 0.1515                | 0.582      | 0.795 |
|                    |                         | Project management      | -0.5985               | 0.685      | 0.384 |
|                    | Project management      | Director/Partner level  | 0.75                  | 0.614      | 0.224 |
|                    |                         | Senior management       | 0.5985                | 0.685      | 0.384 |

| Dependent Variable | (I) Level of Management | (J) Level of Management | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|-------------------------|-------------------------|-----------------------|------------|-------|
| <b>H</b>           | Director/Partner level  | Senior management       | -0.2722               | 0.567      | 0.632 |
|                    |                         | Project management      | 1.3079                | 0.598      | 0.031 |
|                    | Senior management       | Director/Partner level  | 0.2722                | 0.567      | 0.632 |
|                    |                         | Project management      | 1.5801                | 0.668      | 0.02  |
|                    | Project management      | Director/Partner level  | -1.3079               | 0.598      | 0.031 |
|                    |                         | Senior management       | -1.5801               | 0.668      | 0.02  |
| <b>J</b>           | Director/Partner level  | Senior management       | 0.5987                | 0.508      | 0.241 |
|                    |                         | Project management      | 0.9754                | 0.537      | 0.072 |
|                    | Senior management       | Director/Partner level  | -0.5987               | 0.508      | 0.241 |
|                    |                         | Project management      | 0.3766                | 0.599      | 0.531 |
|                    | Project management      | Director/Partner level  | -0.9754               | 0.537      | 0.072 |
|                    |                         | Senior management       | -0.3766               | 0.599      | 0.531 |
| <b>K</b>           | Director/Partner level  | Senior management       | -5.22E-03             | 0.557      | 0.993 |
|                    |                         | Project management      | -0.9002               | 0.587      | 0.128 |
|                    | Senior management       | Director/Partner level  | 5.23E-03              | 0.557      | 0.993 |
|                    |                         | Project management      | -0.895                | 0.656      | 0.175 |
|                    | Project management      | Director/Partner level  | 0.9002                | 0.587      | 0.128 |
|                    |                         | Senior management       | 0.895                 | 0.656      | 0.175 |

\*The mean difference is significant at P=0.01

**Table A6-2. Significant Differences for Level of Management**

| Dependent Variable | (I) Profession       | (J) Profession       | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|----------------------|----------------------|-----------------------|------------|-------|
| <b>A</b>           | Quantity Surveyor    | Civil Engineer       | -0.6343               | 0.639      | 0.323 |
|                    |                      | Architect and Others | -0.1458               | 0.778      | 0.852 |
|                    | Civil Engineer       | Quantity Surveyor    | 0.6343                | 0.639      | 0.323 |
|                    |                      | Architect and Others | 0.4885                | 0.781      | 0.533 |
|                    | Architect and Others | Quantity Surveyor    | 0.1458                | 0.778      | 0.852 |
|                    |                      | Civil Engineer       | -0.4885               | 0.781      | 0.533 |
| <b>B</b>           | Quantity Surveyor    | Civil Engineer       | -0.5452               | 0.552      | 0.325 |
|                    |                      | Architect and Others | -0.1667               | 0.673      | 0.805 |
|                    | Civil Engineer       | Quantity Surveyor    | 0.5452                | 0.552      | 0.325 |
|                    |                      | Architect and Others | 0.3785                | 0.675      | 0.576 |
|                    | Architect and Others | Quantity Surveyor    | 0.1667                | 0.673      | 0.805 |
|                    |                      | Civil Engineer       | -0.3785               | 0.675      | 0.576 |
| <b>C</b>           | Quantity Surveyor    | Civil Engineer       | 1.2793*               | 0.478      | 0.009 |
|                    |                      | Architect and Others | -0.125                | 0.583      | 0.831 |
|                    | Civil Engineer       | Quantity Surveyor    | -1.2793*              | 0.478      | 0.009 |
|                    |                      | Architect and Others | -1.4043               | 0.585      | 0.018 |
|                    | Architect and Others | Quantity Surveyor    | 0.125                 | 0.583      | 0.831 |
|                    |                      | Civil Engineer       | 1.4043                | 0.585      | 0.018 |
| <b>D</b>           | Quantity Surveyor    | Civil Engineer       | 0.3621                | 0.495      | 0.466 |
|                    |                      | Architect and Others | -0.1042               | 0.603      | 0.863 |
|                    | Civil Engineer       | Quantity Surveyor    | -0.3621               | 0.495      | 0.466 |
|                    |                      | Architect and Others | -0.4663               | 0.605      | 0.442 |
|                    | Architect and Others | Quantity Surveyor    | 0.1042                | 0.603      | 0.863 |
|                    |                      | Civil Engineer       | 0.4663                | 0.605      | 0.442 |
| <b>E</b>           | Quantity Surveyor    | Civil Engineer       | -0.2832               | 0.508      | 0.578 |
|                    |                      | Architect and Others | -0.6042               | 0.619      | 0.331 |
|                    | Civil Engineer       | Quantity Surveyor    | 0.2832                | 0.508      | 0.578 |
|                    |                      | Architect and Others | -0.3209               | 0.621      | 0.606 |
|                    | Architect and Others | Quantity Surveyor    | 0.6042                | 0.619      | 0.331 |
|                    |                      | Civil Engineer       | 0.3209                | 0.621      | 0.606 |

| Dependent Variable | (I) Profession       | (J) Profession       | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|----------------------|----------------------|-----------------------|------------|-------|
| <b>F</b>           | Quantity Surveyor    | Civil Engineer       | 0.5133                | 0.521      | 0.327 |
|                    |                      | Architect and Others | 8.33E-02              | 0.635      | 0.896 |
|                    | Civil Engineer       | Quantity Surveyor    | -0.5133               | 0.521      | 0.327 |
|                    |                      | Architect and Others | -0.43                 | 0.637      | 0.501 |
|                    | Architect and Others | Quantity Surveyor    | -8.33E-02             | 0.635      | 0.896 |
|                    |                      | Civil Engineer       | 0.43                  | 0.637      | 0.501 |
| <b>G</b>           | Quantity Surveyor    | Civil Engineer       | -0.5142               | 0.542      | 0.345 |
|                    |                      | Architect and Others | 0.75                  | 0.661      | 0.259 |
|                    | Civil Engineer       | Quantity Surveyor    | 0.5142                | 0.542      | 0.345 |
|                    |                      | Architect and Others | 1.2642                | 0.663      | 0.059 |
|                    | Architect and Others | Quantity Surveyor    | -0.75                 | 0.661      | 0.259 |
|                    |                      | Civil Engineer       | -1.2642               | 0.663      | 0.059 |
| <b>H</b>           | Quantity Surveyor    | Civil Engineer       | 0.4455                | 0.54       | 0.411 |
|                    |                      | Architect and Others | 1.1875                | 0.658      | 0.074 |
|                    | Civil Engineer       | Quantity Surveyor    | -0.4455               | 0.54       | 0.411 |
|                    |                      | Architect and Others | 0.742                 | 0.661      | 0.264 |
|                    | Architect and Others | Quantity Surveyor    | -1.1875               | 0.658      | 0.074 |
|                    |                      | Civil Engineer       | -0.742                | 0.661      | 0.264 |
| <b>J</b>           | Quantity Surveyor    | Civil Engineer       | -8.60E-02             | 0.478      | 0.858 |
|                    |                      | Architect and Others | -1.0833               | 0.583      | 0.065 |
|                    | Civil Engineer       | Quantity Surveyor    | 8.60E-02              | 0.478      | 0.858 |
|                    |                      | Architect and Others | -0.9973               | 0.585      | 0.091 |
|                    | Architect and Others | Quantity Surveyor    | 1.0833                | 0.583      | 0.065 |
|                    |                      | Civil Engineer       | 0.9973                | 0.585      | 0.091 |
| <b>K</b>           | Quantity Surveyor    | Civil Engineer       | -0.5372               | 0.526      | 0.309 |
|                    |                      | Architect and Others | 0.2083                | 0.641      | 0.746 |
|                    | Civil Engineer       | Quantity Surveyor    | 0.5372                | 0.526      | 0.309 |
|                    |                      | Architect and Others | 0.7456                | 0.643      | 0.249 |
|                    | Architect and Others | Quantity Surveyor    | -0.2083               | 0.641      | 0.746 |
|                    |                      | Civil Engineer       | -0.7456               | 0.643      | 0.249 |

\*The mean difference is significant at P=0.01

**Table A6-3. Significant Differences due to Differences in Profession**

| Dependent Variable | (I) Nature of Job    | (J) Nature of Job    | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|----------------------|----------------------|-----------------------|------------|-------|
| <b>A</b>           | Project Based        | Wholly Office Based  | 0.247                 | 0.706      | 0.727 |
|                    |                      | Office/Project Based | -0.4064               | 0.756      | 0.592 |
|                    | Wholly Office Based  | Project Based        | -0.247                | 0.706      | 0.727 |
|                    |                      | Office/Project Based | -0.6535               | 0.7        | 0.353 |
|                    | Office/Project Based | Project Based        | 0.4064                | 0.756      | 0.592 |
|                    |                      | Wholly Office Based  | 0.6535                | 0.7        | 0.353 |
| <b>B</b>           | Project Based        | Wholly Office Based  | -0.8274               | 0.617      | 0.183 |
|                    |                      | Office/Project Based | -0.6676               | 0.661      | 0.315 |
|                    | Wholly Office Based  | Project Based        | 0.8274                | 0.617      | 0.183 |
|                    |                      | Office/Project Based | 0.1598                | 0.612      | 0.794 |
|                    | Office/Project Based | Project Based        | 0.6676                | 0.661      | 0.315 |
|                    |                      | Wholly Office Based  | -0.1598               | 0.612      | 0.794 |
| <b>C</b>           | Project Based        | Wholly Office Based  | -0.3577               | 0.545      | 0.513 |
|                    |                      | Office/Project Based | 0.1257                | 0.584      | 0.83  |
|                    | Wholly Office Based  | Project Based        | 0.3577                | 0.545      | 0.513 |
|                    |                      | Office/Project Based | 0.4834                | 0.54       | 0.373 |
|                    | Office/Project Based | Project Based        | -0.1257               | 0.584      | 0.83  |
|                    |                      | Wholly Office Based  | -0.4834               | 0.54       | 0.373 |
| <b>D</b>           | Project Based        | Wholly Office Based  | 1.5448*               | 0.533      | 0.005 |
|                    |                      | Office/Project Based | 0.4911                | 0.571      | 0.392 |
|                    | Wholly Office Based  | Project Based        | -1.5448*              | 0.533      | 0.005 |
|                    |                      | Office/Project Based | -1.0537               | 0.528      | 0.049 |

