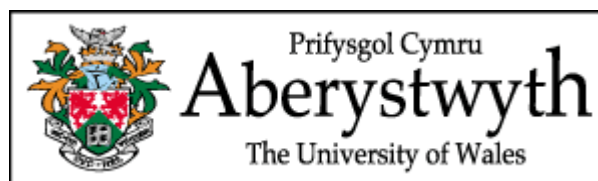


**USING VOLUNTEER-EMPLOYED
PHOTOGRAPHY TO INFORM TOURISM
PLANNING DECISIONS**

THE CASE STUDY OF ST DAVID'S PENINSULA IN
PEMBROKESHIRE COAST NATIONAL PARK

Nika Balomenou

A thesis submitted for the degree of Doctor of Philosophy



Institute of Biological, Environmental and Rural Sciences
University of Wales, Aberystwyth

August 2010

DECLARATIONS AND STATEMENTS

1. This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.
2. This thesis is the result of my own investigations, except where otherwise stated and acknowledged. A bibliography is appended.
3. I hereby give consent for my thesis, if accepted, to be available for photocopying and for inter-library loan, and for the title and summary to be made available to outside organisations.

Nika Balomenou

31 August 2010

ACKNOWLEDGMENTS

I would like to thank my supervisors Dr Brian Garrod and Dr Mike Christie for their excellent advice and constant support throughout. I would like to extend my gratitude to Dr Liz Hughes, Director of the International Centre for Protected Landscapes, both for her invaluable moral and supervisory support, and for co-funding this project. This thesis would not have been possible without the support of Charlie Falzon, to whom I owe my deepest gratitude. I am grateful to Dr David Causton for his help in the area of Canonical Variate Analysis and also to Dr Amanda Lloyd. Likewise, I would like to thank Dr Ioan Fazey, Dr John Warren and Dr Tony Hyde for their help with my statistical analysis.

Grateful thanks go to Tina Blackmore, Richard Kipling, Liz Conrad, Dr. Joseph Dzanja, Dr Mohamed Younes and Dr Stephane Duval for sharing their PhD journey with me and Iwona Cichon for double-coding my photographs. Heartfelt thanks also go to Helen Lloyd, Mary Craig, Kati Wilson, Margaret Evans, Hilary Worgan, Garry Easton and Mair Morgan for all their help and advice in difficult times. I greatly appreciate and wish to thank Paul Drew for managing the financial aspects of this project: also the staff in Hugh Owen and Thomas Parry libraries.

I am grateful to all those who made this work possible through their participation. I would like to extend special thanks to Nona Rees, Sarah Middleton, Mark Horner, Phil Lees, Diane Alwyn and all the staff at the Tourist Information Centre in St David's as well as the lifeguards in Whitesands who kept my camera return-box in their hut.

I extend my deepest gratitude to many colleagues at the University of Hertfordshire: especially Dr Denise Ball for her help and encouragement, Andrew Francis for his support and understanding and Joel Shahr for taking on a great amount of extra work to allow me time to write my thesis. I am deeply indebted to Dr Mary Quek, Alethea Bradley, Brandon Crimes and my students, who have been a constant source of moral support. I am also indebted to Sophie N'Jai for her helpful advice and patient 'read-throughs'.

A number of people provided support, material and moral, in more indirect-but no less valuable-ways. I would like to thank in particular: Panos Rentzelas, Panos Karagiorgos, Isabella Margara, Harry-Babis Margiolakiotis, Elli Amanatidou, Kostas Bechlos,

Iraklis Oikonomou, Bethan Miles, Dimitra Vasilopoulou, Vangelis Papakonstantinou, Dr Anne Arnold and my extended family; especially Vaso Bartsoka, Chrysa Bartsoka for making the VEP posters and Takis Balomenos for roaming around Pembrokeshire with me.

Finally, I would like to thank my mother and my brother who have encouraged and supported me throughout all my educational endeavours and my husband for always being there for me, unconditionally.

ABSTRACT

Tourism planning is widely regarded as being highly political, especially as tourism is usually one of a number of land-use options. The community at the destination level is at the receiving end of pressures caused by tourism development. In most cases, there are several interested parties trying to exert an influence on the tourism planning process. However, it is argued that the winners are most often those with the power. In this light, it is considered necessary to develop tourism planning tools that promote participation. The medium of photography is arguably more sensitive to the multidimensional nature of place experiences than is written text or the spoken word. A number of researchers have used volunteer-employed photography (VEP) methods such as photovoice and autophotography, all of which asked real-life protagonists to express their thoughts and feelings through photographs. However, despite the large number of researchers who have suggested that VEP is a powerful technique, it still remains underused, undervalued and relatively under-researched. The case study examined in this thesis was carried out on St David's Peninsula in the Pembrokeshire Coast National Park in Wales. The area was chosen because of its National Park status, which means that it attracts very high visitor numbers, planning regulations are stricter and conflict between the area user groups is evident. Two user groups, locals and tourists, were given cameras and photo diaries, and were asked to capture what they do and do not appreciate about the area. They were also invited to make planning suggestions regarding existing problems or suggest ways to avoid potential problems. This thesis examines the appropriateness of VEP in assisting tourism planning and demonstrates this by applying VEP to the case study area. The results of the case study demonstrate depth and richness in the dataset and present an experiential technique that can be of great value to the tourism planning process by involving host communities and visitors in the process. Valuable information for tourism planners was collected: natural and built resources were evaluated, strengths, weaknesses and problems and conflict of interests discussed in depth, with the additional advantage of visually representing participants' views. It is thus argued that VEP is a powerful tool that can be a significant addition to the toolkit for participatory tourism planning at the local level.

TABLE OF CONTENTS

VOLUME 1

1 INTRODUCTION	1
1.1 OVERVIEW	1
3.1.12 THE USE OF VISUALS IN RESEARCH	2
3.1.13 VOLUNTEER-EMPLOYED PHOTOGRAPHY (VEP)	3
1.2 RESEARCH AIMS AND OBJECTIVES	5
1.3 THE STRUCTURE OF THE THESIS	8
 2 THE USE OF PHOTOGRAPHY IN SOCIAL SCIENCE RESEARCH WITH A FOCUS ON PARTICIPANT-GENERATED IMAGE RESEARCH IN TOURISM.....	 11
2.1 INTRODUCTION	11
2.2 ISSUES ON IMAGE-BASED RESEARCH IN SOCIAL SCIENCES	11
2.3 PHOTO-ELICITATION IN THE SOCIAL SCIENCES	14
2.4 PHOTOGRAPHY AND TOURISM	16
2.5 THE USE OF PARTICIPANT-GENERATED IMAGES (VEP) IN TOURISM RESEARCH.....	19
3.1.14 USE OF VEP TO INVESTIGATE DESTINATION IMAGE	20
3.1.15 USE OF VEP FOR PLANNING/MANAGEMENT PURPOSES.....	20
3.1.16 USE OF VEP TO INVESTIGATE VISITORS' EXPERIENCES.....	21
3.1.17 USE OF VEP TO EXAMINE DIFFERENT USER GROUPS' PERCEPTIONS OF THE SAME ENVIRONMENT.	21
3.1.18 USE OF VEP TO UNDERSTAND "ATTACHMENT TO HIGH AMENITY PLACES" FROM A LOCAL COMMUNITY PERSPECTIVE.....	22
2.6 CONCLUSION	23
 3 VEP: A METHODOLOGICAL OVERVIEW	 25
3.1 INTRODUCTION	25
3.2 METHOD	26
3.1.19 PUBLICATIONS USED.....	26
3.1.20 PUBLICATIONS NOT USED	28

3.3 RESULTS	28
3.1.21 SCIENTIFIC FIELDS	31
3.1.22 SAMPLE GROUPS	36
3.1.23 SAMPLING TECHNIQUES	37
3.1.24 METHODOLOGY TESTING AS AN OBJECTIVE	38
3.1.25 PHOTOGRAPHS AND COMPLEMENTARY METHODS	38
3.1.26 CAMERA USED	40
3.1.27 NUMBER OF PARTICIPANTS.....	43
3.1.28 INCENTIVE	44
3.1.29 RETURN RATES, PHOTOS REQUIRED, AVERAGE TAKEN, TOTAL NUMBER OF PHOTOS TAKEN, AND NUMBER OF PHOTOS USED	46
3.1.30 NEW TECHNIQUES AND CROSS-DISCIPLINARY REFERENCING	51
3.1.31 REPORTED POSITIVE OUTCOMES.....	53
3.1.32 DATA ANALYSIS METHODS.....	54
3.4 VOLUNTEER EMPLOYED PHOTOGRAPHY TECHNIQUES – A BRIEF ANALYSIS	54
3.4.1 PHOTOVOICE (43 STUDIES)	55
3.4.2 AUTOPHOTOGRAPHY (25 STUDIES).....	57
3.4.3 PHOTOGRAPHY (21 STUDIES)	59
3.4.4 VISITOR EMPLOYED PHOTOGRAPHY (VEP) (11 STUDIES)	60
3.4.5 PARTICIPATORY PHOTOGRAPHY (EIGHT STUDIES).....	61
3.5 BRIEF PRESENTATION OF VEP METHODS	63
3.6 DISCUSSION.....	69
3.6.1 INTRODUCTION	69
3.6.2 DIFFERENT TECHNIQUES - DOES THAT MAKE RESEARCH EASIER?.....	69
3.6.3 DEALING WITH SCIENTISTS' NEGATIVE CRITIQUE.....	72
3.6.4 DATA AVAILABLE IN STUDIES - IS THERE ANYTHING MISSING?	73
3.6.5 SAMPLES, SAMPLING AND ANALYSIS.....	74
3.6.6 COMPLEMENTARY METHODS	74
3.7 CONCLUSION	75
 4 POSITIVE AND NEGATIVE ASPECTS OF VEP	 78
 4.1 INTRODUCTION	 78
4.2 POSITIVE ASPECTS OF VEP RESEARCH	78
4.2.1 GENERAL POSITIVE ASPECTS OF VEP RESEARCH.....	78

4.3	NEGATIVE ASPECTS OF VEP	92
4.3.1	CONCEPTUAL ISSUES	92
4.3.2	GENERAL ISSUES IN RESEARCH USING VEP	94
4.3.3	PROJECT-RELATED NEGATIVES.....	101
4.4	CONCLUSION	102
5	TOURISM PLANNING WITH A FOCUS ON NATIONAL PARKS.....	104
5.1	INTRODUCTION	104
5.2	THE RELATIONSHIP BETWEEN PLANNING AND TOURISM PLANNING	104
5.2.1	PLANNING AND POWER RELATIONSHIPS, POLICIES AND POLITICS	104
5.2.2	TOURISM PLANNING	106
5.2.3	PARTICIPATION IN THE TOURISM PLANNING PROCESS.....	110
5.3	TOURISM PLANNING IN NATIONAL PARKS	119
5.3.1	THE NEED FOR LOCAL SUPPORT IN NATIONAL PARKS.....	120
5.3.2	PLANNING FOR TOURISM IN NATIONAL PARKS.....	123
5.3.3	TOURISM PLANNING IN NATIONAL PARKS IN WALES AND PEMBROKESHIRE COAST NATIONAL PARK 125	
5.4	CONCLUSION	127
6	CASE STUDY AREA: AIMS AND OBJECTIVES.....	130
6.1	INTRODUCTION	130
6.2	CASE STUDY AREA	131
6.3	ST DAVID’S PENINSULA HISTORY.....	132
6.4	LOCAL COMMUNITY AND ECONOMY	134
6.5	TOURISTS.....	136
6.6	AIMS AND OBJECTIVES.....	136
6.7	CONCLUSION	137
7	METHODOLOGY AND RESEARCH DESIGN.....	140
7.1	INTRODUCTION	140
7.2	RESEARCH PHILOSOPHY AND APPROACH	140
7.3	SAMPLING.....	143

7.3.1	SYSTEMATIC RANDOM SAMPLING	144
7.3.2	AREA DEMOGRAPHICS	146
7.4	DATA COLLECTION METHODS	148
7.4.1	METHODS USED: THE VEP TRIAD	148
7.4.2	METHODS NOT USED.....	151
7.4.3	QUESTIONS ASKED IN THE QUESTIONNAIRE PHASE	151
7.4.4	QUESTIONS ASKED IN DIARY AND PHOTOGRAPHS PHASE	153
7.4.5	INTERVIEWS WITH PLANNERS	154
7.5	STUDY IMPLEMENTATION.....	154
7.6	ETHICAL CONSIDERATIONS.....	156
7.7	DATA PROCESSING AND ANALYSIS	158
7.7.1	QUANTITATIVE ANALYSIS: METHODS	158
7.7.2	QUALITATIVE ANALYSIS: METHODS.....	160
7.8	CONCLUSION	161
8	RESULTS: CANONICAL VARIATE ANALYSIS	164
8.1	INTRODUCTION	164
8.2	DESCRIPTION OF THE DATASET.....	165
8.3	CODING FOR CVA	167
8.3.1	METHODOLOGY	167
8.3.2	INTERVIEWS.....	167
8.3.3	VARIABLES	168
8.3.4	CODING	170
8.4	FINDINGS.....	171
8.4.1	INTERPRETING THE DATA.....	171
8.4.2	HYPOTHESES.....	172
8.4.3	CVAs	176
8.4.4	BLIND DOUBLE-CODING CVA.....	193
8.5	DISCUSSION.....	196
8.6	CONCLUSION	198
9	RESULTS: QUESTIONNAIRES, DIARIES AND PHOTOGRAPHS.....	200
9.1	INTRODUCTION	200

9.1.1	PROFILE OF LOCAL PARTICIPANTS.....	200
9.1.2	PROFILE OF TOURIST PARTICIPANTS.....	204
9.2	MAIN FINDINGS.....	206
9.2.1	WHAT MAKES LIVING IN AND VISITING THE AREA ENJOYABLE?	206
9.3	PROBLEMS AND SOLUTIONS.....	236
9.3.1	QUESTIONNAIRE RESULTS	236
9.3.2	DIARY AND PHOTOGRAPHS RESULTS.....	239
9.4	WHAT WOULD ENHANCE YOUR EXPERIENCE OF THE AREA?	264
9.4.1	KEEP IT AS IT IS	265
9.4.2	DEVELOPMENT.....	266
9.4.3	CONTINUE SUPPORT.....	267
9.4.4	INFORMATION	267
9.4.5	PRIORITISE THE LOCALS.....	267
9.4.6	OTHER.....	268
9.5	WHAT WOULD SPOIL YOUR EXPERIENCE OF THE AREA?	268
9.5.1	QUESTIONNAIRE RESULTS	269
9.5.2	DIARY AND PHOTOGRAPHS RESULTS.....	270
9.6	GENERAL COMMENTS	277
9.6.1	COMMENTS ON AUTHORITIES AND PLANNING ISSUES.....	277
9.6.2	PARTICIPANTS' VIEWS ON CHANGE	281
9.6.3	ACKNOWLEDGEMENT OF IMPORTANCE OF TOURISM IN THE AREA	286
9.7	CONCLUSIONS.....	288
10	RESULTS: COMMENTS ON VOLUNTEER-EMPLOYED PHOTOGRAPHY	290
10.1	INTRODUCTION	290
10.2	POSITIVE PARTICIPANT ATTITUDES TOWARDS THE USE OF VEP	291
10.3	NEGATIVE COMMENTS ON THE USE OF VEP	292
10.4	APOLOGIES.....	294
10.5	SUGGESTIONS ON THE USE OF VEP.....	295
10.6	CONCLUSIONS.....	296
11	DISCUSSION.....	297

11.1 INTRODUCTION	297
11.2 AIM 1: TO PROVIDE A CRITIQUE OF VEP, TO EXAMINE THE APPROPRIATENESS OF ITS USE IN ASSISTING TOURISM PLANNING, AND TO IDENTIFY BEST PRACTICE	298
11.2.1 OBJECTIVE 1: TO DEVELOP A TYPOLOGY OF METHODS THROUGH AN INVESTIGATION OF THE PREVIOUS USES OF VEP TECHNIQUES ACROSS THE RANGE OF SOCIAL SCIENCE DISCIPLINES.....	299
11.2.2 OBJECTIVE 2: TO DEMONSTRATE THE VALUE ADDED THAT VEP CAN BRING TO RESEARCH THROUGH A CRITIQUE OF THE MERITS OF DIFFERENT APPROACHES TO VEP.	301
11.2.3 OBJECTIVE 3: TO SAFEGUARD THE QUALITY OF VEP RESEARCH BY DEVELOPING BEST PRACTICE GUIDELINES FOR ITS USE.....	309
11.3 AIM 2: TO DEMONSTRATE THE POTENTIAL OF VEP IN TOURISM PLANNING RESEARCH THROUGH ITS APPLICATION IN A TOURISM PLANNING CONTEXT IN ST DAVID’S PENINSULA, IN PEMBROKESHIRE COAST NATIONAL PARK	319
11.3.1 OBJECTIVE 4: TO DEMONSTRATE THE POTENTIAL OF VEP TO PROVIDE DETAILED AND INFORMATIVE DATASETS AND CONTRIBUTE TO FUTURE RESEARCH BY USING VEP IN A SPECIFIC CASE STUDY CONTEXT	321
11.3.2 OBJECTIVE 5: TO ESTABLISH SIMILARITIES AND DIFFERENCES IN THE VIEWPOINTS AND EXPERIENCES OF THE LOCALS AND TOURISTS BY ASSESSING THE AREA’S BUILT AND NATURAL ENVIRONMENT AND THEIR RELATED USES	328
11.3.3 OBJECTIVE 6: TO DEMONSTRATE THE POTENTIAL OF VEP FOR CONFLICT RESOLUTION BY IDENTIFYING PROBLEMS AND ISSUES IN THE CASE STUDY AREA AS EXPERIENCED BY LOCALS AND TOURISTS.	337
11.4 CONCLUDING REMARKS	340
 12 CONCLUSIONS AND RECOMMENDATIONS	 345
12.1 INTRODUCTION	345
12.2 VEP IN ST DAVID’S PENINSULA: THE RESEARCHER’S ASSESSMENT OF VEP.....	346
12.2.1 DIFFICULTIES EXPERIENCED.....	346
12.2.2 ETHICAL DIMENSIONS.....	347
12.2.3 ASPECTS OF THE RESEARCH PROCESS THAT RESULTED IN THE STUDY BEING A POSITIVE AND FULFILLING EXPERIENCE.....	348
12.2.4 CHANGES THAT WOULD BE SUGGESTED IF THE STUDY WAS REPEATED	350
12.2.5 USING NVIVO	351
12.3 CONTRIBUTION TO KNOWLEDGE	352
12.4 REFLECTIONS ON LIMITATIONS.....	353
12.5 RECOMMENDATIONS FOR FUTURE RESEARCH	354
12.6 CONCLUDING REMARKS	355

13 REFERENCES	359
14 APPENDICES	381
14.1 QUESTIONNAIRE FOR LOCAL PARTICIPANTS	381
14.2 QUESTIONNAIRE FOR TOURIST PARTICIPANTS	383
14.3 LETTER TO LOCAL PARTICIPANTS IN THE RESEARCH PACK, ENGLISH	385
14.4 LETTER TO LOCAL PARTICIPANTS IN THE RESEARCH PACK, WELSH	386
14.5 LETTER TO TOURIST PARTICIPANTS IN THE RESEARCH PACK	388
14.6 EXAMPLE OF COMPLETED AND TRANSCRIBED DIARY, L28	390
14.7 EXAMPLE OF PHOTO-SET, L28	396
14.8 DIARY SAMPLE (SCAN OF ORIGINAL), WELSH.....	399
14.9 PROJECT POSTER, ENGLISH	400
14.10 PROJECT POSTER, WELSH	401
14.11 FOLLOW UP LETTER REQUESTING CAMERA AND DIARY	402
14.12 THANK YOU LETTER ACCOMPANYING PARTICIPANTS' COPY OF THE PHOTOGRAPHS	403
14.13 QUESTIONS FOR INTERVIEWS WITH PLANNERS FOR 11 SEPTEMBER 2008	404
14.14 PUBLICATIONS RESULTING FROM THIS PHD RESEARCH	406

LIST OF TABLES

<i>Table 1: Thesis structure and objectives</i>	8
<i>Table 2: Publications used and publications not used</i>	27
<i>Table 3: Techniques identified</i>	31
<i>Table 4: Dominant technique per field</i>	34
<i>Table 5: All techniques in all fields</i>	35
<i>Table 6: Type of cameras used per decade</i>	42
<i>Table 7: Studies that present their participant numbers and return rates</i>	47
<i>Table 8: Countries from which the studies originated</i>	48
<i>Table 9: Country studies originated and held</i>	50
<i>Table 10: Techniques presented as researchers' inventions in chronological order</i>	52
<i>Table 11: Analysis methods</i>	54
<i>Table 12: Fields in which photovoice was used</i>	56
<i>Table 13: Fields in which autophotography was used</i>	58
<i>Table 14: Brief presentation of all VEP methods</i>	63
<i>Table 15: Disciplines in which VEP was used</i>	72
<i>Table 16: Five approaches to tourism planning</i>	109
<i>Table 17: Arnstein's (1969) typology and Creighton's (1986) techniques</i>	111
<i>Table 19: IUCN protected area management categories</i>	121
<i>Table 20: Visitor Survey tourists' demographics</i>	147
<i>Table 21: St David's community demographics</i>	147
<i>Table 22: Solva community demographics</i>	148
<i>Table 23: Questions asked in the questionnaire survey</i>	152
<i>Table 24: Study dataset in numbers</i>	165
<i>Table 25: Survey questions data drawn from for the quantitative analysis</i>	166
<i>Table 26: Thirty variables identified after the interviews</i>	169
<i>Table 27: The 12 variables used in the CVA coding</i>	170
<i>Table 28: CVA1 populations</i>	176
<i>Table 29: CVA3 populations</i>	181
<i>Table 30: CVA 4 populations</i>	182
<i>Table 31: CVA 6 populations</i>	184
<i>Table 32: CVA 9 Populations</i>	188
<i>Table 33: CVA 11 populations</i>	190
<i>Table 34: CVA 12 populations</i>	191
<i>Table 35: CVA 13 populations</i>	194
<i>Table 36: Return rate, locals</i>	200
<i>Table 37: Demographics of local participants compared to the 2001 census</i>	201

Table 38: Return rate, tourists _____	204
Table 39: Demographics of tourist participants compared to the 2008 Visitor Survey _____	204
Table 40: Chi-square test for not overdeveloped _____	208
Table 41: Chi-square test for quality of life _____	208
Table 42: Chi-square test for location _____	208
Table 43: What makes living in the area enjoyable? _____	210
Table 44: Sites that give locals a sense of place _____	217
Table 45: Why do these places give you a sense of place? _____	217
Table 46: Good planning examples _____	220
Table 47: Comments on photographs that illustrate the history of St David's Peninsula _____	221
Table 48: Comments on photographs that illustrate the culture of the area _____	221
Table 49: Comments on photos that illustrate the religious roots of the area _____	221
Table 50: Comments on photographs that show local pride _____	223
Table 51: Comments on photographs that depict things that make life enjoyable _____	225
Table 52: Services and amenities that make visiting the area enjoyable _____	229
Table 53: Activities that make visiting the area enjoyable _____	232
Table 54: Things that make visiting the area enjoyable _____	232
Table 55: People who make participants' holidays enjoyable _____	235
Table 56: Aspects of the area locals think make holidays enjoyable _____	235
Table 57: Aspects of the area participants do not like _____	237
Table 58: Chi-square test results for "keep it as it is" _____	237
Table 59: Chi-square test results for traffic, parking, and public transport _____	238
Table 60: Chi-square test results for planning and second homes _____	238
Table 61: Identified problem categories _____	240
Table 62: Suggested solutions for traffic issues _____	244
Table 63: Chi-square test results for parking issues _____	245
Table 64: Solutions for parking issues suggested by participants _____	246
Table 65: Chi-square test results for "insufficient maintenance" _____	247
Table 66: Chi-square test results for "litter" _____	247
Table 67: Chi-square test results for "dog faeces" _____	247
Table 68: Solutions to insufficient maintenance issues _____	250
Table 69: Chi-square test results for "development not in keeping with the local environment" _____	251
Table 70: Chi-square test results for "buildings" _____	251
Table 71: Solutions to tackle development or actions not in keeping with the character of the area _____	253
Table 72: Chi-square test results for "housing" _____	254
Table 73: Solutions to the second home and lack of affordable housing issues _____	255
Table 74: Solutions to problems caused by planning authorities _____	257
Table 75: Solutions against the closure of local businesses _____	259

<i>Table 76: Chi-square test results for "area too busy during the summer"</i>	259
<i>Table 77: Solutions for the overwhelming number of summer visitors</i>	260
<i>Table 78: Suggested solutions to environmental issues</i>	260
<i>Table 79: Solutions to lack of signage and information problems</i>	261
<i>Table 80: Suggested solutions to tackle commercialisation</i>	262
<i>Table 81: Suggestions – how to focus planning on the community</i>	262
<i>Table 82: Chi-square test results for "keep it as it is"</i>	266
<i>Table 83: Changes that would have a negative impact on participants' enjoyment of the area in order of importance per user group</i>	271
<i>Table 84: Chi-square test for "development"</i>	272
<i>Table 85: Chi-square test results for "commercialisation"</i>	273
<i>Table 86: Chi-square test results for "negative impacts on the environment"</i>	274
<i>Table 87: Chi-square test results for "too many tourists"</i>	274
<i>Table 88: Chi-square test results for "restrictions: access and health and safety"</i>	275
<i>Table 89: Chi-square test results for "no changes please"</i>	275
<i>Table 90: Chi-square test results for "insufficient maintenance"</i>	275
<i>Table 91: VEP typology: techniques in chronological order of publication with complementary methods</i>	299
<i>Table 92: Is your job related to the tourism industry? (NVivo8 matrix query)</i>	323
<i>Table 93: Would you move elsewhere/ age group matrix (NVivo8 matrix query)</i>	323
<i>Table 94: Groups for CVA according to what people value most</i>	336
<i>Table 95: Groups for CVA according to their attitudes towards improvements to the area</i>	336

LIST OF FIGURES

<i>Figure 1: Types of photo-elicitation</i>	16
<i>Figure 2: VEP techniques in chronological order</i>	31
<i>Figure 3: Fields in which VEP has been used</i>	32
<i>Figure 4: Sample groups</i>	36
<i>Figure 5: Sampling techniques</i>	37
<i>Figure 6: Complementary methods</i>	39
<i>Figure 7: Types of camera used</i>	42
<i>Figure 8: Number of participants</i>	43
<i>Figure 9: Degree of dependence between researcher and participants per field</i>	46
<i>Figure 10: The tourism planning process</i>	118
<i>Figure 11: The VEP triad</i>	150
<i>Figure 12: Locals who would move vs. who those who would not (CVA2) and gender data</i>	174
<i>Figure 13: Locals with tourism related jobs vs. locals with no-tourism related jobs (CVA3) and gender data</i>	175
<i>Figure 14: CVA1 Locals born in St David's vs incomers</i>	178
<i>Figure 15: CVA 1 Locals who were born in St David's vs incomers with dividing line</i>	179
<i>Figure 16: CVA2 Locals who would move elsewhere vs those who would not</i>	180
<i>Figure 17: CVA3 Locals with tourism related jobs vs locals with non-tourism related jobs</i>	181
<i>Figure 18: CVA 4: Locals: what do you think is special about the area?</i>	183
<i>Figure 19: CVA 5 Repeat visitors vs. first time visitors</i>	183
<i>Figure 20: CVA 6 Tourists, main activity</i>	185
<i>Figure 21: CVA 7 Tourists, reason for visit</i>	186
<i>Figure 22: CVA 8 Tourists, stage of holiday</i>	187
<i>Figure 23: CVA 9 Tourists, repeat or first time and stage of holiday</i>	189
<i>Figure 24: CVA 11 Tourists; spent all their holiday in St David's or combined visit</i>	190
<i>Figure 25: CVA 11 What locals and tourists most value</i>	191
<i>Figure 26: CVA 12 Locals and tourists, improvements</i>	193
<i>Figure 27: Blind double-coding CVA</i>	195
<i>Figure 28: Bind double-coding CVA with researcher's notes</i>	196
<i>Figure 29: Are residents' views taken into account about the area planning?</i>	203
<i>Figure 30: Main activity</i>	205
<i>Figure 31: Reason for visit</i>	206
<i>Figure 32: Local participants: what do you think is special about the area?</i>	207
<i>Figure 33: What is it that you value the most about this area?</i>	208
<i>Figure 34: Important places for local participants and the focus of tourists' photographs and references</i>	212

<i>Figure 35: Special qualities of the area</i>	215
<i>Figure 36: Sense of place</i>	216
<i>Figure 37: What makes visiting the area enjoyable?</i>	226
<i>Figure 38: Things that make visiting the area enjoyable</i>	229
<i>Figure 39: Are there any aspects of the area you do not like?</i>	236
<i>Figure 40: How can the area be improved?</i>	239
<i>Figure 41: Identified problems</i>	240
<i>Figure 42: Insufficient maintenance</i>	248
<i>Figure 43: Development not in keeping with the local environment</i>	252
<i>Figure 44: Problems with the quality of services</i>	256
<i>Figure 45: Problems caused by planning authorities</i>	258
<i>Figure 46: What would enhance your experience of the area?</i>	265
<i>Figure 47: Questionnaires: changes that would be detrimental to participants' enjoyment of the area</i>	270
<i>Figure 48: Diaries, changes that would be detrimental to participants' enjoyment of the area</i>	271
<i>Figure 49: Best practice guidelines for VEP and subsequent publications</i>	310
<i>Figure 52: VEP triad: interaction between its components</i>	324
<i>Figure 55: Using VEP to inform tourism planning in St David's Peninsula</i>	343

LIST OF PHOTOGRAPHS

<i>Photograph 1: Camera-coding process</i>	155
<i>Photograph 2: Photo-coding quadrant</i>	167
<i>Photograph 2: Main Street Solva, 3 a.m. (L49)</i>	214
<i>Photograph 3: St David's Cathedral (L9)</i>	218
<i>Photograph 4: "From costal path looking across Ramsey Sound to Ramsey Island" (L99)</i>	222
<i>Photograph 5: "Alpaca and Neil. Welsh wildlife is fascinating!" (L50)</i>	224
<i>Photograph 6: "My local pub an landlord" (L50)</i>	224
<i>Photograph 7: "Land usage" (V1)</i>	231
<i>Photograph 8: "Mackerel fishing" (V38)</i>	231
<i>Photograph 9: Coast to coast publication (V84)</i>	233
<i>Photograph 10: "Rocky headland and husband!" (V90)</i>	234
<i>Photograph 11: Family holidays (V61)</i>	234
<i>Photograph 12: "House on the corners of the bridge" (L136)</i>	242
<i>Photograph 13: "Chelsea tractors" (V107)</i>	242
<i>Photograph 14: "Coffee cup/litter amongst grass" (V106)</i>	249
<i>Photograph 15: Solva skate park (L47)</i>	257
<i>Photograph 16: "Rigid inflatable boats. Too many speeding around island. Noise and visual pollution [...]" (V95)</i>	261
<i>Photograph 17: Bad weather (V106)</i>	263
<i>Photograph 18: Bad weather (V94)</i>	263
<i>Photograph 19: Quickwell Hill car park (L14)</i>	279
<i>Photograph 21: "Very beautiful spot but increasingly spoilt by traffic and large numbers of people doing organised outdoor pursuits" (V72)</i>	325
<i>Photograph 22: Cross square (L28)</i>	330
<i>Photograph 23: Cross square (V25)</i>	331
<i>Photograph 24: "Holiday cottage/woodland at little Haven" (V21)</i>	331
<i>Photograph 25: "St David's, St Non's apartments" (L56)</i>	332
<i>Photograph 26: Tirmynyda/ Thimbles End (L149)</i>	339
<i>Photograph 27: Jackie's ice-creams</i>	356

LIST OF MAPS

<i>Map 1: St David's Peninsula in Pembrokeshire Cast National Park(Office of National Statistics, 2003)</i>	131
---	-----

1 INTRODUCTION

1.1 Overview

Researchers over the years have argued that effective tourism planning requires public participation in the planning process (Jamal and Kim, 2005, Milne and Ateljevic, 2001, Spencer, 2010, Wearing et al., 2009b). Spencer (2010) suggests that the most convincing argument for the participation in tourism planning are the consequences of the lack of consultation. In support of this suggestion, one of the examples he uses is of the Anuha Island Resort development in the 1980s in the Solomon Islands: The local Melanesian community was not consulted and as a result the developers were unaware of the community's traditional customary rights to land. Following numerous confrontations, the resort was dismantled, and the island was repossessed by the community followed by a diplomatic row between Australia and the Solomon Islands. Additionally, the perspectives of the 'experts' in tourism planning are being challenged by social groups, some of which were previously ignored due to traditional consultation mechanisms, lack of recognition by dominant social groups and lack of resources for concerns to be articulated (Hall, 2008). Gunn and Varr (2002) suggest that nowadays the participation of the host communities is facilitated in the decision-making process. Cases like the potential symbiotic relationship between the Kokoda Track communities in Papua New Guinea and the tourists, who are not given central priority but are regarded as equal components of the system, are promising (Wearing et al., 2009b, Wearing et al., 2009a). It is important for planners to visualise what both user groups see in a landscape before the resource is altered (Cherem and Driver 1983). Rosenow and Pulsipher (1979, p 63) suggested that tourism planning "...can begin from an agreed-upon point of reference. Consensus, always elusive in land-use planning, is more attainable when special qualities of place have been commonly recognised".

By bringing together the ownership of the resources that tourists visit (and subsequently the relationship of dependency that is created between the two destination user groups) with the local community, the belief is that planning based on the participation of the affected stakeholders is more likely to be successful (Kaltenborn et al., 1999, Lefevre et al., 2000) . In adopting the view that the inside knowledge of local resources and ecosystems, and experience of an area, can and should complement the knowledge of

scientists (Schultz et al., 2007), it was considered that VEP would make a useful tourism planning tool. A research project that would investigate the use of VEP was therefore conceptualised and implemented in St David's Peninsula in Pembrokeshire Coast National Park.

3.1.12 The use of visuals in research

Historically, in social science, images have been used in text for illustrative purposes and to break their monotony (Prosser, 1998); and as supplementary to more traditional forms of research, not as raw material (Emmison and Smith, 2000). Becker (1995) finds the sparse use of photography and consequently, the slow progress in the field of visual sociology, astonishing. He attributes this to imagery not being conventional in sociology, which according to Collier and Collier (1986) is the parent discipline of visual sociology, along with visual anthropology. According to Becker (1995), visual sociology has progressed slowly because of the tendency of sociologists to think that photographs are used with the aim of persuading readers to accept shaky conclusions by using 'illicit' means. He finds that especially perplexing since photographs are used routinely by natural scientists: indeed, astronomy, biology, physics would be unthinkable without photographic support as data and as visual aids.