| Dependent Variable | (I) Nature of Job    | (J) Nature of Job    | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|----------------------|----------------------|-----------------------|------------|-------|
| <b>D</b>           | Office/Project Based | Project Based        | -0.4911               | 0.571      | 0.392 |
|                    |                      | Wholly Office Based  | 1.0537                | 0.528      | 0.049 |
| <b>E</b>           | Project Based        | Wholly Office Based  | 0.5                   | 0.559      | 0.373 |
|                    |                      | Office/Project Based | 1.0588                | 0.599      | 0.08  |
|                    | Wholly Office Based  | Project Based        | -0.5                  | 0.559      | 0.373 |
|                    |                      | Office/Project Based | 0.5588                | 0.555      | 0.316 |
|                    | Office/Project Based | Project Based        | -1.0588               | 0.599      | 0.08  |
|                    |                      | Wholly Office Based  | -0.5588               | 0.555      | 0.316 |
| <b>F</b>           | Project Based        | Wholly Office Based  | -3.36E-02             | 0.58       | 0.954 |
|                    |                      | Office/Project Based | 0.4332                | 0.622      | 0.487 |
|                    | Wholly Office Based  | Project Based        | 3.36E-02              | 0.58       | 0.954 |
|                    |                      | Office/Project Based | 0.4668                | 0.575      | 0.419 |
|                    | Office/Project Based | Project Based        | -0.4332               | 0.622      | 0.487 |
|                    |                      | Wholly Office Based  | -0.4668               | 0.575      | 0.419 |
| <b>G</b>           | Project Based        | Wholly Office Based  | 0.4032                | 0.611      | 0.511 |
|                    |                      | Office/Project Based | -0.3449               | 0.655      | 0.599 |
|                    | Wholly Office Based  | Project Based        | -0.4032               | 0.611      | 0.511 |
|                    |                      | Office/Project Based | -0.7481               | 0.606      | 0.22  |
|                    | Office/Project Based | Project Based        | 0.3449                | 0.655      | 0.599 |
|                    |                      | Wholly Office Based  | 0.7481                | 0.606      | 0.22  |
| <b>H</b>           | Project Based        | Wholly Office Based  | -1.8379*              | 0.583      | 0.002 |
|                    |                      | Office/Project Based | -0.3904               | 0.624      | 0.533 |
|                    | Wholly Office Based  | Project Based        | 1.8379*               | 0.583      | 0.002 |
|                    |                      | Office/Project Based | 1.4476                | 0.578      | 0.014 |
|                    | Office/Project Based | Project Based        | 0.3904                | 0.624      | 0.533 |
|                    |                      | Wholly Office Based  | -1.4476               | 0.578      | 0.014 |
| <b>J</b>           | Project Based        | Wholly Office Based  | 0.1555                | 0.546      | 0.776 |
|                    |                      | Office/Project Based | -0.3164               | 0.585      | 0.59  |
|                    | Wholly Office Based  | Project Based        | -0.1555               | 0.546      | 0.776 |
|                    |                      | Office/Project Based | -0.4719               | 0.541      | 0.385 |
|                    | Office/Project Based | Project Based        | 0.3164                | 0.585      | 0.59  |
|                    |                      | Wholly Office Based  | 0.4719                | 0.541      | 0.385 |
| <b>K</b>           | Project Based        | Wholly Office Based  | 0.2062                | 0.594      | 0.729 |
|                    |                      | Office/Project Based | 1.69E-02              | 0.636      | 0.979 |
|                    | Wholly Office Based  | Project Based        | -0.2062               | 0.594      | 0.729 |
|                    |                      | Office/Project Based | -0.1893               | 0.589      | 0.748 |
|                    | Office/Project Based | Project Based        | -1.69E-02             | 0.636      | 0.979 |
|                    |                      | Wholly Office Based  | 0.1893                | 0.589      | 0.748 |

\*The mean difference is significant at P=0.01

**Table A6-4.** Significant Differences due to differences in Nature of Job

| Dependent Variable | (I) Country Where Respondent Currently Works | (J) Country Where Respondent Currently Works | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>A</b>           | Asia Pacific                                 | Europe                                       | 1.7222                | 0.888      | 0.055 |
|                    |  | Middle East                                  | 0.3333                | 0.795      | 0.676 |
|                    |  | North America and Australia                  | -0.8667               | 0.944      | 0.36  |
|                    |  | Africa                                       | -0.4561               | 0.873      | 0.602 |
|                    | Europe                                       | Asia Pacific                                 | -1.7222               | 0.888      | 0.055 |
|                    |  | Middle East                                  | -1.3889               | 0.929      | 0.138 |
|                    |  | North America and Australia                  | -2.5889               | 1.059      | 0.016 |
|                    |  | Africa                                       | -2.1784               | 0.997      | 0.031 |

| Dependent Variable | (I) Country Where Respondent Currently Works | (J) Country Where Respondent Currently Works | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>A</b>           | Middle East                                  | Asia Pacific                                 | -0.3333               | 0.795      | 0.676 |
|                    |  | Europe                                       | 1.3889                | 0.929      | 0.138 |
|                    |  | North America and Australia                  | -1.2                  | 0.982      | 0.225 |
|                    |  | Africa                                       | -0.7895               | 0.915      | 0.39  |
|                    | North America and Australia                  | Asia Pacific                                 | 0.8667                | 0.944      | 0.36  |
|                    |  | Europe                                       | 2.5889                | 1.059      | 0.016 |
|                    |  | Middle East                                  | 1.2                   | 0.982      | 0.225 |
|                    |  | Africa                                       | 0.4105                | 1.047      | 0.696 |
|                    | Africa                                       | Asia Pacific                                 | 0.4561                | 0.873      | 0.602 |
|                    |  | Europe                                       | 2.1784                | 0.997      | 0.031 |
|                    |  | Middle East                                  | 0.7895                | 0.915      | 0.39  |
|                    |  | North America and Australia                  | -0.4105               | 1.047      | 0.696 |
| <b>B</b>           | Asia Pacific                                 | Europe                                       | 0.5354                | 0.777      | 0.492 |
|                    |  | Middle East                                  | 1.2704                | 0.695      | 0.071 |
|                    |  | North America and Australia                  | -0.1758               | 0.826      | 0.832 |
|                    |  | Africa                                       | 1.2663                | 0.764      | 0.1   |
|                    | Europe                                       | Asia Pacific                                 | -0.5354               | 0.777      | 0.492 |
|                    |  | Middle East                                  | 0.735                 | 0.813      | 0.368 |
|                    |  | North America and Australia                  | -0.7111               | 0.927      | 0.445 |
|                    |  | Africa                                       | 0.731                 | 0.872      | 0.404 |
|                    | Middle East                                  | Asia Pacific                                 | -1.2704               | 0.695      | 0.071 |
|                    |  | Europe                                       | -0.735                | 0.813      | 0.368 |
|                    |  | North America and Australia                  | -1.4462               | 0.86       | 0.096 |
|                    |  | Africa                                       | -4.05E-03             | 0.8        | 0.996 |
|                    | North America and Australia                  | Asia Pacific                                 | 0.1758                | 0.826      | 0.832 |
|                    |  | Europe                                       | 0.7111                | 0.927      | 0.445 |
|                    |  | Middle East                                  | 1.4462                | 0.86       | 0.096 |
|                    |  | Africa                                       | 1.4421                | 0.916      | 0.118 |
|                    | Africa                                       | Asia Pacific                                 | -1.2663               | 0.764      | 0.1   |
|                    |  | Europe                                       | -0.731                | 0.872      | 0.404 |
|                    |  | Middle East                                  | 4.05E-03              | 0.8        | 0.996 |
|                    |  | North America and Australia                  | -1.4421               | 0.916      | 0.118 |
| <b>C</b>           | Asia Pacific                                 | Europe                                       | -0.2222               | 0.685      | 0.746 |
|                    |  | Middle East                                  | 0.8462                | 0.613      | 0.171 |
|                    |  | North America and Australia                  | 1.2667                | 0.728      | 0.085 |
|                    |  | Africa                                       | 1.6316                | 0.674      | 0.017 |
|                    | Europe                                       | Asia Pacific                                 | 0.2222                | 0.685      | 0.746 |
|                    |  | Middle East                                  | 1.0684                | 0.717      | 0.139 |
|                    |  | North America and Australia                  | 1.4889                | 0.818      | 0.071 |
|                    |  | Africa                                       | 1.8538                | 0.769      | 0.018 |
|                    | Middle East                                  | Asia Pacific                                 | -0.8462               | 0.613      | 0.171 |
|                    |  | Europe                                       | -1.0684               | 0.717      | 0.139 |
|                    |  | North America and Australia                  | 0.4205                | 0.758      | 0.58  |
|                    |  | Africa                                       | 0.7854                | 0.706      | 0.268 |
|                    | North America and Australia                  | Asia Pacific                                 | -1.2667               | 0.728      | 0.085 |
|                    |  | Europe                                       | -1.4889               | 0.818      | 0.071 |
|                    |  | Middle East                                  | -0.4205               | 0.758      | 0.58  |
|                    |  | Africa                                       | 0.3649                | 0.808      | 0.652 |
|                    | Africa                                       | Asia Pacific                                 | -1.6316               | 0.674      | 0.017 |
|                    |  | Europe                                       | -1.8538               | 0.769      | 0.018 |
|                    |  | Middle East                                  | -0.7854               | 0.706      | 0.268 |
|                    |  | North America and Australia                  | -0.3649               | 0.808      | 0.652 |

| Dependent Variable | (I) Country Where Respondent Currently Works | (J) Country Where Respondent Currently Works | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>D</b>           | Asia Pacific                                 | Europe                                       | -0.3687               | 0.694      | 0.596 |
|                    |  | Middle East                                  | -1.3858               | 0.621      | 0.028 |
|                    |  | North America and Australia                  | 0.6424                | 0.738      | 0.386 |
|                    |  | Africa                                       | 0.26                  | 0.682      | 0.704 |
|                    | Europe                                       | Asia Pacific                                 | 0.3687                | 0.694      | 0.596 |
|                    |  | Middle East                                  | -1.0171               | 0.726      | 0.164 |
|                    |  | North America and Australia                  | 1.0111                | 0.828      | 0.225 |
|                    |  | Africa                                       | 0.6287                | 0.779      | 0.422 |
|                    | Middle East                                  | Asia Pacific                                 | 1.3858                | 0.621      | 0.028 |
|                    |  | Europe                                       | 1.0171                | 0.726      | 0.164 |
|                    |  | North America and Australia                  | 2.0282*               | 0.768      | 0.01  |
|                    |  | Africa                                       | 1.6457                | 0.715      | 0.023 |
|                    | North America and Australia                  | Asia Pacific                                 | -0.6424               | 0.738      | 0.386 |
|                    |  | Europe                                       | -1.0111               | 0.828      | 0.225 |
|                    |  | Middle East                                  | -2.0282*              | 0.768      | 0.01  |
|                    |  | Africa                                       | -0.3825               | 0.818      | 0.641 |
|                    | Africa                                       | Asia Pacific                                 | -0.26                 | 0.682      | 0.704 |
|                    |  | Europe                                       | -0.6287               | 0.779      | 0.422 |
|                    |  | Middle East                                  | -1.6457               | 0.715      | 0.023 |
|                    |  | North America and Australia                  | 0.3825                | 0.818      | 0.641 |
| <b>E</b>           | Asia Pacific                                 | Europe                                       | 0.3283                | 0.706      | 0.643 |
|                    |  | Middle East                                  | -0.2401               | 0.632      | 0.705 |
|                    |  | North America and Australia                  | 1.4727                | 0.75       | 0.052 |
|                    |  | Africa                                       | -0.9729               | 0.694      | 0.164 |
|                    | Europe                                       | Asia Pacific                                 | -0.3283               | 0.706      | 0.643 |
|                    |  | Middle East                                  | -0.5684               | 0.739      | 0.443 |
|                    |  | North America and Australia                  | 1.1444                | 0.842      | 0.177 |
|                    |  | Africa                                       | -1.3012               | 0.792      | 0.104 |
|                    | Middle East                                  | Asia Pacific                                 | 0.2401                | 0.632      | 0.705 |
|                    |  | Europe                                       | 0.5684                | 0.739      | 0.443 |
|                    |  | North America and Australia                  | 1.7128                | 0.781      | 0.031 |
|                    |  | Africa                                       | -0.7328               | 0.727      | 0.316 |
|                    | North America and Australia                  | Asia Pacific                                 | -1.4727               | 0.75       | 0.052 |
|                    |  | Europe                                       | -1.1444               | 0.842      | 0.177 |
|                    |  | Middle East                                  | -1.7128               | 0.781      | 0.031 |
|                    |  | Africa                                       | -2.4456*              | 0.832      | 0.004 |
|                    | Africa                                       | Asia Pacific                                 | 0.9729                | 0.694      | 0.164 |
|                    |  | Europe                                       | 1.3012                | 0.792      | 0.104 |
|                    |  | Middle East                                  | 0.7328                | 0.727      | 0.316 |
|                    |  | North America and Australia                  | 2.4456                | 0.832      | 0.004 |
| <b>F</b>           | Asia Pacific                                 | Europe                                       | -5.05E-03             | 0.762      | 0.995 |
|                    |  | Middle East                                  | -1.0734               | 0.682      | 0.118 |
|                    |  | North America and Australia                  | -0.1273*              | 0.81       | 0.875 |
|                    |  | Africa                                       | -0.6746               | 0.749      | 0.37  |
|                    | Europe                                       | Asia Pacific                                 | 5.05E-03              | 0.762      | 0.995 |
|                    |  | Middle East                                  | -1.0684               | 0.797      | 0.183 |
|                    |  | North America and Australia                  | -0.1222               | 0.909      | 0.893 |
|                    |  | Africa                                       | -0.6696               | 0.855      | 0.435 |
|                    | Middle East                                  | Asia Pacific                                 | 1.0734                | 0.682      | 0.118 |
|                    |  | Europe                                       | 1.0684                | 0.797      | 0.183 |
|                    |  | North America and Australia                  | 0.9462                | 0.843      | 0.264 |
|                    |  | Africa                                       | 0.3988                | 0.785      | 0.612 |



| Dependent Variable | (I) Country Where Respondent Currently Works | (J) Country Where Respondent Currently Works | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>G</b>           | North America and Australia                  | Asia Pacific                                 | 0.1273                | 0.81       | 0.875 |
|                    |  | Europe                                       | 0.1222                | 0.909      | 0.893 |
|                    |  | Middle East                                  | -0.9462               | 0.843      | 0.264 |
|                    |  | Africa                                       | -0.5474               | 0.898      | 0.543 |
|                    | Africa                                       | Asia Pacific                                 | 0.6746                | 0.749      | 0.37  |
|                    |  | Europe                                       | 0.6696                | 0.855      | 0.435 |
|                    |  | Middle East                                  | -0.3988               | 0.785      | 0.612 |
|                    |  | North America and Australia                  | 0.5474                | 0.898      | 0.543 |
|                    | Asia Pacific                                 | Europe                                       | 0.2323                | 0.773      | 0.764 |
|                    |  | Middle East                                  | -0.148                | 0.692      | 0.831 |
|                    |  | North America and Australia                  | -0.8121               | 0.822      | 0.325 |
|                    |  | Africa                                       | 0.2791                | 0.76       | 0.714 |
|                    | Europe                                       | Asia Pacific                                 | -0.2323               | 0.773      | 0.764 |
|                    |  | Middle East                                  | -0.3803               | 0.809      | 0.639 |
|                    |  | North America and Australia                  | -1.0444               | 0.922      | 0.26  |
|                    |  | Africa                                       | 4.68E-02              | 0.868      | 0.957 |
|                    | Middle East                                  | Asia Pacific                                 | 0.148                 | 0.692      | 0.831 |
|                    |  | Europe                                       | 0.3803                | 0.809      | 0.639 |
|                    |  | North America and Australia                  | -0.6641               | 0.855      | 0.439 |
|                    |  | Africa                                       | 0.4271                | 0.796      | 0.593 |
|                    | North America and Australia                  | Asia Pacific                                 | 0.8121                | 0.822      | 0.325 |
|                    |  | Europe                                       | 1.0444                | 0.922      | 0.26  |
|                    |  | Middle East                                  | 0.6641                | 0.855      | 0.439 |
|                    |  | Africa                                       | 1.0912                | 0.911      | 0.234 |
| <b>H</b>           | Africa                                       | Asia Pacific                                 | -0.2791               | 0.76       | 0.714 |
|                    |  | Europe                                       | -4.68E-02             | 0.868      | 0.957 |
|                    |  | Middle East                                  | -0.4271               | 0.796      | 0.593 |
|                    |  | North America and Australia                  | -1.0912               | 0.911      | 0.234 |
|                    | Asia Pacific                                 | Europe                                       | -0.202                | 0.78       | 0.796 |
|                    |  | Middle East                                  | 0.1527                | 0.698      | 0.827 |
|                    |  | North America and Australia                  | -0.2242               | 0.829      | 0.787 |
|                    |  | Africa                                       | -0.4769               | 0.766      | 0.535 |
|                    | Europe                                       | Asia Pacific                                 | 0.202                 | 0.78       | 0.796 |
|                    |  | Middle East                                  | 0.3547                | 0.816      | 0.665 |
|                    |  | North America and Australia                  | -2.22E-02             | 0.93       | 0.981 |
|                    |  | Africa                                       | -0.2749               | 0.875      | 0.754 |
|                    | Middle East                                  | Asia Pacific                                 | -0.1527               | 0.698      | 0.827 |
|                    |  | Europe                                       | -0.3547               | 0.816      | 0.665 |
|                    |  | North America and Australia                  | -0.3769               | 0.863      | 0.663 |
|                    |  | Africa                                       | -0.6296               | 0.803      | 0.435 |
|                    | North America and Australia                  | Asia Pacific                                 | 0.2242                | 0.829      | 0.787 |
|                    |  | Europe                                       | 2.22E-02              | 0.93       | 0.981 |
|                    |  | Middle East                                  | 0.3769                | 0.863      | 0.663 |
|                    |  | Africa                                       | -0.2526               | 0.919      | 0.784 |
|                    | Africa                                       | Asia Pacific                                 | 0.4769                | 0.766      | 0.535 |
|                    |  | Europe                                       | 0.2749                | 0.875      | 0.754 |
|                    |  | Middle East                                  | 0.6296                | 0.803      | 0.435 |
|                    |  | North America and Australia                  | 0.2526                | 0.919      | 0.784 |
| <b>J</b>           | Asia Pacific                                 | Europe                                       | -1.5606               | 0.668      | 0.021 |
|                    |  | Middle East                                  | 0.9009                | 0.598      | 0.135 |
|                    |  | North America and Australia                  | -0.6606               | 0.71       | 0.354 |
|                    |  | Africa                                       | -0.9027               | 0.657      | 0.172 |

| Dependent Variable | (I) Country Where Respondent Currently Works | (J) Country Where Respondent Currently Works | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
|                    | Europe                                       | Asia Pacific                                 | 1.5606                | 0.668      | 0.021 |
|                    |  | Middle East                                  | 2.4615*               | 0.699      | 0.001 |
|                    |  | North America and Australia                  | 0.9                   | 0.797      | 0.262 |
|                    |  | Africa                                       | 0.6579                | 0.75       | 0.383 |
|                    | Middle East                                  | Asia Pacific                                 | -0.9009               | 0.598      | 0.135 |
|                    |  | Europe                                       | -2.4615*              | 0.699      | 0.001 |
|                    |  | North America and Australia                  | -1.5615               | 0.74       | 0.037 |
|                    |  | Africa                                       | -1.8036               | 0.688      | 0.01  |
|                    | North America and Australia                  | Asia Pacific                                 | 0.6606                | 0.71       | 0.354 |
|                    |  | Europe                                       | -0.9                  | 0.797      | 0.262 |
|                    |  | Middle East                                  | 1.5615                | 0.74       | 0.037 |
|                    |  | Africa                                       | -0.2421               | 0.788      | 0.759 |
|                    | Africa                                       | Asia Pacific                                 | 0.9027                | 0.657      | 0.172 |
|                    |  | Europe                                       | -0.6579               | 0.75       | 0.383 |
|                    |  | Middle East                                  | 1.8036                | 0.688      | 0.01  |
|                    |  | North America and Australia                  | 0.2421                | 0.788      | 0.759 |
| K                  | Asia Pacific                                 | Europe                                       | -0.4596               | 0.762      | 0.548 |
|                    |  | Middle East                                  | -0.6562               | 0.682      | 0.338 |
|                    |  | North America and Australia                  | -0.5152               | 0.81       | 0.526 |
|                    |  | Africa                                       | 4.63E-02              | 0.749      | 0.951 |
|                    | Europe                                       | Asia Pacific                                 | 0.4596                | 0.762      | 0.548 |
|                    |  | Middle East                                  | -0.1966               | 0.798      | 0.806 |
|                    |  | North America and Australia                  | -5.56E-02             | 0.91       | 0.951 |
|                    |  | Africa                                       | 0.5058                | 0.856      | 0.556 |
|                    | Middle East                                  | Asia Pacific                                 | 0.6562                | 0.682      | 0.338 |
|                    |  | Europe                                       | 0.1966                | 0.798      | 0.806 |
|                    |  | North America and Australia                  | 0.141                 | 0.844      | 0.868 |
|                    |  | Africa                                       | 0.7024                | 0.785      | 0.373 |
|                    | North America and Australia                  | Asia Pacific                                 | 0.5152                | 0.81       | 0.526 |
|                    |  | Europe                                       | 5.56E-02              | 0.91       | 0.951 |
|                    |  | Middle East                                  | -0.141                | 0.844      | 0.868 |
|                    |  | Africa                                       | 0.5614                | 0.899      | 0.534 |
|                    | Africa                                       | Asia Pacific                                 | -4.63E-02             | 0.749      | 0.951 |
|                    |  | Europe                                       | -0.5058               | 0.856      | 0.556 |
|                    |  | Middle East                                  | -0.7024               | 0.785      | 0.373 |
|                    |  | North America and Australia                  | -0.5614               | 0.899      | 0.534 |