The contentious issue in the use of visuals in social science research is that they lend themselves to subjective analysis, which is perceived as less reliable. Harper (1988) suggests that the researcher is charged with the task of interpreting and giving definitions: so either with the use of photographs or interpretation of other phenomena, research is dependent upon the researcher's personal filter. Prosser (1998) finds that photographs present the real world, in a similar way to painting or writing. As Singhal and Rattine-Flaherty (2006) point out, sketches, paintings and photographs are socially and technically created. As the pen captures the world as it is perceived by the researcher, similarly, albeit more accurately, the camera captures what the eye sees (Jokinen and Veijola, 2003). The photograph's inherent subjectivity needs to be accepted as it reflects the photographers' views, biases and knowledge (Singhal and Rattine-Flaherty, 2006): the photographer needs to be accepted as a subjective presence (Prosser, 1998). This should not imply that photographic methods in research should be overlooked; it should be accepted as it is accepted for written text. Additionally, the

great power of the visual should be taken into account, as it can tempt viewers to perceive the photograph as the whole picture (Edwards, 2001).

In the context of planning, aerial photographs have been used to assist land-use planning in creating inventories for as long as half a century ago (Marschner, 1950). Aerial photography and remote sensing are currently used in land-use planning (Lagabriele et al., 2010, Laumonier et al, 2010). In land-use planning, photography is used in more 'scientific' approaches, as an inventory or record, yet is hardly used to examine sociological dimensions in planning, although its appropriateness has been suggested in several studies (Beilin, 2005, Cherem and Traweek, 1977, Stefano et al., 2005). Taking photographs is an activity that is characteristic of tourists (Markwell, 2000b) and as Urry (2002) suggests, a camera is a kind of brand name for tourists. Photography can shape travel as people build their itineraries in order not to miss valuable opportunities to take photographs (Urry, 2002). Due to its importance to tourists and also due to the power of the visual element, photography and imagery in general has been the focus of many studies in the field of tourism (Cragg, 1997, Markwell, 1997, Garlick, 2002, Stewart and Floyd, 2004).

Consequently, the combination of four reasons should have led to the use of participant-generated images in tourism planning. The first is the shift towards community participation in land-use planning as the way to involve those affected by planning decisions in the planning process (Adaman and Devine, 2006, Kruger, 2007, Owen, 2002). The second parameter is the understanding that tourism planning on a local level is, according to Hall (2008), land-use oriented as this is where planning is physically implemented. The third is that community involvement in the tourism planning process is essential for its success, as those who experience the area should be the ones to evaluate it as a destination (Gunn and Varr, 2002). The fourth parameter is that photography is currently used in planning because it can map land use. It is therefore reasonable to use photography to map apart from location tourists' and locals' experiences and feelings tied to a specific locale. This gap has been identified in the literature and this thesis aims to address it.

3.1.13 Volunteer-Employed Photography (VEP)

Photography can include as much as it can exclude, and according to Urry (2002), the person who is behind the lens can construct reality, as it displays only one segment in

space and time (Crang, 1997). However, this thesis will argue that this perceived disadvantage of the photographs can be turned into an advantage for research that focuses on people's perceptions of the environment and their interactions with it, because it shows what they think is important.

Photography has been used, though underutilised in research (Garrod, 2008a). One of the ways photographs are used in this context is photo-elicitation, where the researcher interviews the participants using predetermined photographs from their own environment (Jenkins, 1999, Loeffler, 2004). Photo-elicitation was first described by Collier (1967) and is considered to allow better insights that would otherwise be missed (Banks, 2001): a cutting-edge method with endless potential (Harper, 2002). Although photo-elicitation allows better insights into participants' worlds because of what such photographs depict, it cannot achieve the maximum insight as there is still the filter of the researcher between the photograph captured by the researcher and the participants' perceptions of their worlds. Two methods first tackled this issue by placing the cameras in the hands of the participants: participants were considered to be experts of their own experiences and were therefore asked to do the capturing. Trawick (Cherem and Trawick, 1977, Trawick, 1977) first used a method he called Visitor-Employed Photography to investigate visitors' perceptions of a river environment. In the same year, another study placed cameras in the hands of participants, this time in psychology: Ziller and Smith (1977) used participant-generated images to research people's perception of the self.

Subjectivity, the "disadvantage" of photography, is used to understand how people interact with the world. Studies that use photo-elicitation methods with participant-generated images have reported significant advantages. However, the common ground among researchers is that they are underutilised (Garrod, 2007, MacKay and Couldwell, 2002). Participants' perceptions of their lived environments have always been of interest in tourism research (Diedrich and García-Buades, 2009, Mmopelwa et al., 2007, Poria et al., 2006) and this research technique was considered appropriate for testing as a tourism planning tool. However, its previous uses needed to be investigated in order to design a robust study that incorporates advice from previous users and avoids re-inventing the wheel. The search for previous studies in various different fields verified Prosser's view (1998, p102):

“Visual researchers...are compartmentalised and divided by their disciplines, the media in which they work and by a changing intellectual landscape. There is no Gestalt, no totality that encompasses and unifies image-based research other than the “visual”.

Numerous techniques used in many fields were discovered in the course of this research study, with no overarching principle, name or description. Following an extensive review of the literature, it was concluded that an overall term, a collection of studies and an analysis of their positive and negative aspects, along with best practice guidelines should be presented.

1.2 Research Aims and Objectives

This thesis has two equally weighted aims. The first aim is to examine the appropriateness of the use of VEP in assisting tourism planning, and if it is appropriate, how this method can be applied. The second aim is to establish if VEP can inform policy using St David’s Peninsula as the case study area. Each aim comprises three objectives:

Aim 1: To provide a critique of VEP, to examine the appropriateness of its use in assisting tourism planning, and to identify best practice.

1. To develop a typology of methods through an investigation of the previous uses of VEP techniques across the range of social science disciplines.
2. To demonstrate the value added that VEP can bring to research through a critique of the merits of different approaches to VEP.
3. To safeguard the quality of VEP research by developing best practice guidelines for its use.

Aim 2: To demonstrate the potential of VEP in tourism planning research through its application in a tourism planning context in St David’s Peninsula, in Pembrokeshire Coast National Park.

4. To demonstrate the potential of VEP to provide detailed and informative datasets and contribute to future research by using VEP in a specific case study context.

5. To establish similarities and differences in the viewpoints and experiences of the locals and tourists by assessing the area's built and natural environment and their related uses.
6. To demonstrate the potential of VEP for conflict resolution by identifying problems and issues in the case study area as experienced by locals and tourists.

The first aim is to provide a critique of VEP, to examine the appropriateness of its use in assisting tourism planning, and to identify best practice. This aim will be fulfilled by answering the first three objectives, based on an in-depth literature review. The theoretical appropriateness of VEP as a tourism planning tool should first be established, before it is applied to the field.

The first objective is to develop a typology of methods through an investigation of the previous uses of VEP techniques across the range of social science disciplines. According to Afolabi (1992) and Bourner (1996), it saves valuable research time to build on a platform of already existing ideas and knowledge. In this subject this proved challenging as the body of research is fragmented and difficult to access as one body of work. It was therefore considered necessary to bring together this body of knowledge and create a typology that will hopefully save future researchers from 'reinventing the wheel'.

The second objective is to demonstrate the value added that VEP can bring to research through a critique of the merits of different approaches to VEP. Following the review of the literature, the analysis of the studies that have used volunteer-employed photography and the suggestion that VEP should be used in the tourism planning field, it was central to this study to establish the positive and negative aspects of VEP and ensure that in terms of theory, and compared to other successful participatory tourism planning tools, its effectiveness should be investigated.

The third objective is to safeguard the quality of VEP research by developing best practice guidelines for its use. The study of a large body of disconnected VEP studies over a number of fields resulted in the need to establish benchmarks of best practice and identification of practice that does not contribute to Prosser's (1998) and Becker's (1995) call for further strengthening of the field of visual sociology. VEP appears to be a tool with great potential, yet in many cases it has been badly applied, this has resulted to further delays in advances and acceptance of visual sociology from the wider

sociological circles. Establishing best practice guidelines for the use of VEP was therefore considered a priority for this study.

The second aim is to demonstrate the potential of VEP in tourism planning research through its application in a tourism planning context in St David's Peninsula, in Pembrokeshire Coast National Park; this will be fulfilled by addressing the next three objectives. Following the theoretical establishment of VEP as an appropriate tool to inform tourism planning decisions, its appropriateness will be tested on the ground by using it in St David's Peninsula.

The fourth objective is to demonstrate the potential of VEP to provide detailed and informative datasets and contribute to future research by using VEP in a specific case study context. The appropriateness of VEP as a participatory tourism planning tool on a theoretical level will be established. Its application and first-hand experience of the positives and negatives of the tool [as described in the literature], designed explicitly to assist tourism planning and involving locals and tourists in St David's Peninsula in the process, was considered imperative in order to prove its appropriateness in practice. A popular tourism destination was chosen as the case study area, one which faces the additional challenge and limitations that result from its National Park designation.

The fifth objective is to establish similarities and differences in the viewpoints and experiences of the locals and tourists by assessing the area's built and natural environment and their use. Using photographs, questionnaires and diaries that resulted from the data collection process, the potential of assessing the natural and man-made assets of the area using VEP will be examined in order to determine its appropriateness in contributing to a situation analysis (Lavery, 2002). Furthermore, the two user groups' views will be compared and potential causes for conflict will be identified.

The sixth objective is to demonstrate the potential of VEP for conflict resolution by identifying problems and issues in the case study area as experienced by locals and tourists. According to Wearing et al. (2009b), a step towards conflict resolution is to identify the sources of conflict. Participants were invited to identify problems and suggest solutions that would make them more comfortable living in and visiting St David's Peninsula. The potential of VEP will be tested here; if it proves to be an appropriate tool, it will provide a detailed insight into the problems tourists and locals face and will help in identifying solutions that can be used as a basis for discussion.

The research addresses a key gap in the literature, in that, although there is a shift towards participatory planning in tourism and a shift towards the use of participant-generated images in social science research, it still remains for VEP to be tested as a tool to inform tourism planning decisions. Additionally, although a multitude of techniques that use participant-generated images have been used in numerous principles, a “Gestalt” – a totality according to Prosser (1998) – has yet to be established. This thesis addresses this and suggests a course of action. Furthermore, it will be argued that the use of VEP can be used in tourism planning, and potential uses of VEP in tourism marketing will be suggested.

1.3 The structure of the thesis

The thesis is divided into twelve chapters as outlined below. Table 1 indicates how each chapter relates to the overall thesis objectives.

This thesis follows a classic thesis format: the first five chapters review the literature, addressing two of the thesis objectives. Chapter 2 examines the use of photography in social science research with a special focus in the use of photography in tourism. The challenges facing, and scepticism towards the use of photography in research are presented in this chapter. The use and importance of photography in tourism and tourism research is demonstrated.

Chapter 3 presents a review of all the studies identified that have used VEP. This chapter groups the studies, amongst others, according to the name given to the VEP technique used, the complementary techniques used in conjunction with the photographs, and sampling techniques used, and provides the basis for the creation of the typology presented in Chapter 11.

Table 1: Thesis structure and objectives

	Objectives					
	1	2	3	4	5	6
Chapter 1	Introduction					
Chapter 2	Setting the scene: photography and tourism					
Chapter 3	✓					
Chapter 4		✓	✓			

Chapter 5	Setting the scene: tourism planning in National Parks					
Chapter 6	Setting the scene: case study area, aims and objectives					
Chapter 7	Methodology					
Chapter 8				✓	✓	
Chapter 9				✓	✓	✓
Chapter 10		✓				
Chapter 11	✓	✓	✓	✓	✓	✓
Chapter 12	Conclusions and recommendations					

Chapter 4 is an analysis of the positive and negative aspects of the use of VEP based on the studies collected that have used VEP. Qualitative software NVivo8 is used to assist the categorisation and organisation of the data for an effective and inclusive analysis of the advantages and disadvantages VEP researchers have highlighted.

Chapter 5 outlines the literature in the area of tourism planning and planning in National Parks with a special focus on the Pembrokeshire Coast National Park (PCNP). The complexity of planning and the necessity for local support and consequently for participatory planning practices is discussed.

Following the review of the literature, Chapter 6 presents the case study area and discusses the aims and objectives of this study. St David's Peninsula is put on the map: a general description of the physical geography and brief history of the area related to tourism is followed by details about its population and visitors. The aims and objectives of the study are contextualised.

Chapter 7 presents a detailed discussion of the methodology used in the study. The research approach, sampling techniques, data collection process, pilot studies and the planning and implementation of the main study are presented.

Chapter 8, Chapter 9 and Chapter 10 present the results of the study. Chapter 8 discusses the results of the quantitative analysis of the photographs using Canonical Variate Analysis (CVA): Chapter 9 presents the results of the combined qualitative analysis of the questionnaires, diaries and photographs, and Chapter 10 presents the feedback of the study participants on the research technique.

Chapter 11 brings together the results of the study and discusses them in the context of the study's aims and objectives. In this chapter, the appropriateness of the use of VEP is discussed, at both theoretical and practical levels following the theoretical test of "fitness" for tourism planning and the actual use of VEP on the ground.

Chapter 12 discusses the research approach from the researcher's viewpoint and gives recommendations for future research. It also reflects on the contribution of this work to addressing the identified knowledge gaps, and its limitations.

2 THE USE OF PHOTOGRAPHY IN SOCIAL SCIENCE RESEARCH WITH A FOCUS ON PARTICIPANT- GENERATED IMAGE RESEARCH IN TOURISM

2.1 Introduction

This chapter gives an overview of the use of photography in tourism research and especially photographs that are generated by research participants. The use of photography in social science research will be examined first, followed by the importance of photography and imagery in tourism and tourism research. Taking into account the importance of photography in tourism, and the close links between the two, it seems only reasonable for researchers to apply photographic techniques in a tourism context. According to Crang (1997, p.370) “the possibilities of using film (be it still or video) to help understand the processes by which people engage with and make sense of the world, in tourism in particular, seem significant”. Finally, the use of participant-generated images in tourism research will be examined.

2.2 Issues on image-based research in social sciences

The use of image-based research is still an ongoing and unresolved debate among social scientists, anthropologists, geographers, and ethnographers. According to Ruby (1996, cited in Proser 1998, p 102), anthropology has a tendency to “ignore the visual-pictorial world perhaps of distrust of the ability of images to convey abstract ideas” and in ethnographic research, the fieldwork experience must be converted to

“words in a notebook and then transform these words onto other words shifted through analytic methods and theories. The logocentric approach to understanding denies much of the multicentric experience of trying to know another culture”.

Even though the quote refers to anthropology and ethnography, the situation relating to image-based research is not different in other social science disciplines. However, in spite of the critiques of some researchers, image-based research nowadays is more

widely respected and accepted, and used to examine complex phenomena, often in conjunction with other techniques (Loeffler, 2004, Markwell, 1997).

The underutilisation of visual information in the context of social sciences is identified by many researchers (Emmison and Smith, 2000, Garrod, 2007, Groves and Timothy, 2001, Jenkins and Jenkins, 1998). In an attempt to explain this phenomenon, Prosser (1998, p 102) suggests that for “traditional” qualitative researchers images have been used mainly as a break in the monotony of a written text in the form of a graph or an illustration of an object. He partially ascribes this to historic reasons and the way social science research has been conducted over the years: he also highlights that American sociology was dominated by research methods that reinforced a distance between the researcher and the subject. Additionally, the virtual non-existence of visual sociology between the 1920s and the 1960s is highlighted. Emmison and Smith (2000, p 1) also observed that photographs have been used as “raw material”, as visual supplements for more traditional forms of research and not collected as for stand-alone photographic research techniques. In an effort to illustrate the historic reasons responsible for the out-of-proportion low status of image-based research, Prosser (1998, p. 102) quotes Schultz (1964), who appears to have a rather radical approach: he argues that academics are strongly influenced by

“...the ready-made standardized scheme of pattern handed down to [him], by ancestors, teachers and authors as an unquestioned and unquestionable guide in all situations that normally occur within the social world”

The opinions of social scientists on the use of visual information seem to be polarised. The main point of friction is the subjectivity of photography as a research tool and thus its lack of reliability. Harper (1988) argues that in scientific and narrative modes the sociologist is the one who gives definitions. Researchers have their point of view and this is reflected in any activity they undertake: either in the way they take a photograph themselves or how they interpret photographs taken by others. In other words, a certain degree of subjectivity is always present as either the photographs or the interpretations go through the researcher’s personal filter. Urry (2002) also argues that the person who takes the photograph is in the best position to construct reality. He goes a step further and uses Lake District postcards as an example: the photographer in some way manages to produce an image of the Lake District without any cars, tourists, litter, bad weather,

and so on. Urry (2002) also suggests that photography *excludes* as much as it *includes*. Photography is a medium that gives the photographer the freedom to select the image he or she wants to present.

Consequently, whether scientific or narrative, the mode goes through the personal filter of the researcher: which subsequently implies that subjectivity is unavoidable. As Taylor (1995, p 62) observes when talking in a different context, that of environmental perception,

“...perception is a dynamic interaction between humans and environment that is dynamic, inextricably linked to the whole psychology of the observer, and immersed in the environment that is experienced”.

This suggests that research bias is unavoidable when the researcher is the one either taking the photographs that will be used in the research process or the one interpreting the photographs taken by others. The question that emerges here is whether this so-called limitation can be reversed and used as a methodological strength when the research subjects do the capturing. This point will be discussed later in this chapter in the context of photo elicitation.

Another conceptual issue is how photography grasps a moment in time (Crang, 1997), as the photograph is a frozen moment captured digitally or on film - simply a piece of space and time displaced from the flow. Edwards (2001) notes that in a way photography denies history: taken out of context, its original meaning is lost and is open to misinterpretation. Photographs seem to record reality but in truth they are not statements of the real world but simply small pieces of reality (Urry, 2002). According to Edwards (2001) the previous arguments apply more to public photographs, where their meaning is externally generated. It does not seem to be the same with photos to which personal meaning is attached (for example, family photos) (Edwards, 2001). However, people might argue that family photos are staged as they predominately capture happy moments, with everybody wearing their best smile (Edwards, 2001).

On the other hand, there are researchers who acknowledge that although research can be subjective, this can be overcome: and that such a powerful research tool should not be underutilised. As Prosser (1998) highlights, photographs can give evidence of the real world analogous to the evidence provided by painting or writing. On the same note,

Prosser (1998, p. 108) notices that the photographer should be accepted as a subjective presence “even while the science of his or her camera allows us to continue to test, in a qualitative way, for authenticity”. Jokinen and Veijola (2003, p. 259) describe the camera as a means to capture what the eye sees and agree with Taylor (1995) that the camera and the human eye both represent “the point of view of the subject, the one who sees”. Edwards (2001) expresses a similar opinion to Prosser on what photographs should be expected to reveal: they should not be treated differently to other historical sources, as they too have to be incorporated in other ways of expressing the past. This is often seen as a weak point of photography as a tool for social science. It seems that photography tempts people to think that because it looks so real, it reveals the ‘whole picture’ (Edwards, 2001).

2.3 Photo-elicitation in the social sciences

It is clear that research methods that incorporate the use of photographs are noticeably underused in the social sciences in comparison to their merits (Garrod, 2008b). In Emmison and Smith (2000, p 25), Becker is claimed to be the founding father of visual social science. It is considered that his article “Photography and Sociology” in the journal *Studies in the Anthropology of Visual Communication* (1974) shaped this field thereafter. Becker suggested documentary photography as the main application of photography in social science. Other researchers such as Wagner (1979, cited in Emmison and Smith 2000, p 27) suggest a variety of uses for photography in the social sciences. Wagner identifies five modes for the use of photography in the social sciences:

- Photographs as interview stimuli
- Photography as systematic recording
- Content analysis of naïve photographs (it is suggested that these could be photographs from advertisements, police records, tourism brochures, etc)
- Native image making (technique already used by anthropologists in the 1970s)
- Documentary photography

In the same book (Emmison and Smith, 2000), Harper is acclaimed to be one of the main defenders of modern visual research. He identifies two major categories of visual researchers: those who take the photographs for use in their studies and those who analyse photographs others have taken. Harper also suggests four methodological frameworks for the use of photography in social science: the 'scientific', the 'narrative', the 'reflexive' and the 'phenomenological'. The 'scientific' can be thought of as the use of photographs as 'filing cabinets for data', that are going to be examined at a later stage: in this case, the researcher uses photographs to capture and store images for further investigation. It is suggested that ethnography uses photography in this mode. The 'narrative' mode according to Harper is more commonly used in ethnographic films. Both still photography and films are used by the researcher to capture events as they unfold. In the 'phenomenological' mode meanwhile, the power of images is claimed to have multiple uses. Images can leave us unmoved or can make us admire what has been captured without generating strong emotions. On the other hand, images can strongly affect us and stir up our emotions. It is claimed that in this mode, art and sociology merge. The researcher is the one who takes the photographs in this mode, in both these modes.

The difference between the 'reflexive' mode and the three other modes is that the researcher does not interpret the photographs. In the reflexive mode the research subject is involved in the interpretation of images. The most widely used form of reflexive photographic research is photo-elicitation. The researcher usually presents the interviewee with photographs of his or her own world and uses them as a prompt to discuss further issues (Jenkins, 1999). Both Jenkins (1999) and Loeffler (2004) note that Collier (1967) was the first to describe a photo-elicitation interview.

Photo elicitation seems to appeal to a number of researchers. It is widely considered to be a dynamic and useful tool for social research. It allows insights and understanding that could be missed or would not be discernible using other methods (Banks, 2001). Harper (1994, cited in Jenkins 1999) describes photo elicitation as a cutting edge sociological method with endless potential (Figure 1). Harper further supports photo elicitation by saying that "the well-achieved photo elicitation interview really redefines the essential relationships of research (cited in Jenkins 1999, p. 9).

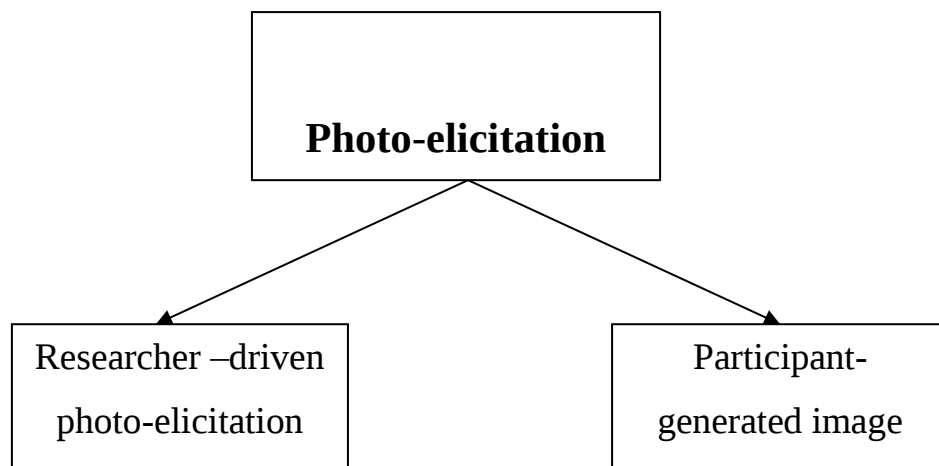


Figure 1: Types of photo-elicitation

A number of case studies (163) have been identified, that have employed Volunteer-employed Photography, albeit using 30 different names for the technique. The first time this concept was used was in 1972, where Worth and Adair taught Navajo Indians how to operate a camera and asked them to video some of their traditions and rituals in order to portray them accurately. Prosser (1998, p 120) notes that the film unfortunately did not have a big impact and argues that although key methodological models have been created and major personalities have worked on enhancing the role of image-based research, “other more significant forces... have been in place which have undercut their endeavours”. Crang (1997) also mentions a case when the BBC started giving cameras to individuals to make their own video logs under the umbrella of the *Picture Post/New Society* reportage tradition.

2.4 Photography and tourism

In 1997, Crang suggested that in the late 1990s six billion photographs were taken every year. This number has grown due to digital photography as people are no longer limited to 24 or 36 exposures. The website royalpingdom.com (2009) suggests that 30 billion photographs are uploaded to Facebook every year. Tourists tend to take a camera with them on holiday - taking photographs is what most tourists do. There is

the element of “naturalness of the photographic act within the tourism experience” (Markwell, 1997, Markwell, 2000a). A camera is a kind of a brand name. A person carrying a camera is the typical image of a tourist according to Urry (2002, p 128), who also suggests that a camera is a badge that separates tourists from locals. Markwell uses the ‘cliché’ image of tourists to express this genuineness: could a person weighed down by tripods, cameras, lenses, etc be anything else but a tourist? Markwell (1997, p 132) cites Kenyon (1993) who suggests that photography is “the most direct example of a leisure pursuit that exists to make representations of our experience”. This view is also supported by Haywood (1990), who adds that through photographs, good times can be re-lived. Photographs also allow tourists to prove that they were actually ‘there’ and to communicate that to people back home and highlight their ‘importance’ to others, which is an important motivation for people to travel (Haywood, 1990). This is a point that Markwell (1997) and Urry (2002) seem to share: Urry describes how photographs are actually used as evidence, as people tend to assume that the camera never lies, tourists can therefore prove that they actually have seen and experienced a destination, or an event.

Furthermore, some would argue that photography or video is the most appropriate medium to record a landscape, or the experience of seeing it, listening to it and smelling it: photographs are “capable of conveying multilayered meanings as they can represent multiple things (e.g. experiences, settings, social domains) simultaneously” (Stedman et al., 2004). Jokinen and Veijola (2003) suggest that photography can be used to give a better understanding of a landscape, as often words are not enough to describe the landscape itself and the feelings experienced. According to Jokinen and Veijola (2003, p 259),

“unlike narratives with linear textuality, such as autobiography or sociological theory, a landscape does not use words or conventional grammar. Still it has a grammar and a glossary, and it bears intertextual references”.

The use of photography as evidence that the trip has been made is one of the reasons a number of researchers support the use of photographs in research (Urry, 2002, Markwell, 2000a). A photo as previously suggested represents a frozen moment in time. Photography is creating a “tangible image for the future of what will be the past” (Cronni1998, cited in Loeffler 2004, p 540). People therefore use photos in a sense to

protect them against time: by doing so they are in effect willing time to stand still (Loeffler, 2004). Urry (2002, p. 128) supports this by noting that people who come from countries with a particularly strong working ethic such as Japan, America and Germany, seem to be obliged to take photographs and remember their experience through them. This argument might also apply to other countries with strong work ethics such as the UK.

The argument that photography has a selective filter has already been discussed. However in the context of tourism it seems to be easier to explain. The fact that tourists do not tend to take photographs of negative features makes sense. As Urry (2002, p 129) notes, tourism photographs exclude as much as they include. People do not usually take photographs of waste, rubbish, or spoilt landscapes.

However, the mere fact that this selective filter exists can actually shape the destination image, which is partially presented to the people back home. This degree of control people have over the evidence they take back can shape the destination image that people back home are going to formulate. This is, therefore, a two-way dynamic process: the pre-constructed image people have before visiting a destination can be affected by photos other visitors have taken during their visit, or by photos that have been, in a way, selected for them by the tourism industry. Urry (2002, p 127) cites Barthes (1981) who says that “photography began with photography of the notable and has ended up making notable whatever is photographed”. According to Markwell (1997) and Urry (2002), the other side of the coin is that the tourism industry can shape a destination image by imposing certain images of a destination. Sometimes, people return home with photographs of exactly the same sites they had seen on postcards of the destination, or in tour operator brochures prior to their departure: in effect these images acted as a catalyst in their decision to visit the destination in the first place. In other words tourists are reproducing the images that originally motivated them to visit the destination. Additionally, in most cases when people take photographs of landscapes they imply the notion of ‘mastery’. The photographer and the person who sees the photograph appear to dominate the static landscape captured. The language used in photography is indicative of this notion of ‘mastery’. People ‘capture’ on film, ‘take’ photographs, ‘shoot’ films, and are happy when they “acquire the image for themselves” (Markwell, 1997, p 133). Another indication that photography is an acquisitive act in some cases is that it shapes travel. Sometimes all tourists do in certain

cites is take photographs: arrive-click-depart. This can be understood as an indication of how people see and understand landscapes (Urry, 2002). Photography shapes travel to some extent: people do not want to miss opportunities to take good photographs and sometimes structure their timetable accordingly (Urry, 2002).

It appears, based on the discussion above, that tourism and photography are intimately interrelated. Each draws from and adds to the other (Urry, 2002). Urry (2002) further suggests that the global tourism industry as we know it would not exist without photography. The 'tourist gaze' may have been completely different if cheap cameras had not been invented. Urry (2002) gives the example of late nineteenth century Cairo, which was developed to look like a London suburb in response to the 'tourist gaze'. The traditional Cairo evolved into a cosmopolitan city in order to accommodate the pre-constructed image of Egypt that European visitors used to have. As a result, the influence of a number of architectural styles can be seen in Cairo's buildings: Italian Gothic and Renaissance, French Baroque, Neo-Islamic, Art Nouveau, Art Deco and Expressionism (Rashed and Kamal, 2005).

2.5 The use of participant-generated images (VEP) in tourism research

Haywood (1990, p. 25) finds the use of VEP in tourism highly appropriate, as photographs "reveal something about us - how we see and interpret the world and the people and places in it, and all the meaning and associations we conjure up". A number of researchers consider that methods using VEP have potential in visual research. However, few researchers have used such methods (MacKay and Couldwell, 2002, Garrod, 2007), and the number who has been disproportionate to the advantages they have to offer. The first use of a VEP type of approach is cited in Jutla (2000): Kevin Lynch in 1960 asked his research participants to sketch detailed maps of the area he was examining. Lynch (cited in Jutla 2000, p 408) introduced the term 'legibility', which Jutla (2000) defined as "the ability of the physical environment to communicate a clear image of itself". People have their individual perceptions of a city but there should be a group image on which a number of people agree (Jutla, 2000), and this is what Lynch tried to find through his experiment.

Volunteer-Employed Photography research has not been widely used in the tourism context. An attempt will be made here to categorise the themes on which researchers who have used this methodology have focused to date in this specific context.

3.1.14 Use of VEP to investigate destination image

MacKay and Couldwell (2004) explain that, traditionally, destination image has been measured using quantitative techniques. They also notice the limited use of photographic methods in investigating destination image: they further note that most of the research in that field is restricted to the use of researcher-generated or commercially generated photographs when using photo elicitation techniques. Additionally, they suggest that in using researcher-generated or commercially generated photographs as stimuli for conversation, the participants might not agree with the researcher's understanding and interpretation of the photographs.

MacKay and Couldwell (2002) tested the adequacy of VEP as a technique to investigate place image. The conclusions of their work as well as research that Garrod (2007) has undertaken on destination imagery, are that VEP can be used as an alternative data-collection technique for image assessment. They also suggest that the technique looks promising for other possible applications in future research in national parks and historic sites.

3.1.15 Use of VEP for planning/management purposes

Most of these studies were conducted in areas where landscape is used for recreational purposes and most of the researchers in this group also comment on the limited use of the technique to address landscape management issues (Cherem and Driver, 1983, Chenoweth, 1984, Taylor et al., 1995, Oku and Fukamachi, 2006)..It is important for planning managers and planners to see what the public sees or might see in a landscape before the resource is altered (Cherem and Driver, 1983). Thus, VEP is seen as a measure of feature importance (Taylor et al., 1995).

Researchers suggest that VEP should be used when planning for recreational forest (Oku and Fukamachi, 2006), in landscape architecture (Chenoweth, 1984), in national parks (Schuster et al., 2004), and for rivers and other linear environments (Cherem and

Driver, 1983, Traweek, 1977). VEP is an experience-recording technique that allows people's experiences of landscapes to be captured when they take place. Additionally, it is suggested that people have diverse experiences and VEP is capable of recording the majority of these (Taylor et al., 1995). Chenoweth (1984) in particular refers to the results of a VEP study that were used to influence public policy, and as a result extra protection was given to cliffs and bluffs that were frequently photographed as their importance for the public was acknowledged.

3.1.16 Use of VEP to investigate visitors' experiences

Volunteer-Employed Photography is considered a powerful research tool with limitless potential to provide "visual and evidentiary information to support reactions to, opinions about, and assessment of a visitor's experiences in specific places or destinations" (Haywood, 1990, p. 25), as it can reveal ways of seeing and experiencing that might not be clear especially to those responsible for planning and marketing (Haywood, 1990). Researchers who have conducted research on visitors' experiences also agree that photographs tell stories and that such stories can inform trip planners and designers as well as destinations managers about what visitors like, appreciate, dislike and expect (Groves and Timothy, 2001). There is unanimity in this category of researchers on the issue of underutilisation of VEP as a research tool (Markwell, 1977, Markwell, 2000a, Loeffler, 2004): in fact, all the researchers mentioned suggest that VEP should be used in conjunction with other tourism research tools.

3.1.17 Use of VEP to examine different user groups' perceptions of the same environment

This thematic group is particularly important for this thesis. As previously mentioned the use of VEP is very limited. There are even fewer examples available to illustrate the differences between user groups in a tourism destination. As highlighted by Garrod (2007), the neglect of VEP is puzzling in this particular context. There are only three studies that examine the differences between user groups: one examines the needs of different groups of visitors (Flick and Taylor, 1998). The other two examine resident and tourist perceptions of a tourism destination (Garrod, 2007, Jutla, 2000). Given the tensions that often arise between locals and tourists as different users with different

needs and perceptions of tourism destinations, as well as the potential of VEP as a very useful planning tool as proved in previous studies, the fact that VEP is underutilised is even more puzzling.

Jutla (2000) adds another dimension to VEP by noting that most people think visually so the use of photographs to examine environmental perception is appropriate. Based on previous research, Jutla (2000) concludes that there are no major differences in the ways people evaluate photos and the actual sites. Another interesting suggestion that emerges from both Garrod's (2007) and Jutla's research that supports the claims that VEP should be used in a planning context is that "unless planners understand the various ingredients which come together to provide the essence of a place, they cannot modify it without risking the destruction of its valuable characteristics" (Jutla, 2000, p. 405). As a result, it has been suggested that planners have to familiarise themselves with the sense of place, social setting and visual identity.

Whereas Garrod (2007) concludes that contrary to expectations locals' and tourists' perceptions of the seaside town of Aberystwyth did not differ significantly, Jutla (2000) finds that there are two distinct images of Simla, one for tourists and another one for residents: however he concludes that there is a strong feeling among both groups for the need to protect the natural and cultural landscape. All three studies that examined different user groups' perceptions of the same environment came to the same conclusion regarding the use of VEP: they recommend the wider use of VEP to examine image perceptions of a destination. All of them argue that VEP can be a powerful planning tool.

3.1.18 Use of VEP to understand "attachment to high amenity places" from a local community perspective

There are not many examples of VEP used to examine the local community perspective. The most representative one is the work of (Stedman et al., 2004). Like Garrod (2007) and Jutla (2000), Stedman et al. (2004, p. 590) also focus on sense of place and argue that photographic methods represent "a logical progression in cumulative efforts to understand sense of place". If account is taken of the fact that local communities have to live with the impacts of tourism all year round and that they

have the expert knowledge of their area, the use of VEP as a participatory tourism planning tool seems appropriate.

2.6 Conclusion

In his 1867 publication of his novel entitled “Fathers and Sons”, Ivan Turgenev, is one of the first people to compare the information acquired from a picture (a drawing in this case) to that acquired from text. Turgenev (1867, p. 98) wrote: “A drawing represents to my eyes what demands ten pages of description in a book”. Similarly, in a bid to promote the use of pictures in advertising, Fred Barnard devised the motto “One look is worth a thousand words” (Barnard 1921, p. 96), which is now an American proverb (Mieder et al., 1991). The strength of the visual element to portray complex and multilayered meanings, albeit open to interpretation, has been a reason for a number of social scientists to advocate the use of photographs in social science research.