\*The mean difference is significant at P=0.01

**Table A6-5. Significant Differences based on Regional Posting**

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| A                  | None   | 1 different country                                  | -1.5667               | 1.037      | 0.134 |
|                    |  | 2 different countries                                | -2.9118*              | 1.002      | 0.004 |
|                    |  | 3 different countries                                | -2.6111*              | 0.987      | 0.009 |
|                    |  | 4 different countries                                | -1.75                 | 1.109      | 0.117 |
|                    |  | 5 different countries                                | -1.3667               | 1.037      | 0.19  |
|                    |  | 6 or more different countries                        | -1.4048               | 0.949      | 0.142 |
|                    | 1 different country                                  | None   | 1.5667                | 1.037      | 0.134 |
|                    |  | 2 different countries                                | -1.3451               | 1.076      | 0.214 |
|                    |  | 3 different countries                                | -1.0444               | 1.062      | 0.327 |
|                    |  | 4 different countries                                | -0.1833               | 1.176      | 0.876 |
|                    |  | 5 different countries                                | 0.2                   | 1.109      | 0.857 |
|                    |  | 6 or more different countries                        | 0.1619                | 1.027      | 0.875 |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
|                    | 2 different countries                                | None   | 2.9118*               | 1.002      | 0.004 |
|                    |  | 1 different country                                  | 1.3451                | 1.076      | 0.214 |
|                    |  | 3 different countries                                | 0.3007                | 1.027      | 0.77  |
|                    |  | 4 different countries                                | 1.1618                | 1.145      | 0.312 |
|                    |  | 5 different countries                                | 1.5451                | 1.076      | 0.154 |
|                    |  | 6 or more different countries                        | 1.507                 | 0.991      | 0.131 |
|                    | 3 different countries                                | None   | 2.6111*               | 0.987      | 0.009 |
|                    |  | 1 different country                                  | 1.0444                | 1.062      | 0.327 |
|                    |  | 2 different countries                                | -0.3007               | 1.027      | 0.77  |
|                    |  | 4 different countries                                | 0.8611                | 1.132      | 0.448 |
|                    |  | 5 different countries                                | 1.2444                | 1.062      | 0.244 |
|                    |  | 6 or more different countries                        | 1.2063                | 0.975      | 0.219 |
|                    | 4 different countries                                | None   | 1.75                  | 1.109      | 0.117 |
|                    |  | 1 different country                                  | 0.1833                | 1.176      | 0.876 |
|                    |  | 2 different countries                                | -1.1618               | 1.145      | 0.312 |
|                    |  | 3 different countries                                | -0.8611               | 1.132      | 0.448 |
|                    |  | 5 different countries                                | 0.3833                | 1.176      | 0.745 |
|                    |  | 6 or more different countries                        | 0.3452                | 1.099      | 0.754 |
|                    | 5 different countries                                | None   | 1.3667                | 1.037      | 0.19  |
|                    |  | 1 different country                                  | -0.2                  | 1.109      | 0.857 |
|                    |  | 2 different countries                                | -1.5451               | 1.076      | 0.154 |
|                    |  | 3 different countries                                | -1.2444               | 1.062      | 0.244 |
|                    |  | 4 different countries                                | -0.3833               | 1.176      | 0.745 |
|                    |  | 6 or more different countries                        | -3.81E-02             | 1.027      | 0.97  |
|                    | 6 or more different countries                        | None   | 1.4048                | 0.949      | 0.142 |
|                    |  | 1 different country                                  | -0.1619               | 1.027      | 0.875 |
|                    |  | 2 different countries                                | -1.507                | 0.991      | 0.131 |
|                    |  | 3 different countries                                | -1.2063               | 0.975      | 0.219 |
|                    |  | 4 different countries                                | -0.3452               | 1.099      | 0.754 |
|                    |  | 5 different countries                                | 3.81E-02              | 1.027      | 0.97  |
| <b>B</b>           | None   | 1 different country                                  | 0.7833                | 0.908      | 0.39  |
|                    |  | 2 different countries                                | 0.2735                | 0.877      | 0.756 |
|                    |  | 3 different countries                                | 0.2278                | 0.863      | 0.792 |
|                    |  | 4 different countries                                | -0.4667               | 0.97       | 0.631 |
|                    |  | 5 different countries                                | 1.9167                | 0.908      | 0.037 |
|                    |  | 6 or more different countries                        | 1.0214                | 0.83       | 0.221 |
|                    | 1 different country                                  | None   | -0.7833               | 0.908      | 0.39  |
|                    |  | 2 different countries                                | -0.5098               | 0.941      | 0.589 |
|                    |  | 3 different countries                                | -0.5556               | 0.929      | 0.551 |
|                    |  | 4 different countries                                | -1.25                 | 1.029      | 0.227 |
|                    |  | 5 different countries                                | 1.1333                | 0.97       | 0.245 |
|                    |  | 6 or more different countries                        | 0.2381                | 0.898      | 0.791 |
|                    | 2 different countries                                | None   | -0.2735               | 0.877      | 0.756 |
|                    |  | 1 different country                                  | 0.5098                | 0.941      | 0.589 |
|                    |  | 3 different countries                                | -4.58E-02             | 0.899      | 0.959 |
|                    |  | 4 different countries                                | -0.7402               | 1.002      | 0.462 |
|                    |  | 5 different countries                                | 1.6431                | 0.941      | 0.084 |
|                    |  | 6 or more different countries                        | 0.7479                | 0.867      | 0.39  |
|                    | 3 different countries                                | None   | -0.2278               | 0.863      | 0.792 |
|                    |  | 1 different country                                  | 0.5556                | 0.929      | 0.551 |
|                    |  | 2 different countries                                | 4.58E-02              | 0.899      | 0.959 |
|                    |  | 4 different countries                                | -0.6944               | 0.99       | 0.485 |
|                    |  | 5 different countries                                | 1.6889                | 0.929      | 0.072 |
|                    |  | 6 or more different countries                        | 0.7937                | 0.853      | 0.354 |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>B</b>           | 4 different countries                                | None   | 0.4667                | 0.97       | 0.631 |
|                    |  | 1 different country                                  | 1.25                  | 1.029      | 0.227 |
|                    |  | 2 different countries                                | 0.7402                | 1.002      | 0.462 |
|                    |  | 3 different countries                                | 0.6944                | 0.99       | 0.485 |
|                    |  | 5 different countries                                | 2.3833                | 1.029      | 0.022 |
|                    |  | 6 or more different countries                        | 1.4881                | 0.962      | 0.125 |
|                    | 5 different countries                                | None   | -1.9167               | 0.908      | 0.037 |
|                    |  | 1 different country                                  | -1.1333               | 0.97       | 0.245 |
|                    |  | 2 different countries                                | -1.6431               | 0.941      | 0.084 |
|                    |  | 3 different countries                                | -1.6889               | 0.929      | 0.072 |
|                    |  | 4 different countries                                | -2.3833               | 1.029      | 0.022 |
|                    |  | 6 or more different countries                        | -0.8952               | 0.898      | 0.321 |
|                    | 6 or more different countries                        | None   | -1.0214               | 0.83       | 0.221 |
|                    |  | 1 different country                                  | -0.2381               | 0.898      | 0.791 |
|                    |  | 2 different countries                                | -0.7479               | 0.867      | 0.39  |
|                    |  | 3 different countries                                | -0.7937               | 0.853      | 0.354 |
|                    |  | 4 different countries                                | -1.4881               | 0.962      | 0.125 |
|                    |  | 5 different countries                                | 0.8952                | 0.898      | 0.321 |
| <b>C</b>           | None   | 1 different country                                  | 0.5167                | 0.83       | 0.535 |
|                    |  | 2 different countries                                | 1.4618                | 0.801      | 0.071 |
|                    |  | 3 different countries                                | 1.1056                | 0.789      | 0.164 |
|                    |  | 4 different countries                                | 0.7167                | 0.887      | 0.421 |
|                    |  | 5 different countries                                | 0.5167                | 0.83       | 0.535 |
|                    |  | 6 or more different countries                        | 0.431                 | 0.759      | 0.571 |
|                    | 1 different country                                  | None   | -0.5167               | 0.83       | 0.535 |
|                    |  | 2 different countries                                | 0.9451                | 0.861      | 0.274 |
|                    |  | 3 different countries                                | 0.5889                | 0.849      | 0.49  |
|                    |  | 4 different countries                                | 0.2                   | 0.941      | 0.832 |
|                    |  | 5 different countries                                | 0                     | 0.887      | 1     |
|                    |  | 6 or more different countries                        | -8.57E-02             | 0.821      | 0.917 |
|                    | 2 different countries                                | None   | -1.4618               | 0.801      | 0.071 |
|                    |  | 1 different country                                  | -0.9451               | 0.861      | 0.274 |
|                    |  | 3 different countries                                | -0.3562               | 0.822      | 0.665 |
|                    |  | 4 different countries                                | -0.7451               | 0.916      | 0.418 |
|                    |  | 5 different countries                                | -0.9451               | 0.861      | 0.274 |
|                    |  | 6 or more different countries                        | -1.0308               | 0.793      | 0.196 |
|                    | 3 different countries                                | None   | -1.1056               | 0.789      | 0.164 |
|                    |  | 1 different country                                  | -0.5889               | 0.849      | 0.49  |
|                    |  | 2 different countries                                | 0.3562                | 0.822      | 0.665 |
|                    |  | 4 different countries                                | -0.3889               | 0.905      | 0.668 |
|                    |  | 5 different countries                                | -0.5889               | 0.849      | 0.49  |
|                    |  | 6 or more different countries                        | -0.6746               | 0.78       | 0.389 |
|                    | 4 different countries                                | None   | -0.7167               | 0.887      | 0.421 |
|                    |  | 1 different country                                  | -0.2                  | 0.941      | 0.832 |
|                    |  | 2 different countries                                | 0.7451                | 0.916      | 0.418 |
|                    |  | 3 different countries                                | 0.3889                | 0.905      | 0.668 |
|                    |  | 5 different countries                                | -0.2                  | 0.941      | 0.832 |
|                    |  | 6 or more different countries                        | -0.2857               | 0.879      | 0.746 |
|                    | 5 different countries                                | None   | -0.5167               | 0.83       | 0.535 |
|                    |  | 1 different country                                  | 0                     | 0.887      | 1     |
|                    |  | 2 different countries                                | 0.9451                | 0.861      | 0.274 |
|                    |  | 3 different countries                                | 0.5889                | 0.849      | 0.49  |
|                    |  | 4 different countries                                | 0.2                   | 0.941      | 0.832 |
|                    |  | 6 or more different countries                        | -8.57E-02             | 0.821      | 0.917 |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>C</b>           | 6 or more different countries                        | None   | -0.431                | 0.759      | 0.571 |
|                    |  | 1 different country                                  | 8.57E-02              | 0.821      | 0.917 |
|                    |  | 2 different countries                                | 1.0308                | 0.793      | 0.196 |
|                    |  | 3 different countries                                | 0.6746                | 0.78       | 0.389 |
|                    |  | 4 different countries                                | 0.2857                | 0.879      | 0.746 |
|                    |  | 5 different countries                                | 8.57E-02              | 0.821      | 0.917 |
| <b>D</b>           | None   | 1 different country                                  | 0.6667                | 0.833      | 0.425 |
|                    |  | 2 different countries                                | 0.6118                | 0.805      | 0.449 |
|                    |  | 3 different countries                                | 0.1444                | 0.793      | 0.856 |
|                    |  | 4 different countries                                | 1.0333                | 0.891      | 0.249 |
|                    |  | 5 different countries                                | 0.2                   | 0.833      | 0.811 |
|                    |  | 6 or more different countries                        | 9.52E-03              | 0.762      | 0.99  |
|                    | 1 different country                                  | None   | -0.6667               | 0.833      | 0.425 |
|                    |  | 2 different countries                                | -5.49E-02             | 0.864      | 0.949 |
|                    |  | 3 different countries                                | -0.5222               | 0.853      | 0.542 |
|                    |  | 4 different countries                                | 0.3667                | 0.945      | 0.699 |
|                    |  | 5 different countries                                | -0.4667               | 0.891      | 0.601 |
|                    |  | 6 or more different countries                        | -0.6571               | 0.825      | 0.427 |
|                    | 2 different countries                                | None   | -0.6118               | 0.805      | 0.449 |
|                    |  | 1 different country                                  | 5.49E-02              | 0.864      | 0.949 |
|                    |  | 3 different countries                                | -0.4673               | 0.825      | 0.572 |
|                    |  | 4 different countries                                | 0.4216                | 0.92       | 0.648 |
|                    |  | 5 different countries                                | -0.4118               | 0.864      | 0.635 |
|                    |  | 6 or more different countries                        | -0.6022               | 0.796      | 0.451 |
|                    | 3 different countries                                | None   | -0.1444               | 0.793      | 0.856 |
|                    |  | 1 different country                                  | 0.5222                | 0.853      | 0.542 |
|                    |  | 2 different countries                                | 0.4673                | 0.825      | 0.572 |
|                    |  | 4 different countries                                | 0.8889                | 0.909      | 0.33  |
|                    |  | 5 different countries                                | 5.56E-02              | 0.853      | 0.948 |
|                    |  | 6 or more different countries                        | -0.1349               | 0.784      | 0.864 |
|                    | 4 different countries                                | None   | -1.0333               | 0.891      | 0.249 |
|                    |  | 1 different country                                  | -0.3667               | 0.945      | 0.699 |
|                    |  | 2 different countries                                | -0.4216               | 0.92       | 0.648 |
|                    |  | 3 different countries                                | -0.8889               | 0.909      | 0.33  |
|                    |  | 5 different countries                                | -0.8333               | 0.945      | 0.38  |
|                    |  | 6 or more different countries                        | -1.0238               | 0.883      | 0.249 |
|                    | 5 different countries                                | None   | -0.2                  | 0.833      | 0.811 |
|                    |  | 1 different country                                  | 0.4667                | 0.891      | 0.601 |
|                    |  | 2 different countries                                | 0.4118                | 0.864      | 0.635 |
|                    |  | 3 different countries                                | -5.56E-02             | 0.853      | 0.948 |
|                    |  | 4 different countries                                | 0.8333                | 0.945      | 0.38  |
|                    |  | 6 or more different countries                        | -0.1905               | 0.825      | 0.818 |
|                    | 6 or more different countries                        | None   | -9.52E-03             | 0.762      | 0.99  |
|                    |  | 1 different country                                  | 0.6571                | 0.825      | 0.427 |
|                    |  | 2 different countries                                | 0.6022                | 0.796      | 0.451 |
|                    |  | 3 different countries                                | 0.1349                | 0.784      | 0.864 |
|                    |  | 4 different countries                                | 1.0238                | 0.883      | 0.249 |