However, a number of issues regarding their characteristics, primarily the openness of photographs to misinterpretation, have sparked numerous debates regarding their use in social science research. Prosser (1998) advocates the use of photographs in research suggesting that the presence of the photographer has to be acknowledged as subjective; as the point of view of a writer is. Photography has been used in photo-elicitation interviews; however, the perception of the environment that is depicted in the photographs usually incorporate the researcher’s point of view. Few photo-elicitation techniques have used photographs captured by the participants; the researchers concerned realised that they could more accurately recount their experiences if they were doing the capturing. The first Volunteer-Employed Photography studies were conducted by Ziller (1997) in psychology and Trawick (1977) in tourism and planning.

As this thesis focuses on tourism planning, studies that had used VEP in a tourism and in a planning context were sought, with special preference given to those that use participant-generated photographs. A number of studies were identified, and several interesting conclusions emerged. First, it was suggested that it is more difficult for local people than it is for tourists to express aesthetic quality. Local people are themselves a part of the landscape; therefore they are less conscious of its aesthetic qualities (Jutla, 2000, Yamashita, 2002). Suggestions were also made on the potential use of VEP as a

tool for community planning. Outside experts brought into the community to determine community needs and suggest solutions are more likely to get it wrong (Jenkins and Jenkins, 1998). On the other hand, if the role of the local community changes from mere map – and – document reviewers to that of local experts who produce the maps and documents, the sense of community will be further enhanced (Dakin, 2003, Jenkins and Jenkins, 1998, Stewart and Floyd, 2004). Thus, there seems to be unanimity in the suggestion that VEP should be used by sociologists in their community-building efforts.

3 VEP: A METHODOLOGICAL OVERVIEW

3.1 Introduction

This is an analysis of 163 studies that have used participant-generated images in photo elicitation drawn from 160 papers. The initial aim of this study was to focus on Volunteer-Employed Photography (Garrod, 2007), as this is the technique of immediate interest of this study. However it soon became apparent that this or similar techniques have been used for decades in numerous fields and principles. In the process of collecting these studies, the absence of totality posed an issue, as identified by Prosser (1998), that the lack of a single voice in visual social sciences was now becoming an obstacle. After extensive research undertaken over the course of a year, it is still difficult to claim that all the techniques that have placed cameras in the hands of research participants and the studies that were carried out over the years have been identified: this is mainly due to the plethora of different names given to the technique in the academic arena. Additionally, there are voices in the scientific community that consider techniques that use participant-generated images unscientific. Wang (1998) refers to cases where researchers have been marginalised in their own institutions when having to deal with other researchers' negative critique.

It was therefore necessary to first compile an overview of the literature of photo-elicitation techniques that used participant-generated, which is the aim of this chapter. It is anticipated that this will save valuable research time, as it pulls together information from several principles that have never before been recorded in such an analytical manner in one study. However, reference must be made to a literature review by Harper (2002) that refers to a number of publications in visual research, which include several studies that have used participant-driven photo-elicitation techniques. This chapter aims to fulfil three objectives. The first is, having identified the plethora of techniques and lack of consistency, to discuss the validity of these techniques and their scientific rigour. A critique of the techniques will be provided and clarification will be given as to whether the techniques are unscientific or lack rigour. The second objective is to clarify what is meant by participant-generated image research techniques and provide a clear set of definitions for different forms and techniques. The final objective is to provide best practice guidelines for future applications of these techniques.

This analysis includes an introduction to the method used to identify the studies, an overview of the identified techniques, an analysis of the methodological issues that occurred from the use of the techniques and a discussion of matters arising from the review of the literature. Both qualitative and quantitative data are used. This analysis also examines the reasons that have led to the use of so many similar research techniques which make very little reference to each other.

3.2 Method

A systematised, replicable review of the literature was the desired outcome, as a replicable analysis with the use of statistics provides a robust outcome. In systematic reviews there are boundaries to identifying the sources of the literature used and the time frames required [see Fazey et al. (2005a), Fazey et al. (2005b), Pike (2002)], in order to suggest replicability. This was challenging due to the diversity of terms used to describe the methodologies, which were not available from the start but were discovered as the research was advancing. It was therefore impossible to define clear boundaries and keywords, and thus to guarantee replicable results: this is the main reason this review is not described as systematic, a term traditionally used in medical studies (Mulrow, 1994), but as systematised.

3.1.19 Publications used

The terms initially used were volunteer-employed photography which was first used by Garrod (2007), Visitor-Employed Photography (Cherem and Driver, 1983, Cherem and Traweek, 1977, Traweek, 1977) and Resident-Employed Photography (Hawkins et al., 1999, Stedman et al., 2004, Stewart et al., 2003). These terms were used as key search words in Google Scholar and Web of Knowledge. Next, a snowball technique was used, where references from the relevant publications were used.

The publications used are those that were found to have used any kind of photo elicitation where the still photographs were taken by the participants for the specific study, and include one or more case studies where the technique has been applied (Table 2). This review consists of papers published between 1977, when the first studies were identified (Cherem and Traweek, 1977, Traweek, 1977, Ziller and Smith, 1977),

until October 2008. Time restrictions were imposed in order to complete the study within the set timeframe of the project.

Table 2: Publications used and publications not used

Publications used	Publications not used
• Publications that include case studies • Any kind of photo elicitation technique where participants take the photographs • Still photography • Photographs were taken for the specific study	• Publications that match criteria for inclusion but do not enough methodological details • Studies that used photographs not explicitly taken for the study • Autophotographic studies of the researcher • Studies that used video cameras

Three publications fulfilled the criteria set but their applicability is arguable. These are Noda (1988), Markwell (1997) and Groves and Timothy (2001). Noda (1988) introduced the photo projective method in 1988 and has been cited in all the publications that have used this method. He was credited with the ‘ownership’ of the method so finding his paper was important for this study. However, the text has not been translated from Japanese to English: in fact, all the authors who have been identified as having used the photo-projective method are Japanese. The citation was initially found in Yamashita (2002): the author (Yamashita, 2002) was contacted and kindly agreed to provide an outline of the study with its most important methodological characteristics. It was thus decided that the book would be included in the study. The second and third ones by Markwell (1997) and Groves and Timothy (2001) used participant-generated images: but the participants were unaware of the fact that their photographs would be used for research purposes. However, it was decided that both studies are going to be used because, according to the authors, the experiment and the issues explored would be biased if the participants were aware of the study and the roles of their photographs in it (Groves and Timothy, 2001, Markwell, 1997).

3.1.20 Publications not used

Several kinds of publications were not used (Table 2): primarily those that do not contain enough methodological information to shed light on the methodology and outcomes, mainly because they are used in conjunction with other techniques. This group includes studies such as Brown et al. (2000), Malone and Hasluck (2002), Percy-Smith (2002) Wilhjelm (2002), Zambon (2005), Knight et al. (2006) and Prosser and Loxley (2007).

Naturally, when using keywords and reference lists, publications such as research proposals and works in progress come up, which unfortunately cannot be used for the purpose of this review. Examples include Willmott and Chávez (2002) and the second study by Bijoux and Myers (2006).

Papers that use photographs captured in the past and not for the purpose of a study were also omitted [see Hurworth et al. (2005)]: as were papers and books where the researcher was the subject of the study. Examples of such studies are those of Spence (1986), Guimond (1994), and Dykstra (1995). Studies that put video cameras instead of still photography cameras in the hands of participants were excluded. The use of different cameras is a contentious point in this kind of research, in the disposable versus digital camera debate. This resulted in the exclusion of important studies such as the first study recorded to use the concept of participant-generated images (Worth and Adair, 1972) and other studies (Keighron, 1993, Positive Futures, 2006, Rich and Chalfen, 1999, The London Multimedia Lab Social Psychology Department, 2003).

3.3 Results

The data collected come from eight sources: journals (77.2%), books (6.2%), conference papers (6.8%), online journals (4.3%), other online sources (1.2%), reports (1.2%), and theses (1.8%).

Thirty different techniques were identified (Table 3). The names of the techniques used in the analysis were those found in the original texts: Hubbard (1994) is grouped in the general category “photography”, as this is how the technique is characterised in the text, even though it is well known that Hubbard is a photo journalist. As discussed above, 160 sources were retrieved for the purpose of this paper, from reference to 163

actual studies. This is because some researchers, especially in the 1970s and 1980s presented more than one case study per publication. Also, particularly from the 1990s onwards, some researchers tended to write more than one paper based on the same case study. The categories identified are presented in Table 3.

All the researchers involved in participant-generated image research, regardless of discipline or field, technique used and application methods, agree that participant-generated image-based research methods are valid scientific methods and recommend their further exploration and use. In terms of the chronological order of the appearance of each technique, visitor-employed photography was the first technique utilising participant-generated images to appear in a PhD thesis by Traweek (1977) and a paper by Cherem and Traweek (1977) (Figure 2).

Name of technique	Number of studies	% of total
1. Photovoice	43	26.5
2. Autophotography	25	15.4
3. Photography	21	13
4. Visitor-Employed Photography	11	6.8
5. Participatory photography	8	4.9
6. Photo-elicitation	5	3.1
7. Self-directed photography	5	3.1
8. Photo-diary	4	2.5
9. Child photography	4	2.5
10. Resident employed photography	3	1.8
11. Photo-projective method	3	1.8
12. Native image making	3	1.8
13. Photographic self-representation	3	1.8
14. Photo essays	3	1.8
15. Visual narrative	2	1.2
16. Autodriven photo-elicitation	2	1.2
17. Phototherapy	2	1.2
18. Reflexive photography	2	1.2
19. Photo-evaluation	2	1.2
20. Volunteer-employed photography	1	0.6
21. Photo-communication	1	0.6
22. Photo-novella	1	0.6
23. Diary photograph, diary interview	1	0.6
24. Photo-journals, photo-dyads	1	0.6
25. Self-portrait	1	0.6
26. Disposable camera exercise	1	0.6
27. Community photography	1	0.6
28. Visual voice	1	0.6
29. Participant-directed landscape image making	1	0.6
30. Participant-generated images, photo elicitation	1	0.6
Total	163	100%

Table 3: Techniques identified

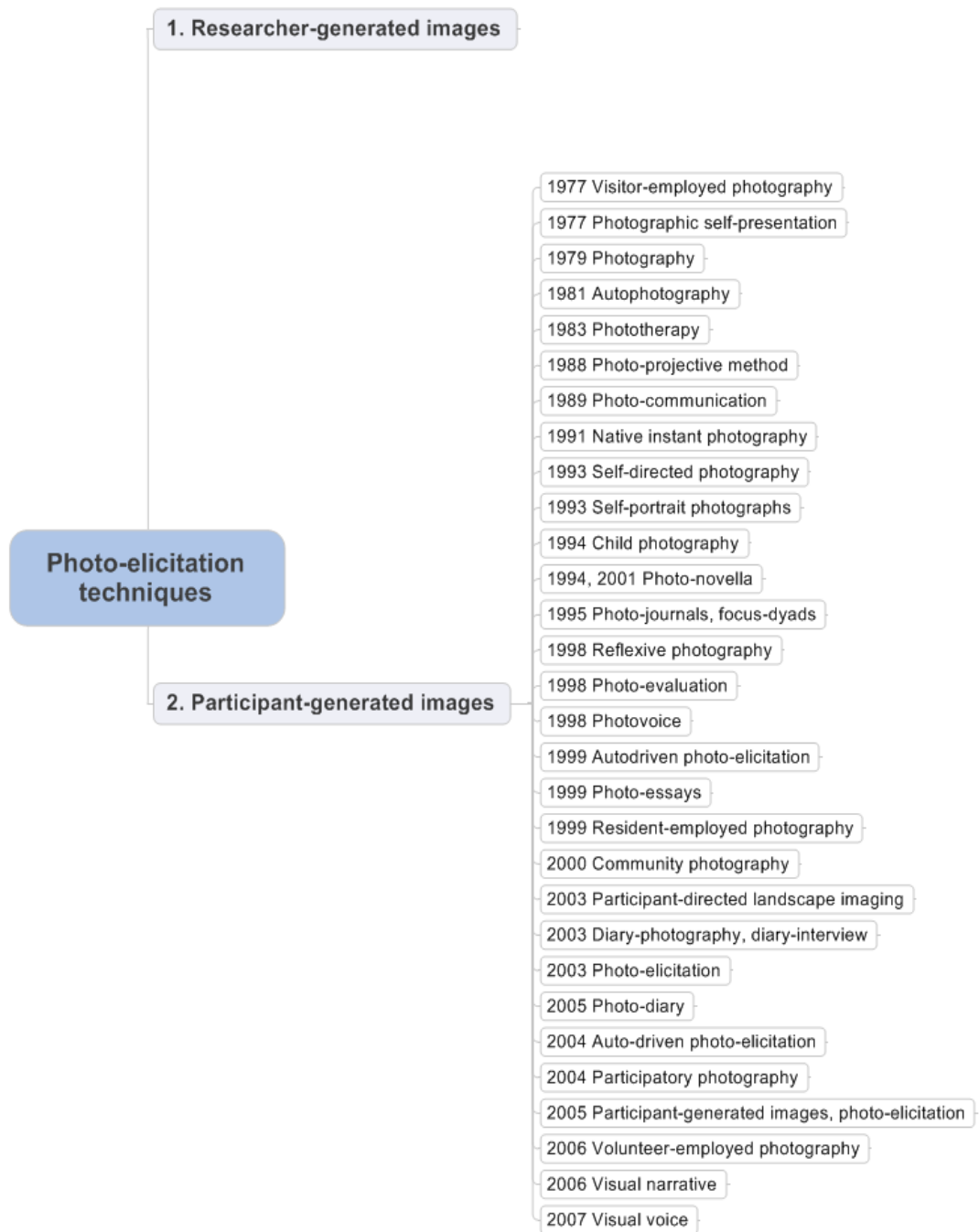


Figure 2: VEP techniques in chronological order

3.1.21 Scientific fields

Participant-generated images have been use in a diversity of scientific fields as shown in Figure 3. Defining these fields was challenging for two main reasons: the first was that it was not always clear in the text what the discipline or the field was. The initial aim was to sort the studies by discipline. However there have been cases where more

than one discipline is mentioned in one paper (McIntyre, 2003, Okamoto et al., 2006). Since that was not possible, a decision was made to use scientific fields instead. The second reason is that boundaries between fields and disciplines are not always clear (for example in Bilnn and Harist (1991). It was therefore decided that the fields would be set by the journals and books concerned. However, it proved impossible to do this accurately, as for example papers like Garlick (2002) which is a paper on tourism, was published in the journal Cultural Studies and papers like Kenney (1993), in psychology, was published in Visual Anthropology. So the researcher decided that broad categories would be identified, based on broader fields that would allow categorisation and make sense for the analysis. Eleven categories were identified as can be seen in Figure 3.

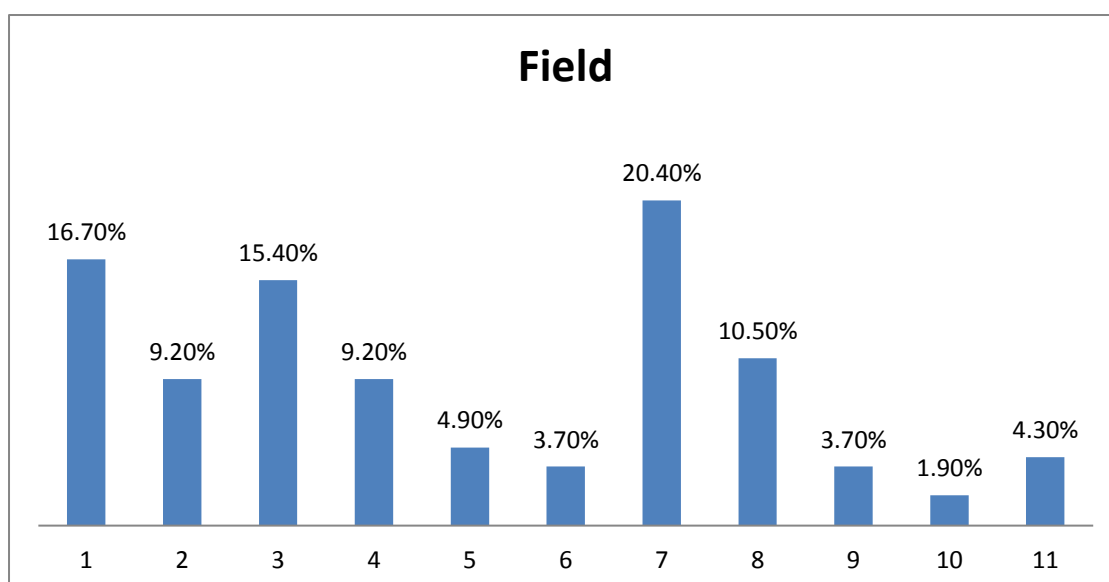


Figure 3: Fields in which VEP has been used

1.Experience of place/physical features 2. Experience of illness 3. Personality assessment 4. Experiences of marginalised and vulnerable social groups 5. Disadvantaged people 6. Disabilities 7. Experience of place/social construct 8. Community education/empowerment 9. Health education 10. Information studies 11. Other

Most of the researchers studied the experience of place as a social construct (20.4%). These include studies on how children understand their environments (Aitken and Wingate, 1993), educational inclusion (Kaplan et al., 2007), and reflections on professional space (Rapport et al., 2007). The second group of tudies comprised

studies on the experience of place in relation to its physical features (16.7%): including studies in tourism (Garrod, 2007) and planning (Hawkins et al., 1999).

The third most popular group is personality assessment (15.4%), where almost all of the studies are in psychology. Community education and empowerment is the next group of studies (10.5%) which includes studies on community building (Jenkins and Jenkins, 1998) and oppression (Boal, 1979). The next group studies experience of illness (9.2%). This is quite a diverse group as it includes studies on people with HIV/AIDS (Rhodes, 2006), breast cancer survivors (López et al., 2005), and carers of patients and their quality of life (Aubeeluck and Buchanan, 2006).

Studies of the experiences of marginalised or vulnerable social groups is the next group (9.2%), including homeless people (Wang et al., 2000), transgender people (Hussey, 2006) and immigrant communities (Rhodes and Hergenrather, 2007). The following group represents studies on disadvantaged people and includes those on impoverished women (Laughlin et al., 2004) and child workers (Bolton et al., 2001). The next group includes studies on several issues such as educational radio programmes (Singhal et al., 2004, Singhal and Rattine-Flaherty, 2006) and women's reproductive health (Pertice and Ardene Robinson, 2004).

The next one is on people with disabilities and includes studies on people with learning (Booth and Booth, 2003) and physical disabilities (Thoutenhoofd, 1998). The last of these four is a category that includes studies that did not fit into any of the previous categories: studies on children's theories on physical activity (MacDougall et al., 2004), and on the relationships between a school and its local community (Sampson-Cordle, 2001), among others. Finally, 1.90% of the studies were in the field of information studies, including studies on computing (Bristow et al., 2004) and diary studies (Carter and Mankoff, 2005).

It is also useful for the analysis to examine which techniques are used per field (table 3.3). With very few exceptions, only one or two methods are used per field. In order to examine experience of place according to its physical features, the most common method used is Visitor-Employed Photography (MacKay and Couldwell, 2004, Taylor et al., 1995) which is used in 37% of the studies, with photography amounting to 22.2% of the studies. In studying the experience of illness, photovoice is the most common method used, with 40% of the studies using photovoice and 20% using photo-

evaluation. Most of the studies in the personality assessment field were done using autophotography (60%); however six other techniques are also used. Photovoice was the most popular method used (in 60% of the studies) to examine the experiences of marginalised and vulnerable social groups: it was also employed in 50% of studies about disadvantaged people, along with four other methods. Photovoice is by far the most popular method used with people with disabilities, as 66.6% of the studies used this technique.

Two other methods were also used. Fourteen methods were used in 33 studies that examined the experience of place as a social construct. The most used methods: photovoice, photography and photo-diary: and each method had the same score, at 12.1%. In the community education and empowerment field, 58.8% of the studies were done using photovoice and four more methods were used. In health education, the method that prevails is photovoice: however photo-diary was used as well. In information studies, only self-directed photography was used. The last group referred to as ‘other’ consists of studies that used several different methods. In nine out of 10 fields, there is one method that can be described as dominant, as per Tables 4 and 5.

Table 4: Dominant technique per field

	Field	Dominant methodology	%	Number of other methods	Total number of techniques
1	Experience of place/physical features	Visitor-Employed Photography	37%	8	9
2	Experience of illness	Photovoice	40%	4	5
3	Personality assessment	Autophotography	60%	6	7
4	Experiences of marginalised and vulnerable social groups	Photovoice	60%	5	6
5	Disadvantaged people	Photovoice	50%	4	5
6	People with disabilities	Photovoice	66.6%	2	3
7	Experience of place/social construct	Photovoice, photography, photo-diary	12.1% each	12	15
8	Community education/empowerment	Photovoice	58.8%	4	5
9	Health education	Photovoice	66.7%	1	2
10	Information studies	Self-directed photography	100%	0	1
11	Other	Photovoice, autophotography	28.6% each	3	5

Table 5: All techniques in all fields

Field	Methodology	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	Number of studies																														
1	27			6	10	2	1				3								2	1							1			1	
2	15	6		2		1			1														3								
3	25	1	15	3													2	2			1					1					
4	15	9	2	1											1				1												1
5	8	4		1			1	1														1									
6	6	4	1	1																											
7	33	4	2	4		2	3		4	2		3	2	3								1		1	1			1	1		
8	17	10	3	2	1					1																					
9	6	4							2																						
10	3							3																							
11	7	2	2							1						1		1													

Fields: 1. Experience of place/physical features 2. Experience of illness 3. Personality assessment 4. Experiences of marginalised and vulnerable social groups 5. Disadvantaged people 6. People with disabilities 7. Experience of place/social construct 8. Community education/empowerment 9. Health education 10. Information studies 11. Other **Methodologies:** 1. Photovoice 2. Autophotography 3. Photography 4. Visitor-Employed Photography 5. Participatory photography 6. Photo-elicitation 7. Self-directed photography 8. Photo-diary 9. Child photography 10. Resident-employed photography 11. Photo-projective method 12. Native image-making 13. Photographic self-representation 14. Reflexive photography 15. Visual narrative 16. Autodriven photo-elicitation 17. Phototherapy 18. Photo essays 19. Photo-novella 20. Volunteer-employed photography 21. Photo-communication 22. Photo-evaluation 23. Diary-photograph, diary interview 24. Photo journals, photo dyads 25. Self portrait 26. Disposable camera exercise 27. Community photography 28. Visual voice 29. Participant-directed image-making 30. Participant-generated images, photo elicitation

3.1.22 Sample groups

Deciding on the sample categories was challenging. Sixteen categories of sample communities were identified (Figure 4). The student sample group is the largest one (19.1%); it also includes the psychology students, who are used as the sample population for 11.1% of the studies and are also used in studies in psychology. During the data input process it was noted that psychology students were used as participants for psychology experiments. The second most popular sample group is school children (16.7%), followed by tourists (8%), low income youth (7.4%) and patients (6.8%). Of note is that category 14 includes studies within groups that could not be grouped with any other. This category includes three studies: one with child monks in Sri Lanka (Samuels, 2004), one with breast cancer survivors (López et al., 2005) and a study with spouses as carers of patients with Huntington's disease (Aubeeluck and Buchanan, 2006).

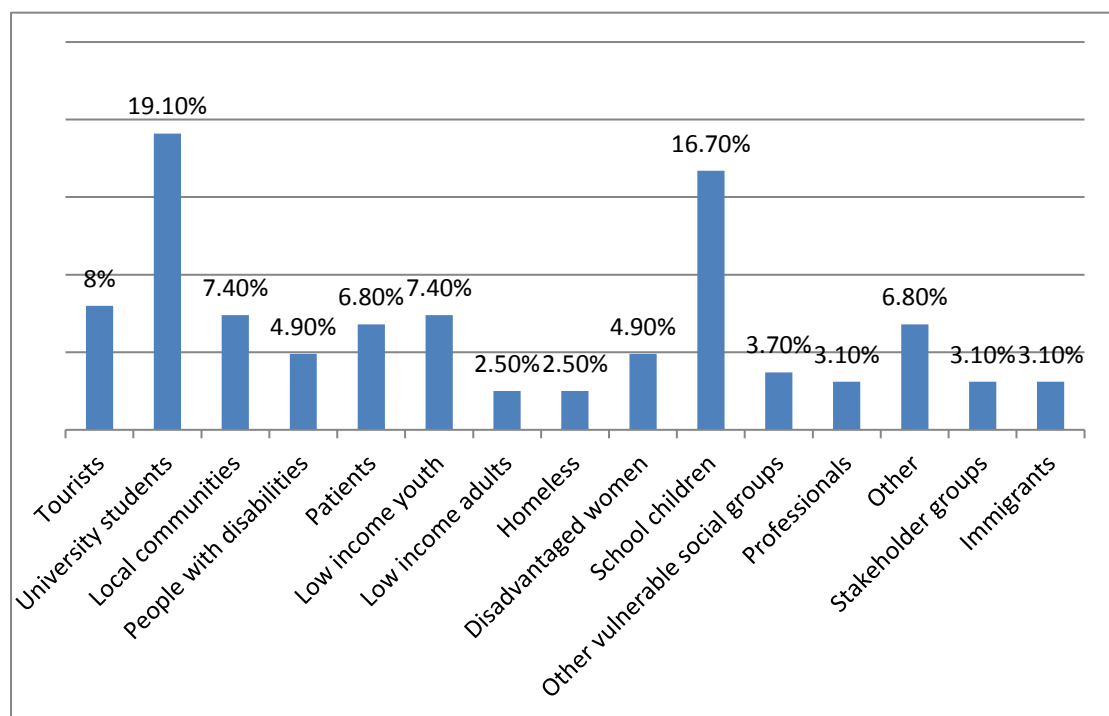


Figure 4: Sample groups

3.1.23 Sampling techniques

The sampling techniques used were grouped into eight categories and were used by studies as shown in Figure 5:

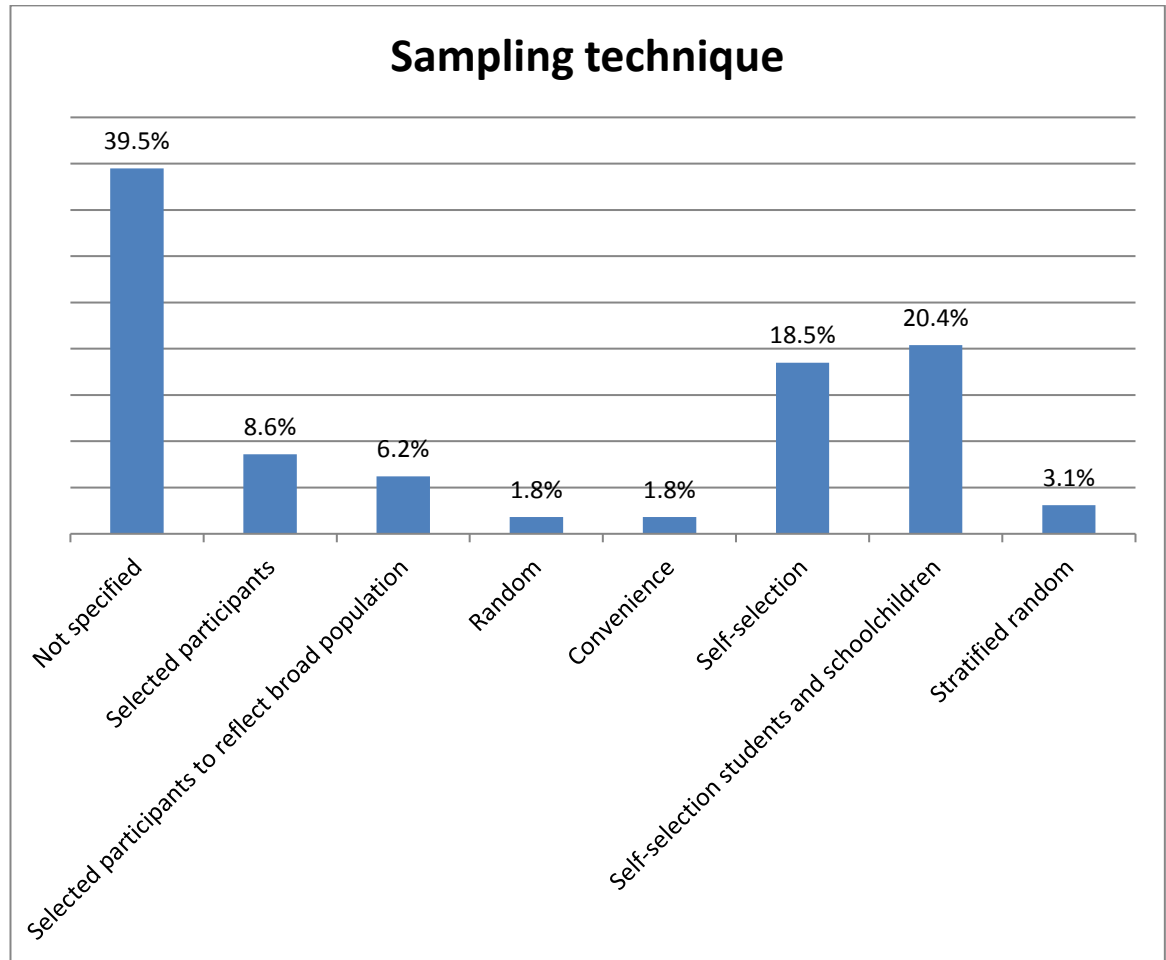


Figure 5: Sampling techniques

All the participants in the studies were voluntary. The main difference between the sampling methods is the way the participants were approached. An astonishing 39.5% of the studies do not specify their sampling method. The most popular sampling method among the remaining studies is self-selection. A target group was asked to participate based on positive responses from those approached. The total number of people who participated via self-selection is 38.4%, with 20.4% being schoolchildren and students. Students and schoolchildren were grouped together regardless of the offer of incentive, as it was considered that whether they were given course credits for their participation or not, they would still want to please their teachers, as noted generally for the participant-researcher power relationship (Loeffler, 2004, Prosser, 1998).

Unfortunately, there are not enough data available in the studies collected to make a comparison between completion rates of other sample groups with student and schoolchildren completion rates, which poses an issue regarding the robustness of some studies and does not help the research community when using participant-generated image techniques. ‘Selected participants’ (8.6%) and participants chosen to reflect a broad population (6.2%) were personally chosen by the researcher.

Based on the large number of studies that had tested the methodology as one of their aims, 95% is a very high percentage of studies that used sampling techniques that were unable to produce generalisable and replicable results. Studies that have methodology testing as their objective amount to 61.7% of the total: studies that do not aim to test the methodology they are using amount to 33.9%, and 4.3% do not specify if methodology testing is one of their aims. There is therefore a mismatch between the aims of the studies and the sampling methods used. It could be claimed that in certain studies it is not necessary to generalise but to describe. However, in terms of promoting methods that use participant-generated images, the comparison proves that more work needs to be done using more robust sampling techniques.

3.1.24 Methodology testing as an objective

During the data input process it became clear that in the majority of the studies (61.7%), one of the objectives was to test the methodology used. In 33.9% of the studies, the methodology used was accepted as a valid and effective technique, and was used as a research tool, while 4.4% were not specific on this subject. It was also noted that 58% of the studies have only used the participant-generated image method as a research tool without using it in conjunction with other methods whose validity is well established, whereas in 38.9% of the studies supplementary methods were used. However, 3.1% of the studies did not specify the method used.

3.1.25 Photographs and complementary methods

It often proved challenging to distinguish if the name given to a technique referred to the overall data collection process, including the complementary method used in the analysis of the photographs such as photo-logs or interviews, or the photo-taking

process. In 74.7% of the studies at least one more method was used to collect data. In 16.7% of the studies the techniques mentioned only included the photo-taking. This means that by saying that the technique used was, for example, reflexive photography, Douglas (1998) implied that reflexive photography is the photo-taking process only. In 6.2% of the studies the researcher did not specify whether, by naming the technique, the process described was the photo taking process or the entire data collection process including complementary techniques. These methods are grouped into 14 categories and range from interviews before the photo-capturing to photo-logs and focus groups. All the complementary methods are presented in Figure 6.

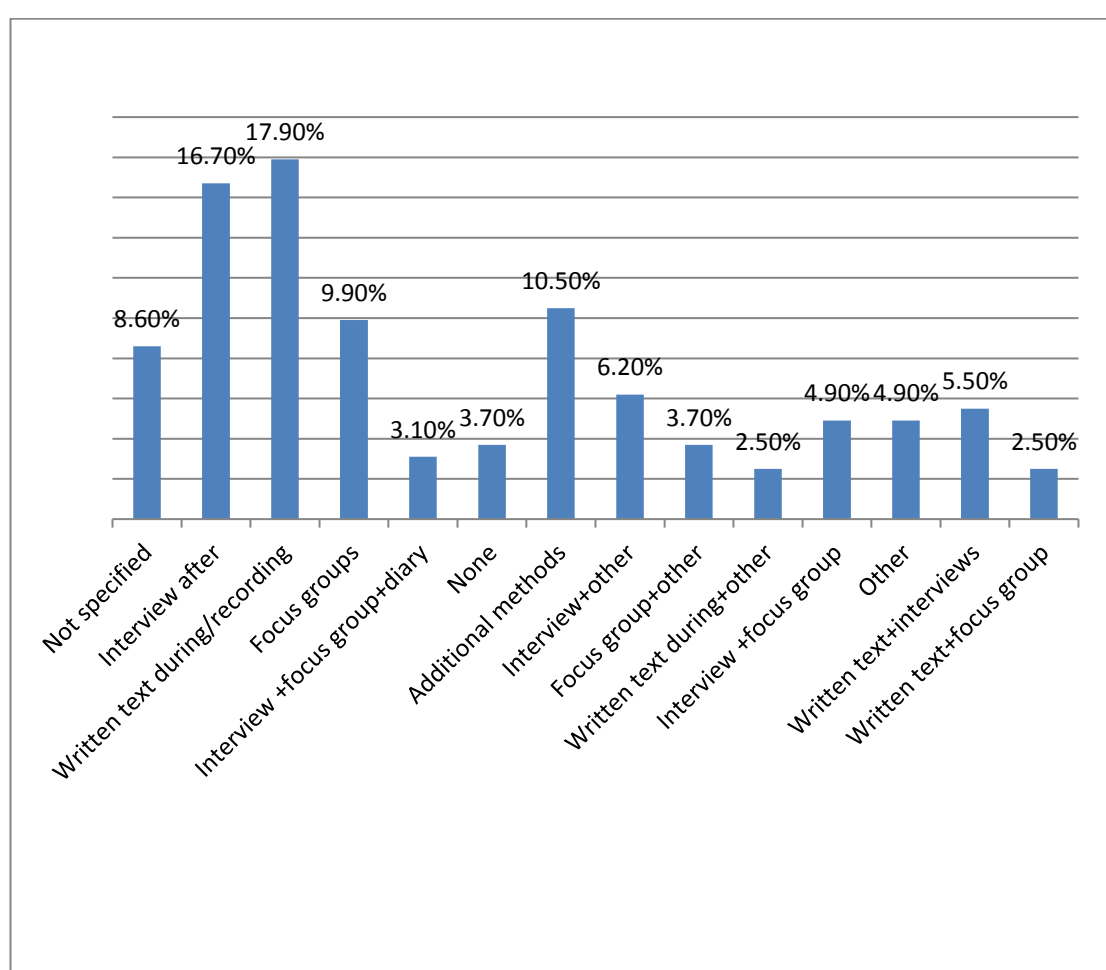


Figure 6: Complementary methods

The most common complementary techniques used are: written text during the photo taking, interview after the photo taking and focus groups. The group called additional techniques (mentioned in Figure 6) refers to studies that use the photographic technique

only as a means of collecting photographs and use additional techniques in the data collection process. In the group titled ‘other’, there are studies that have used additional techniques such as conference online postings (Perry, 2006).