|                    |  | 5 different countries                                | 0.1905                | 0.825      | 0.818 |
| <b>E</b>           | None   | 1 different country                                  | 1.1                   | 0.848      | 0.197 |
|                    |  | 2 different countries                                | 1.2412                | 0.819      | 0.133 |
|                    |  | 3 different countries                                | 0.2444                | 0.807      | 0.763 |
|                    |  | 4 different countries                                | 1.05                  | 0.907      | 0.249 |
|                    |  | 5 different countries                                | 1.2333                | 0.848      | 0.149 |
|                    |  | 6 or more different countries                        | 0.8714                | 0.776      | 0.264 |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| E                  | 1 different country                                  | None   | -1.1                  | 0.848      | 0.197 |
|                    |  | 2 different countries                                | 0.1412                | 0.88       | 0.873 |
|                    |  | 3 different countries                                | -0.8556               | 0.868      | 0.327 |
|                    |  | 4 different countries                                | -5.00E-02             | 0.962      | 0.959 |
|                    |  | 5 different countries                                | 0.1333                | 0.907      | 0.883 |
|                    |  | 6 or more different countries                        | -0.2286               | 0.84       | 0.786 |
|                    | 2 different countries                                | None   | -1.2412               | 0.819      | 0.133 |
|                    |  | 1 different country                                  | -0.1412               | 0.88       | 0.873 |
|                    |  | 3 different countries                                | -0.9967               | 0.84       | 0.238 |
|                    |  | 4 different countries                                | -0.1912               | 0.937      | 0.839 |
|                    |  | 5 different countries                                | -7.84E-03             | 0.88       | 0.993 |
|                    |  | 6 or more different countries                        | -0.3697               | 0.81       | 0.649 |
|                    | 3 different countries                                | None   | -0.2444               | 0.807      | 0.763 |
|                    |  | 1 different country                                  | 0.8556                | 0.868      | 0.327 |
|                    |  | 2 different countries                                | 0.9967                | 0.84       | 0.238 |
|                    |  | 4 different countries                                | 0.8056                | 0.926      | 0.386 |
|                    |  | 5 different countries                                | 0.9889                | 0.868      | 0.257 |
|                    |  | 6 or more different countries                        | 0.627                 | 0.798      | 0.434 |
|                    | 4 different countries                                | None   | -1.05                 | 0.907      | 0.249 |
|                    |  | 1 different country                                  | 5.00E-02              | 0.962      | 0.959 |
|                    |  | 2 different countries                                | 0.1912                | 0.937      | 0.839 |
|                    |  | 3 different countries                                | -0.8056               | 0.926      | 0.386 |
|                    |  | 5 different countries                                | 0.1833                | 0.962      | 0.849 |
|                    |  | 6 or more different countries                        | -0.1786               | 0.899      | 0.843 |
|                    | 5 different countries                                | None   | -1.2333               | 0.848      | 0.149 |
|                    |  | 1 different country                                  | -0.1333               | 0.907      | 0.883 |
|                    |  | 2 different countries                                | 7.84E-03              | 0.88       | 0.993 |
|                    |  | 3 different countries                                | -0.9889               | 0.868      | 0.257 |
|                    |  | 4 different countries                                | -0.1833               | 0.962      | 0.849 |
|                    |  | 6 or more different countries                        | -0.3619               | 0.84       | 0.667 |
|                    | 6 or more different countries                        | None   | -0.8714               | 0.776      | 0.264 |
|                    |  | 1 different country                                  | 0.2286                | 0.84       | 0.786 |
|                    |  | 2 different countries                                | 0.3697                | 0.81       | 0.649 |
|                    |  | 3 different countries                                | -0.627                | 0.798      | 0.434 |
|                    |  | 4 different countries                                | 0.1786                | 0.899      | 0.843 |
|                    |  | 5 different countries                                | 0.3619                | 0.84       | 0.667 |
| F                  | None   | 1 different country                                  | -0.4833               | 0.872      | 0.581 |
|                    |  | 2 different countries                                | 0.5088                | 0.842      | 0.547 |
|                    |  | 3 different countries                                | -0.3833               | 0.83       | 0.645 |
|                    |  | 4 different countries                                | -1.2167               | 0.932      | 0.195 |
|                    |  | 5 different countries                                | 0.1833                | 0.872      | 0.834 |
|                    |  | 6 or more different countries                        | -0.2167               | 0.798      | 0.786 |
|                    | 1 different country                                  | None   | 0.4833                | 0.872      | 0.581 |
|                    |  | 2 different countries                                | 0.9922                | 0.904      | 0.275 |
|                    |  | 3 different countries                                | 0.1                   | 0.893      | 0.911 |
|                    |  | 4 different countries                                | -0.7333               | 0.989      | 0.46  |
|                    |  | 5 different countries                                | 0.6667                | 0.932      | 0.476 |
|                    |  | 6 or more different countries                        | 0.2667                | 0.863      | 0.758 |
|                    | 2 different countries                                | None   | -0.5088               | 0.842      | 0.547 |
|                    |  | 1 different country                                  | -0.9922               | 0.904      | 0.275 |
|                    |  | 3 different countries                                | -0.8922               | 0.863      | 0.304 |
|                    |  | 4 different countries                                | -1.7255               | 0.963      | 0.076 |
|                    |  | 5 different countries                                | -0.3255               | 0.904      | 0.72  |
|                    |  | 6 or more different countries                        | -0.7255               | 0.833      | 0.386 |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| F                  | 3 different countries                                | None   | 0.3833                | 0.83       | 0.645 |
|                    |  | 1 different country                                  | -0.1                  | 0.893      | 0.911 |
|                    |  | 2 different countries                                | 0.8922                | 0.863      | 0.304 |
|                    |  | 4 different countries                                | -0.8333               | 0.952      | 0.383 |
|                    |  | 5 different countries                                | 0.5667                | 0.893      | 0.527 |
|                    |  | 6 or more different countries                        | 0.1667                | 0.82       | 0.839 |
|                    | 4 different countries                                | None   | 1.2167                | 0.932      | 0.195 |
|                    |  | 1 different country                                  | 0.7333                | 0.989      | 0.46  |
|                    |  | 2 different countries                                | 1.7255                | 0.963      | 0.076 |
|                    |  | 3 different countries                                | 0.8333                | 0.952      | 0.383 |
|                    |  | 5 different countries                                | 1.4                   | 0.989      | 0.16  |
|                    |  | 6 or more different countries                        | 1                     | 0.924      | 0.281 |
|                    | 5 different countries                                | None   | -0.1833               | 0.872      | 0.834 |
|                    |  | 1 different country                                  | -0.6667               | 0.932      | 0.476 |
|                    |  | 2 different countries                                | 0.3255                | 0.904      | 0.72  |
|                    |  | 3 different countries                                | -0.5667               | 0.893      | 0.527 |
|                    |  | 4 different countries                                | -1.4                  | 0.989      | 0.16  |
|                    |  | 6 or more different countries                        | -0.4                  | 0.863      | 0.644 |
|                    | 6 or more different countries                        | None   | 0.2167                | 0.798      | 0.786 |
|                    |  | 1 different country                                  | -0.2667               | 0.863      | 0.758 |
|                    |  | 2 different countries                                | 0.7255                | 0.833      | 0.386 |
|                    |  | 3 different countries                                | -0.1667               | 0.82       | 0.839 |
|                    |  | 4 different countries                                | -1                    | 0.924      | 0.281 |
|                    |  | 5 different countries                                | 0.4                   | 0.863      | 0.644 |
| G                  | None   | 1 different country                                  | 0.9333                | 0.909      | 0.307 |
|                    |  | 2 different countries                                | 0.2471                | 0.878      | 0.779 |
|                    |  | 3 different countries                                | 0.9333                | 0.864      | 0.283 |
|                    |  | 4 different countries                                | 0.6                   | 0.971      | 0.538 |
|                    |  | 5 different countries                                | -1.0667               | 0.909      | 0.243 |
|                    |  | 6 or more different countries                        | 0.8857                | 0.831      | 0.289 |
|                    | 1 different country                                  | None   | -0.9333               | 0.909      | 0.307 |
|                    |  | 2 different countries                                | -0.6863               | 0.942      | 0.468 |
|                    |  | 3 different countries                                | 0                     | 0.93       | 1     |
|                    |  | 4 different countries                                | -0.3333               | 1.03       | 0.747 |
|                    |  | 5 different countries                                | -2                    | 0.971      | 0.042 |
|                    |  | 6 or more different countries                        | -4.76E-02             | 0.899      | 0.958 |
|                    | 2 different countries                                | None   | -0.2471               | 0.878      | 0.779 |
|                    |  | 1 different country                                  | 0.6863                | 0.942      | 0.468 |
|                    |  | 3 different countries                                | 0.6863                | 0.9        | 0.447 |
|                    |  | 4 different countries                                | 0.3529                | 1.003      | 0.726 |
|                    |  | 5 different countries                                | -1.3137               | 0.942      | 0.166 |
|                    |  | 6 or more different countries                        | 0.6387                | 0.868      | 0.463 |
|                    | 3 different countries                                | None   | -0.9333               | 0.864      | 0.283 |
|                    |  | 1 different country                                  | 0                     | 0.93       | 1     |
|                    |  | 2 different countries                                | -0.6863               | 0.9        | 0.447 |
|                    |  | 4 different countries                                | -0.3333               | 0.991      | 0.737 |
|                    |  | 5 different countries                                | -2                    | 0.93       | 0.034 |
|                    |  | 6 or more different countries                        | -4.76E-02             | 0.855      | 0.956 |
|                    | 4 different countries                                | None   | -0.6                  | 0.971      | 0.538 |
|                    |  | 1 different country                                  | 0.3333                | 1.03       | 0.747 |
|                    |  | 2 different countries                                | -0.3529               | 1.003      | 0.726 |
|                    |  | 3 different countries                                | 0.3333                | 0.991      | 0.737 |
|                    |  | 5 different countries                                | -1.6667               | 1.03       | 0.109 |
|                    |  | 6 or more different countries                        | 0.2857                | 0.963      | 0.767 |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| G                  | 5 different countries                                | None   | 1.0667                | 0.909      | 0.243 |
|                    |  | 1 different country                                  | 2                     | 0.971      | 0.042 |
|                    |  | 2 different countries                                | 1.3137                | 0.942      | 0.166 |
|                    |  | 3 different countries                                | 2                     | 0.93       | 0.034 |
|                    |  | 4 different countries                                | 1.6667                | 1.03       | 0.109 |
|                    |  | 6 or more different countries                        | 1.9524                | 0.899      | 0.032 |
|                    | 6 or more different countries                        | None   | -0.8857               | 0.831      | 0.289 |
|                    |  | 1 different country                                  | 4.76E-02              | 0.899      | 0.958 |
|                    |  | 2 different countries                                | -0.6387               | 0.868      | 0.463 |
|                    |  | 3 different countries                                | 4.76E-02              | 0.855      | 0.956 |
|                    |  | 4 different countries                                | -0.2857               | 0.963      | 0.767 |
|                    |  | 5 different countries                                | -1.9524               | 0.899      | 0.032 |
| H                  | None   | 1 different country                                  | -0.8                  | 0.907      | 0.38  |
|                    |  | 2 different countries                                | -1.4118               | 0.876      | 0.11  |
|                    |  | 3 different countries                                | -5.56E-02             | 0.863      | 0.949 |
|                    |  | 4 different countries                                | -1.75                 | 0.97       | 0.074 |
|                    |  | 5 different countries                                | -0.7333               | 0.907      | 0.421 |
|                    |  | 6 or more different countries                        | -0.2857               | 0.83       | 0.731 |
|                    | 1 different country                                  | None   | 0.8                   | 0.907      | 0.38  |
|                    |  | 2 different countries                                | -0.6118               | 0.941      | 0.517 |
|                    |  | 3 different countries                                | 0.7444                | 0.928      | 0.424 |
|                    |  | 4 different countries                                | -0.95                 | 1.029      | 0.358 |
|                    |  | 5 different countries                                | 6.67E-02              | 0.97       | 0.945 |
|                    |  | 6 or more different countries                        | 0.5143                | 0.898      | 0.568 |
|                    | 2 different countries                                | None   | 1.4118                | 0.876      | 0.11  |
|                    |  | 1 different country                                  | 0.6118                | 0.941      | 0.517 |
|                    |  | 3 different countries                                | 1.3562                | 0.898      | 0.134 |
|                    |  | 4 different countries                                | -0.3382               | 1.001      | 0.736 |
|                    |  | 5 different countries                                | 0.6784                | 0.941      | 0.472 |
|                    |  | 6 or more different countries                        | 1.1261                | 0.866      | 0.196 |
|                    | 3 different countries                                | None   | 5.56E-02              | 0.863      | 0.949 |
|                    |  | 1 different country                                  | -0.7444               | 0.928      | 0.424 |
|                    |  | 2 different countries                                | -1.3562               | 0.898      | 0.134 |
|                    |  | 4 different countries                                | -1.6944               | 0.99       | 0.09  |
|                    |  | 5 different countries                                | -0.6778               | 0.928      | 0.467 |
|                    |  | 6 or more different countries                        | -0.2302               | 0.853      | 0.788 |
|                    | 4 different countries                                | None   | 1.75                  | 0.97       | 0.074 |
|                    |  | 1 different country                                  | 0.95                  | 1.029      | 0.358 |
|                    |  | 2 different countries                                | 0.3382                | 1.001      | 0.736 |
|                    |  | 3 different countries                                | 1.6944                | 0.99       | 0.09  |
|                    |  | 5 different countries                                | 1.0167                | 1.029      | 0.325 |
|                    |  | 6 or more different countries                        | 1.4643                | 0.961      | 0.13  |
|                    | 5 different countries                                | None   | 0.7333                | 0.907      | 0.421 |
|                    |  | 1 different country                                  | -6.67E-02             | 0.97       | 0.945 |
|                    |  | 2 different countries                                | -0.6784               | 0.941      | 0.472 |
|                    |  | 3 different countries                                | 0.6778                | 0.928      | 0.467 |
|                    |  | 4 different countries                                | -1.0167               | 1.029      | 0.325 |
|                    |  | 6 or more different countries                        | 0.4476                | 0.898      | 0.619 |
|                    | 6 or more different countries                        | None   | 0.2857                | 0.83       | 0.731 |
|                    |  | 1 different country                                  | -0.5143               | 0.898      | 0.568 |
|                    |  | 2 different countries                                | -1.1261               | 0.866      | 0.196 |
|                    |  | 3 different countries                                | 0.2302                | 0.853      | 0.788 |
|                    |  | 4 different countries                                | -1.4643               | 0.961      | 0.13  |
|                    |  | 5 different countries                                | -0.4476               | 0.898      | 0.619 |



| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| J                  | None   | 1 different country                                  | -0.5667               | 0.799      | 0.48  |
|                    |  | 2 different countries                                | -0.3471               | 0.772      | 0.654 |
|                    |  | 3 different countries                                | 0.6333                | 0.76       | 0.407 |
|                    |  | 4 different countries                                | 0.8833                | 0.855      | 0.304 |
|                    |  | 5 different countries                                | 0.6333                | 0.799      | 0.43  |
|                    |  | 6 or more different countries                        | -0.7                  | 0.731      | 0.341 |
|                    | 1 different country                                  | None   | 0.5667                | 0.799      | 0.48  |
|                    |  | 2 different countries                                | 0.2196                | 0.829      | 0.792 |
|                    |  | 3 different countries                                | 1.2                   | 0.818      | 0.145 |
|                    |  | 4 different countries                                | 1.45                  | 0.906      | 0.113 |
|                    |  | 5 different countries                                | 1.2                   | 0.855      | 0.163 |
|                    |  | 6 or more different countries                        | -0.1333               | 0.791      | 0.866 |
|                    | 2 different countries                                | None   | 0.3471                | 0.772      | 0.654 |
|                    |  | 1 different country                                  | -0.2196               | 0.829      | 0.792 |
|                    |  | 3 different countries                                | 0.9804                | 0.792      | 0.218 |
|                    |  | 4 different countries                                | 1.2304                | 0.882      | 0.166 |
|                    |  | 5 different countries                                | 0.9804                | 0.829      | 0.24  |
|                    |  | 6 or more different countries                        | -0.3529               | 0.764      | 0.645 |
|                    | 3 different countries                                | None   | -0.6333               | 0.76       | 0.407 |
|                    |  | 1 different country                                  | -1.2                  | 0.818      | 0.145 |
|                    |  | 2 different countries                                | -0.9804               | 0.792      | 0.218 |
|                    |  | 4 different countries                                | 0.25                  | 0.872      | 0.775 |
|                    |  | 5 different countries                                | 0                     | 0.818      | 1     |
|                    |  | 6 or more different countries                        | -1.3333               | 0.752      | 0.079 |
|                    | 4 different countries                                | None   | -0.8833               | 0.855      | 0.304 |
|                    |  | 1 different country                                  | -1.45                 | 0.906      | 0.113 |
|                    |  | 2 different countries                                | -1.2304               | 0.882      | 0.166 |
|                    |  | 3 different countries                                | -0.25                 | 0.872      | 0.775 |
|                    |  | 5 different countries                                | -0.25                 | 0.906      | 0.783 |
|                    |  | 6 or more different countries                        | -1.5833               | 0.847      | 0.064 |
|                    | 5 different countries                                | None   | -0.6333               | 0.799      | 0.43  |
|                    |  | 1 different country                                  | -1.2                  | 0.855      | 0.163 |
|                    |  | 2 different countries                                | -0.9804               | 0.829      | 0.24  |
|                    |  | 3 different countries                                | 0                     | 0.818      | 1     |
|                    |  | 4 different countries                                | 0.25                  | 0.906      | 0.783 |
|                    |  | 6 or more different countries                        | -1.3333               | 0.791      | 0.095 |
|                    | 6 or more different countries                        | None   | 0.7                   | 0.731      | 0.341 |
|                    |  | 1 different country                                  | 0.1333                | 0.791      | 0.866 |
|                    |  | 2 different countries                                | 0.3529                | 0.764      | 0.645 |
|                    |  | 3 different countries                                | 1.3333                | 0.752      | 0.079 |
|                    |  | 4 different countries                                | 1.5833                | 0.847      | 0.064 |
|                    |  | 5 different countries                                | 1.3333                | 0.791      | 0.095 |
| K                  | None   | 1 different country                                  | -0.5833               | 0.871      | 0.504 |
|                    |  | 2 different countries                                | 0.3265                | 0.841      | 0.699 |
|                    |  | 3 different countries                                | -0.2389               | 0.828      | 0.774 |
|                    |  | 4 different countries                                | 0.9                   | 0.931      | 0.336 |
|                    |  | 5 different countries                                | -1.5167               | 0.871      | 0.084 |
|                    |  | 6 or more different countries                        | -0.6119               | 0.797      | 0.444 |
|                    | 1 different country                                  | None   | 0.5833                | 0.871      | 0.504 |
|                    |  | 2 different countries                                | 0.9098                | 0.903      | 0.316 |
|                    |  | 3 different countries                                | 0.3444                | 0.891      | 0.7   |
|                    |  | 4 different countries                                | 1.4833                | 0.988      | 0.136 |
|                    |  | 5 different countries                                | -0.9333               | 0.931      | 0.318 |
|                    |  | 6 or more different countries                        | -2.86E-02             | 0.862      | 0.974 |