No trends were noticed concerning the complementary method used, apart from the techniques that *a priori* include an additional technique in the way they have been traditionally applied. For example, most of the photovoice studies have used focus groups and all photo elicitation studies have used interviews following the photo-taking. However, Table 4 shows that in most techniques, the complementary methods vary. A good example for that is photovoice: only 32 out of the 43 studies used focus groups. On the same note, no trends were identified when complementary methods were associated with scientific fields (see Table 5).

Finally, it has become apparent that some of the studies that have used the name of the technique to describe the photo taking process have actually used additional methods in the data collection process: for example Douglas (1998), Warren (2002) and Moore (2006). The relation between the studies that used only the participant images as their datasets and the use of complementary data collection techniques would be an interesting concept to explore. Out of 26 studies mentioned above that include only the photo taking process when referring to the photographic technique, 15 used at least one additional technique in the data collection process, five did not specify and six studies only used the photos as the single data set for analysis. Three of these studies are in psychology/personality assessment.

3.1.26 Camera used

The kind of camera used has changed over the years. However, even though digital technology is becoming increasingly cheaper and accessible to more people, there are a few issues regarding the types of camera available and the types of cameras preferred. The most popular are disposable cameras (Figure 7): the most obvious reason being that disposable cameras have been around since the late 1980s (Grundberg, 1988). Unfortunately, only 26 (16%) of the studies identified explained their choice of camera.

Eight groups were identified to describe the kind of camera used in the studies. The point and shoot group includes all inexpensive point and shoot cameras such as

instamatic cameras, Holgas, and others. The self developing group includes all Polaroid and Polaroid-type cameras. Some researchers used black and white cameras, so this is presented as a different category here (Wang et al., 2004b, Kenney, 1993). In addition, in some cases the participants were given two kinds of camera to use (Rasmussen, 2004, Cavin, 1994).

Cost is the main reason behind the choice of camera: this was highlighted by three studies that use disposable cameras (Clark-Ibanez, 2004, Garrod, 2007, Sampson-Cordle, 2001): six studies that used point and shoot cameras (Chenoweth, 1984 , Orellana, 1999, Strack et al., 2004, Wang et al., 2000), one that used black and white (Wang et al., 2004b) and one that used Polaroid (Cavin, 1994). The second reason for the choice of camera is ease of use: this was related to almost all camera types and applies to most of them: disposable (Garrod, 2007, Mizen, 2005, OPENspace, 2005, Sampson-Cordle, 2001), digital (Carter and Mankoff, 2005), point and shoot (Wang et al., 1996b, Wang et al., 2000, Wilson et al., 2007, Ziller and Rorer, 1985) and Polaroid (Blinn and Harist, 1991). Cavin (1994) used both Polaroid and ‘pocket’ cameras, which are grouped as ‘point and shoot’ and also comments on the ease of use of the point and shoot cameras. Finally, researchers who used self-developing cameras justify their choice based on the instant development of the photos. This enables the participant to immediately check whether what was captured was what they intended (Hanna and Jacobs, 1993). Additionally, the photo elicitation interviews could take place instantly (Blinn and Harist, 1991, Hanna and Jacobs, 1993, Radley and Taylor, 2003a, 2003b).

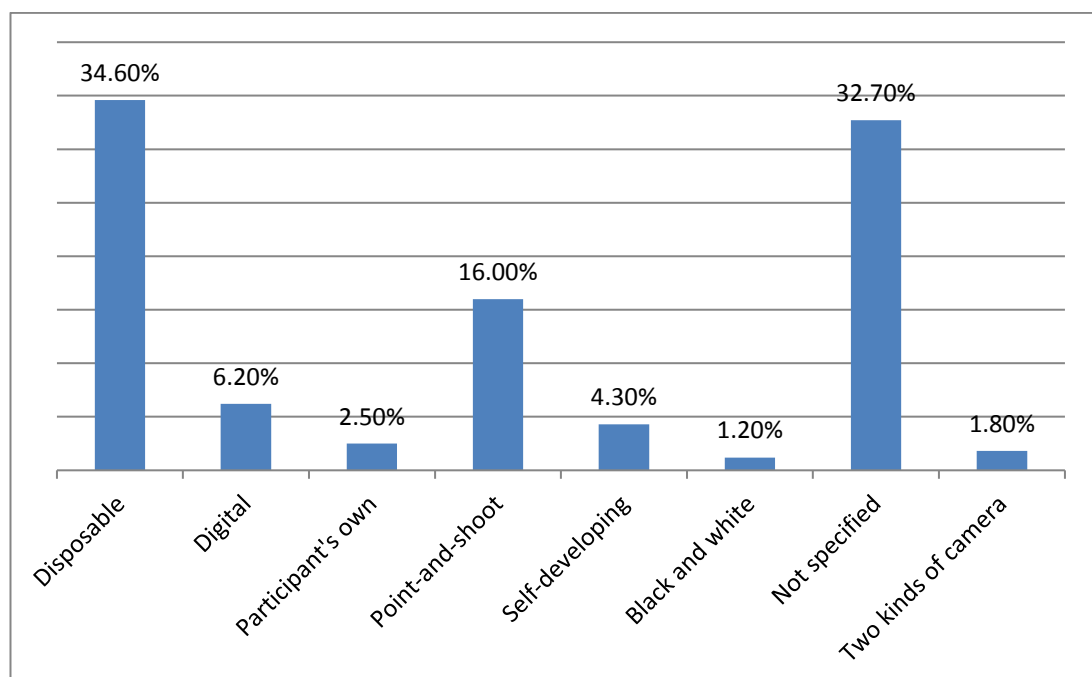


Figure 7: Types of camera used

The use of cameras has changed over the decades as indicated in Table 6. However, this analysis may be somewhat biased, as disposable cameras were not widely used until the early 1990s. The reasons given for the use of point and shoot cameras in the early studies were the same as those relating to disposable cameras, so it can be argued that disposable cameras replaced point and shoot cameras to a great extent. Additionally, digital cameras were not widely used until the early 2000s. However, 101 studies have been conducted since 2000 and only 10 used digital cameras. A factor could be the cost of digital cameras: however, as the cost of digital cameras continues to fall, this problem may soon be overcome. However, the cost is not the only reason disposable cameras are chosen over digital. As discussed in Hanieh and Walker (2007) digital cameras are a potentially easy, fast way to collect good quality photographs. Perhaps the most serious disadvantage of this method is that participants can alter or even delete the photos they capture. This can result in affecting the impulsiveness and simplicity of the task and “misplacing” the emphasis on the quality of the photograph rather than the content, “an emphasis that was intended to reduce the anxiety of the participant in returning the camera” (Hanieh and Walker, 2007). However, the aims of the study concerned should determine the choice of camera, and whether the deletion or alteration of photographs is appropriate.

Table 6: Type of cameras used per decade

decade	disposable	digital	point and shoot	self-developing	black and white
70s	-	-	3	-	-
80s	-	-	6	2	-
90s	6	-	6	1	1
00s	43	10	7	2	1
Total	49	10	22	5	2

3.1.27 Number of participants

As previously discussed, a number of crucial elements that could inform further research are often omitted from journal articles. This is confirmed again by numerous studies (18.5% of the 30 studies) that do not include the number of participants. The numbers of participants range between one (Cavin, 1994) and 511 (Dollinger, 2001), as per Figure 8.

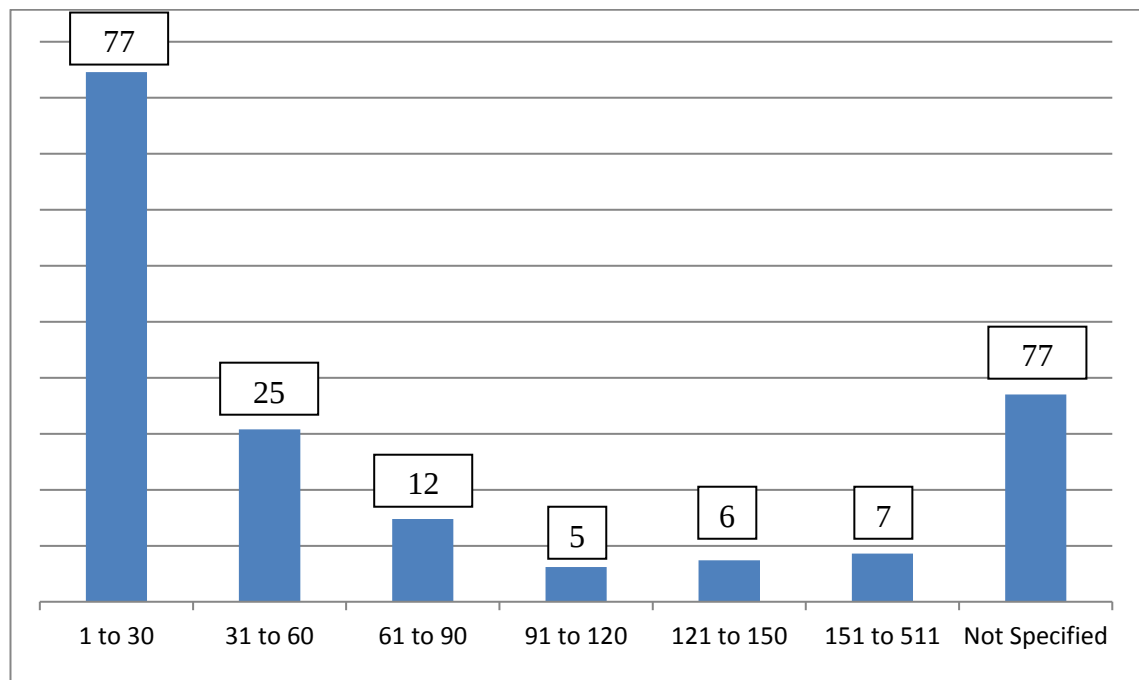


Figure 8: Number of participants

Cavin (1994) used one child participant in her study. The child was given a camera and was asked to use it as she wished. The study aimed to discover what a child would do with the camera, leaving behind any adult preconceptions. This is an interesting study to use as an example when discussing the scientific rigour and validity of participant-generated image research, an issue raised by Wang (1998) and pursued by this review. Dollinger (2001), on the other hand, used previously taken photos collected for other autophotographic studies, where the same question was asked (who are you?).

An interesting finding regarding the number of participants is that only 30 studies had more than 60 participants (18.5%): 15 of them were on personality assessment, seven on experience of place as a physical construct and four on experience of place as a social construct. A closer look at the analysis methods used in the above fields shows that personality assessment was the only field where only advanced statistics are used, without any kind of qualitative analysis (14 studies). Additionally, a combination of

advanced statistics and qualitative analysis was used in 20 studies: eight are on experience of place as a physical construct, six were personality assessment studies and four explore experience of place as a social construct. There is, therefore, an association between the number of participants used within the field and the methods of analysis. In personality assessment studies, more participants were used compared to other fields, with studies that explore experience of place as a physical construct and a social construct, in terms of participant numbers.

3.1.28 Incentive

In a number of studies those approached were offered an incentive to participate, which was thought would have a significant impact on completion rates. Unfortunately completion rates are not available in most studies, as will be discussed in more detail in the discussion section of this Chapter.

Thirty eight studies did not mention if they had used an incentive, whereas incentives were not offered in the majority of the studies (83 studies, 53.1%). Incentives were offered to participants in 38 studies (23.4%): these ranged from copies of the photographs taken (Dodman, 2003, Jones, 2004) to extra credits in University modules (Burke and Dollinger, 2005, Ziller, 1990) and photo prints and vouchers (Wilhelm and Schneider, 2005). Antonioni et al. (2007) offered tickets to the research venue: and other researchers working with disadvantaged people used an amount of money per session (Foster-Fishman et al., 2005). Unfortunately, it is not possible to discuss whether using an incentive works due to the lack of completion rate data in the vast majority of the studies. However, the use of incentives in personality assessment stood out. Twenty five studies were conducted in the personality assessment field. Fourteen of those (56%) used an incentive: this is much higher than any other field, where nine of them gave the student participants extra course credits, and one was an in-class exercise.

Had return rates been available, it would have been interesting to examine the return rates in conjunction with the sample used (many in personality assessments are University students), and also in conjunction with the return rates and numbers of participants in studies that did not use incentives. The only possible comparison here is degree of dependence between researcher and participants and the scientific field

(Figure 9). Degrees of dependence were therefore split into three categories: the first shows no dependence between researcher and participants. The second category implies an average degree of dependence, where the participants are school students, patients or members of vulnerable social groups such as homeless people and are asked by an outside researcher to participate in a study through their school, shelter or hospital. The third category implies a strong degree of dependence between researcher and participant where the participants are asked to participate by their lecturer, teacher or guardian.

As expected, personality assessment studies have the highest degree of dependence, mainly reflecting the lecturer-student relationship between researchers and participants. It is safe to say that the more representative the sample, the lower the dependence between researcher and participant. As discussed already, the aim in a number of studies was to test the methodology. However, in the case of personality assessment, research using participant-generated images has been used since 1977 and participant-generated image methods should now be accepted as well-established methods, so it can be argued that opening the methods up to other groups rather than psychology students would be a good idea.

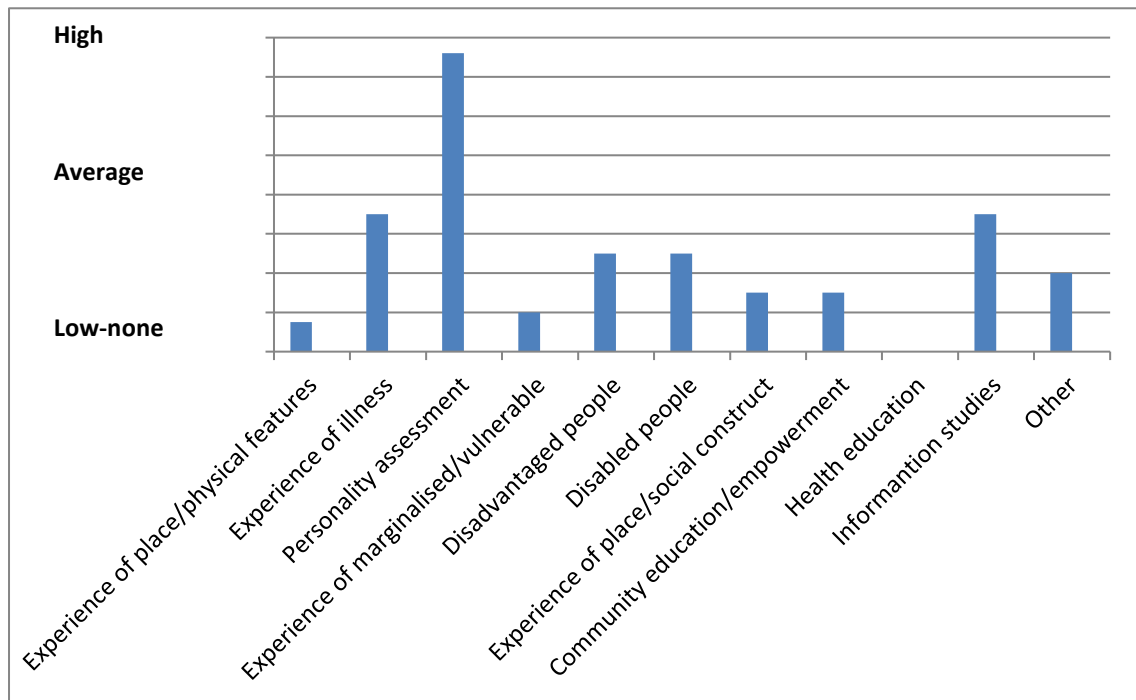


Figure 9: Degree of dependence between researcher and participants per field

3.1.29 Return rates, photos required, average taken, total number of photos taken, and number of photos used

Wang's (1998) remark about social scientists being marginalised because of some researchers' criticism of visual research methods and especially methods that use participant-generated images, unfortunately cannot be challenged using return rates and other statistics from the existing studies. A number of studies included all the relevant information for other researchers to understand what processes were followed, what worked and what did not and how similar research should be replicated (Table 7). However, the vast majority of studies (83.3%) did not include information about their return rates: and even fewer include information about the number of photos required, captured or used. Of the studies, 101 (62.3%) did not provide any information about the number of photos each participant was required to capture: only 41 (25.3%) studies give a total number of photos taken by the participants and 26 studies (16%) give the number of photos used in the analysis.

Table 7: Studies that present their participant numbers and return rates

Reference	Completion rate	Number
Cavin (1994)	100%	1/1
Wang et al. (2000), Wang (1998)	100%	12/12
Rapport et al. (2006)	100%	12/12
MacKay and Couldwell (2004), MacKay and Couldwell (2002)	94.85%	129/136
Booth and Booth (2003)	81.25%	13/16
Loeffler (2004)	100%	14/14
Traweek (1977), Cherem and Traweek (1977)	97.67	168/172
Taylor et al. (1995)	22.75%	179/193
Jutla (2000)	90%	18/20
Stewart et al. (2003)	80%	20/25
Garrod (2007)	40%	20/50
Dollinger and Clancy (1993)	78.21%	201/257
Hanieh and Walker (2007)	78.51%	22/28
Blinn and Harist (1991)	100%	27/27
Foster-Fishman et al. (2005)	93.55%	29/31
Frohmann (2005)	69.05%	29/42
Chenoweth (1984)	94.74%	36/38
Mizen (2005)	78%	39/50
Dodman (2003)	100%	45/45
Dollinger et al. (1993)	56.80%	46/81
Clark-Ibanez (2004)	85.45%	47/55
Stefano et al. (2005)	83.30%	5/6
Baker and Wang (2006)	48.15%	13/27
Sampson-Cordle (2001)	87.50%	7/8
Germain (2004)	77.80%	7/9
Orellana (1999)	42.10%	8/19
OPENspace (2005)	90%	9/10

3.1.11 Country of origin and location of studies

Approximately 90% of the studies using participant-generated images originate from the USA, Canada, the UK, Australia and New Zealand (see table 7). Of interest is that

despite the general academic richness in terms of new methodologies and new knowledge being produced, Europe is significantly behind in using participant-generated image research. This can perhaps be attributed to historic reasons which Prosser (1998) considers responsible for the disproportionately low status of image-based research. He quotes Schultz (1964), who appears to have taken a rather radical approach: he argues that academics, like everybody else, are strongly influenced by “the ready-made standardized scheme of pattern handed down to [him], by ancestors, teachers and authors as an unquestioned and unquestionable guide in all situations that normally occur within the social world” (Schultz 1964, cited in Prosser 1998, p 102).

Table 8 also shows that certain methodologies have been used more in some countries than others. An example here is photovoice: out of the 43 photovoice studies, 35 originated from the US and Canada. This will be discussed further in 3.1.12 on cross disciplinary referencing. However, it can be noted in Table 3.9 that there are some techniques that have only been used in certain countries, such as the Photo Projective Method (Noda, 1988, Okamoto et al., 2006, Yamashita, 2002) which has only been used in Japan, and Resident Employed Photography, that has only been used in the USA (Garrod, 2007, Hawkins et al., 1999, Stedman et al., 2004). It is interesting that the aims and objectives of these studies were similar to other studies from other countries that used other techniques.

Table 8: Countries from which the studies originated

Country/ continent	Studies originated %	Number	Studies held %	Number
North America (US and Canada)	67.5%	110	58.9%	96
UK	16%	26	14.7%	24
Australia and New Zealand	6.1%	10	5.5%	9
Europe	3.7%	6	2.5%	4
South America	1.2%	2	4.9%	8
Asia	(Japan) 2.5%	4	7.4%	12
Africa	(South Africa) 1.2%	2	3.1%	5
Not specified	1.8%	3	1.2%	2
Two countries	0%	0	1.8%	3

Country	North America	UK	Australia, New Zealand	Europe	South America	Asia	Africa	Not Specified	Two countries
Methodology	STUDIES ORIGINATED				STUDIES HELD				
1 Photovoice	35 30	4 5	2 2		0 2	0 1	2 4	1 0	
2 Auto-photography	22 21	3 3			0 1				
3 Photography	8 5	8 8	2 1	1 0	2 3	0 3			0 1
4 Visitor-Employed Photography	10 10					1 1			
5 Participatory photography	2 0	3 1	2 2		0 1	0 2	0 1		
6 Photo-elicitation	3 3	1 1		1 1					
7 Self-directed photography	1 1	1 1	2 1	1 0	0 1	0 1			
8 Photo-diary	2 2	2 2							
9 Child photography	3 3	1 1							
10 Resident-employed photography	3 3								
11 Photo-projective method						3 3			
12 Native image-making	1 1			2 2					
13 Photographic self-representation	3 3								
14 Reflexive photography	2 2								
15 Visual narrative			2 2						
16 Autodriven photo-elicitation	1 0					0 1		1 1	
17 Photo-therapy	2 2								
18 Photo essays	3 3								
19 Photo-novella	1 1								
20. Volunteer-employed photography		1 1							
21 Photo-com/cation	1 0								0 1
22 Photo-evaluation	1 1			1 1					
23 Diary-photograph, diary interview		1 0	0 1						
24 Photo journals, photo dyads	1 1								
25 Self portrait	1 0								0 1
26 Disposable camera exercise		1 1							
27 Community photography	1 1								
28 Visual voice	1 1								

29 Participant-directed image-making	1	1								
30 PGI, photo elicitation	1	1								

Table 9: Country studies originated and held

3.1.30 New techniques and cross-disciplinary referencing

It was noted during the data input process that many researchers claimed that they had actually devised the technique they were using. As can be seen in Table 10, in 12.3% - 20 studies, the authors argued that they devised the method they used. However, the number of techniques identified is 30 and as a result, there are methods that nobody has claimed they devised. Additionally, in 75% of the above studies (15 studies), no reference was made to other techniques that had in the past used participant-generated images. Wang (1996b) went as far as to copyright the name of the technique, without ever referring to any of the researchers who had, in the past 20 years, used participant-generated images in their research. Furthermore, in 67.5% of the studies (110 studies) there was no cross-disciplinary referencing and no reference to other participant-generated images other than the one used by the authors. In 73 studies (44.8%), the researchers do not specify if photographic techniques have been used in the past in their own field.

Returning to Prosser's (1998) point that image-based research needs to be strengthened and supported, the way certain researchers have approached participant-generated image research does not help. Not only is the field not strengthened thus rendering it difficult for new researchers to identify previously conducted research because of the lack of consistency in naming the techniques, but also enables some researchers to claim fame by either slightly altering already existing techniques (Dakin, 2003, Milford et al., 1983, Noda, 1988) or by ignoring past research and re-inventing the wheel (Wang, 1998, Wang and Burris, 1994, Wang et al., 2004a) (Table 10). Of course, it can also be suggested that the researchers cited as examples above did not conduct holistic literature searches on the techniques that had been used in the past, probably due to the inconsistency and all the different names. The only reasonable way to approach this is to put all these studies under one broad grouping where all techniques can be used according to their philosophy and the field of research.

Table 10: Techniques presented as researchers' inventions in chronological order

Publication	Technique	Field
Ziller and Smith (1977)	Photographic self-representation	Psychology
Traweek (1977), Cherem and Traweek (1977)	Visitor-Employed Photography	Tourism planning, interpretive planning
Boal (1979, 2000)	Photography	Community empowerment
Rorer and Ziller (1982)	Photography	Psychology
Milford et al. (1983)	Phototherapy	Psychology
Cherem and Driver (1983)	Visitor-Employed Photography	Tourism, planning
Noda (1988)	Photo-projective method	Planning, psychology
Buss (1995)	Photo-journals, photo-dyads	Planning, ethnography
Wang et al. (1998), Wang et al. (1996b)	Photovoice	Health promotion
Groves and Timothy (2001)	Photography	Tourism
Dakin (2003)	Participant-directed landscape image-making	Environmental management
Wang and Pies (2004)	Photovoice	Health promotion
Newman and Kanjanawong (2005)	Photography	Health promotion
Baker and Wang (2006)	Photovoice	Health promotion
Bijoux and Myers (2006)	Self-directed photography	Experience of place, geography
Moore et al. (2006)	Self-directed photography	Environmental research
Okamoto et al. (2006)	Photo-projective method	Environmental perception, social identity, stereotypes

3.1.31 Reported positive outcomes

Since participant-generated image research requires commitment from the participant and in some cases it can be considered that participants make big efforts and attach emotionally, especially in longer-running projects, such as photovoice (Wang et al., 1996a), it was considered essential to examine if these projects actually have real-life outcomes. Of the 43 studies, 26% reported positive results, while 116 studies (71.2%) did not. This information was not available in three studies.

Several of these studies resulted in the public exhibition of the photographs (Wang et al., 2004a, McIntyre, 2003, Graziano, 2004). Using the photographs taken for the study, the participant not only showed the world the experiences of being homeless or a victim of violence but was made to feel empowered (Mitchell et al., 2006). After participating in a photovoice project, 10 out of 11 homeless people left the shelter and found their own accommodation (Wang et al., 2000). Mitchell et al.'s study (2006) resulted in the establishment of a feeding scheme for schoolchildren at weekends, and Flint photovoice (Wang et al., 2004b) helped secure funding for violence prevention schemes. Visitor- and resident-employed photography studies have been integrated in planning systems (Hawkins et al., 1999) or have been the catalysts to drive the expansion of the protection status of certain areas (Chenoweth, 1984). Three studies formed part of larger projects (Germain, 2004, Newman and Kanjanawong, 2005, Smith and Barker, 2000, Stefano et al., 2005). Results of studies and photographs were published in the media (Thoutenhoofd, 1998) and participants of at least five studies spoke at conferences (Lykes, 2001, Jennings, 2004, Woolrych, 2004, Wang et al., 2004a, Kaplan et al., 2007). Wilson et al. (2007) and Hergenrather et al. (2006) report that the studies helped the participants to develop action plans. Finally, Fotokids became a well known programme that expanded from Guatemala to other countries, exhibited children's photos in Britain, Germany and Spain, and allowed children to sell their postcards. Their photos featured in promotional campaigns for children's rights and several of them escaped squalour and are now studying art, photography and journalism.

3.1.32 Data analysis methods

Four methods were used to carry out most of the analysis of the studies. The most popular method was qualitative analysis, which results from the nature of the data collected. Of the 105 studies, 64.4 % were analysed using qualitative methods. The second most popular method used in 12.3% of the studies (20 studies) (see Table 11) used a combination of more advanced statistics such as ANOVA and chi-square with qualitative methods. Descriptive statistics were used to present the results in 11% of studies, and 8.6% used only advanced statistics without any qualitative analysis or descriptive statistics. Additionally, 100% of the studies that have only used advanced statistics to analyse their data are in psychology. In all of these studies the question posed to the participant was ‘Who are you?’ Of the studies that used a combination of advanced statistics and qualitative analysis, 65% examined experience of place (tourism, planning and geography). Descriptive statistics were used in all fields with the exception of psychology, where very few studies (three) were analysed using qualitative methods.

Table 11: Analysis methods

Analysis	Number of studies	Percentage %
Qualitative methods only	105	64.4%
Descriptive statistics and qualitative methods	18	11%
Advanced statistics and qualitative methods	20	12.3%
Quantitative methods only	14	8.6%
Information not available	8	4.9%

3.4 Volunteer Employed Photography techniques – a brief analysis

This section presents an overview of five techniques that have been used in 66.6% of the total number of studies. A thorough analysis of these techniques will depend on the number of studies they were used in, ranging from 26.5% to 4.9%. The remaining 25

techniques are presented in Table 14, with references in addition to their aims and their associated context. The references cited below are given as examples.

3.4.1 Photovoice (43 studies)

The first photovoice study was published by Wang et al. in 1996 under the term photovoice. Later in the year, another paper was published (Wang et al., 1996b) with a footnote that noted that photo novella has been used as a tool to either tell a story or teach literacy, and that the technique used thereafter was called photovoice. Five photovoice studies were published in the 1990s and the rest of them in the 2000s.

Photovoice is a participatory action research qualitative technique, where people are enabled to “identify, represent, and enhance their community” (Wang and Burris 1997, p 369). Photovoice builds on Freire’s work on critical consciousness (Freire, 1970), where sketches and photographs were analysed in group discussions which provided the context for the group analysis. This process has received acclaim for its ability to enable community members to identify codes and analyse community issues with the knowledge of the insider. It also identifies with feminist theory, where the community members are the experts of their own environment and not mere recipients of information and decisions, and takes political action by giving a voice to people and groups that would otherwise be silenced (Bilsky, 1998). As Keller and Longino (1996) put it, nobody is in a better position to understand the issues in question than the members of a group. Photovoice also builds on documentary photography. Documentary photography brings other people’s reality closer: it is a way to educate and sensitise the public (Hubbard (1994). It has three main goals: i) to enable the community members to express themselves, and to voice issues and concerns, ii) to encourage critical dialogue and knowledge by discussing community photographs, and iii) to act as a catalyst for social change by reaching and mobilising policy makers (Wang et al., 2000). The main notions in the photovoice literature are participation, action research, community empowerment, and social justice.

Photovoice studies usually follow certain steps, although since the technique became more widely known, several researchers have used it in different ways. These steps include (Wang et al., 1998):

- a. photovoice training which includes group discussions about photo taking, use of cameras and ethical issues
- b. taking photos
- c. focus group discussion of issues that come up (usually series of focus groups)
- d. policy makers' approach

According to the analysis, the fields of research that photovoice was used in, come to support the aims and objectives of photovoice, as can be seen in Table 3.12. Ten of the studies that have used photovoice are in community, education and empowerment, (Foster-Fishman et al., 2005, Jennings, 2004, Lykes, 2001, Pearson and Ralph, 2007, Williams and Lykes, 2003). Four studies that have used photovoice examine the experiences of marginalised and vulnerable social groups (Graziano, 2004, Rhodes and Hergenrather, 2007, Streng et al., 2004). Also, four studies used photovoice to examine experience of illness (Aubeeluck and Buchanan, 2006, Baker and Wang, 2006, López et al., 2005), disadvantaged people (Killion and Wang, 2000, Mitchell et al., 2006, Strack et al., 2004), people with disabilities (Brown et al., 2003-2004, Whitney, 2006, Woolrych, 2004), experience of place as a social construct (McIntyre, 2003, Riley and Manias, 2003, Stefano et al., 2005) and health education (Carlson et al., 2006, Pertice and Moffitt, 2007). Other studies include fields such as personality assessment (Pearson and Ralph, 2007), as can be seen in Table 11.

Table 12: Fields in which photovoice was used

Field	Number of studies
Experience of illness	2
Personality assessment	3
Experiences of marginalised and vulnerable social groups	4
Disadvantaged people	4
Disabled people	4
Experience of place as a social construct	4
Community education and empowerment	10
Health education	3
Other	2

The groups chosen to participate in photovoice studies are also indicative of its empowering nature. Most are women who live in poor areas or in fragile environments (Killion and Wang, 2000, Wang and Pies, 2004). The second most popular category of

participants are people with disabilities (Booth and Booth, 2003, Woolrych, 2004), and the third, young people who come from low income backgrounds (Moss, 1999, Wilson et al., 2007).

In addition to being the ones who do the capturing, the participants are also the ones who explain and discuss the photos produced. As discussed above, the predominant method used to discuss/analyse the photos is the focus group method: 60.5% of photovoice studies used focus groups either as the only method (53.8%) or in conjunction with other methods (46.1%).

It can be posited here that there are photovoice projects that last for quite a long time, indicating that although the photovoice process takes time, its funders obviously believe in its effectiveness. The studies analysed here last between a few weeks (Baker and Wang, 2006, Lockett et al., 2005) to a year or more (Kroeger, 2003, Wang and Burris, 1997). Additionally, the qualitative character of photovoice is also evident from the analysis. Although the number of participants tends to be fairly low, ranging from five to 122 (Killion and Wang, 2000, Wilson et al., 2007), a relatively long time is spent with them to achieve good quality responses.

Additionally, the data analysis methods used in photovoice studies enhance the qualitative nature of the methodology: 79% of the photovoice studies were analysed in a qualitative fashion only and 11.6% used qualitative analysis and descriptive statistics. None of the studies used quantitative analysis, or a combination of quantitative and qualitative methods.

3.4.2 Autophotography (25 studies)

Autophotography is the second most popular technique that uses participant-generated images. It is also one of the first techniques that put cameras in the hands of participants. The first autophotographic studies were published by Ziller and Lewis in 1981. Ziller had previously published other studies, where he examined participant-generated photographs (Ziller and Smith, 1977) but he did not use the term ‘autophotography’.

This method was initially used, and continues to be used by most researchers, as a technique in personality research. It initially used the ‘who are you?’ approach, where

participants were asked to answer the question through the photographs they took. Ziller drew on Worth and Adair's (1972) work with a special emphasis on self-concept (Ziller and Lewis, 1981), which is the effort to understand ourselves and others (Ziller, 1990). The method was chosen as it was suggested that the iconic communication would spare some of the problems posed by speech. Dollinger (Dollinger, 2002) noted that autophotography has the potential to study a wide range of "social, psychological and personality phenomena" (p 25). Through the years other questions have been asked, such as 'what are you not?' (Jones, 2004), or 'me and not me' (Noland, 2006), which are again in the same context. Notably, 52.17% of the studies examined have asked the participants to answer the question 'who are you?' There are a few researchers who escape that context, such as Wilhelm and Schneider (2005) who ask 'what does nature in the city mean to you?' and Dodman (2003) asking 'what are your surroundings, the environment and life like in your area?' Both these studies are more in the realm of geography in that they examine the human-environment interaction, than in the realm of psychology where autophotography is traditionally used. As Dodman (2003) notes, the use of this methodology offers the potential to prevent problems linked with representing the perspective of another person and the prospect to understand what the participants choose to focus on in their environment by observing the photographs. Dodman (2003) also describes this method as a method of empowerment, as the participants are the ones who have the knowledge and are empowered by being asked to share it.

A closer look at the scientific fields in which autophotography has been used confirms that autophotography is a research tool predominantly used in psychology: as 60% of the autophotography studies were in personality assessment. The rest of the studies were more or less equally divided within other fields, with very few studies in each field, ranging from a maximum of three to one study (Table 13).