| Dependent Variable | (I) Countries Where Respondent has Previously Worked | (J) Countries Where Respondent has Previously Worked | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>K</b>           | 2 different countries                                | None   | -0.3265               | 0.841      | 0.699 |
|                    |  | 1 different country                                  | -0.9098               | 0.903      | 0.316 |
|                    |  | 3 different countries                                | -0.5654               | 0.862      | 0.513 |
|                    |  | 4 different countries                                | 0.5735                | 0.961      | 0.552 |
|                    |  | 5 different countries                                | -1.8431               | 0.903      | 0.044 |
|                    |  | 6 or more different countries                        | -0.9384               | 0.832      | 0.262 |
|                    | 3 different countries                                | None   | 0.2389                | 0.828      | 0.774 |
|                    |  | 1 different country                                  | -0.3444               | 0.891      | 0.7   |
|                    |  | 2 different countries                                | 0.5654                | 0.862      | 0.513 |
|                    |  | 4 different countries                                | 1.1389                | 0.95       | 0.233 |
|                    |  | 5 different countries                                | -1.2778               | 0.891      | 0.155 |
|                    |  | 6 or more different countries                        | -0.373                | 0.819      | 0.65  |
|                    | 4 different countries                                | None   | -0.9                  | 0.931      | 0.336 |
|                    |  | 1 different country                                  | -1.4833               | 0.988      | 0.136 |
|                    |  | 2 different countries                                | -0.5735               | 0.961      | 0.552 |
|                    |  | 3 different countries                                | -1.1389               | 0.95       | 0.233 |
|                    |  | 5 different countries                                | -2.4167               | 0.988      | 0.016 |
|                    |  | 6 or more different countries                        | -1.5119               | 0.923      | 0.104 |
|                    | 5 different countries                                | None   | 1.5167                | 0.871      | 0.084 |
|                    |  | 1 different country                                  | 0.9333                | 0.931      | 0.318 |
|                    |  | 2 different countries                                | 1.8431                | 0.903      | 0.044 |
|                    |  | 3 different countries                                | 1.2778                | 0.891      | 0.155 |
|                    |  | 4 different countries                                | 2.4167                | 0.988      | 0.016 |
|                    |  | 6 or more different countries                        | 0.9048                | 0.862      | 0.296 |
|                    | 6 or more different countries                        | None   | 0.6119                | 0.797      | 0.444 |
|                    |  | 1 different country                                  | 2.86E-02              | 0.862      | 0.974 |
|                    |  | 2 different countries                                | 0.9384                | 0.832      | 0.262 |
|                    |  | 3 different countries                                | 0.373                 | 0.819      | 0.65  |
|                    |  | 4 different countries                                | 1.5119                | 0.923      | 0.104 |
|                    |  | 5 different countries                                | -0.9048               | 0.862      | 0.296 |

\*The mean difference is significant at P=0.01

**Table A6-6. Significant Differences based on Experience of Previous Countries**

| Dependent Variable | (I) Level of diversity among workforce | (J) Level of diversity among workforce | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>A</b>           | Little diversity                       | Medium diversity                       | -0.6084               | 0.75       | 0.419 |
|                    |  | Large diversity                        | -0.4941               | 0.693      | 0.477 |
|                    | Medium diversity                       | Little diversity                       | 0.6084                | 0.75       | 0.419 |
|                    |  | Large diversity                        | 0.1143                | 0.687      | 0.868 |
|                    | Large diversity                        | Little diversity                       | 0.4941                | 0.693      | 0.477 |
|                    |  | Medium diversity                       | -0.1143               | 0.687      | 0.868 |
| <b>B</b>           | Little diversity                       | Medium diversity                       | -1.4975               | 0.621      | 0.017 |
|                    |  | Large diversity                        | 0.3682                | 0.573      | 0.522 |
|                    | Medium diversity                       | Little diversity                       | 1.4975                | 0.621      | 0.017 |
|                    |  | Large diversity                        | 1.8657*               | 0.568      | 0.001 |
|                    | Large diversity                        | Little diversity                       | -0.3682               | 0.573      | 0.522 |
|                    |  | Medium diversity                       | -1.8657*              | 0.568      | 0.001 |
| <b>C</b>           | Little diversity                       | Medium diversity                       | 0.7933                | 0.578      | 0.173 |
|                    |  | Large diversity                        | 0.3247                | 0.534      | 0.544 |
|                    | Medium diversity                       | Little diversity                       | -0.7933               | 0.578      | 0.173 |
|                    |  | Large diversity                        | -0.4686               | 0.529      | 0.378 |
|                    | Large diversity                        | Little diversity                       | -0.3247               | 0.534      | 0.544 |
|                    |  | Medium diversity                       | 0.4686                | 0.529      | 0.378 |
| <b>D</b>           | Little diversity                       | Medium diversity                       | 0.4361                | 0.579      | 0.452 |
|                    |  | Large diversity                        | 0.6647                | 0.534      | 0.216 |

| Dependent Variable | (I) Level of diversity among workforce | (J) Level of diversity among workforce | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>D</b>           | Medium diversity                       | Little diversity                       | -0.4361               | 0.579      | 0.452 |
|                    |  | Large diversity                        | 0.2286                | 0.529      | 0.667 |
|                    | Large diversity                        | Little diversity                       | -0.6647               | 0.534      | 0.216 |
|                    |  | Medium diversity                       | -0.2286               | 0.529      | 0.667 |
| <b>E</b>           | Little diversity                       | Medium diversity                       | 8.40E-03              | 0.594      | 0.989 |
|                    |  | Large diversity                        | -0.6059               | 0.549      | 0.272 |
|                    | Medium diversity                       | Little diversity                       | -8.40E-03             | 0.594      | 0.989 |
|                    |  | Large diversity                        | -0.6143               | 0.544      | 0.261 |
|                    | Large diversity                        | Little diversity                       | 0.6059                | 0.549      | 0.272 |
|                    |  | Medium diversity                       | 0.6143                | 0.544      | 0.261 |
| <b>F</b>           | Little diversity                       | Medium diversity                       | -0.3084               | 0.608      | 0.613 |
|                    |  | Large diversity                        | -0.8541               | 0.561      | 0.131 |
|                    | Medium diversity                       | Little diversity                       | 0.3084                | 0.608      | 0.613 |
|                    |  | Large diversity                        | -0.5457               | 0.556      | 0.329 |
|                    | Large diversity                        | Little diversity                       | 0.8541                | 0.561      | 0.131 |
|                    |  | Medium diversity                       | 0.5457                | 0.556      | 0.329 |
| <b>G</b>           | Little diversity                       | Medium diversity                       | 1.3639                | 0.632      | 0.033 |
|                    |  | Large diversity                        | 0.2753                | 0.583      | 0.638 |
|                    | Medium diversity                       | Little diversity                       | -1.3639               | 0.632      | 0.033 |
|                    |  | Large diversity                        | -1.0886               | 0.578      | 0.062 |
|                    | Large diversity                        | Little diversity                       | -0.2753               | 0.583      | 0.638 |
|                    |  | Medium diversity                       | 1.0886                | 0.578      | 0.062 |
| <b>H</b>           | Little diversity                       | Medium diversity                       | -0.6748               | 0.64       | 0.294 |
|                    |  | Large diversity                        | -0.1576               | 0.59       | 0.79  |
|                    | Medium diversity                       | Little diversity                       | 0.6748                | 0.64       | 0.294 |
|                    |  | Large diversity                        | 0.5171                | 0.585      | 0.379 |
|                    | Large diversity                        | Little diversity                       | 0.1576                | 0.59       | 0.79  |
|                    |  | Medium diversity                       | -0.5171               | 0.585      | 0.379 |
| <b>J</b>           | Little diversity                       | Medium diversity                       | -0.1034               | 0.569      | 0.856 |
|                    |  | Large diversity                        | 0.2824                | 0.525      | 0.592 |
|                    | Medium diversity                       | Little diversity                       | 0.1034                | 0.569      | 0.856 |
|                    |  | Large diversity                        | 0.3857                | 0.521      | 0.46  |
|                    | Large diversity                        | Little diversity                       | -0.2824               | 0.525      | 0.592 |
|                    |  | Medium diversity                       | -0.3857               | 0.521      | 0.46  |
| <b>K</b>           | Little diversity                       | Medium diversity                       | 0.5908                | 0.619      | 0.342 |
|                    |  | Large diversity                        | 0.1965                | 0.571      | 0.732 |
|                    | Medium diversity                       | Little diversity                       | -0.5908               | 0.619      | 0.342 |
|                    |  | Large diversity                        | -0.3943               | 0.567      | 0.488 |
|                    | Large diversity                        | Little diversity                       | -0.1965               | 0.571      | 0.732 |
|                    |  | Medium diversity                       | 0.3943                | 0.567      | 0.488 |

\*The mean difference is significant at P=0.01

**Table A6-7. Significant Differences as a result of Diversity Among Subordinate Staff**

| Dependent Variable | (I) Level of problems caused by working outside UK | (J) Level of problems caused by working outside UK | Mean Difference (I-J) | Std. Error | Sig.  |
|--------------------|--|--|-----------------------|------------|-------|
| <b>A</b>           | More Problematic                                   | About the Same                                     | 0.7159                | 0.611      | 0.244 |
|                    | About the Same                                     | More Problematic                                   | -0.7159               | 0.611      | 0.244 |
| <b>B</b>           | More Problematic                                   | About the Same                                     | -1.8903*              | 0.502      | 0     |
|                    | About the Same                                     | More Problematic                                   | 1.8903*               | 0.502      | 0     |
| <b>C</b>           | More Problematic                                   | About the Same                                     | -0.8297               | 0.472      | 0.081 |
|                    | About the Same                                     | More Problematic                                   | 0.8297                | 0.472      | 0.081 |
| <b>D</b>           | More Problematic                                   | About the Same                                     | 1.2564*               | 0.461      | 0.007 |
|                    | About the Same                                     | More Problematic                                   | -1.2564*              | 0.461      | 0.007 |
| <b>E</b>           | More Problematic                                   | About the Same                                     | 1                     | 0.47       | 0.036 |
|                    | About the Same                                     | More Problematic                                   | -1                    | 0.47       | 0.036 |
| <b>F</b>           | More Problematic                                   | About the Same                                     | 0.4667                | 0.502      | 0.354 |
|                    | About the Same                                     | More Problematic                                   | -0.4667               | 0.502      | 0.354 |
| <b>G</b>           | More Problematic                                   | About the Same                                     | 0.1764                | 0.529      | 0.74  |
|                    | About the Same                                     | More Problematic                                   | -0.1764               | 0.529      | 0.74  |
| <b>H</b>           | More Problematic                                   | About the Same                                     | -1.561*               | 0.506      | 0.003 |
|                    | About the Same                                     | More Problematic                                   | 1.561*                | 0.506      | 0.003 |
| <b>J</b>           | More Problematic                                   | About the Same                                     | -0.2482               | 0.467      | 0.596 |
|                    | About the Same                                     | More Problematic                                   | 0.2482                | 0.467      | 0.596 |
| <b>K</b>           | More Problematic                                   | About the Same                                     | 0.9138                | 0.502      | 0.071 |
|                    | About the Same                                     | More Problematic                                   | -0.9138               | 0.502      | 0.071 |