Table 13: Fields in which autophotography was used

Field	Number of studies
Personality assessment	15
Experiences of marginalised and vulnerable social groups	2
Disabled people	1
Experience of place as a social construct	2
Community education and empowerment	3
Other	2

The participant groups used should be mentioned as an indication that autophotography is mostly used in psychology. It is indicative that 48% of the participants were psychology university students, outnumbering by far all other groups, and with only 16% of them being school children. The numbers of participants in autophotographic studies are usually quite large, starting from 12 (Noland, 2006), to 257: (Clancy and Dollinger, 1993) and 511 (Dollinger, 2001). In this last study Dollinger (2001) used photographs taken for previous autophotography projects. Larger sample sizes tend to be used in autophotographic studies compared to other techniques.

Ziller (1977) and Ziller and Rorer (1985) use the technique to collect and analyse photographs. Dollinger (1996, 2001, 2002), on the other hand, who has conducted a big proportion of the autophotographic studies examined here (seven studies), uses the term ‘autophotographic essay’, and accompanies the photos with an explanation. Other researchers, such as Armstrong (2005) and Taylor (2003) have also used complementary methods to make sense of the photographs: however the number of studies that have only used photographs is relatively high: 64% of the studies have used a combination of methods, 24% of the studies have only used photographic datasets and 12% did not specify.

The analysis of the data is mostly undertaken using advanced statistics and far less qualitative analysis. In 60% of the autophotography studies the data analysis was done in an advanced quantitative fashion (10 used advanced statistics only and five used a combination of advanced statistics and qualitative data): 36% used qualitative methods only and 4% did not specify. Finally, worthy of note is that 96% of the autophotographic studies originated from North America, but only 4.3% from the UK.

3.4.3 Photography (21 studies)

This is a very broad category which includes all the studies that are not specific about the technique they are using: the researchers concerned just call it photography, or use photographs taken by the study participants. This category includes studies from several disciplines and in different fields:

- Six studies (28.6%) in experience of place as landscape (Cosco and Moore, 2002, McIntyre et al., 2004, Stevenson, 2007).

- Four studies (19%) in experience of place as a social construct (Germain, 2004, Rapport et al. 2006).
- Three studies (14.3%) in experience of illness (Hanieh and Walker, 2007, Taylor, 2003b).
- Three studies (14.3%) in personality assessment (Phillips, 1986, Newman and Kanjanawong, 2005).
- Two studies (9.5%) in community education and empowerment (Boal, 1979, Grey, 1995).
- One study in disadvantaged people (Bolton et al., 2001).
- One study (4.8%) in experiences of marginalised and vulnerable social groups (Gonzalez, 2003).
- One study in people with disabilities (Germain, 2004).

The sample groups are equally as broad: four studies with illness sufferers, four with university students, three with school children, two with low income youth, two with homeless people, three with professionals and one with tourists, one with people with disabilities, one with low income adults and one with two user groups of the same landscape.

There is a general agreement that through the use of photography, person-environment interactions can be explored (Rorer and Ziller, 1982): in addition to gaining insights into people's social and psychological worlds (Damico, 1985, Phillips, 1986, Germain, 2004) .Boal (1979), referring to a literacy project in Peru, claims that giving the camera to people is a political action: "If we are going to give the people the means of production, it is necessary to hand over to them, in this case, the camera" (p122), an action that will enable people to speak through photography. It is here that the major similarity of the studies in this group lies: they consider that photography can be used to break the language barrier that is dominant in more traditional research methods (Damico, 1985).

3.4.4 Visitor employed photography (VEP) (11 studies)

Visitor employed photography is one the first techniques mentioned in the literature that placed cameras in the hands of participants, as the first paper on VEP was published in 1997 by Cherem and Traweek based on Traweek's PhD thesis (1977) and

explored the use of VEP as a tool for interpretive planning from the visitors' perspective. A number of researchers who have used VEP as a planning and management tool have followed. Oku and Fukamachi (2006) suggest that VEP should be used when planning for recreational forest, while Chenoweth advocates its use in landscape architecture (1984) and in rivers and other linear environments (Cherem and Driver, 1983). VEP has also been used to investigate destination image (MacKay and Couldwell, 2002, MacKay and Couldwell, 2004). Researchers who have used VEP to conduct research on visitors' experiences also agree that photographs tell stories that can inform trip planners and designers as well as destinations managers about what visitors like, appreciate, dislike and expect (Groves and Timothy, 2001).

Volunteer-Employed Photography is an experience-recording technique that allows people's experiences and perceptions of landscapes to be captured when they take place (Jenkins and Jenkins, 1998) and then be shared. Haywood (1990, p 27) notes: "Visitor-Employed Photography is a powerful tool in that it provides usual and evidentiary information to support reactions to, opinions about, and assessment of a visitor's experiences in specific places or destinations". It is also important to mention that the aim is to reach policy makers, planners and marketers, to show them what is not always obvious to them, through the photographs taken by the participants (Haywood, 1990).

Ten out of 11 studies undertaken using VEP are in experience of place as landscape (Cherem and Driver, 1983, Flick and Taylor, 1998): and the remaining one is community education and empowerment (Jenkins and Jenkins, 1998). Also, in accordance with the study fields' results, in 10 studies the sample group used consisted of tourists and in the remaining study, local community members.

3.4.5 Participatory photography (eight studies)

All the studies that have used the participatory photography technique have been published between 2004 and 2007. The first one, the Taru Project, was presented at a conference in 2004 (Singhal et al., 2004) and aimed to explore the impact of an educational entertainment project in India. A similar study from the same author was published in 2006 (Singhal and Rattine-Flaherty, 2006) and took place in Peru. The fields in which participatory photography has been applied are: four studies in experience of place as a social construct (Beilin, 2005, Kaplan et al., 2007), two in

health education mentioned above (Singhal et al., 2004, Singhal and Rattine-Flaherty, 2006), one in experience of illness (Miller and Happell, 2006) and one in experiences of members of marginalised or vulnerable social groups (in this case, battered women) (Frohmann, 2005).

The predominance of textocentrism is an issue that preoccupies researchers who have used participatory photography in their research (Singhal and Rattine-Flaherty, 2006), and is presented as a barrier, as discussed in the previous group of studies. However, common ground for all the researchers who used participatory photography is the opportunity given to people or groups who would traditionally be objects of somebody else's research to express themselves: to present their world as they live in it: to provide an insight into relationships, perceptions, and experiences, and to share their reflections and feelings (Frohmann, 2005, Kaplan et al., 2007, Miller and Happell, 2006, Singhal et al., 2004). The comparison of participatory photography to a window in people's lives is a vivid account that schematically represents the role of the technique (Frohmann, 2005).

In terms of the groups of people sampled for these studies, three studies used schoolchildren, two used radio programme listeners, one schizophrenic patients, one battered women and one farmers (Beilin, 2005). Significantly, in none of the studies above was the participant given any kind of incentive, and none of the researchers claims that this is a new technique they devised. Also, in all of the studies there are references to other studies using similar methods.

3.5 Brief presentation of VEP methods

Table 14: Brief presentation of all VEP methods

Name of technique/ no of studies	References	Aims	Field	Sample
1. Photovoice (43)	McIntyre, (2003), Riley and Manias, (2003), Stefano et al. (2005)	• People are enabled to identify, represent and enhance their community • Community empowerment	10 fields including experience of illness, personality assessment, disadvantaged people	Women, refugees, disadvantaged people
2. Autophotography (25)	Ziller, (1977), Ziller and Rorer, (1985), Dollinger, (2001)	Assessment of the self	Six fields including personality assessment, disabled people, community education and empowerment	Students, schoolchildren, schizophrenic patients
3. Photography (21)	Cosco and Moore, (2002), McIntyre et al., (2004, Stevenson (2007).	Insights into people's social and psychological worlds	Seven fields including experience of place as landscape, experience of place as a social construct, experience of illness	Various
4. Visitor-employed photography (11)	Cherem and Driver, (1983), Flick and Taylor, (1998)	• A tool for interpretive planning • Allows people's experiences of the landscape to be captured when they take place	Experience of place as a landscape and community education and empowerment	Tourists, community members

5.Participatory photography (8)	Singhal et al. (2004), Singhal and Rattine-Flaherty (2006)	Allows people or groups who would traditionally be objects of somebody else's research to express themselves: to present their world as they live in it: to provide an insight into relationships, perceptions, and experiences, and to share their reflections and feelings	Experience of place as a social construct, health education, experience of illness, one in experiences of members of marginalised or vulnerable social groups	Battered women, vulnerable social groups, radio audiences.
6.Photo-elicitation (5)	Clark-Ibanez (2004), Glover et al. (2008) Loeffler (2004), Radley and Taylor (2003a), Rasmussen (2004)	• Allows participants' experiences, feelings and thoughts to be expressed more accurately than in interviews alone. • Empowerment through participant-generated images is mentioned in political terms as a way of provoking consciousness of people's situation	Experience of place as a social construct, tourism, experience of illness, community-based land-use planning	Schoolchildren, university students, patients, local community members
7.Self-directed photography (5)	Aitken and Wingate (1993), Markwell (2000a), Bijoux and Myers (2006), Moore et al. (2006), Dahlblom et al. (2008)	• Gives power to the participants: they are the ones who do the capturing, therefore they can tell their own story. It promotes participation, engagement and empowerment (Bijoux and Myers, 2006, Moore et al., 2006). • Researchers have come to choose this method to elicit participants' experiences and feelings and to minimise researcher input (Bijoux and Myers, 2006)	Experience of place as a social construct, experience of place as landscape, disadvantaged people	Local community members, students, schoolchildren, children carers
8.Photo-diary (4)	Bristow et al., 2004, Carter and Mankoff (2005), Mizen (2005)	Empower the participants by asking them to do the capturing in order to gain an understanding of their lives, experiences and perspectives.	Information studies, low income youth	Professionals, child workers

9.Child photography (4)	Cavin, (1994), Hubbard, (1994), Orellana, (1999), Turnstall et al., (2004)	• Provides opportunities so that children can interpret their own visions of the world (Hubbard, 1994). • Researchers can have a better understanding of how children experience the landscape and features of natural environment (Turnstall et al., 2004), • Researchers gain insight into children's views of their social worlds (Orellana, 1999)	Children's experience of place as a social construct	Schoolchildren, young native Americans
10. Resident employed photography (3)	Hawkins et al. (1999), Stedman et al. (2004), Stewart and Floyd (2004)	• Integrate community values, perceptions in planning process • Capture, communicate social/ physical characteristics valued • Identify values, concerns • Include marginalised social groups	Experience of place/landscape	Community stakeholders, local community members
11.Photo projective method (3)	Noda (1988), Yamashita (2002), Okamoto et al. (2006)	People's attitudes and perceptions of their living environments	Experience of place/social construct	Schoolchildren, local community members, university students
12.Native image making (3)	Antonioni et al. (2007), Blinn and Harrist(1991), Gemini and Boccia-Artieri (2007)	Document participants' experiences of their worlds	Experience of marginalised/vulnerable social groups, experience of place/landscape	Vulnerable social groups, local community members, tourists

13. Photographic self representation (3)	Ziller and Smith (1977)	Investigate people's perceptions and interactions with physical and social environment	Experience of illness	Psychology students
14. Photo essays (3)	Dollinger et al. (2007), Dollinger et al. (1999), Sampson-Cordle (2001)	• Test individuality • Understand how rural school-community relationship is perceived	Personality assessment, other	Psychology students, community stakeholders
15. Visual narrative (2)	Lemon (2006), Moss et al. (2007)	• Tool for reflection to promote student-centred learning • Explore students' experiences and feelings • Abstract concepts	Experience of place/social construct	Schoolchildren
16. Autodriven photo elicitation (2)	Clark (1999), Samuels (2004)	Investigate children's viewpoints, experiences and perceptions	Experience of illness, other	Patients, children monks
17. Phototherapy (2)	Milford et al. (1983), Blinn (1987)	• Provide confrontation with self • Explore how people can learn/ understand themselves	Personality assessment	Low income youth, vulnerable social groups
18. Reflexive photography (2)	Douglas (1998), Harrington and Lindy (1999)	Study impressions of experiences	Experience of place/social construct	University students
19. Photo evaluation (1)	Schratz, Steiner-Löffler (1998)	• How young people experience school life • Active evaluators	Experience of place/social construct	University students

20.Volunteer employed photography (1)	Garrod (2007, , 2008a, , 2008b)	Investigate locals' and tourists' perceptions of a tourism destination	Experience of place/landscape	Locals and tourists
21.Photo communication (1)	Dinklage and Ziller (1989)	Investigate meanings of war and peace	Personality assessment	University students
22.Photo novella (1)	Berman et al. (2001)	Children's perspectives and feelings	Experiences of marginalised and vulnerable social groups	Refugee children
23.Diary photograph, diary interview (1)	Latham (2003)	Study of social action: can it be viewed as performance?	Experience of place/social construct	n.s.
24.Photo journals, photo dyads (1)	Buss (1995)	Study children's experience of the contemporary city	Experience of place/social construct	University students
25.Self portrait (1)	Kenney (1993)	Understand the 'self' in interaction with significant others, materials and objects and cultural ideas	Personality assessment	University students
26.Disposable camera exercise (1)	OPENspace (2005)	Record visitor views and experiences	Experience of place/landscape	Tourists

27.Community photography (1)	McIntyre (2000)	• Study how students make sense of community • Impact of school and community their lives	Experience of place/ social construct	Schoolchildren
28.Visual voice (1)	Lutrell (2007)	Study how children perceive and experience the environment	Experience of place/ social construct	Schoolchildren
29.Participant-directed landscape image making (1)	Dakin (2003)	People's attitudes and perceptions of their living environments	Experience of place/ landscape	Local community members
30.Participant-generated images, photo-elicitation	Frohmann (2005)	Meaning of safety in the life of battered women. Violence and their approaches to creating safer spaces	Violence, feminist approach, community education	Mexican and South Asian immigrant women

3.6 Discussion

3.6.1 Introduction

The aim of this chapter was to create an overview of the literature of techniques that used participant-generated images. Additionally, it aimed to fulfil three objectives: to discuss the validity and scientific rigour of these techniques, to clarify what is meant by participant-generated image research techniques and to provide a clear set of definitions of different forms and techniques: and finally, to provide best practice guidelines for future applications of these techniques. Following the analysis and the brief overview of the techniques, the problems caused by the plethora of names/techniques are discussed, as well as issues of scientific rigour in the use of image research in general and participant-generated image techniques in particular. Finally, a set of best practice guidelines is suggested as well as a blanket term for all these techniques.

3.6.2 Different techniques - does that make research easier?

Using the information provided by the analysis of the studies on techniques that use participant-generated images as research tools, there are several questions that spring to mind. Thirty techniques were identified, in 11 different fields. It would be clear if we could say, for example, that autophotography is a method used in psychology, or volunteer-employed photography is used in tourism, or photovoice in health education. However, in studies like Dodman (2003) and Wilhelm and Schneider (2005) where the authors used autophotography when researching young people's own impressions and interpretations of their urban environment, only some are mentioned. This is despite the fact that there are a plethora of other methods that have been used for this purpose in the past such as photo projective method, self-directed photography, and participatory photography. The same applies to Frohman (2005) who investigated the meaning of violence and safety in the lives of battered women, and their approaches to creating safer spaces: participatory photography is used but exactly like photovoice. The same applies to Clark-Ibanez (2004),

who uses the same reasoning and techniques to build her research as photovoice but calls it photo elicitation.

The researchers who came up with the idea of photovoice (Wang et al., 1996a, Wang and Burris, 1997, Wang et al., 1998) refer to the ideas behind the development of this methodology, like pedagogy and feminist principles, but do not extensively acknowledge the contribution of a number of researchers in the 20 years before photovoice was presented. Photovoice is presented as a technique but it is more like a guide of good practice in the use of participant-generated image techniques. One of the aims of photovoice, which was to reach planners and policy makers, was the same as earlier techniques, even though this was not made explicit. The techniques developed before photovoice experimented with participant-generated images and concluded that they can be successfully utilised in a number of ways. Therefore, those who developed photovoice did not have to test the photo-taking aspect, but rather the complementary methods applied that accompany the photo taking. It is not to be denied that photovoice is a step forward in image-based research: however, it has to be acknowledged that it is neither the first nor the only step forward.

The problem lies in the ensuing confusion, and there is no clear reason why the researcher used one name/technique over the other. It is worth noting the results of the analysis on the use of other techniques/names in the review of the literature in the published studies: in 75% of the studies there are no references to other techniques/studies that use participant-generated images in the data collection process: neither is there indication that this is intentional. However, the literature is available, even though it is difficult to find. This can also explain why many researchers believe that participant-generated image techniques are underutilised.

The implication here is that it is not that the lack of unanimity on the way the technique is referred that is the main reason: however, some researchers, in an effort to assist social science by presenting something new and unique, actually deprive visual social science of its single voice. Prosser (1998, p. 102): describes them thus “Visual researchers...are compartmentalised and divided by their disciplines, the media in which they work and by

a changing intellectual landscape. There is no *Gestalt*, no totality that encompasses and unifies image-based research other than the “visual”.

This is mentioned as an observation and does not deny that there are differences in the way the techniques are applied in each case. There are cases where photo logs are provided to the participants to fill in while they are taking the photographs: some use interviews with the participants to discuss the meaning of the photographs, and most of the researchers analyse the data in a qualitative manner. Traditional techniques are applied in different ways depending on the study and on what the research team aims to find out. However, the basic principles of the technique are the same. Questionnaires, for example, are simple and to the point: there is a range of ways the questionnaire can be used, from a simple tick-box technique to a semi-structured interview questionnaire. However, despite the approach adopted the technique is still called a questionnaire survey.

However, there is an underpinning, fundamental problem, which is the reason this review has been undertaken. It is very difficult for researchers to know what previous research has been conducted using participant-generated images because the techniques applied are so diverse: as a result, very significant amounts of time are spent researching the literature. This is what researchers should be doing: however, it is clear that time constraints exist. It is therefore difficult for a layperson to know that a similar research tool was used unless all these techniques are grouped together, under the same umbrella.

This explains why, when discussing the application of these methods in their fields, some researchers noted that the methodology is new. It is therefore suggested here that no matter which methodology people are using, it should be noted in the publication keywords that they are using participant-generated images. A review of the literature suggests that four groups of studies that have used participant-generated images can be identified. These groups are broad enough to include studies in different fields: however, these disciplines can be narrowed down (Table 15).

Table 15: Disciplines in which VEP was used

Studies in:	Discipline
experience of place in terms of its physical features	environmental management
experience of place as a social construct	geography, ethnography
personality assessment	psychology
community empowerment	geography, ethnography

3.6.3 Dealing with scientists' negative critique

Wang et al. (1998) include a very interesting observation in their paper about the dangers faced by academics who use photovoice. Surely, this observation can be extended to those who undertake image-based research using participant-generated images. This group runs the risk of being marginalised within their own institutions, as there are those who might consider these techniques unscientific. However, this idea was not without roots: it is in fact quite a long-standing debate among members of the academic community. Visual researchers claim that visual techniques are underutilised: however, there are obviously researchers who do not accept visual methods as scientific tools.

The use of image-based research is still an ongoing and unresolved debate amongst social scientists, anthropologists, and geographers, as noted in the quote above. The underutilisation of visual information in the context of social sciences is identified by many researchers (Emmison and Smith, 2000, Garrod, 2007, Jenkins and Jenkins, 1998,). Prosser (1998) partially attributes this to historical reasons and the way social science research has been conducted over the years. Becker (1995) finds this underutilisation of photographs perplexing, and the reservations expressed by social scientists absurd, given that it is unimaginable for some of the natural sciences not to use photographs, especially since in social sciences photography is given explicit social context (Becker, 1995) - it is not post-modern art where the photographer wants the viewer to have their own understanding of an image. Even objects of art that exist in isolation have a context. Providing a social context for a photograph is not different, especially if the photograph is commissioned for

a study and participants use complementary techniques to make their meanings explicit (Reis et al., 1994).

The need to develop a set of best practice guidelines, is, therefore, pressing. It needs to be shown that using photographs, the enterprise of sociology is furthered forward: it should help answer questions in a way acceptable to one or more disciplinary fractions (Becker, 1995). Furthermore, the criteria against which to judge a scientific method is by what it eventually gives back to society. Taking into account what visual methods that use participant-generated images have given, and will continue giving back to society, by inspiring people, by using the power of photographs to exert influence on policy makers, and many other impacts they have had, the view that techniques that use participant-generated images are unscientific and useless should be characterised is ignorant at the very least.

3.6.4 Data available in studies - is there anything missing?

The background of the studies referred to is usually well documented, with the exception that it is usually unclear why certain methodologies are chosen over others. However, it is the data presentation process that seems problematic.

Very limited information is available on completion rates (27 studies, 16.6%, mention their completion rates), as very few studies specify the number of photos asked for, the number of photos taken, or the total number of photos analysed: neither do they specify return rates, or average number of photos taken per participant. If all this information was available, further comparisons would be allowed and it would be easier to draw conclusions on the use of complementary methods, the optimal number of photos the researchers should ask for, and so on.

As mentioned, the time commitment attached to the technique makes it difficult for a number of people to complete. However, it is very difficult to examine the extent to which this and other negative aspects of participant-generated image techniques impact their effectiveness. Two trends seem to exist: researchers who refer to their return rates only when they are good, and researchers who refer to their return rates in order to address

methodological aspects. Unfortunately, it is impossible to know which category the researchers who did not present their return rates fall into.

3.6.5 Samples, sampling and analysis

Sampling is the criterion that defines whether each study can be generalised. Surprisingly enough, even in cases with very large samples, only 2% of the studies were done using random sampling and 2.6% applied stratified random sampling. This can lead to two conclusions: either that what matters the most is the quality of the data and researchers do not seek representativeness, or that representativeness is difficult to obtain and researchers use convenience sampling. By examining the analysis techniques, it seems that with the exception of techniques used in psychology, in all other disciplines the data are analysed in a qualitative fashion. This is not based on the size of the sample but on the kind of responses required from participants. The ideas and meanings conveyed through these methodologies are hard to fit in tick boxes.

It was thought imperative at this stage to refer to the research done in psychology. The data analysis shows that psychology students are used as the sample population for 11.1% of the studies. All the studies that use psychology students as a sample group are in personality assessment. There are two issues to be noted here. First of all, psychology students cannot be considered as a representative sample of the population as they are university students and they have a better understanding of the issues they are studied on than the average person does. Secondly, there is no need to question whether or not the students volunteered to participate: as is clear from Figure 9, the degree of dependence between researcher and participant in personality assessment studies is very high. This therefore links to the discussion about dependency and incentives.

3.6.6 Complementary methods

In Boal (1979), children were asked to take photographs that portray exploitation. Among others, a nail on the wall was photographed: few adults understood the meaning. However, children who were shining shoes for a living in the town centre were in complete agreement

that this photograph was a representation of exploitation. The equipment was quite heavy to carry so they agreed with shop owners in the town centre to rent a nail on the wall on which to hang their equipment. This story, except for revealing the power of participant-generated images, also indicates that a photograph on its own is not always self-explanatory. Studies that have used photographs without any complementary techniques are interested in the researcher's interpretation of the photographs (e.g. autophotography in psychology). On the other hand, in studies where the focal point is the meaning participants want to convey, complementary methods are used. There is no pattern to the complementary methods used in relation to the techniques, with the exception of photovoice, where it is usually accompanied by focus groups. Depending on when researchers want the participants to reflect within the photographs, appropriate complementary methods are chosen. The methods used in each study are not necessarily the same: they vary depending on the researcher, not by technique name. Examples of this observation can be found in Moore (2006), Bolton (2001) and Gonzalez (2003).

3.7 Conclusion

This study comprises the qualitative analysis of 163 studies that have used VEP under all the known names and in all different disciplines. This analysis was undertaken on data collected from the background research to achieve Objectives 1, 2 and 3 of this study; it specifically constitutes the backbone of the VEP typology presented in Chapter 11.

This study is an effort to summarise what has been studied using participant-generated images. As indicated above, it has been hard work for the researcher to collect the images mainly due to lack of consistency in the use of the names/techniques and the number of terms used in the field. Thirty techniques were identified and an effort was made to pull together information about the fields the techniques were used in and the ways in which the associated methodologies were applied. This is also an attempt to bring together all these studies, something that has not been done before but is considered useful as it will enable researchers in the future to use this study as a starting point and will hopefully help to demystify the confusion that exists around names-techniques-disciplines. An

observation that resulted from analysing the data was that in terms of the complementary methods used to accompany the photo-taking process, there were no clusters of studies that indicated that the use of these different names were indicated. Furthermore, it was observed that despite the existence of these techniques since 1977, researchers rarely reference fellow researchers from different academic disciplines. The fragmentation in research fields and the lack of unanimity in terms of the choice of name for the techniques has resulted in a number of researchers believing that they had in fact invented new techniques.

Furthermore, the findings of this analysis can offer indications of why visual sociology is not taken seriously, as a number of published studies lacked fundamental details of they were conducted and who their participants were. Wang (1998) raises the issue of marginalisation of VEP researchers in the academic community and attributes it to the use of visuals. However, there is evidence in this analysis that researchers who use VEP might not be marginalised due to their choice of visual sociology as their discipline and the use of visuals, but due to the lack of rigour in their research method or the lack of clarity in how it was conducted, due to the omission of crucial information from their publications. This analysis forms the backbone of the best practice guidelines for VEP research presented in Chapter 11 of this thesis.

4 POSITIVE AND NEGATIVE ASPECTS OF VEP

4.1 Introduction

This chapter aims to present a review of all the positive and negative aspects discussed in all the publications collected referring to Volunteer-Employed Photography (VEP) research. The volume of the data collected (63 pages of compiled positives and negatives) required the use of NVivo, a qualitative analysis software, which substantially helped in the classification and grouping of researchers views. The feedback was initially divided into positive and negative, and subsequently different categories for each group were constructed by reading the transcripts and organising them into themes. This chapter is organised and presented in a similar fashion. The positive comments in the use of VEP techniques by far overshadow the negative ones: they are presented first, and they are divided in two categories. The first one consists of general comments, which are mainly conceptual advantages of VEP techniques, and the second one consists of project-specific comments. The negative aspects of these techniques were presented in the same fashion: conceptual issues followed by project-related issues.

4.2 Positive aspects of VEP research

None of the researchers who has used VEP research techniques has argued against their use in their respective fields. On the contrary, a number of researchers suggested that such techniques should be used more frequently (Garrod, 2008b, Markwell, 1997, Wang and Pies, 2004). All researchers who used VEP techniques highlighted a number of positive aspects, which are presented below, where they are divided in two groups: the general advantages of using such techniques and project-specific positive aspects.

4.2.1 General positive aspects of VEP research

There are numerous general and conceptual advantages of using VEP research as suggested in the studies that are testing the methodology in their fields, and are reporting on its appropriateness therein. In an effort to capture as many advantages as possible, they

are divided into 12 groups and are discussed in order of importance, according to the number of researchers who have commented on them.

4.2.1.1 *Empowerment*

All researchers who have written about VEP techniques have, in one way or another, commented on them as being empowering. They look at empowerment from different perspectives, but they conclude that participating can be an empowering experience (Foster-Fishman et al., 2005, Rhodes et al., 2008), with participants themselves suggesting that they felt empowered by the experience (Goodhart et al., 2006, Lockett et al., 2005).

4.2.1.1.1 VEP research can drive change

A number of researchers consider such techniques to have the potential to drive change (Cherem, 1983, Wang, 1996). Many of these researchers are using photovoice: one of its main goals is to act as a catalyst for social change by reaching and mobilising policy makers (Wang et al., 2000). The first way it can drive change is by facilitating public dialogue. Using photographs as a starting point, stakeholders are able to learn from each other, to discuss with each other (Stewart et al., 2003), exchange ideas about improving their quality of life (Wang et al., 1998) and express their concerns (Woolrych, 2004). Therefore, they become a group, they acknowledge common ground and discuss solutions to common problems (Downey et al., 2008, Rhodes et al., 2008), which can in its turn spark action (Downey et al., 2008) and result in policy change (Moffitt and Robinson-Vollman, 2004). According to Wang et al. (2004a), all that happens regardless of the participants' educational or cultural background, so it can also be claimed that equality is promoted. Furthermore, apart from acknowledging their commonalities, participants also discuss and accept their differences (Graziano, 2004) and over a period of time, trust can develop within the participant community (Castleden et al., 2008).

The power of the visual is considered a strength which can drive change. Berman et al. (2001), Carlson et al. (2006) and López et al. (2005) agree that photography adds an

emotional element and has potential to drive policy change. Photographs are tangible and can rarely be ignored (Schratz and Steiner-Löffler, 1998) and can reach people who cannot be reached using conventional methods (Wang et al., 1996a). By the use of photographs, people can educate policy makers and other professionals about their realities and what needs to change (Wang and Burris, 1997). In addition using photographs focuses people's attention to the visual and attention is diverted from the person doing the telling, making it easier for the participants to express their feelings without being overexposed (Glover et al., 2008). Photographs can help participants who would normally not be heard communicate their views and feelings to policymakers (Wang, 1998, Wang et al., 1996a, Woolrych, 2004), other decision-makers and the media (Wang, 1998); can help build new partnerships with power-holders (Rhodes et al., 2008), and inform policy (Strack et al., 2004, Stefano et al., 2005, Rhodes et al., 2008).

Promoting critical dialogue and reaching policy makers and other power-holders are the results of participant empowerment brought about through the use of participant-generated images, and are suggestive that stories using the power of photographs stimulate social action (Glover et al., 2008). Even though it takes a lot of campaigning and awareness-raising efforts to stimulate social action, it is possible that the use of photographs, and the 'grassroots' involvement such projects require (Wang, 1998) can increase awareness and raise consciousness (Kaplan et al., 2007, Aubeeluck and Buchanan, 2006, Strack et al., 2004), and motivate people to organise and take action on the issues affecting them (Foster-Fishman et al., 2005, Streng et al., 2004, Whitney, 2006).

4.2.1.1.2 Change of power relationships in research

The issue of power relationships between participants and researchers is a long standing one. A numbers of VEP researchers have referred to it, rendering it one of the most mentioned positive aspects of VEP research. A number of researchers commented that the participants are more in control of the research process, as they are the ones who take the photographs ((Castleden et al., 2008, Jenkins and Jenkins, 1998, Traweek, 1977). Participants are in most cases invited to present their own realities, from behind the lens,

something which gives them the freedom to portray a pure and authentic account of their experiences (Germain, 2004, MacKay and Couldwell, 2002) without the distortion of other researchers' ideas. It allows them the choice to include certain things and exclude others (Berman et al., 2001, Bolton et al., 2001, Jones, 2004) which are not as important as researchers might think. Samuels (2004) described auto-driven photo-elicitation as a bridge between her perception of the world and the world of child-monks who participated in her study. She found that in order to use this method, her assumptions should be put aside and eventually re-evaluated.

As a result, researcher bias is reduced (Garrod, 2007 Trawick 1977) by equalising the power relationship (Glover et al., 2008) and using more unobtrusive methodologies (Ziller and Smith, 1977). Yamashita (2002) suggests that the researcher's subjectivity is compensated by minimising researcher input (Warren, 2002) and by addressing the issues participants consider important, rather than the ones researchers prioritised (Streng et al., 2004, Graziano, 2004, Samuels, 2004).. Thus, the participants are in control (Dollinger, 1996). Wang (1996a) considered Chinese village women to be co-researchers in her anthropological study on health education: they, rather than the research team, shaped the content of the research project. The same account is given by Bolton et al. (2001) who worked with the child worker participants as a team, with the participants being the field experts working to the research team's remit. Finally, researcher bias is also minimised by the physical distance between the researcher and the participant during the photographic activity, as highlighted by Jurkowski (2008), who suggested that in VEP research the danger that people with intellectual difficulties are agreeable and might want to please people in positions of authority (researchers, in that case) is minimised by the mere absence of the researcher. The same issue is also discussed by Clark-Ibanez (2004), Miller and Happell (2006) and Ziller and Smith (1977).

4.2.1.1.3 Empowers silent voices

A number of people and groups who are, for a number of reasons, unable to participate in conventional research, can participate in VEP research. It is, therefore, considered a research methodology that promotes democracy, as it grants access to underrepresented groups. One of the most important reasons for this is the removal of the language barrier.

Ziller and Smith (1977, p 182) were the first researchers to comment on the uniqueness of photography as a medium in VEP research, as it “frees the subjects from some of the constraints of language”: and Ziller and Lewis (1981, p 343) considered photography as an ideal research method for international and cross-cultural studies as it “is the universal language”. Thoutenhoofd (1998) used autophotography successfully with young deaf people. Germain (2004) suggested that using photography when conducting research with participants with learning disabilities partially removes the language barriers and allows participation. The same argument is expressed by Berman et al. (2001), in research involving children with poor language skills, by Bijoux and Myers (2006) when working with mostly illiterate children, as well as by a number of other researchers (Boal, 1979, Dollinger and Clancy, 1993, Moss et al., 2007, Noland, 2006, Ziller and Lewis, 1981). Stefano et al. (2005, p 3) quoted their participants who considered that taking photographs a good idea because they “sometimes don’t really know how to say things”.

There are a multitude of reasons why voices fall silent, but which can be overcome by the use of VEP techniques. Taking photographs for research gives people opportunities to tell stories they might not have been able to do otherwise (Dollinger et al., 1993, Killion and Wang, 2000, Beilin, 2005), through the power of images . Additionally, people who might not have spoken due to shyness (Moss et al. 2007, Ziller and Rorer, 1985), low self esteem (Noland, 2006) or simply because they were not asked (children as an underrepresented group in the OPENspace project (2005), are given the opportunity to express themselves using another more appealing medium). Researchers who work with marginalised social groups strongly recommend the use of VEP techniques in order to give their participants an opportunity to express themselves (Boal, 1979, Hawkins et al. 1999, Hubbard, 1994, Singhal et al., 2004).

4.2.1.1.4 Helps build self-esteem

Further arguments that confirm the support of researchers for the use of VEP techniques are those that consider them empowering in that they help participants build up their self-esteem. Bijoux and Myers (2006) used self-directed photography to examine how place of residence influences what women do on an everyday basis, how they go about doing it and what feelings the activities evoke. The research process provided a boost to the self-esteem

and confidence of the women participants: they saw the results of their efforts valued by others. The same feedback comes from Grey (1995), who worked with homeless young people, and by Strack et al. (2004) whose participants' (11 to 19 year old, low income urban youth) confidence was built by this exercise, as it was an exceptional occurrence in which they received positive attention.. Wang et al. (1998), Thompson et al. (2008), Gonzalez (2003) and McIntyre (2003) consider the experience of using a VEP technique as value-rich assignments that enhanced the participants' confidence, and therefore they felt more empowered. Lemon (2006) supports the use of visual narrative with children in educational settings as a tool that encourages investigation and increases confidence and self-esteem in building literacy skills.

A sense of pride for the work and results was also reported (Jurkowski, 2008, Moffitt and Robinson-Vollman, 2004). In Hubbard's (1994) Shooting Back project, the cameras given to young Native Americans gave them a new sense of freedom: the freedom to express themselves in a new way. In addition, they learnt a new skill and they worked together to produce photographs they were proud of. Strack et al. (2004) suggest that the photographs in their study created a sense of ownership and pride amongst the young participants that helped them to exchange views. The same was reported by Johnsen et al. (2008), whose participants, much as they wanted to, could not take credit for their photographs in publication as this was prohibited by confidentiality rules. Stefano (2005) reports that the farmers in his study were proud of their efforts and they considered the information captured in the photographs valuable.