\*The mean difference is significant at P=0.01

**Table A6-8.** Significant Differences due to Perception of Problematic Nature of Working Overseas

## **APPENDIX 7**

### **Case Study Protocol**

#### **Case Study Overview**

##### **Research Propositions**

*Proposition No. 1:* "Cultural Diversity, at a national level, effects the management and business activities of British construction enterprises operating internationally"

*Relevant variables:* (1) management and business activities  
(2) international cultural diversity  
(3) technical and logistical issues  
(4) commercial considerations

*Proposition No. 2:* "Managers operating internationally for British construction enterprises adopt an ethnocentric/parochial approach in response to cultural diversity"

*Relevant variables:* (1) management approach  
(2) degree of cultural diversity  
(3) company policy (organisational culture)  
(4) previous overseas experience of staff (managers)  
(5) educational and training background of staff  
(6) staff sensitivity to cultural differences

*Proposition No. 3:* "As part of their international company policy, British construction enterprises provide little or no training and education in cross-cultural issues for their managers who are working in a culturally diverse environment"

*Relevant variables:* (1) training and education in cross-cultural issues  
(2) international company policy and strategic approach  
(3) selection policy for expatriate staff  
(4) previous overseas experience and educational background  
(5) staff sensitivity to cultural differences

*Proposition No. 4:* "British construction enterprises do not adopt a strategic approach to their overseas work"

*Relevant variables:* (1) international company policy and strategic approach  
(2) nature, extent and location of overseas work  
(3) company size and ownership  
(4) previous experience of company in overseas markets

### **Statement of Broader Theoretical Relevance**

Through investigation of the stated research propositions, this case study seeks to develop my understanding of the following broader theoretical issues:

*First Research Objective:* To confirm the understanding of 'cultural differences' from the perspective of the case study organisation and examine the interaction of national and organisational cultures when that organisation operates internationally.

*Second Research Objective:* To understand how the organisation operates internationally, in the global construction industry, from a range of viewpoints, including economic, management and recruitment issues and in terms of business approaches and strategies employed, and what the implications of cultural differences have on these.

*Third Research Objective:* To determine the extent to which theories and concepts developed for the management of cultural differences, both generally and in other industries, can be applied to the context of the global construction industry.

*Fourth Research Objective:* To examine the degree to which the case study organisation accounts for the effects of cultural differences in its practices and activities when operating in a culturally diverse environment.

## Case Study Questions

### Case Specific Questions

- Question 1a:* To what extent does the company consider cultural differences with regard to its corporate structure, policies and organisation-wide standards?
- Question 1b:* Where cultural differences are considered in this respect, how are they implemented?
- Question 2a:* Are cultural management techniques employed in the application of the various elements of global strategy?
- Question 2b:* Where cultural management techniques are employed in this respect, how are they implemented?
- Question 3a:* Is cultural diversity and difference given any consideration in the execution of human resource management practices and policies?
- Question 3b:* Where cultural diversity and difference are given consideration in this respect, how is this achieved?
- Question 4a:* To what degree are cultural management practices incorporated into the human resource development function?
- Question 4b:* Where cultural management techniques are incorporated in this respect, in what ways is this accomplished?

## APPENDIX 8

### Interview Guide

#### INTERNATIONAL CONSTRUCTION MANAGEMENT INTERVIEW GUIDE

##### Preparation Checklist

- First, thank interviewee for agreeing to be interviewed.
- Introduce myself and give some of my background and some background to the research.
- Ensure interviewee is comfortable with tape recording of interview (assure anonymity).
- Ensure "potted history" of interviewee's company is on-hand.
- Confirm [for tape purposes] interviewee's name and company.
- Confirm [for tape purposes] date, time and location of interview.

##### Section One - Interviewee Background

*Firstly, I'd like, if I may, to start with a few questions about yourself and your background*

**Background Question:** Can you describe, in general terms, your background. ☐

**Introducing Question:** What are your main responsibilities with regard to your company's international workload? ☐

**probe:** How does this fit in with your other [domestic] duties? ☐

**Specifying Question** What do those responsibilities involve? ☐  
[only ask if not entirely obvious]

##### Section Two - The Interviewee's General Understanding of International Construction Issues

*Right, I'd like to move on to the International side and what you think about international construction*

**Direct Question** From your perspective, what do you see as the most important aspects of managing international construction operations? ☐

**Structuring Question:** [If necessary] That's very interesting. Perhaps I can about your views on some specific issues.

**prompts:** What about... marketing? ☐  
partnering/joint ventures? ☐  
setting up overseas office? ☐  
human resources/personnel issues? ☐  
design issues? ☐  
logistics/technical factors? ☐  
financial factors? ☐

**Direct Question:** So, in summary, what do you understand by the term ☐  
[possibly] "international construction management"?



### Section three - The Interviewee's perception of his/her Company's International Workload

*Perhaps we can move on to your company's involvement in International Construction*

- Direct Question:* How would you describe your company's current international workload/profile?
- probe:* What regions are you currently working in?
- probe:* How has this changed over time?
- How important is the international workload to your company?
- probe:* Roughly, how much of your company's turnover is outside the UK?
- probe:* How has this changed over time?
- Introducing Question:* From your strategic perspective, do you think the international side of your company presents more or fewer difficulties than your domestic business?
- Specifying Question:* How would you characterise your company's performance internationally?
- probe:* What factors would you use to measure this?
- Structuring Question:* Why do you think your company chooses to operate internationally?

### Section four - The Interviewee's knowledge of Personnel Issues

*Right, I'd like to finish with a discussion about recruitment and personnel.*

- Specifying Question:* Do you have any involvement in recruitment for the international division of your company?
- If not:* Can you tell me anything about it at all?
- If yes:* Can you describe the way in which you employ people to work on your international projects?
- Introducing Question:* What sort of selection procedure does your company use to select prospective overseas employees?
- Follow-up Question:* What training or information will typically be provided to a prospective overseas employee?

## **APPENDIX 9**

### **The Use of NUD\*IST in the Thesis**

The Non-numerical, Unstructured, Data: Indexing, Searching and Theorising (NUD\*IST) qualitative software programme is a computer programme designed to manage textual documents. Richards and Richards (1994 – the designers) claim that the programme facilitates the indexing of the components of these textual documents through the use of various search mechanisms. Further, it supports theorising through enabling the retrieval of indexed text segments, related memos, text and index searches and through the construction of a hierarchically structured ‘tree’ to order indexed categories. The computer programme is just one of several designed to handle qualitative data (Buston, 1997). NUD\*IST was chosen for this study primarily because of its compatibility with spreadsheets, which enabled the handling of the large quantity of data gathered by the survey. In addition to this, the computer programme had the advantages of being easily available, quickly learned with substantial support in this respect and contained an impressive array of analysis functions.

The main benefit of using NUD\*IST was the automation that could be brought to many routine tasks. Where a segment of text was seen to be relevant to a specific issue or theme, it could be stored with other text segments also addressing that theme. These segments could then be easily recovered and sorted. At the same time, the segments retained their link with the original document (which remained unchanged) could support memos of thinking and ideas and could be linked interactively to other collections of themed data. This ‘coding’ process is at the heart of any qualitative analysis. The ‘tree’ is a conduit for the storage of the indexing within NUD\*IST. A structure already existed for both the survey (very structured) and the interview (less structured). Other ideas and theories that were thought to be possibly important supplemented these structures. During coding and indexing of the raw text, additional themes and issues arose and these were added to the tree, creating a rich, complex arrangement of data fragments, held at ‘nodes’ on the tree.

The final tree structure contained the ideas, issues and themes within ‘conceptual’ nodes, while the demographic data (respondent reference/interviewee, location, profession etc.) were held in ‘descriptive’ nodes. These could then be cross-referenced

to find, for example, all that a specific individual said on a particular topic, all that a specific group of individuals said about a particular topic, what those group of individuals said on one topic only when they mentioned some other topic, and so on, with retrieval options becoming progressively more complex and finely tuned. Thus, the principle purpose of NUD\*IST was to order and store ideas and topics which had emerged during interviews or that had been offered by the questionnaire respondents, in a comprehensive and systematic indexing system. Various combinations from this indexing system, limited by imagination and time, could then be quickly retrieved, read in and out of context, allowing the forming of findings rooted in the empirical data. In this process, the computer programme remains a sophisticated inferential database tool for the manipulation and handling of qualitative data (much like SPSS handles and manipulates quantitative data). The analysis and interpretation of that data remains the remit of the person carrying out the study. The software introduces rigour into the analysis in that ideas and coding are not lost or forgotten (thereby ensuring that all the data are considered) and the flexibility of the system allows a large number of combinations of data arrangements to be viewed and considered, enabling the identification of the patterns and commonalities identified by Yin (1994) as a key element of qualitative (case study) analysis.

However, NUD\*IST is not a completely neutral tool. For example, working with NUD\*IST is not the same as working with manual methods. The searching and retrieval features built into the programme lead the direction in many directions that would not have been considered previously. Similarly, certain approaches may not be chosen when they would have been appropriate, simply because the programme does not support those approaches (Buston, 1997). However, the array of analysis tools offered by NUD\*IST is very impressive.

It has been suggested that NUD\*IST is limited when compared to other computer programmes with similar designs (Coffey et al, 1996). Other programmes widely available include THE ETHNOGRAPH, HYPERQUAL, WINMAX, ATLAS/ti and HYPERRESEARCH (Kelle, 1997). These computer programme are all available as demonstration programmes and each was investigated prior to selection of NUD\*IST. It was found that each of the programmes has certain advantages over others. Where NUD\*IST was limited in terms of, for example, the finesse with which documents could be coded, it benefited enormously (at least, for this particular project) by being

able to handle large quantities of survey data of a qualitative nature, primarily through its compatibility with various spreadsheet packages. Similarly, while some programmes were easier to learn, NUD\*IST had a greater range of powerful analysis tools.

In retrospect, NUD\*IST was the right programme to use for this project due to its capacity to deal with spreadsheet data. Other programmes would be more suitable if closer analysis of the data were required (e.g. ATLAS/ti and THE ETHNOGRAPH) or if only a small project were being undertaken (e.g. WINMAX). It should be noted that, at the time of writing, the designers of NUD\*IST had released a new development of the programme called NVivo. Initial experiences of this programme indicate that many of the shortcomings of NUD\*IST have been addressed.

It is clear that the degree of detail in the analysis and confidence with which the findings of this and many other research projects using qualitative data are immeasurably enhanced by the application of computerised techniques. However, it was found, in practice, that NUD\*IST package was just a tool. It was no replacement for thinking about the data and reading them many times.

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