Apart from the pride in their work, other sources of pride were identified, that made participants willing to be part of VEP projects. Thoutenhoofd (1998) found that his young deaf participants were proud of their sign language ability and they tried to express that through their photographs. Finally, two researchers reported that participants felt a sense of pride participating in VEP research, simply due to the fact that they owned a camera. Clark-Ibanez (2004) suggests that owning a camera was very important to children. In the photovoice project involving homeless young people by Wang et al. (2000), and considering the stigma attached to being homeless, participants felt that owning a camera

changed their social status in the eyes of others, which made them proud carriers of their Holga cameras.

4.2.1.1.5 Opportunity to tell their own story

Parks (1966) writes on his book cover: “I chose my camera as a weapon against all the things I dislike about America - poverty, racism, discrimination”. One of the most obvious and most important characteristics of these techniques is that they place the cameras in the hands of their participants and they let them do the capturing. Thus it is they who tell the story. VEP is a step towards Hubbard’s (1994) suggestion that people should not let others speak in their name, photographically or otherwise. While participants welcome the opportunity to share their views and lives and represent themselves (Armstrong, 2005, Rhodes et al., 2008, Ziller and Lewis, 1981), the subjective nature of these techniques is not criticised. On the contrary, their subjectivity is considered to be their strong point. Researchers understand this: as Wang and Redwood-Jones (2001, p 571) put it, “the photographer is moored in political, cultural, social, and economic circumstances as the subject” and this is precisely what VEP techniques are looking to investigate. Participants get to choose what to include and what to leave out of the frame of their photographs. This makes it a more democratic research approach and as already discussed, it gives researchers the opportunity to reach where they previously could not (Dollinger and Clancy, 1993, McIntyre, 2003, Wang and Burris, 1997).

4.2.1.2 *Experiential data*

The second most discussed group of VEP research strengths relates to the very nature of these techniques: the use of people’s experiences to measure their perceptions (Taylor et al., 1995, Dakin, 2003, Garrod, 2007). The images used provide rich sets of data from an ‘inside perspective’ (Bijoux and Myers 2006, p 50), which without the use of participant-generated photographs, would have remained hidden (Luttrell, 2007, Markwell, 2000b, Newman and Kanjanawong, 2005).

In a way, by asking participants to photograph their experiences, researchers are granted ‘access’ to areas of lived experiences they had not seen before. In Wang et al. (1996a) and Wang and Burris (1997), Chinese village women used photography to capture images to which people outside of their community were much less likely to have access. Williams and Lykes (2003) gained access into lived experiences of women who experienced armed conflict, access that is largely unavailable to researchers (Graziano, 2004). Castleden’s (2008) project allowed researchers an authentic understanding of living with HIV/AIDS and Johnsen et al. (2008) consider the photographs their homeless participants took as a window to the homeless way of life that did not previously exist in academic literature. Luttrell’s (2007) and Kroeger’s (2003) work with schoolchildren suggests exactly that: photographs bring to light aspects of the schooling experience that otherwise would not have been picked up. Participants are empowered to ‘teach’ the researchers aspects of their social worlds that otherwise would have been unknown (Clark-Ibanez, 2004, Markwell, 2000a, Markwell, 2000b, Samuels, 2004, Singhal et al., 2004).

The experiences photographed and presented are verbatim, real-time authentic experiences. They are taken while participants are experiencing the situation, be it a landscape (Chenoweth, 1984, Garrod, 2007 Markwell, 2000a), their schooling (Damico, 1985, McIntyre, 2000, Moss et al., 2007), chronic pain (Baker and Wang, 2006), caring for Huntington’s Disease patients (Aubeeluck and Buchanan, 2006), social life experiences of people with intellectual difficulties (Jurkowski et al., 2007), or homelessness (Johnsen et al., 2008). Therefore, in addition to presenting personal perspectives (Jurkowski et al., 2007), these photographs provide on the spot, authentic information (Gemini and Boccia-Artieri, 2007) that only needs the participants’ interpretation. They present their lived experiences the way they live them and understand them: subjectively (Warren, 2002), through their biased perceptions (Loeffler, 2004). A researcher is shown how it is to experience the world from the personal context of a shy person (Ziller and Rorer, 1985), from a nurse in an operating room (Riley and Manias, 2003), from people with mental illness (Thompson et al., 2008), in a way that the physical presence of a researcher would not have allowed. People’s intimate interactions, for example in a family environment, would be different in the presence of a researcher (Clark-Ibanez, 2004, OPENspace, 2005).

Finally, an added advantage that falls within the experiential nature of VEP research is the visualisation of participant experiences. Photos are taken in a specific place (Stedman et al., 2004) which allows more locale precision. Photographs exemplify: they invite researchers to see for themselves (Radley and Taylor, 2003a, Warren, 2002). They specifically show what the participant means, making it explicit and visual (Bolton et al., 2001, Killian and Wang, 2000, Mizen, 2005).

4.2.1.3 *Enjoyable set of techniques*

At least 33 researchers have labelled VEP techniques enjoyable: largely following comments received by participants. More specific comments refer to the enjoyment of participants as one of the reasons for high levels of interest and participation (Booth and Booth, 2003, Garrod, 2007, Kaplan et al., 2007, MacDougall et al., 2004, Moffitt and Robinson-Vollman, 2004, Rorer and Ziller, 1982, Samuels, 2004). Schratz and Steiner-Löffler (1998) suggest that the process had been enjoyable and that this strengthened the seriousness of its outcomes. Using “fun” methods in research engages young people who might have otherwise not have been interested (Harper, 2002). Similarly, Castleden et al. (2008) suggest that this interesting research technique helped overcome research fatigue issues, often encountered in indigenous communities. VEP techniques seem to be an enjoyable activity for researchers as well, as indicated by Warren (2002), Harper (2002), Sampson-Cordle (2001) and Thompson et al. (2008).

4.2.1.4 *Participants think more carefully about the subjects of their photographs*

Seeing reality from behind a photographic lens can make participants think more deeply about things they were not consciously aware of (Radley and Taylor, 2003a). Blinn and Harrist (1991) found that mature women students took time to reflect on the task they had undertaken and therefore realise that they were caught between traditional and non-traditional roles, something they would not necessarily have been aware of if they were only interviewed, or if they were filling in a questionnaire. Similarly, Foster-Fishman et al. (2005) suggested that photovoice gave people the opportunity to critically reflect on

their neighbourhoods and develop a shared understanding of community life. In Markwell's (2000a) study, participants were encouraged to think more about what places mean to them, and in Strack et al. (2004), participants got to think more about their community and their place in it. A number of other researchers approached this issue from the same angle (Grey, 1995, Miller and Happell, 2006, Noland, 2006). Furthermore, Garrod (2007) and Haywood (1990) suggest that using a camera for research purposes sharpens the power of observation, whereas Wang et al. (2000) and Lockett et al. (2005) support that participants were made to observe their surroundings in a more deliberate manner and therefore they saw their environment through fresh eyes (Stedman et al., 2004). This is important as it helps to understand other people's point of view (Wang et al., 2000) and facilitates the ability to transmit the meaning of the photographs to other viewers (Samuels, 2004).

4.2.1.5 *Special bonds*

Participants and researchers are required to invest more time in VEP projects, due to their logistic complexity. This, however, allows more time for special bonds to be developed between the participants and researcher, depending on the type of each project. In projects such as photovoice, where in most cases focus groups are employed to discuss the photographs captured, participants started off the process as strangers and by the end of it they had developed a strong sense of community (Wang and Pies, 2004, Wang et al., 2004). It was therefore easier to obtain information that would not be disclosed to strangers (Blinn and Harrist, 1991, Castleden et al., 2008, Streng et al., 2004). Group members established relationships that lasted past the project period (Killion and Wang, 2000, Wang et al., 2000).

Participants also formed strong relationships with the researchers, as they shared pictures of intimate details of their lives with them (Blinn and Harrist, 1991). With VEP research, participants and researchers reach a degree of intimacy which is very difficult to be reached in an interview (Miller and Happell, 2006) or other more traditional research projects. Harper (2002) suggested that this model of research is ideal for him, as it encourages

collaboration, and it motivates people to discuss and work together. When VEP projects are initiated in a learning environment such as a school, relationships based on mutual trust are developed, due to the discussion of participants' views (Kroeger, 2003) as well as the fact that they were trusted with cameras by their teachers (Lemon, 2006). Participants in Lopez et al. (2005) felt they were trusted because, as they held the decision-making powers over the direction of the study, they were considered the experts of their own environment which also boosted their confidence.

4.2.1.6 *VEP methods help convey complex meanings*

Abstract meanings such as awe, mystery and beauty (Loeffler 2004, p 551), oppression (Warren, 2002), inclusion and values (Moss et al., 2007), pain (Boal, 1979), and landscape values (Glover et al., 2008) cannot be successfully described using words. Photographs, on the other hand, are capable of conveying complex meanings (Stedman et al., 2004, MacKay and Couldwell, 2004) as well as many things simultaneously. Okamoto et al. (2006) suggest that a number of things can be seen in a photograph apart from its focal point, including angle, depth and distance. Words are often not enough to depict a situation and participants using photographs are inviting researchers to “see for themselves” (Warren 2002, p 230). According to Harrington and Lindy (1999-2000), pen and paper methods do not always yield enough information for decisions to be made, as they rarely capture the breadth and depth of issues concerning first year students' wellbeing.

4.2.1.7 *Participants acquire new skills*

Although it might be assumed that everybody is familiar to some degree with the use of a camera, this is not necessarily the case, especially with marginalised social groups and younger people. This is confirmed by Hubbard (1994) who taught young Native Americans to use a camera and they found freedom to express themselves through this medium. Jurkowski et al. (2007) and Jurkowski (2008) also suggest that teaching people with intellectual disabilities to use a camera is empowering. It also gives children

confidence (Gonzalez, 2003), boosts self-esteem, empowers participants (Strack et al., 2004) and streams their creativity to a new way of expressing themselves (Armstrong, 2005). Participatory research techniques are educating the community (Frohmann, 2005), not only by teaching participants how to use a camera but by teaching them to take part in participatory processes (Mitchell et al., 2006).

4.2.1.8 *Photographs add value to interviews*

Photographs add values to interviews in several ways, as reported from the outcomes of the studies. Most importantly, photographs act as focal points for interviews according to Markwell (2000a), Stedman et al. (2004) and Warren (2002). The awkwardness of asking participants questions can be avoided through the use of photographs, as they can provide a focus for the interviews and make it easier for researchers to ask questions (Clark-Ibanez, 2004). Another characteristic that strengthens the empowerment argument is that in the interview process, although the researcher can give some directions, using the photographs as stimuli allows participants to express their views without having to abide by the rules of a structured interview (Gemini and Boccia-Artieri, 2007, Riley and Manias, 2003). Photographs can be used as focal points for revealing of issues that are not obvious to the researcher by looking at the photographs, but are apparent to the participant (Clark-Ibanez, 2004). Participants are therefore allowed to incorporate their perspectives into the interviews (Clark, 1999) thus again offering the researcher more access to hidden issues (Blinn and Harrist, 1991).

Furthermore, photographs can be used as memory triggers. As Loeffler (2004, p 551) suggests, they can be used as “memory anchors” for participants. In some cases they can be used as tangible triggers (Clark-Ibanez, 2004) so that the participants can unravel their stories. A number of researchers have commented on this positive aspect of using participant-generated photographs in the interview process (Carter and Mankoff, 2005, Glover et al., 2008, Lemon, 2006, Radley and Taylor, 2003b, Samuels, 2004).

Photographs can also be used as ice-breakers. Using photographs captured by participants to initiate discussion is considered a more natural process (Warren, 2002). Feelings of

discomfort can be overcome by holding and looking at photographs, making the interview a more pleasant process (Clark-Ibanez, 2004, Samuels, 2004). Also, the enthusiasm participants generally show when they look through their photographs can be used as a successful ice-breaker for the interview process (Clark, 1999). Thus the whole process becomes more interesting and participants are more willing to take part in the process (Samuels, 2004).

4.2.1.9 *Photographs promote discussion*

Newman and Kanjanawong (2005) reported that a discussion of only a small sample of photographs lasted for two and a half hours, which is much longer than a discussion without the photographs would have lasted. Also, the use of photographs helped overcome difficulties between participants, such as age, culture and language. Researchers argue that the use of VEP in research helps establish important parameters in the discussion that would otherwise be overlooked (López et al., 2005). Discussion about the images portrayed can inspire participants and promote dialogue using photographs as the focal point for discussion (Moffit and Robinson-Vollman, 2004, Strack et al., 2004, Wang, 1998).

4.2.1.10 *Other positive aspects in the use of VEP techniques*

A number of other advantages of using VEP techniques were noted by researchers. Some researchers especially in planning and tourism raised the importance of having a visual record of an area for future use of the community (Castleden et al., 2008, Chenoweth, 1984, Dakin, 2003, Stefano et al., 2005). MacKay and Couldwell (2004) suggested that keeping a visual inventory of the visitors' image of a site can be used in promotional efforts. Hubbard (1994), and Clark (1999) were also supportive of keeping a visual inventory of lives, places and activities.

VEP techniques are preferred by some researchers as they are easy to use, even by participants who are illiterate (Graziano, 2004, Bijoux and Myers, 2006, Moss et al., 2007) or who have intellectual difficulties (Jurkowski et al., 2007), and by participants who have

never taken a photograph before (Boal, 1979). Children can easily figure how to operate a camera without strong prompting (Lemon, 2006) and by pushing a button a variety of information is captured (Okamoto et al., 2006). Photographs are an interesting research medium which also challenges participants' creativity (Laughlin et al., 2004, Woolrych, 2004, Ziller and Lewis, 1981, Ziller, 1990) and makes the research process more interesting. In addition, VEP techniques give participants a sense of involvement which makes them feel they contribute to the research process (MacKay and Couldwell, 2004, Taylor et al., 1995).

4.2.1.11 *Comparison to traditional techniques*

In an effort to justify their choice of VEP techniques over more traditional research techniques, researchers often compared the results and the approaches with traditional word-based techniques. The control of the participant over the research process (Dollinger et al., 1996, Radley and Taylor, 2003a) was discussed under the "empowerment" title as well as the added value of the non-verbal character of the technique (Berman et al., 2001, Warren, 2002) and others. Most of the researchers referred to the richness of the datasets obtained from VEP techniques (Aubeeluck and Buchanan, 2006, Clark-Ibanez, 2004, Damico, 1985, Miller and Happell, 2006, Rhodes et al., 2008, Stedman et al., 2004). Dollinger (2001) compares VEP with other methodologies and suggests that although VEP techniques do not offer quantitative accuracy they do generate very rich qualitative data. Pairing the power of the images with the power of the research process given back to the participants allowed for greater depths of insight and discussion (Perry, (2006) and provided participants an opportunity to give richer data compared to most assessment tools (Dollinger and Clancy, 1993, Germain, 2004). Ziller and Lewis (1981, p 63) suggest that rich data are gained not only from what is intentionally caught in the frame of a photograph, but also what is captured unintentionally, which gives VEP techniques the quality of "rich revealingness".

Researchers branded VEP techniques branded as more suitable in certain research contexts. Stedman (2004) suggested that VEP is more appropriate than word-based

techniques when asking people to assess a place, as it contextualises the discussion, and it specifies what the participants are talking about. Glover et al. (2008) also suggest that when discussing landscape values it is much easier for participants to answer with photographs than answering open-ended questions. Participants are more inclined to participate in research projects that involve photography (Hanieh and Walker, 2007). Lockett et al. (2005) and Harrington and Lindy (1999-2000) also suggested that pen and paper techniques are insufficient to yield the information required, which is better accomplished with the use of photographs.

Germain (2004) and Harper (2002) found that VEP techniques are superior to other word-based techniques, as photographs could be used to extend people's memory and allow them to be more detailed in their accounts. Finally, MacKay and Couldwell (2004) and Miller and Happell (2006) suggest that the superiority of VEP techniques is due to their collaborative approach which involves people much more than traditional research techniques. This results in people being more committed and more willing to invest their time and effort.

4.3 Negative aspects of VEP

Despite the large number of studies drawn in on this analysis, relatively few negative aspects have been identified. There are a few conceptual issues discussed by a relatively small number of researchers, followed by some issues faced in practice that can be classified in nine main categories. Lastly, there are some issues regarding specific applications and methodologies.

4.3.1 Conceptual issues

Collecting people's subjective perceptions through photographs is regarded as the strength of this technique by the majority of researchers who have used VEP techniques. These include Oku and Fukamachi (2006), Taylor et al. (1995), Loeffler (2004) and Thompson

(2008) amongst others. However, some researchers have identified certain conceptual issues which, if not attended to or acknowledged, could result in misleading research results.

The main focus is the decision about what is included - and consequently what is excluded - from a photograph. In a tourism context, Markwell (1997) suggests that the snapshots captured might not be representative of a tourist's experience: rather they can be driven by the desire to demonstrate that they experienced a dream holiday and to demonstrate this uses the example of satellite dishes left out from what would otherwise be a primitive jungle scene. As photography can be selective and can express the reality one participant considers accurate, it is possible that other people might not represent the full range of perspectives (Castleden et al., 2008). Such an example is given by Kaplan et al. (2007), who suggest that what is captured in the frame can appear to constitute a limited account of a more inclusive whole: members of staff in schools where VEP research had taken place felt that images and descriptions amounted to personal insults. Thus, although the subjectivity of photography is considered one of the major strengths of VEP, it also has the strength to exclude knowledge (Castleden et al., 2008, Lockett et al., 2005). Taylor (1995) also suggests that although choosing what to photograph might be a matter of preference, it might also reflect the inability of participants to photograph what they preferred. On the same note, Pearson and Ralph (2007) suggest considering that in some cases, the photographs may be a result of opportunity and chance rather than choice. Finally, Wang and Redwood-Jones (2001) discussed the use of consent forms and permission to photograph people and noted that participants thought that this would not give a true reflection of the intended moment or idea: in effect, it would really be a staged pose that would not reflect reality.

The second conceptual issue raised by researchers relates mainly to the key goals of photovoice: one of which is to act as a catalyst for social change by reaching and mobilising policy makers (Wang et al., 2000). Research can mobilise people and facilitate discussion (Wang et al., 1998) and it can help reach policy makers: however, it does not guarantee change. Power is not going to be handed over to people and researchers should ensure people are aware of this. As Wang (1998), Wang et al. (1996a), and Mitchell et al. (2006)

suggest, it can romanticise participation, raise people's expectations and finally lead people to feel more hopeless and disempowered (Strack et al., 2004) with a sense of cynicism (Wang et al., 1998). As a result of this study, it is suggested that photovoice should not suggest that it can succeed in bringing social change by reaching and mobilising policy makers.

4.3.2 General issues in research using VEP

These issues are presented in order of popularity, based on the number of researchers who discussed these issues.

4.3.2.1 *Ethical issues*

The area that most researchers focus on when discussing negative aspects of VEP research is the ethical issues that can result from the use of VEP techniques. Photographing people can be intrusive both from the researcher's point of view (as holding a camera and pointing at people is not the same as taking notes or as recording an interview) (Warren, 2002) and from the point of view of a 'subject' of a photograph.

It is common practice for researchers in VEP projects to ask for permission to take photographs that include people: if consent is not obtained, then serious consequences might arise, especially in communities where not all activities are legal (Strack et al., 2004). However, as Johnsen et al. (2008) point out, in some cases ethical issues about the use of the images might arise even if consent is given by the people photographed, especially if they are under the influence of drugs or alcohol. Pearson and Ralph (2007) found that seeking and obtaining consent, particularly if it is written consent, raises dilemmas and puts participants in an awkward position (Moffitt and Robinson-Vollman, 2004). Frohmann (2005) also found that the process of developing consent protocols that respect the participants' rights and are culturally appropriate without being too legalistic, is an ongoing and difficult process. Warren (2002) also emphasises that the consent issue makes the process more complicated compared to a simple pen-and-paper technique:

however Wang and Redwood-Jones (2001) found that the issue of intrusion to people's private space was partially addressed by seeking their consent to be part of the research project.

The use of controversial photographs is the most commonly discussed issue in this category. As Sampson-Cordle (2001, p 351) suggests, photographs "can be dangerous as they literally show without edit". Consequently, people might not want to be seen where they were photographed (Wang and Redwood-Jones, 2001), being involved with what they were pictured doing (Johnsen et al., 2008, Strack et al., 2004, Wang and Redwood-Jones, 2001). Moffitt and Robinson-Vollman (2004) suggest that misuse of photographs can impact on community cohesion, especially if people are shown in an unfavourable light, or if embarrassing facts are disclosed. Germain (2004) also agrees and suggests that photographs can be potentially misused especially when dealing with vulnerable social groups such as abuse victims. As Germain (2004, p 173) rightly puts it, photographs can "reveal the unexpected" and researchers need to understand the sensitivity of the data they collect.

Privacy issues are another contentious point in VEP research, which links to the previous issue of data sensitivity. Privacy issues do not only refer to the participants' anonymity and confidentiality, which are highlighted by a number of researchers (Clark-Ibanez, 2004, Johnsen et al., 2008, Moffit and Robinson-Vollman, 2004). They also have to do with the nature of the project and the area researched: patients in hospitals are entitled to their privacy and researchers intruding and prompting other patients to take photographs might be considered a breach of patients' privacy (Riley and Manias, 2003). Furthermore, even if measures are taken to protect the anonymity of the participants and the people and places photographed, when a research setting is intimate, people familiar with the setting can easily understand who captured the photograph and where the setting is (Sampson-Cordle, 2001).

The issue of safety, especially regarding participants from vulnerable social groups, is discussed in detail in Wang et al. (2000). Participants are advised of the dangers of using cameras in research: however, Mitchell et al. (2006) and Johnsen et al. (2008) raised the point that the dangers are magnified when projects involve vulnerable members, such as

children, homeless people and victims of abuse. It is important to acknowledge the implications and make the participants fully aware of them.

A few more ethical issues were raised, such as copyright issues which might need to be addressed (Warren, 2002), especially since photographs are considered to be an artistic medium. It is more usual for such issues to arise in image-based research as opposed to word-based research (Warren, 2002). Clark-Ibanez (2004) raises concerns about people using their cameras inappropriately, which, however, can happen when participants are asked to return paper questionnaires or internet surveys. Finally, Moffitt and Robinson-Vollman (2004) highlighted the inappropriateness of publishing photographs to make money.

4.3.2.2 *Resource-intensive method*

The second most commented-on negative aspect of VEP research is the amount of resources that need to be invested in VEP compared to other traditional research methods. Researchers regard the commitment required as the most important downside in this category. Kenney (1993) describes the data-collection process for participants and researchers as troublesome. Bijoux and Mayers (2006) and Wang et al. (1998) acknowledge that the time required to participate in a VEP project is greater compared to traditional research techniques; it can be tiresome at times, and according to Garrod(2007, 2008a, 2008b), this can explain the failure of some participants to complete the task. Participants are encouraged to take the photographs in their own time, which may result in participants neglecting the task (Goodhart et al., 2006). According to Markwell (2000a), participants are required to make an extra effort to photograph particular sites in the case of tourism research. In some cases, participants were absorbed in tasks of “more immediate concern” (Moffit and Robinson-Vollman, 2004 p 198), which also resulted in neglect of the task (Booth and Booth, 2003), and late return of the camera, despite repeated reminders (Riley and Manias, 2003).

A number of researchers consider VEP to be equally time-consuming for the research team. Haywood (1990) only gave the cameras to participants for a day and described the

process as “hectic” (Haywood, 1990, p 28). Kaplan et al. (2007), Damico (1985), Clark (1999) and Clark-Ibanez (2004) describe a series of issues which have to be dealt with, such as organising the whole research process, distributing cameras, collecting cameras, familiarising participants with the code of ethics and transcribing interviews/focus group discussions. However, Damico (1985) insists that despite the time spent overcoming obstacles, the findings are worth the effort. Prosser and Loxley (2007) are of the opinion that such methods are more demanding compared to more traditional approaches. Johnsen et al. (2008) claim that the reason is that a lot of time is required to support the participants. Jurkowski (2008) suggests that VEP research requires more time compared to traditional methods due to the essential time spent in developing a relationship with the participants, so they remain actively engaged for the duration of the project.

A number of researchers commented on the costs involved in almost all the stages of the project. MacKay and Couldwell (2004), Clark (Clark, 1999), Clark-Ibanez (Clark-Ibanez, 2004), Castleden (2008) and Kenney (1993) commented on the cost of the cameras, film development, and posting. Frohmann (2005) commented on the additional cost of tape recording supplies, exhibit related costs and research assistance costs, and Moffit and Robinson-Vollman (2004) also identified costs incurred from replacement of stolen, damaged or lost cameras.

Researcher time spent on reminding participants to return their cameras was identified as another source of added cost (Clark, 1999). Despite efforts to request the return of the cameras, it was not always possible to achieve the best possible return rate (Johnsen et al., 2008, Garrod, 2008a).

4.3.2.3 *Interpretation of photographs*

Interpreting the photographs captured by participants correctly was another concern raised by researchers. The need to interpret is not a negative aspect of VEP research per se; however, photographs may be subject to misinterpretation that is classified as a negative. Thoutenhoofd (1998) suggests that the *correct* interpretation of photographs relies on the cultural background of the reader whereas Germain (2004, p 173) insists on the importance

of “validating communication”; in other words, ensuring that the photographs convey the message the participant intended. In response to this, researchers suggested that complementary methods should be employed to ensure validity and reliability. Okamoto et al. (2006) suggested obtaining participants’ comments, Garrod (2008a) and Stedman et al. (2004) suggested the use of photo logs or interviews, others recommended observation (Samuels, 2004). Pearson and Ralph (2007) used photo-logs and asked participants to review the photographs paired with their comments. The common ground is that the meaning of the photographs is not necessarily evident so some form of explanation is crucial for coding purposes (Carter and Mankoff, 2005). However, even though this need has been highlighted by a few researchers, there have been cases where inappropriate complementary methods have been used and the participants were unable to remember why each photo was captured (Carter and Mankoff, 2005, Thompson et al., 2008). This usually happens when the complementary method is an interview or a focus group which does not take place soon enough after the photo-taking exercise to aid recollection (Castleden et al., 2008). Complementary methods may also be considered inappropriate if they do not allow the participants to voice their perspective, or if their voice is lost in the multitude of voices. Clark-Ibanez (2004) therefore suggests that individual voices can be lost if photographs are discussed in a group setting.

Coding photographs proved to be challenging for a number of researchers (Clark-Ibanez, 2004, Hanieh and Walker, 2007, Killion and Wang, 2000, Wang and Pies, 2004); however Kenney (1993) again suggested written captions to complement the photographs to ensure the correct meanings are conveyed.

4.3.2.4 *Technical issues*

The technical issues highlighted as negative aspects of VEP research mainly concern the quality of the photographs. A number of photographs cannot be used as they might be blurry, underexposed or overexposed (Wang et al., 1996a), poorly developed (Goodhart et al., 2006), or of unacceptable quality for publication purposes (Johnsen et al., 2008). Regardless of the problem and whether the camera used is responsible for the low quality

(Garrod, 2008a), the fact remains that the quality of the photographs can be compromised by several factors and that there are photos which cannot be used in almost every VEP project (Castleden et al., 2008). Another issue faced by many researchers is the loss of (Clark-Ibanez, 2004, Germain, 2004) and damage to cameras (Wang et al., 1996b, Moffitt and Robinson-Vollman, 2004). The loss of research material is not uncommon in itself. In traditional methods, however, it is usually less expensive to overcome. In VEP, photographic data are unique and cameras might be replaceable at a cost (Moffitt and Robinson-Vollman, 2004): however the photographs lost are irreplaceable (Sampson-Cordle, 2001, Warren, 2002) raised a further technical issue: the difficulty posed by the large storage space required to store large volumes of digital data. They are also difficult to handle when sending via email, and pose difficulties when they need to be published in printed journals.

4.3.2.5 *Sampling bias*

A few researchers have raised the issue of sampling bias, particularly when disposable cameras were used, which resulted in a limited amount of exposures per camera (Taylor et al., 1995): there was a tendency to photograph something very beautiful a lot of times or save exposures and “burn” them towards the end of the project (Haywood, 1990, Stedman et al., 2004, Goodhart et al., 2006). Clark (1999) noticed that a few of the families that participated in the autodriven interviews took most of their photos on the first or last day.

Another sampling bias issue was raised by Clark-Ibanez (2004) and Jurkowski (2007): this addresses the issue of participants who are dependent on others, either because of their young age or because of their intellectual abilities. These people need the support of their carers in order to participate in the research activity and therefore the lack of support might result in the inability to participate. Furthermore, dependency and willingness to please carers and researchers might result in biased results.

Finally, Castleden et al. (2008) suggested that seasonality and weather could pose possible sample biases, as they can limit photographer’s choices, and impact on the results.

Garrod (2008b) discussed the issue of sample bias in terms of the method of recruitment: he used the example that retired people have more time to participate in research that requires extra commitment from the participants.

Castleden et al. (2008) suggest that people's physical ability might make it impossible for community groups to participate: in Castleden et al. (2008) it was considered inappropriate to recruit elders as they might have limited mobility.

4.3.2.6 *Accessibility*

Negative comments regarding limited access to what participants would want to photograph can be linked to sampling bias. Taylor et al. (1995) suggested that researchers should not assume that what was photographed was the participant's only preference, as access to other preferred areas or activities might have been restricted (Kaplan et al., 2007, Tunstall et al., 2004). Haywood (1990) makes the same point, suggesting that cameras might not be allowed or the use of a camera might be disapproved of. Additionally, juggling a camera and remembering it all the time is sometimes challenging (MacKay and Couldwell, 2004) and photo-opportunities may be missed as a result (Haywood, 1990, Stefano et al., 2005, Wang et al., 1996a).

4.3.2.7 *Intangible meanings*

Conveying intangible meaning using photographs is a contentious issue, as the vast majority of researchers who have used VEP techniques suggest that photographs are an appropriate tool to convey complex meanings (Loeffler, 2004, Warren, 2002). However, there are researchers who suggest that it is difficult to photograph ideas (Castleden et al., 2008, Okamoto et al., 2006) and therefore participants might not be able to photograph exactly what they want to express (Tunstall et al., 2004). Warren (2002) suggests that intangible meanings such as "community" and "freedom" could be communicated more successfully with word-based techniques. However, Boal (1979) gives an excellent example of working children producing photographs to describe "oppression" by

photographing the nail on a wall they had to rent to hang their heavy gear and avoid carrying it home for the night. Jurkowski (2008) supports that it is difficult to ask people with intellectual disabilities to photograph abstract meaning; this can be further examined as a project-specific issue as it concerns the particular participants of this study.

4.3.2.8 Skills required

This is another contentious issue, as acquiring photographic skills has been described as easy by researchers who consider it an advantage of VEP research (Okamoto et al., 2006, Stewart et al., 2003). Clark-Ibanez (2004) suggested that participants unskilled in photography might find it difficult to participate, while Germain's (2004) study of young people found the physical photo-taking task challenging. However, others support that it is a very easy skill to pick up even for illiterate children (Bijoux and Myers, 2006), an argument that contradicts Jurkowski's (2008) claim that VEP research could pose difficulties for non-verbal participants.

4.3.3 Project-related negatives

Project-related disadvantages of VEP techniques were also discussed in some papers; however, these were very few. They are presented in two groups in no particular order of importance. The first group consists of some negative issues identified by tourism researchers in the use of VEP research. Taylor et al. (1995) noted that it is completely against the nature of people (tourists in this particular study) to photograph negative features: participants are therefore asked to carry out something unnatural, which explains the very small number of negative photographs. Additionally, according to Markwell (1997, p 153), capturing negative holiday photographs would not be conforming to the "myth of the perfect holiday" every tourist wants to live. Another negative point which could deter people from participating in VEP projects according to Haywood (1990) is the link between carrying a camera and being a tourist. Some tourists try to avoid being characterised as such: therefore, they might not participate or they might not photograph what they would have otherwise captured. Finally, in a tourism-related project, by

evaluating the response rate for his study and comparing it to other studies, Garrod (2008b) concluded that because VEP studies are conducted in an open space, without distinctive entrance and exit points, this makes the collection of the cameras and logs more challenging.

Other disadvantages of VEP research include issues of possible sampling bias: Hanieh and Walker (2007) used VEP techniques to research participants' experience of depression. The participants were aware that the study was researching depression and it was suggested that this might have influenced the photographs the participants took.

Booth and Booth (2003) asked the participants in their study to take 39 photographs: the participating mothers found the exposures too many and found it challenging to use up the film, so as a result they put the camera aside and took a lot of prompting and reminding to get back to taking more photographs. Additionally, in the same study, mothers with disabilities were invited to exhibit their photographs, but this proposal was not very welcome. The mothers were happy to share their photographs and talk about them with one another, but refused to turn the "public spotlight upon themselves" (Booth and Booth, 2003, p 435).

4.4 Conclusion

This chapter aimed to group all the positive and negative aspects of VEP techniques mentioned in the 163 sources identified that contain VEP case studies. In this review, the qualitative analysis software NVivo8 was used, due to the large volume of the dataset. The dataset was reviewed a number of times which resulted in the emergence of several themes. The comments on the various VEP techniques were initially divided into positives and negatives, and subsequently into conceptual and practical. Following that, the dataset was studied again, and themes were classified in more detail. The dataset was imported into NVivo; nodes were created and the dataset was classified accordingly. Thus, it is considered unlikely that any key advantage or disadvantage would have been overlooked.

There are a few negative aspects reported that are, in their vast majority, logistical issues that can possibly be overcome with better organisation of the research process and larger research teams, by drawing on the expertise that has now been brought together. However,

these negative aspects are overshadowed by the advantages of using VEP techniques. Although these techniques have been used for a number of years, it was imperative for all this expertise that existed in a number of fields under a multitude of names to be brought together and applied in new VEP research. As this study aims to bring all the studies that have used, and will use VEP, by initiating the VEP typology and inviting researchers to use VEP as an ‘umbrella term’, collecting and analysing all its positive and negative aspects is a step closer in allowing more effective use of VEP in the future, by utilising its strengths and thus avoiding ‘reinventing the wheel’.

5 TOURISM PLANNING WITH A FOCUS ON NATIONAL PARKS

5.1 Introduction

This review explores the subject of tourism planning in national parks in the context of the forces that shape planning policies. A significant challenge in exercising tourism planning in national parks is that there are protected area regulations in place, besides the general planning regulations. This first part of this review examines the relationship between planning and tourism planning in general, with an initial focus on planning at the local level. Power relationships that can shape the planning process are discussed, as well as different approaches to tourism planning with a specific focus on participatory planning. The second part of the review examines tourism planning in national parks: the differences between tourism planning in general and tourism planning in national parks are examined, as well as the need for local support for the national park designation. Finally, the implementation of planning and tourism planning in national parks in Wales is discussed, with a focus on Pembrokeshire Coast National Park.

5.2 The relationship between planning and tourism planning

5.2.1 Planning and power relationships, policies and politics

“Space is not a scientific object removed from ideology and politics; it has always been political and strategic... Space has been shaped and moulded from historical and natural elements, but this has been a political process. Space is political and ideological. It is a product literally filled with ideologies” (Lefebvre, 1976, p30).

Defining planning is a contentious issue that fails to achieve consensus (Mintzberg, 1981). There are thus many definitions of the term: According to Friedmann (1987), planning is finding out what needs to be done and how to do it, a definition supported by Hall (2008) and Cullingsworth (1997).

Planning involves setting objectives and trying to achieve them by gathering and analysing information, and formulating and evaluating policies, designs or projects (Randolph, 2004). One of the most widely used applications of planning is in public policy, where

terms like town and city planning, land-use planning, landscape and urban planning are often used interchangeably. In the UK the common terms for planning are town planning, regional planning and land-use planning (McFarquhar, 1999). The Canadian Institute of Planners offers the following definition: “[Land-use] planning means the scientific, aesthetic, and orderly disposition of land, resources, facilities and services with a view to securing the physical, economic and social efficiency, health and well-being of urban and rural communities” (CIP, 2000). Hall (2008) suggests that strands of planning are: economic planning, which discusses the distribution of economic activity and which aims to manage productive forces: physical development planning, which discusses where development is going to be placed on the physical landscape and finally, public administration and policy, which focuses on planning and implementing government policies.

Hall (2008), Gunn and Varr (2002) and Hall and Page (2002) suggest that planning is a role of the state and a political process: as Cullingsworth (1997) and Mason (2008) suggest, planning is an exercise of political choice. Public administration, especially, is influenced by factors including cultural norms, historical influences, economic priorities and political beliefs (Doswell, 1997). According to Doswell (1997), laws are interpreted and used in ways that reflect the policies of those in power. For Hall and Jenkins (1995), public policy covers actions governments decide to take, or not to take, decisions that are made and decisions that are not made: it implies a choice between alternatives: It is a process, as policies are shaped and put into practice in dynamic environments, in a complex combination of decisions, actions, interaction, reaction and feedback. These decisions impact on the way planning is perceived and implemented from the global to the local level.

Hall and Jenkins (1995) emphasise the importance of public policy in tourism. Public policy is influenced by economic, social and cultural characteristics of the society. According to Barrett and Fudge (1981), in a policy-making process, economic, physical, social and political environments are involved in a process of action and reaction over time. Policy is influenced by the economic, social and cultural norms of society. It is also dictated by the government and other structures of the political system. Policy should, therefore be perceived as a result of the political environment, power relationships, values

and ideologies, institutional frameworks and decision-making processes (Dredge and Jenkins, 2003, Hall, 2008, Hall, 1994).

Consequently, there are various interest groups involved-or not-that exert power in shaping (tourism) policies (Britton, 1991), which thus suggests there are winners and losers in this process. This implies that the winners are almost certainly those who have more power. The implication of this theoretical approach to planning is that the views of minorities are not necessarily going to be heard. As noted in Moodie and Studdert-Kennedy (1970, p. 11),

“Inequality of access to those in control of resources and hence inequality of opportunity to exert pressure, is neither accidental nor the result of deliberate conspiracy of the wicked or the selfish: it is unavoidable in a complex society with an elaborate division of labour operating in a world of which a general attribute is scarcity (of time, effort and ability, as well as of goods): the degree and importance of inequality will vary, but not the fact of it”

5.2.2 Tourism planning

Economic geographers and political scientists share common ground insofar as they argue that tourism has not received sufficient attention, and still remains at the periphery of economic geography and political science, even though it is growing in size and importance for local, regional and national economies (Hall, 1994, Hall, 2008, Hall and Page, 2002, Ioannides, 1995). Britton (2004) attributes the weakly developed theory of tourism geography to the reluctance of researchers to associate the tourism phenomenon with its explicitly capitalistic nature. The nature of capital is accumulative (Brenner, 1998, Britton, 1991, Marx, 1867) and should be examined as such in the tourism production system. According to Britton (2004, p 451), the tourism production system is

“simultaneously a mechanism for the accumulation of capital, the private appropriation of wealth, the extraction of surplus value from labour, and the capturing of (often unearned) rents from cultural and physical phenomena (especially public goods) which are deemed to have both a social and scarcity value”.

This last observation is particularly important in national parks, as it confirms the reason for conflict between the tourism industry, the environment and the local communities in such areas by recognising the trend of capital to accumulate on one hand and the use of resources that belong to the public, which are even more scarce in a protected area and therefore require protection, on the other. In particular private-sector interests are motivated by profit (Britton, 1991, Hall and Page, 2002) and if left unchecked, this is likely to cause conflicts in the organisation of tourism (Shaw and Williams, 1994).

5.2.2.1 *Defining tourism planning*

The aim of the preceding analysis was to emphasise the difficulties tourism planning faces, especially in the context of the existing global economic system. According to Hall (2008) and Fennell and Dowling (2003), tourism planning is an amalgamation of economic, social, political and environmental factors that reflect the range of forces that affect tourism development. The demand for tourism planning and government intervention stems from the negative impact that tourism development can have on the environment and the host communities (Hall, 2000, WTO, 1994). There is broad agreement among researchers that in order to optimise benefits that result from tourism and prevent or mitigate problems, sound tourism planning is essential (Inskip, 1991, Lavery, 2002, Timothy, 2001,). Godfrey and Clarke (2000) suggest that when tourism planning is non-existent or inadequate, the financial returns to the local communities are lower, the customers are less satisfied and the resource is not protected properly. Negative tourism impacts include impacts on wildlife behaviour, soils, geological exposures, vegetation, water resources, aesthetic factors, and the effects on the cultural environment and the local communities (Ceballos-Lascurin, 1996, Dyer et al., 2003, Mason 2008).

Taking into account the potentially serious negative impacts of tourism, of insufficient or non-existent planning, the goals of the market and privately owned businesses, as previously discussed, make it ill-advised for tourism planning to be left in the market's hands. According to Hall (2008), tourism planning is, and should be, considered a role of the state, as it is the state's responsibility to safeguard the livelihoods of all citizens. In Europe, there has been a shift to privatisation in recent years in sectors such as education,

health and welfare, especially during and after the 1980s and 1990s, where Conservative governments advocated privatisation, corporatisation, free trade and the shift towards smaller governments and far less regulated markets (Hall, 2000). Even though there has been greater involvement of the private sector in tourism, Hall and Page (2002) believe that there are certain aspects such as destination marketing and planning that should be the state's business, if the interests of local communities are to be protected (Hall and Page, 2002).

Getz (1987) identified four approaches to tourism planning and Hall (2008) added the last one as presented in Table 16. According to Hall (2008), boosterism can be regarded as a form of non-planning, as the market is left to take its course without any intervention: tourism development is regarded as inherently good and consequently beneficial for the host communities, who are not involved in the least in the tourism planning process. Although boosterism was the dominant tradition since the beginning of mass tourism, it can still be seen especially in development for mega-events (Nauright and Schimmel, 2005). As Getz (1987, p. 10) notes,

“Boosterism is still practiced, and always will be, by two groups of people: politicians who philosophically or pragmatically believe that economic growth is always to be promoted, and by others who will gain financially from tourism.”

The economic tradition prioritises economic goals over social and environmental issues; it is regarded as an income generator. Marketing is used to promote the destination targeting the type of tourist who will bring the maximum economic benefit considering the areas' resources (Hall, 2008). A rational approach advocated by geographers, conservationists and land-use planners is the root of the physical/spatial planning approach. Land-use planning is the oldest form of environmental protection and is dominant in the public tourism planning terrain; indeed, it was the preferred form of tourism planning by academics until sustainable tourism planning was incorporated in the tourism planning traditions (Gunn and Varr, 2002, Hall, 2008). An example of this type of planning is the zoning system used in some national parks, where visitors are not allowed in designated areas, or only allowed to enter at certain times of the year (National Trails, 2010).

Table 16: Five approaches to tourism planning

Approach	Characteristics
Boosterism	• Residents are not involved in the planning process • Practiced by people/groups who think that economic growth should always be promoted/politicians or people who will benefit financially from tourism
Economic/ industry-oriented	• Used as a tool to achieve economic growth, employment, development • Governments utilise tourism to promote growth/always need relevant research • Marketing and research to attract the kind of visitor suitable for the area • Economic goals are prioritised over social and environmental issues
Physical/spatial	• Economic geography/land-use planning approach • Minimise tourism impacts on physical environment, examines carrying capacity, environmental thresholds, limits of acceptable change (Hall, 2000) • Social and cultural issues are left out of the equation
Community-oriented	• Negative impacts of tourism on environments and communities considered • Need for local control over the development process • By satisfying the needs of the local community it is possible to satisfy the needs of tourists
Sustainable	• Economic, environmental and sociocultural values are considered • Tourism planning integrated with other planning processes • Planning and implementation as two sides of the same coin • Recognition of political dimension of tourism

Community-oriented planning is a response to negative social tourism impacts. In the 1980s and 1990s it was regarded as an alternative and reflected elements of what is today called ecotourism. This type of planning implies local control over the tourism planning and development, which, however can be met by resistance from business circles and

politicians. Community-oriented planning is seen as difficult to implement and operate (Hall, 2008).

Finally, the sustainable planning approach is considered as an approach that will integrate planning and development in a way that the economy, the local community and the environment will coexist harmoniously, as they will each have a voice in the tourism planning process. Although sustainable tourism and consequently sustainable tourism planning are terms that mean different things to different people (Butler, 1999), none of the three pillars of sustainability is considered more important than the others, which theoretically gives their voice an equal opportunity in the tourism planning process.

These approaches often suggest that certain aspects of tourism planning should be considered more important than others; In the case of boosterism for example, local communities are of secondary importance compared to economic growth. Hall (2008) notes that there is no right or wrong approach to planning: the different traditions mentioned above have different foci. These approaches are judged against sets of criteria that reflect what tourism planning is trying to achieve: thus they cannot be characterised as inherently wrong or right (Hall, 2008). Furthermore, the planner's expertise is now challenged and communities are considered to be the experts of their own space (Wearing et al., 2009a, 2009b). Communities have knowledge of their local area and its intrinsic value, whereas planners have planning experience and scientific knowledge: collaboration between the two groups can lead to more informed planning decisions (Wearing et al., 2009a).

5.2.3 Participation in the tourism planning process

Participation in planning has been advocated as an effective the way to provide solutions for community issues (Adaman and Devine, 2006, Kruger, 2007, Owen, 2002). It is vital to examine the meaning of the terms 'participatory' or 'collaborative' planning, which in the literature are used interchangeably. According to Healey (1997), collaborative planning is a way to co-exist in shared spaces. However, following attempts to understand what participatory planning means to researchers, it emerged that the term has been used in many ways to describe situations ranging from token participation to a more genuinely

participatory approach. Arnstein (1969) presented the “ladder of citizen participation” which Creighton (1986 cited in Ananda (2007)) enriched (Table 17). In this study, it is considered that participation in planning is considered to give people the opportunity to participate in the tourism planning process, be it in a community-planning approach, a land-use planning approach, or a sustainable planning approach.

A number of researchers have suggested that involving the community in the tourism planning process is essential for its success (Getz and Jamal, 1994, Reed, 1997, Simmons, 1994). However, it is imperative to understand the way power relationships work within communities. Power is not evenly distributed, and it should not be based on the assumption that the groups or people who have power in their hands will distribute it for the common good (Reed, 1997). Theoretically, it makes sense to rely on local authorities to make fair decisions but that assumes that local authorities are neutral and are not involved in or affected by any power group or interest. As plans embrace the strategies with which policies are implemented (Brent Ritchie and Crouch, 2005, Fennell and Dowling, 2003), it is important to see who influences these policies. According to Hall (2008), a number of stakeholders can influence tourism planning policies:

- pressure/interest groups
- significant individuals e.g. local government councillors, business leaders
- members of the bureaucracy e.g. economic development agencies
- academics, consultants

Table 17: Arnstein's (1969) typology and Creighton's (1986) techniques

Level of participation		Technique
High	Forming/agreeing to decisions	Joint decision-making

	Having an influence <i>on</i> decisions	Conciliation/mediation Assisted negotiation Collaborative problem solving Facilitation/interactive workshops Task force/advisory groups
	Being heard <i>before</i> decisions	Conferences Public hearings
Low	Knowledge <i>about</i> decisions	Public information

Source: Ananda (2007)

Simmons (1994) seems to share Hall's and Jenkin's (1995) view that, historically speaking, the cases where communities have been manipulated by participating in seemingly collaborative planning processes aim at reinforcing political or bureaucratic control. Sewell and Phillips (1979) suggested three fundamental steps for successful public participation processes: i) high degree of citizen involvement, with high numbers of citizens involved and equal degree of participation from all, ii) impartiality in participation, which means that all potential opinions should be heard, and iii) efficiency of participation, which means both adequate agency resources and influence of planning decisions by public involvement (Simmons, 1994). The more these occur, the more members of the public are willing to participate (Simmons, 1994), as they feel that their views do matter and that by participating they can influence the planning process.

Hall and Jenkins (1995) locate participatory planning in the context of power and politics: they argue that the application of participatory planning models assumes pluralism in the allocation of power in a community. However, this can be used to reinforce existing power structures and exclusion of different voices and interests. Often, the allocation of power in the community is weighted in favour of certain groups, whereas less powerful groups remain under-represented and disadvantaged, despite the existence of participatory processes. Certain groups are more capable of defining their interests as they have greater influence on the direction of planning policies. Hall and Jenkins (1995) argue that due to

the uneven allocation of power in society, participation does not necessarily mean that planning outcomes will be affected. This can indeed be the case: as previously explained in this review, participation is viewed as a tool with potential although its outcomes depend on how it is used.

An example of using a participatory process to reinforce government decisions is taking place in Greece [as of the time of writing], where the decision to raise retirement age is against public opinion. As a result, the unions supporting the government (not the public) are being asked to engage in social dialogue relating to the future of the pension schemes (Rizospastis, 2009). However, direct democratic participatory processes in France and Holland have resulted in the change in EU plans for a European constitution (Steele, 2005). It is therefore apparent that public participation is a tool, and like all tools, the results it produces depend on whether its full potential is realised.

Participation can thus be interpreted in different ways in different settings. Adaman and Devine (2006) urge people to participate in the running of society and the economy rather than leaving the market forces and the economic ruling class in charge. According to the former Cuban National Assembly President, Juan Escalona, the community must be involved in the solution of its problems, otherwise there will never be a solution (Roman, 2003). The aim of this review is by no means to declare participatory planning impossible: on the contrary, it is essential for communities to plan and design services for themselves and their visitors (Gunn and Varr, 2002).

As tourism impacts on the life of the community, it is appropriate to involve the community in the planning process. Gunn and Varr (2002) suggest that residents deserve to know how tourism will affect them and they should be able to suggest ways to mitigate these impacts. It is more likely for natural resources to be conserved properly if communities are given ownership of them, if they share the benefits and are involved in the decision making process (Hall, 2008). However, it is the aim of this review to raise the challenges that are involved in participatory planning: issues of politics and power in tourism have to be considered if tourism planning is to be discussed, as the gap between theory and practice needs to be addressed. Although it is common ground, at least on a theoretical level, that

participatory planning achieves results that are more likely to be accepted by the community, conflicts still exist between locals and tourists.

5.2.3.1 *Stakeholder conflict*

Almost thirty years ago, Mathieson and Wall (1982, p 186) suggested that through the planning process, it should be ensured that: "opportunities are available for tourists to gain enjoyable and satisfying experiences and at the same time to provide a means of improving the way of life for residents and of destination areas". Although the need for tourism planning has been long established, unfortunately, most governments and authorities are still more preoccupied with the marketing side of tourism, rather than making sure that the supply side can effectively handle more tourists (Gunn and Varr, 2002). As a result, the inability to host high volumes of tourists due to the lack of planning often causes congestion and litter, and competition for goods, services, land and other resources between locals and tourists (Gunn and Varr, 2002, Mason, 2008). On the contrary, tourism planning should supply positive mechanisms so that land possession, design and development can provide the maximum user satisfaction, for both tourists and local communities.

Tourism economies and visitor satisfaction prevent resource degradation (Fennell and Dowling, 2003): locals and tourists are more committed to protecting their resources when they see return from them. Tourism planning should thus play the role of mediator that can effectively manage stakeholders and balance the needs of locals and tourists. Gunn and Varr (2002) and Hall (2008) suggest that planning concentrates on locals while visitors are often ignored and their interests are left out, although the worth of the planned tourism development should be judged by the visitor, not by the local (Gunn and Varr, 2002). However, the tendency of nations to see tourism as an easy way out of their financial and development problems (Gunn and Varr, 2002) and to neglect other potential such as farming and the loss of historical economic bases, such as fishing (Inskeep, 1991), often result in tourism becoming the sole or the main economic provider for an area (Gunn and Varr, 2002). It is often ignored that tourism is only one of many land-use options (Romeril, 1989). In such cases, tourists have great powers over the destination and the host

communities; as Tudor and Williams (2003) suggest, a result of tourist dissatisfaction can be loss of income. Bearing in mind that there are different economic interests in communities, that locals perceive tourism impacts differently, according to their economic dependence on tourism as reported by some researchers (McGehee and Andereck, 2004, Angeles Oviedo-Garcia et al., 2008) and that authority planners are constrained by stakeholders' economic and political powers (Hall, 2008), consensus is difficult to achieve in tourism planning. However, both locals and tourists need to coexist and therefore, tourism planners should consider them as stakeholders when planning for tourism in an area. Gunn and Varr (2002) suggest that it is very important for tourism planning to integrate all aspects of tourism development in the social and economic life of the community.

Defining stakeholders in the tourism planning context can prove to be challenging. A multitude of definitions of stakeholders exists. Starick (1999 (p. 90), cited in Sheehan and Ritchie (2005) summarises the wide-ranging stakeholder definitions:

“...there may be numerous levels of specificity as to what the term “stakeholder” means, depending on what the user is referring to. The range appears to be bounded in this case, on one end, by those entities which can and are making their actual stakes known (sometimes called “voice”), and, on the other end, by those which are or might be influenced by, or are or potentially are influencers of, some organization or another, whether or not this influence is perceived or known.”

Furthermore, Hall and Jenkins (1995, p. 31) suggest that

“...students of tourism must, among other things, identify and access the relevant key actors and agencies, examine the values, perceptions, and interests of significant individuals and organizations, and isolate the relationships within and between stakeholders”.

Consequently, deciding who should have a say in the tourism planning process largely depends on the chosen tourism planning approach [as can be seen in Table 16] and thus on the priorities of the government at each level. Although it is necessary to prioritise the stakeholders and hence focus their efforts in order to effectively manage an area, Sheehan and Ritchie (2005) suggest that all stakeholders are not equal; however, the stakeholder

hierarchy depends on which tourism planning approach is adopted. The main concern in tourism planning should be for the local community, the visitors, the local economy and the environment to have a voice. However, as already demonstrated, prioritising all stakeholders is a political issue.

5.2.3.2 *Tourism planning levels and the tourism planning process*

It has been established that stakeholder involvement is desirable and proven to fulfil a mediator role, in order for planning policies to be accepted and supported. However, this greatly depends on the level of planning. According to Mason (2008), tourism planning extends across three levels: national, regional and local. Fennell and Dowling (2003) agree, as they suggest that there are three tourism planning scales: macro (national, supra-national and global), medium (regional, state or provincial) and micro (site). As Hall (2008) highlights, responsibilities that some years ago would have been regarded as those of a national government, are now being handled at a supra-national level and this is made easier due to the existence and the enhanced responsibilities of organisations like the European Union. Such organisations make economic and other decisions that have great impacts on the national, regional and local levels of tourism planning. An example is the Maastrich Treaty (European Union, 1992) that established the European Union and aimed to facilitate the free movement of goods, service, people and capital across borders. It is sometimes difficult to grasp the extent of the impact of these decisions and interventions. The national and sub-national levels of tourism planning are far from secondary: although the role of the state changed, it is still extremely significant, as at the national and sub-national levels, laws are constructed and enforced.

Godfrey and Clarke (2000) suggest that the community or destination is the physical area where the action takes place: where tourism happens. It is there that tourism impacts are felt more acutely, it is where the tourists visit and where the jobs are created. The destination level is where conflict ceases to be theoretical: conflict can be seen as the competition for resources and land-use (Gunn and Varr, 2002). Hall (2008) suggests that planning activities vary: they extend from the local to the global level and similarly vary from being land use-oriented at the site to being policy-oriented at the global level. The

definition of a tourism destination by Papatheodorou (2006) puts the conflict issue in perspective, as it demonstrates the power relationships between locals and tourists. According to Papatheodorou (2006, p. xv), a tourism destination is a “geographical area of variable territorial scale, where tourism is a predominant activity both from a demand side (i.e. tourists) and a supply side (i.e. infrastructure and employment) perspective”.

The tourism planning process, despite the difference in scale discussed above, comprises a certain set of actions. Although academics’ views differ on the evolution of tourism planning, with Yates et al. (2010) suggesting that tourism planning needs to be integrated in tourism management as more long term solutions and implementation are needed, it seems that there is some consensus amongst a number of academics that tourism planning has come a long way from its ‘traditional’ plan-oriented reputation (Lavery, 2002): it includes implementation and monitoring, it is proactive, receptive to community needs and recognises planning and implementation as one single, ongoing process (Hall, 2008). According to Inskeep (1991), the tourism planning process comprises eight steps, which contradicts the view expressed by Yates et al. (2010) that monitoring and implementation are not integral parts of the tourism planning process. Although Inskeep (1991), Lavery (2002) and Hall (2008) describe the tourism planning process without using exactly the same terms, their approaches are similar as can be seen in Figure 10. The basic steps all three suggest are formulation of a tourism policy, setting the aims and objectives, assessing the area and its assets, evaluating the market, preparing and implementing and finally evaluating the process outcomes.

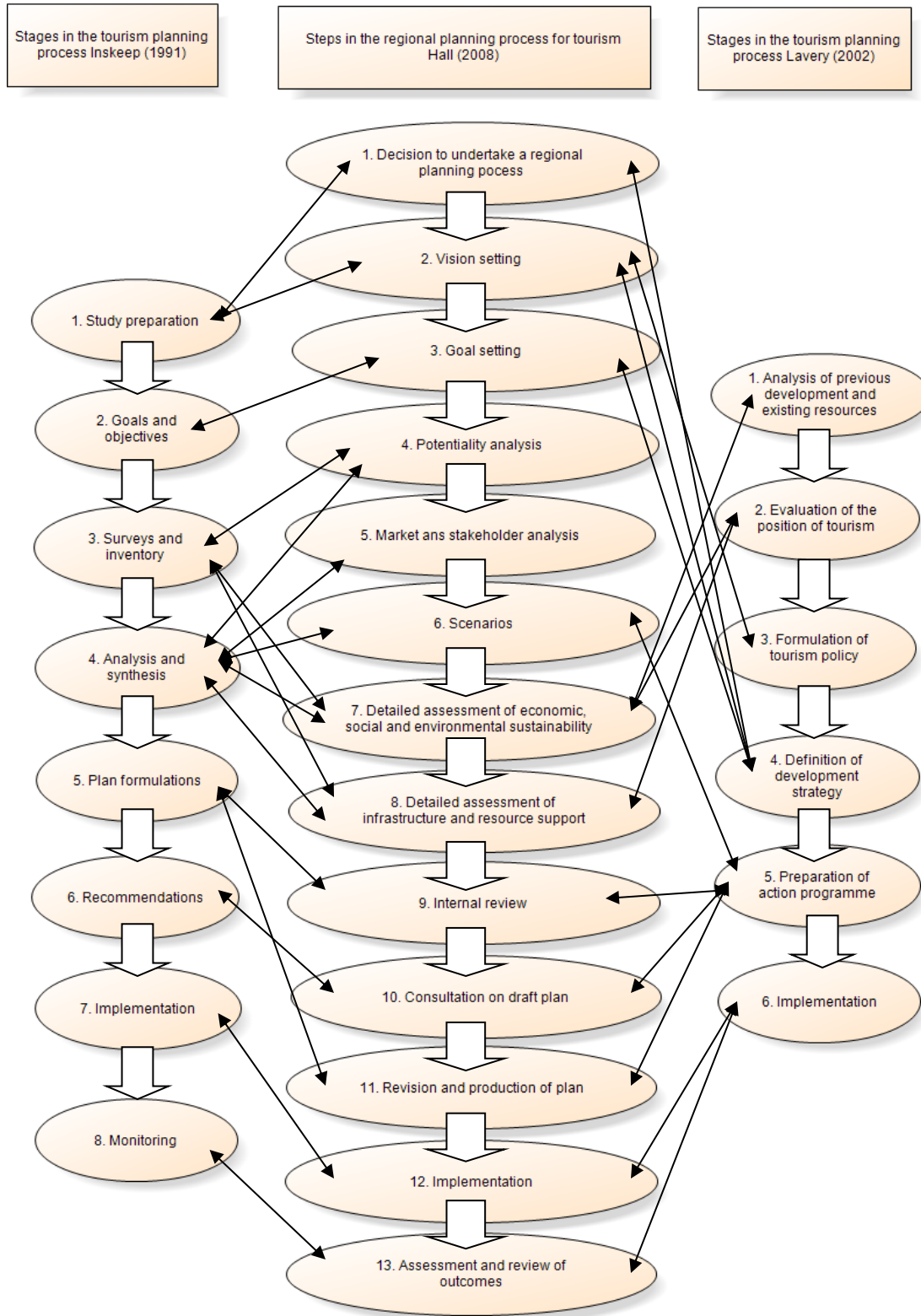


Figure 10: The tourism planning process

5.3 Tourism planning in national parks

MacEwen and MacEwen (1982) argue that the creation of national parks was the human reaction to the cruel exploitation of nature, especially by advanced industrial nations of the West. Nature was considered to have endless resources. However, human activity poses threats to nature and steps have to be taken to protect the natural environment by designating areas with protection status (Lockwood et al., 2006). As mentioned in MacEwen and MacEwen (1982), there are examples where people and nature have had a harmonious relationship. It is this relationship between species and habitats, amongst other aspects, which the local, national and international designations were created to protect. There are numerous such designations globally (about 104,791 according to Lockwood et al., 2006); however, the International Centre for the Conservation of Nature has identified seven categories of protected areas (Bishop et al., 2004) in an effort to achieve a more holistic global approach (Table 18, adapted from IUCN, 2009). Two of these categories are more relevant to this study: protected landscapes and national parks, as they are areas that tend to be more attractive to tourists.

According to IUCN, national parks are:

“designated to a. protect the ecological integrity of one or more ecosystems for present and future generations, b. exclude exploitation or occupation inimical to the purposes of designations of the area and c. provide a foundation of spiritual, scientific, educational, recreational and visitor opportunities, all of which can be environmentally and culturally compatible” (Bishop et al., 2004, p. 93)

Accordingly, it can be concluded that national parks are relatively wild, unspoilt and uninhabited areas which are not altered by human activity, and where the most important goal is the conservation of nature. National parks usually allow controlled access to visitors. However, it is obvious to whoever has visited a national park in England or Wales, that they can hardly be described as wild and uninhabited. National parks in England and Wales belong to the Protected Landscape IUCN Category II, as they are areas of distinct natural beauty that are inhabited by local communities. National Parks in England and Wales cover approximately nine per cent of the landscape (Lockwood et al., 2006).

National Parks in England and Wales have a dual purpose according to the Environment Act (1995, clause 61):

“...to conserve and enhance the natural beauty, wildlife and cultural heritage and to promote opportunities for the understanding and enjoyment of the special qualities of National Parks by the public. When National Parks carry out these purposes they also have the duty to seek to foster the economic and social well being of local communities within the National Parks”.

A reason for the designation of National Parks is therefore recreational use (Bishop et al., 2004), which implies that, by definition, an economic development planning decision has been made *a priori*: a source of income for the local communities is tourism revenue. According to the Association of National Park Authorities (2010), national parks face four challenges: to tackle the negative impacts of tourism, to look after the wildlife, to tackle climate change and support the local communities that live in them.

5.3.1 The need for local support in National Parks

It can be argued that the support of the local community to achieve the maximum level of protection for an area is a most important component. It is imperative for the success of the protected area designation that the local people who live in Category V protected areas in particular support, understand and promote its aims and objectives (Holdgate, 2003). This means that people understand what the aims and objectives are, and feel consulted and involved knowing their concerns and suggestions are taken into account (Lewis, 1996).

An important note is that worldwide, the history of the national park has been marked by exiled communities, where the local people not only fail to support the efforts to protect the area, but illegally poach and farm on their own land. The most well-known example is Yellowstone, USA, the first national park to be designated as such in 1872. At the time, the indigenous population were not consulted about the area designation, and were actually brutally ejected from the land they had owned for centuries (Bishop et al. 2004). Such situations raise questions about the reasoning behind area designations in some cases, and exactly which group the area is designated for.

Table 18: IUCN protected area management categories

Ia Strict Nature Reserve	Category Ia are strictly protected areas set aside to protect biodiversity and also possibly geological/geomorphical features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values. Such protected areas can serve as indispensable reference areas for scientific research and monitoring
Ib Wilderness Area	Category Ib protected areas are usually large unmodified or slightly modified areas, retaining their natural character and influence within permanent or significant human habitation, which are protected and managed so as to preserve their natural condition.
II National Park	Category II protected areas are large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible, spiritual, scientific, educational, recreational, and visitor opportunities.
III Natural Monument or Feature	Category III protected areas are set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value.
IV Habitat/Species Management Area	Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many Category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category.
V Protected Landscape/Seascape	A protected area where the interaction of people and nature over time has produced an area of distinct character with significant, ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.
VI Protected area with sustainable use of natural resources	Category VI protected areas conserve ecosystems and habitats together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in a natural condition, where a proportion is under sustainable natural resource management and where low-level non-industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area

The designation of the royal forests is a similar case: they were exclusively for the use and enjoyment of the royal families and their courts, to the exclusion of the local people (MacEwen and MacEwen, 1982).

There are contentious issues which might cause conflicts between the local communities and the park authorities. Contentious issues, of course, emerge from the nature of the underlying planning regulations and the interests they serve. Conflicts, if not addressed effectively can have a negative impact on people's livelihoods, and lead to difficulties in implementing the objectives of the protected areas. The main reason for conflict is different interests of different user groups of the same area, functional aspects of rights and the economy (Kaltenborn et al., 1999). According to Kaltenborn et al. (1999, p.52), protected areas are "societal institutions created by politically influential forces, and the aim is to satisfy societal needs and interests. Hence they only retain their role and status as long as there is sufficient social, political and legal support."

A serious problem facing communities that live in national parks is the lack of affordable housing for local people that is built to the required standards while remaining in keeping with the environment (Holdgate 2003). Currently, the younger members of the community are experiencing difficulties in purchasing affordable housing, as they do not earn enough. Jobs are often part time and seasonal, as confirmed in the Pembrokeshire Coast National Park Management Plan (2003). The number of local people selling their homes and relocating because of limited employment opportunities is growing every year; and the number of well-off potential buyers is increasing as the reputation of the area grows (Cheyne and Freeman, 2006, Hall and Muller, 2004). The second-home issue is considered strongly related to tourism, and will be examined in more depth in the results and discussion sections.

Because of the importance of local community involvement in the fulfilment of the protected area objectives, a number of researchers and planners suggest that planning based on the participation of the affected stakeholders is more likely to be successful (Kaltenborn et al., 1999, Lefevre et al., 2000). Additionally, the local community 'owns' the resource and therefore should be consulted in the interests of the community: it would be exercising democracy (Ananda, 2007). Furthermore, the use of local knowledge of the local resources

and ecosystem dynamics can and should complement the knowledge of scientists (Schultz et al., 2007) and planners about how best to use resources. According to James and Gittins (2007), community participation and empowerment have become buzzwords, but even though public involvement has become a requirement nowadays, there are many cases where local group members are still not considered to be adequately engaged by the planning authorities (Hermans et al., 2007, Schultz et al., 2007).

5.3.2 Planning for tourism in National Parks

During the fieldwork period for this project, in the summers of 2006 and 2007, it was noted (as will be presented and analysed in the results section of the thesis) that a number of tourists in Pembrokeshire Coast National Park mentioned that they used to holiday in Cornwall, and that its geomorphology is very much like that of Pembrokeshire. However, they stopped going because it became too crowded and overdeveloped, and it also now has a theme park. Based on these comments, two questions arise. The first one is: Who is left to deal with the consequences of badly planned tourism development? In their paper on repeat visitation of mature sea and sand destinations, Allegre and Cladera (2006) mention that there are three types of attitudes repeat tourists have towards the destinations:

- a. compensatory attitude. The tourists are satisfied with what the destination offers them and at the same time they are avoiding substitution costs they would incur if they were to go elsewhere
- b. a utilitarian attitude. The destination offers a good balance of cost, satisfaction and quality
- c. a sense of place attachment. The tourists have an emotional attachment to the destination, be it happy memories or family reasons combined with satisfaction from the destination.

It is important to establish how strong c. is going to be if the negative impacts of tourism are not managed or mitigated and the original criteria for the choice of destination are no longer satisfied. Hopefully, because of its designation as a national park and the strict planning regulations that come with it, PCNP will not suffer the negative impacts of

tourism as badly as Cornwall has. It is also important to establish how planning regulations that derive from the area protection status are applied to national parks: while at the same time, remaining aware that tourism development *does* take place, and sometimes on a grand scale (Elgammal and Jones, 2008).

Butler and Waldbrook (2003) noted that tourism is dynamic and that destinations and places change to meet new market tastes and requirements. Recreational use, according to the definition of national parks (Bishop et al., 2004), is one of the reasons national parks are designated as such. However, the tendency for destination areas to change for the sake of tourism is diametrically opposite to the reasons why national parks are designated as such. It is, therefore, apparent that the coexistence of tourism and protected areas is dynamic and that inadequate planning can create conflict.

National parks are designated for a variety of reasons that have to be considered in the planning process: they provide reserves to a variety of species, supply habitats for endangered species, provide environments for local communities to live in and interact, supply protection for important natural resources necessary for local people to survive, and contain important cultural, historical and spiritual sites (Eagles and McCool, 2002). The impacts of tourism in national parks do not differ from the more generic impact of tourism. However, the impacts of inadequate tourism planning are greater and in some cases irreversible since National Parks are hosts to endangered species, and historic man-made or natural physical features.

However, there are some impacts that feature more prominently in National Parks. One of them-and probably the most important- in the UK is the issue of second homes. In some areas second homes put further pressure on the housing stock and cause prices to rise sharply. The industry is not developed in National Parks and job creation and sufficient income (Pembrokeshire Coast National Park Authority, 2003) are issues which need to be addressed. Furthermore, the willingness of people living outside the area to pay large amounts of money to buy a house puts pressure on the market and makes it very difficult for the local community to obtain housing (Cheyne and Freeman, 2006, Hall and Muller, 2004), and especially for the younger generations who are struggling to climb the property ladder. This causes chain reactions, such as ghost streets in villages as locals sell their

homes and move elsewhere, loss of community spirit, closure of local businesses, and more limited availability of services outside the tourism season.

5.3.3 Tourism planning in National Parks in Wales and Pembrokeshire Coast National Park

Hall (2008) suggested that planning-related activities range from the local to the global and likewise, from being primarily land use-oriented at the local level to being policy-oriented at the global level. Furthermore, Godfrey and Clarke (2000) and Gunn and Varr (2002) suggest that the local level is where tourism happens and consequently jobs are created, tourists visit and conflicts over land use take place. Although it is suggested by a number of researchers (Hall, 2008, Lavery, 2002, Hall and Jenkins, 1995) that tourism planning requires several steps before it is done successfully and although it is within the aims of the National Parks to cater for visitors, tourism planning is not always exercised by the National Park Authorities. Gunn and Varr (2002) suggest that visitors are often ignored as tourism planning is mostly about the community and that the integration of tourism planning into land-use planning is happening in a very slow pace.

Despite Inskeep's (1991) suggestion that tourism planning in some places was simplistic, as it only dealt with destination promotion and support for tourism businesses almost 20 years ago, according to the Pembrokeshire County Council tourism officer Mark Horner (2008) and Pembrokeshire Coast National Park planner Sarah Middleton (Interview with S. Middleton and P. Lees, 2008), National Park Authorities are responsible for land-use planning and County Councils are responsible for tourism. National Park Authorities are independent local planning authorities (LPAs). The County Council's involvement in tourism planning is limited to conducting visitor surveys, informing visitors about the park via its website, and liaising with local businesses. It produced the Tourism Strategy for Pembrokeshire (Pembrokeshire County Council, 2006) which, however, is not legally binding and is only used as guidance.

In Wales, out of 25 LPAs (Pycroft, 2010) only three are National Park Authorities: Pembrokeshire Coast, Snowdonia and Brecon Beacons. Each one of them has a National Park Management Plan (NPMP) and they adhere to Welsh Assembly Government policy

objectives by following the Planning Policy Wales (PPW), its updates called Ministerial Interim Planning Policy Statements (MIPPS) and Technical Advance Notices (TANs). The Wales Spatial Plan which was updated in 2008 has to be regarded when plans are prepared (Pycroft, 2010). National Park Authorities have also prepared Local Development Plans (LDPs), which are not repeating National Guidance but explain how they should apply to the local area. Pycroft (2010), the Welsh Policy Officer of the Association of National Park Authorities, suggests that all these are confusing and time-consuming and proposes that the policy-making process should be revisited as a bureaucratic burden is created that is difficult for the Local Authorities to manage. Additionally, conflicts arise when different government objectives are delivered. Pycroft (2010) uses the example of affordable housing to demonstrate the challenges facing this issue as a result of the introduction of the code for sustainable homes. This code has introduced more guidelines and actions that can impede the building of affordable homes. Pycroft (2010) also suggests that reconciling competing needs will always be on the agenda in Local Authorities and that community engagement is extensively sought, especially in the application process. On behalf of the Association of National Park Authorities, he presents a different approach to those who call for local communities to be more involved in the planning process (Angeles Oviedo-Garcia et al., 2008, Wearing et al., 2009a). However, he suggests that the Welsh Assembly Government could do more to engage the public when drafting national policies, it is noted that the weight of public opinion should not dictate local or national policy.

In Pembrokeshire Coast National Park, as is common practice in the UK, the land-use planning process in practice works as follows: upon receipt of a planning application (domestic or commercial), a notice is put up outside the property or area the application is for. Neighbouring properties, the Local Council and the Local Highways Authority are also informed by letter. Details of applications are also published on the Pembrokeshire Coast National Park website daily (Pembrokeshire Coast National Park Authority, 2009-2010). A consultation period follows where interested parties can write to the Authority. The Case Officer then visits the site and considers the application as well as comments received from consultees and other interested parties. The decisions are made by Officers, who have been delegated this responsibility by the Park Authority. Applications for major developments or for developments that raise local or strategic issues are examined by the

Development Management Committee (Pembrokeshire Coast National Park Authority, 2009-2010).

The absence of a body that tackles tourism planning as a whole in Pembrokeshire Coast National Park is revealed in this literature review. Land-use aspects of it are dealt by the National Park Authority whereas the County Council is responsible for the promotional efforts. Stages such as those suggested by Lavery (2002) and Hall (2008) are either not done at all or done only from the perspective of the local or the tourist, without combining the two.

5.4 Conclusion

This review has put the issue of tourism planning in a national park in context. Firstly, it established the relationship between planning and tourism planning, especially at the local level, where tourism planning is effectively land-use planning. It also examined the relationship between planning, public policy and politics and demonstrated that planning -and consequently tourism planning-is inherently political. The approaches to tourism planning were briefly presented in an historic sequence of appearance. Here too it became apparent that there are many choices to be made, according to what each local, regional and national government aims to achieve, also taking into consideration the increased influence of organisations such as the EU in the planning process.

In an effort to demonstrate that regardless of the tourism planning approach, participation in the planning process should be sought by the planning authorities, the question of defining stakeholders arose, as those who have a right to participate in the planning process should be identified in order to participate. Defining stakeholders and pinpointing who has a legitimate interest in the outcomes of tourism planning proved to be difficult as it depends on the planning approach used. It is inherent, for instance, in boosterism, that communities do not have a say; planning is practiced by those who consider tourism an inherently positive development, including those who will benefit financially from it: consequently excluding the communities and the local environment. The stages of the tourism planning

process were presented, as VEP is suggested as a tool to assist tourism planning at the local level.

The second part of this chapter focused on tourism planning in national parks. The need for protected area designations was established, as human activity poses dangers to the environment. The negative impacts of tourism in national parks and the more acute way they can be felt was also brought in the discussion. The need for local support in national parks for the designation to be successful and fulfil its objectives was then discussed: In this context the need for the participation of the local community as well as the need for those who experience the destination as a tourism designation, in the tourism planning process was established.

It can be concluded that it is imperative for successful tourism planning that advocates the rights and opinions of the local community and the tourists to realise the important role politics and power play, and the influences they exert in the tourism planning process and how that influences participation.

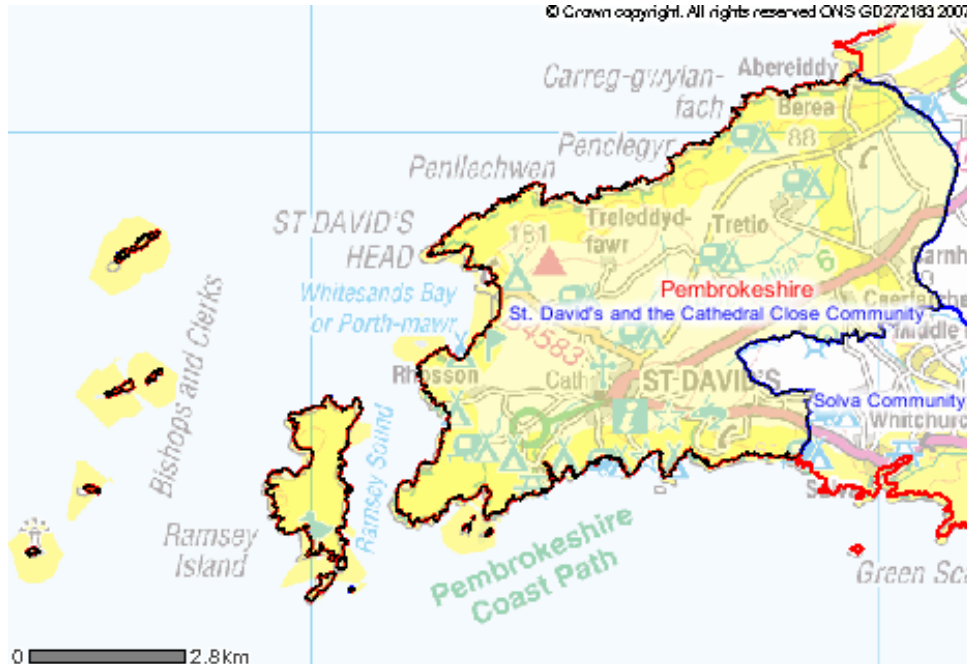
6 CASE STUDY AREA: AIMS AND OBJECTIVES

6.1 Introduction

National Parks are protected by law for the benefit of the nation. Their aim is to achieve a harmonious balance between people and nature. They were established by the 1949 National Parks and Access to the Countryside Act and have two statutory purposes: “a. to conserve and enhance natural beauty, wildlife and cultural heritage of the National Park, and b. to promote opportunities for the understanding and enjoyment of the special qualities of the National Parks by the public” (Campaign for National Parks, 2007). National Parks in England and Wales are lived-in, working landscapes: and tourism, along with agriculture and forestry is one of the dominant land-uses (Phillips, 2002). The demand for tourism planning and government intervention stems from the negative impacts tourism development can have on the environment and the host communities (Hall, 2000, World Tourism Organisation, 1994). The negative impacts of tourism have been widely discussed by researchers in the tourism literature. They include impacts on the natural environment such as on wildlife behaviour, soils, geological exposures, vegetation, and water resources: and impact on the aesthetic quality of the landscape, the cultural environment and the local communities, to mention just a few (Ceballos-Lascurin, 1996, Page and Connell, 2008).

This study aims to examine tourism planning issues using Volunteer-Employed Photography, with both user groups of the area (locals and tourists) showcasing their own viewpoint through a camera lens. This chapter consists of two main parts. The first part presents a brief description of the case study area. First of all, the Pembrokeshire Coast National Park is described, in order to explain the reasons behind the high volumes of tourists that visit the area. Similarly, the history of St David’s Peninsula is briefly presented, followed by a presentation of the local community and economy and the main characteristics of the type of tourist who visits the area. Finally, the aims and objectives of this research project are discussed, in light of the area, visitors and local population description.

6.2 Case study area



Map 1: St David's Peninsula in Pembrokeshire Coast National Park (Office of National Statistics, 2003)

Source: Office of National Statistics (2003)

The study area for this project is St David's Peninsula situated at the North of Pembrokeshire Coast National Park (PCNP) in Wales. The Pembrokeshire Coast National Park was created in 1952 (John, 1995) and is one of Britain's 15 National Parks (National Parks, 2010). It was designated primarily for its coastal scenery and is the only coastal National Park in Britain. The PCNP has some unique characteristics that make it one of the most visited places in Wales. It is the only National Park with offshore islands, Ramsey and Skomer: and it covers an area of 628 square kilometres and a stretch of a 240 kilometre ribbon. It is 200 metres wide at its narrowest point, extending to 16 kilometres at its widest point (Pembrokeshire Coast National Park Authority, 2003). It has 24,000 inhabitants which makes it the most densely populated national park in the UK. It has a 186 mile (299 km) coastline and its Coastal Path is one of 15 National Trails in England and Wales. The National Trail was designated under the 1949 National Parks and Access to the Countryside Act (Stockdale and Barker, 2009) and was officially opened in 1970, to allow the public to walk through the exceptional coastal landscape of Pembrokeshire

(Pembrokeshire Coast National Park Authority, 2003). The National Trail is 300 kilometres long and the park also boasts 224 kilometres of National Cycle Network.

According to the Park Management Plan (2003), the National Park includes seven Special Areas of Conservation, three Special Protection Areas, one Marine Nature Reserve, six National Nature Reserves, and 75 Sites of Special Scientific Interest: and 80% of its coastline is designated as SSSIs. It also includes 257 Scheduled Ancient Monuments, 1,156 listed buildings, 19 historic Parks and Gardens, 14 Conservation Areas and a number of Scheduled Ancient Monuments. The area also boasts over 40 Iron Age forts, Norman and medieval castles, and a chain of Napoleonic and later forts (National Trails, 2010). The National Park has greater diversity of geological and landform scenery than any other area of the same size in Britain. It is home to 50 Geological Conservation Review sites, that cover 40% of the Pembrokeshire coastline and at least 40 Second Tier Geological sites of national or regional importance, which account for an additional 30% of the coastline. The air quality meets the criteria of the UK National Air quality standards and 13 Park beaches have received the Blue Flag Award. It comprises at least 24 well-known sandy beaches and it attracts overseas as well as British tourists. There are 44 beaches in the Park and they all meet the mandatory bathing water quality standard, with 30 meeting the higher guideline water quality standard (Pembrokeshire Coast National Park Authority, 2004).

6.3 St David's Peninsula history

The area has a very long history, which dates back to the late Neolithic or New Stone Age period. The largest early Neolithic pottery collection in Wales, along with two unconfirmed hut circles, was uncovered at Clegyr Boia in Pembrokeshire, west of St David's and dates back to 3000BC (BBC Wales, Unknown, Pembrokeshire Virtual Museum, 2006). Castell Henllys is a Scheduled Ancient Monument and one of many prehistoric promontory forts in the National Park dating back to around 600BC. The site is now owned by the Pembrokeshire Coast National Park Authority and has been partially reconstructed (Castell Henllys Iron Age Fort, 2010, Harding et al., 1993, Mytum, 2004). There are associations with Stonehenge (Pembrokeshire Coast National Park Authority,

2003), as it is said that the Stonehenge bluestones originated from Pembrokeshire. The area also has strong connections with Celtic tradition and the legends of the Mabinogion, where Pembrokeshire is described as “Gwlad hud a lledrith” - the land of magic and enchantment (Pembrokeshire Coast National Park Authority, 2003). St David’s Peninsula and Ramsey Island are in the ICOMOS (International Council on Monuments and Sites), and Cadw and Countryside Council Wales’ register of Landscapes of Outstanding Historic Interest, as one of four such areas in Pembrokeshire Coast National Park (Pembrokeshire Coast National Park Authority, 2003). Additionally, Solva and St David’s are two of the 14 Conservation Areas of the National Park (Pembrokeshire Coast National Park Authority, 2003).

However, St David’s is mostly known as a place of pilgrimage: the city has been an important site of European pilgrimage since the seventh century AD: and it is said to have evolved because of the income that pilgrims brought into the area (St David's City Council, 2010). The area is of great religious significance for a number of reasons. St David was reputedly born on a cliff top and his birth place is marked by St Non’s Well. The eighteenth century chapel dedicated to St Non [who according to a legend is King Arthur’s niece] stands next to St Non’s Well. These places of pilgrimage are at close walking distance from St David’s Cathedral, the central point of pilgrimage in the area. St David founded a strict monastic order and was an influential clergyman in Wales in the “Age of Saints” (Bowen, 1956). The Cathedral was built on the site of St David’s sixth century monastery: building work on the Cathedral began in 1181. The Cathedral’s religious importance was such that in the twelfth century a ‘papal privilege’ granted that two pilgrimages to St David’s equalled one to Rome (BBC South West Wales, 2010). St David’s Cathedral is the holiest site in Wales and the only Cathedral in the UK to have a stall permanently held in reserve for the reigning monarch (BBC South West Wales, 2010). St David’s was granted City status by Queen Elizabeth II on 1 June 1995 because of the presence of the Cathedral, and is in the Guinness World Record book as the smallest city in Wales and the UK, with a population of 1588 in 1999 (St David's City Council, 2010). The bones of St David and St Justinian are kept in the Cathedral. St Justinian’s burial place was at the Chapel of St Justinian, which is now fenced off to the public as the land belongs to a private landowner. St Justinian had retreated to Ramsey Island to devote himself to God. Additionally, several

chapels in the area are dedicated to St Patrick who is said to have sailed from Wales to convert Ireland to Christianity (History Tourist, 2008).

Adjacent to the Cathedral is Bishop's Palace. The Palace was commissioned by Bishop Henry de Gower (1328-47). However, by the middle of the sixteenth century and especially after 1678, when St David's was rummaged by Parliamentary soldiers, the palace was beyond repair and stood derelict until the eighteenth century. In 1932 the Representative Body of the Church in Wales placed the ruined palace into the care of the state. Cadw, the Welsh Assembly Government's historic environment service started the renovation work 15 years ago and completed it in October 2009. The project was so successful that it is on the short list for one of six Grand Prix awards by Europa Nostra, the Pan-European Federation of Cultural Heritage (Williams, 2010).

The second biggest town in St David's Peninsula is Solva, which has its own seafaring history. During the Middle Ages, Solva was the most important trade centre in St Bride's Bay, as its natural harbour makes it one of the most sheltered ports between Fishguard and Milford Haven (Raggett, 2000). Solva had a number of fishing boats and 30 trading ships registered there in the nineteenth century (Raggett, 2000): it is still a working harbour with a small number of registered fishing boats still working there. Solva was also important for lime burning: of the original 12 lime kilns at Solva, seven remain.

6.4 Local community and economy

Farming was the main income generator in the area for the best part of the twentieth century (Turvey, 2007) and historically has shaped both the economy and the landscape (Pembrokeshire Coast National Park Authority, 2003). However, the decline in agriculture in the area has its roots in the nineteenth century. In 1906, Milford Haven was the sixth largest fishing port in Britain, but the fishing trade has declined since the 1950s (Turvey, 2007). The Milford Haven oil refinery provided jobs for the local population and by early 1990 the Haven was the largest mainland oil port in Britain, handling close to 33 million tonnes per annum. In February 1996, the grounding of the *Sea Empress* oil tanker resulted in the discharge of approximately 72,000 tonnes of oil into the seas around the

Pembrokeshire coast. The oil spill directly affected the local environment (Edwards and White, 1998) as well as the health of the local residents (Lyons et al., 1999). Natural factors and effective clean-up at sea and on land, as well as the loyalty of the repeat visitors (Edwards and White, 1998), were the main reasons the area financially survived the disaster.

According to the current management plan (Pembrokeshire Coast National Park Authority, 2003) the current employment rate is 61.4%, lower than the British average of 73.5%, as most jobs are low-paid and seasonal. Relative earnings are less compared to the UK as a whole and disposable income is smaller because of the high amount of income that has to be used for necessary goods and services, such as transportation, food, clothes and heating because of the remoteness of the area, faeces housing and restricted shopping. The average gross weekly earnings reach only 70% of the national figure and 21% of the population is receiving some kind of benefit, while the UK median is 12%. Furthermore, considering the stigma associated with benefit uptake in rural areas it is possible that this percentage might be bigger: consequently, the number of people entitled to benefits might be under-represented. The closure of the St David's Assemblies factory in 2007 affected more than 70 local families and met very strong local opposition (Crabb, 2007).

Additionally, geographical access to primary and secondary healthcare services is limited in rural areas. However, there have been discussions about downgrading or closing Withybush Hospital in Haverfordwest: this would mean a long, difficult journey to Glangwili or Morriston for those requiring medical treatment. Over 21,000 people in Pembrokeshire live an hour or more away from Carmarthen, where the next closest hospital is (Burns, 2007). Narrowing the focus down, St David's Peninsula received more than 500,000 visitors in 2006 (Alwyn, 2006), while no more than 2,650 people actually live there. According to the Office of National Statistics, there are 1,797 people living in St. David's and the Cathedral Close Community (Office of National Statistics, 2003) and 809 living in Solva (Office of National Statistics, 2004). This means that there is a ratio of 192 tourists to each local resident. Local income is largely dependent on the tourism industry. Informal interviews with residents suggest that more than 54% of the houses in St David's are holiday homes. This creates problems such as inflated house prices, which

results in the inability of local people to buy properties in the area. It is clear from the data given above that tourism is a very important source of income for the local economy. It is also evident that there is plenty of potential for conflicts to arise between locals and tourists, and between local people and the planning authorities.

6.5 Tourists

Pembrokeshire County Council, South West Wales Tourism Partnership and Pembrokeshire Coast National Park commissioned QA Research to perform the Visitor Survey 2007/2008. This is a Pembrokeshire-wide survey rather one that is limited to the study area: however this is the only one available that includes the National Park area and consequently St David's Peninsula. According to the survey, 74% were staying visitors and 26% were day visitors. Visitors were more likely to stay in the area overnight during the spring and summer months (Trembath and Tennstedt, 2008). The proportion of repeat visitors is very high: 82% of the visitors are a loyal base. Females accounted for 53% of the visitors, while male visitors account for 47%. A broad range of age groups were attracted to Pembrokeshire: 13% of visitors were aged 16 to 34 years, 35% were aged 35 to 54 years and 27% were aged 55 years plus. Trembath and Tennstedt (2008) used the National Readership Survey of demographic classification to identify the visitors' social class. According to the Visitor Survey, 30% of the visitors were upper middle class and middle class, 33% lower middle class, 20% skilled working class and 17% working class and pensioners (Trembath and Tennstedt, 2008). The vast majority of visitors (90%) travel to the area by car or other motorised vehicle, and only 6% use public transport. The most popular activity is walking (65%). The vast majority of visitors (79%) said they were very likely to visit Pembrokeshire in the next 12 months and 91% stated they were very likely to visit in the next one to five years.

6.6 Aims and objectives

This research project has two aims of equal importance. The aims and main objectives are:

Aim 1: To provide a critique of VEP, to examine the appropriateness of its use in assisting tourism planning, and to identify best practice.

1. To develop a typology of methods through an investigation of the previous uses of VEP techniques across the range of social science disciplines.
2. To demonstrate the value added that VEP can bring to research through a critique of the merits of different approaches to VEP.
3. To safeguard the quality of VEP research by developing best practice guidelines for its use.

Aim 2: To demonstrate the potential of VEP in tourism planning research through its application in a tourism planning context in St David's Peninsula, in Pembrokeshire Coast National Park.

4. To demonstrate the potential of VEP to provide detailed and informative datasets and contribute to future research by using VEP in a specific case study context.
5. To establish similarities and differences in the viewpoints and experiences of the locals and tourists by assessing the area's built and natural environment and their use.
6. To demonstrate the potential of VEP for conflict resolution by identifying problems and issues in the case study area as experienced by locals and tourists.

The first aim and objectives were addressed in Chapters 2, 3 and 4 of this thesis as they are largely bibliographical. The second aim and the subsequent objectives will be addressed from Chapter 7 onwards, where the case study will be presented from the conceptual stage to its implementation and the analysis of the results.

6.7 Conclusion

A number of tourism planning and land-use planning issues arise in the area under discussion, mainly because of the large volume of tourists who visit during a three-month high season (June to August) (Pembrokeshire Coast National Park Authority, 2003). A number of issues such as traffic volume, lack of parking, insufficient jobs, unsightly

development, and reliance on cars to visit the Coast Path are some of the issues highlighted in the Visitor Survey and the State of the Park review. The main reason behind the choice to use Participant-generated Image research was that this would be the ideal way to *see* exactly what people mean by what they *say* in paper-based surveys and interviews: in other words, to *see* how many is too many tourists and cars and *see* the extent to which something can be described as amazing, magnificent or merely okay. It was therefore considered imperative to give a brief description of the park and the study area, its inhabitants and visitors: and following that to present the aims and objectives of this research project.

7 METHODOLOGY AND RESEARCH DESIGN

7.1 Introduction

This chapter aims to present the process followed from the conceptualisation of the research project to the data collection process. It is divided in six parts; in the first part developments in social science research is discussed. This focused on tourism, in an effort to justify the research philosophy that underpins this project. Following that, the research approach and sampling techniques are discussed and the demography of the sample group is presented in conjunction with the Visitor Survey (Trembath and Tennstedt, 2008) and the updated 2001 Census data (Office of National Statistics, 2003, Office of National Statistics, 2004). The data collection process is then discussed, along with presentation of the complementary methods chosen to accompany the photographs captured by the research participants, the pilot study process and, finally, the main study. An overview of the data analysis methods will be given here; this will be discussed further in the analysis chapters.

7.2 Research philosophy and approach

According to Levent and Paraskevas (2008) and Esterby-Smith et al. (1999), it is imperative for any research to adhere to a specific research philosophy. This dictates the overall research strategy: it *a priori* accepts or rejects certain research methods, or encourages the use of some and objects to the use of others. It also shapes the data interpretation process and naturally is the basis of decisions that will determine the originality of the research project .

The battle between research philosophies is not a new phenomenon in tourism research and certainly not a new phenomenon in social science research. A number of researchers including Ambroise (2010), Botterill (2001), Feighery (2006), Goodson and Phillimore (2004), Pernecky (2010) and Tribe (2001), have referred to the different and conflicting philosophies in tourism research. In an effort to simplify the situation, Levent and

Paraskevas (2008) suggested that there are two main research philosophies, positivism and phenomenology. However, such a simplification does not do justice to the fact that this is one of the most common and significant debates in social science, as well as in the natural sciences.

In their analysis about how thinking about research in the social sciences has evolved, Goodson and Phillimore (2004) elaborate on Denzin and Lincoln's (2005) five moments of qualitative research framework about the introduction of key theories and themes which have achieved growing recognition in social research practice and discourse. This is not a strict progression: rather, they overlap, whereby the existence of the next moment does not imply the disappearance of the previous ones. In this framework, according to the first, 'Traditional', phase, studies were still based on a "predetermined research agenda" (Goodson and Phillimore, 2004, p7) and aimed to be generalisable and to discover the truth. In the second moment, called the "Modernist phase", which lasted up to the 1970s, most studies continued to seek a singular version of reality, but the notion that multiple realities could be recorded using appropriate techniques started to emerge. Following that, came the "Blurred genres" moment, which lasted until the mid-1980s. This introduced more innovative approaches and acknowledged the multidisciplinary nature of tourism research (Botterill, 2001). The fourth moment was entitled "Crisis in representation". Here, the role of the researcher as somebody who knows everything is challenged, and the personal biography of the researcher was added to the equation. Dyer et al. (2003) even suggested that the interpretation of the research should not be done by the researcher: the readers should be allowed to reach their own conclusions. The fifth and current moment rejects the authority of the researcher and accepts the researcher's voice as one of many. Objective interpretation of data and the pursuit of a singular reality are considered redundant (Flick, 1998)

This is a mechanistic approach. It seems to be implying that unless a project is classified as "fifth moment", research is not "cutting edge" and up to date with new developments. It is also argued that it disregards that technique and philosophy do not have to be linked to each other. This is the case of this research project: it tests the development and application of a tool to assist tourism planning, which is in effect a way to collect subjective

“views” of an area, based on people’s aesthetic and intrinsic values. This by no means instantly translates into a “fifth moment” research project. It does collect people’s subjective points of view, and can be very artistic at times: it can give researchers and practitioners an understanding of people’s feelings and views about a place using photographs, and quantify people’s descriptions, but at no point should it be regarded as a tool to reach the truth, or the solution to a tourism planning problem. It can only advise the planning authorities about the multitude of different ways an issue is received by the area user groups.

This is an attempt to explore tourism from the perspective of the local community and the tourists, which answers an issue raised by a number of researchers including Wearing and Wearing (2001): that tourism research can be used to emphasise the researcher’s authority and preserve, rather than wreck, stereotypes. However, this research is not attempting to do this from Wearing and Wearing’s (2001) post-colonial perspective, as generalisable facts and findings and research that aim to discover the truth are not going to be dismissed as erroneous. Emphasising the researcher’s authority and disregarding the voices the researcher should be concerned about is bad research, and bad research can be conducted regardless of research philosophy or paradigm.

In terms of the research approach, which is linked with the research philosophy (Levent and Paraskevas, 2008), the aims and objectives of the research project were used as the starting point. The first aim is to examine the appropriateness of the use of VEP methods in assisting tourism planning, and if it is appropriate, how this method can be applied. In order to achieve this aim, a plan was put in place before the data collection process started. This means that the researcher had a clear idea of the hypothesis to be tested. It can, therefore, be argued that a deductive approach was used (Levent and Paraskevas, 2008). Logically, to develop or work on an existing methodology for a particular use requires reviewing published case studies that used similar techniques and as a result of this, a new way of applying the technique was designed and employed.

The second aim of this study is to establish whether such methods can inform policy using St David’s Peninsula as the case study area. This, again, required a research design,

hypotheses and pilot studies, to test the proposed methodology. Consequently, this part of the project has also used a deductive approach (Goodson and Phillimore, 2004).

It can, therefore, be argued that a choice of philosophy might not apply in some cases, when a tool is developed. A questionnaire, for example, which is a long established research tool, cannot be used in the pure science arena, but can be used for both quantitative and qualitative research in *social* science. It is a tool which can be used according to the research paradigm and the research questions. Consequently, VEP can be used from an “induction” perspective, as it can be used with a basic research design, where from “sensible singulars, perceived by the senses, one arrives at universal concepts and principles held by the intellect” (Johnson-Laird and Bryne 1991, p. 16). Surely, an approach such as Sandelowski’s (1994, p. 312) who suggests that “qualitative studies are located at the meeting place between art and science” cannot be adopted in tourism planning. This research study, therefore, is of an exploratory nature. It explores the ‘fitness’ of VEP to assist in tourism planning decisions and more widely, it aims to offer insights into the application and analysis of visual research techniques.

7.3 Sampling

Examining the appropriateness of the use of VEP methods in assisting tourism planning and aiming to establish whether such methods can inform policy using St David’s Peninsula as the case study area, does not require a large sample, as the aim is not to generalise the findings but to determine whether the technique can work and suggest future research. This kind of research that requires more commitment from participants and researchers compared to other techniques (Bijoux and Myers, 2006, Haywood, 1990) also generates more data compared to other techniques. It is difficult to classify VEP as a qualitative or quantitative technique. It all depends on the sample size, the analysis, the aims and objectives. Qualitative and quantitative data have been used in this project. Additionally, attempts were made to quantify qualitative data in order to use triangulation, so that the usefulness of the technique could be tested and strengthened by showing that different data sources produce similar results (Decrop, 1999). According to the above, the

issue posed by Morse (1991, p.127) has been avoided: he suggests that small, random sample “violates the qualitative principle that requires an adequate sample size in order to ensure representativeness and the qualitative principle of appropriateness that requires purposeful sampling and a “good” informant (i.e. one who is articulate, reflective and willing to share with the interviewer)”. The sample for this study was systematic random sampling, which met the requirements of the quantitative analysis. However, the qualitative analysis was not compromised as an in depth analysis of the dataset was performed.

7.3.1 Systematic random sampling

Recruiting visitors to participate in the research took place in August 2006. It took place every day of the week, including the August bank holiday weekend, starting from eight in the morning and finishing at eight o’clock at night. Following a discussion with the Tourist Information Centre staff (Alwyn, 2006), six sites that were popular with tourists were suggested. The first was the Tourist Information Centre (TIC) , which is adjacent to the car park: even if people did not visit the TIC, they were very likely to leave their car in the car park as it is the biggest one in St David’s (in addition to the fact that 91% of tourists arrive in St David’s by car) (Trembath and Tennstedt, 2008). The second site was Caerfai Bay, a beautiful bay with a small car park at the top, adjacent to two caravan parks. The third was Whitesands Bay, one of the most popular and beautiful beaches in Pembrokeshire, which attracts families as well as surfers (Pembrokeshire Coast National Park Authority, 2004). The fourth was Porthgain harbour, a beautiful little harbour with Lime Kilns, a very small café, which is a spot many people stop at during their Coastal Path walk from Caerfai to Whitesands. The next site was St Justinian’s, where the lifeboat station and St Justinian’s chapel are to be found, which faces Ramsay Island and is the small quay the pleasure boats depart for the tour around Ramsay. Finally, Solva Harbour was suggested as a relatively quiet harbour, and a place of natural beauty with an adjacent, free-of-charge car park, in addition to a working harbour, with pleasure and fishing boats, a picnic area for families and a slipway for crabbing.

Twenty five people agreed to participate in the survey from each site. Systematic random sampling was used to identify the participants. Despite the fact that the aim was not necessarily to manage a representative sample, knowing that the Pembrokeshire visitor survey was carried out at the same time, it was considered reasonable to check the demography of the VEP research against that of the Tourist Visitor Survey at a later stage. Also, it was considered imperative to conduct the research with scientific rigour in order to achieve the best possible participant diversity. In each site, the first participant was chosen randomly, and following that, every fifth person passing in front of the researcher was approached and asked to participate. It was quite often that the fifth person was contained within a group of passers-by. In that case, the group was approached, the aim of the project and what it entailed was explained, and upon the agreement of the group to put somebody forward, the person whose future birthday was closest to the survey date was the next participant. The advantage of this method is that it is relatively simple and no other specific frame is needed (Levent and Paraskevas, 2008). Following the data classification and input, it emerged that according to the visitor survey the sample collected was very similar according to age groups and gender, except for people aged 65 or above. A second round of sampling took place in September the following year, when, according to the visitor survey, people aged 65 or above tend to visit St David's. Taking into account the return rate and the number of people required from that age group, 10 more people were recruited.

A similar sampling principle was followed for the sample of the local community. Sampling took place in September 2007, as this was the period when the tourist flow starts to ease and the local community will still remember their experiences from a busy August fairly well. The electoral roll was used to randomly select every fifth person. However, the limitation of this method was that some people had opted out of the published version of the electoral roll. It was therefore considered a better approach to ask for the help of the company '121 Business Lists', who specialise in mailing lists for business advertising. The mailing lists from 121 included more local community members when compared to the electoral roll. When the list was received for the study area, one out of every five people was picked from the list, and the researcher went to their houses and asked them to participate. At the end of September, the researcher had to return to the University for

further research training, so the sampling had to stop. To this point, two thirds of the participants had been approached (100 participants). The rest of the participants were recruited through the post. A letter was sent to one in every five residents from the 121 Business List. Despite some initial letters asking how their address had been obtained, the return rate of the participants recruited in this phase was the same as the rest of the sample. However, it proved more difficult and time consuming to recruit local residents. Subsequently, communication with those who declined to participate suggested that there are two possible explanations for this; the first is that some people felt that they had been over-researched, and the second is that this research was not a questionnaire that could be completed on the spot: rather it carried the responsibility of the camera and agreeing to participate would require more commitment from those concerned. Interestingly, even though some participants used these reasons for not wanting to participate, they nonetheless felt obliged to, in the event that the research outcome may improve the situation in their area.

In the research philosophy discussion it was briefly mentioned that today post-modern theories influence tourism research, with the researcher's voice regarded as one of many, and suggestions that it is not possible to replace one researcher with another and expect the same results (Goodson and Phillimore, 2004). Shick (2002) suggests that the biography of the researchers is not referred to in methodology chapters. Yet such factors can significantly influence knowledge production (Feighery, 2006). In this research process it is considered that the personality of the researcher was not what influenced the response rate. The driving factor for the high response rate was the originality of the research and the challenge and curiosity of participating in a research project that uses photographs taken by the participants themselves, according to their feedback.

7.3.2 Area demographics

According to the 2007/2008 final report of the visitor survey, which consists of data collected in 2006 and 2007 (Trembath and Tennstedt, 2008), tourists demographics are as follows (Table 20):

Table 19: Visitor Survey tourists' demographics

	Jan – Mar (Sample: 255)	Apr – Jun (Sample: 478)	Jul – Sep (Sample: 481)	Oct – Dec (Sample: 232)	TOTAL (Sample: 1,146)
Age Group					
18-24	9.0%	3.8%	2.7%	3.9%	4.4%
25-34	20.4%	11.5%	15.6%	7.8%	13.8%
35-44	22.4%	22.4%	19.8%	16.8%	20.6%
45-54	20.4%	18.6%	21.0%	26.3%	21.0%
55-64	16.1%	20.1%	22.9%	22.8%	20.7%
65+	11.8%	23.4%	18.1%	22.4%	19.4%
Social Group					
AB	34.5%	28.2%	27.4%	34.9%	30.2%
C1	41.6%	35.6%	36.2%	34.9%	36.7%
C2	15.7%	28.5%	27.2%	25.4%	25.3%
DE	7.8%	7.7%	8.5%	4.7%	7.5%
Refused	0.4%	0.0%	0.7%	0.1%	0.3%
Gender					
Male	49.8%	53.6%	46.8%	Not given	50.8%
Female	50.2%	46.4%	53.2%	Not given	49.2%

According to the Office of National Statistics, there were 1,797 people living in St. David's and the Cathedral Close Community (Office of National Statistics, 2003) and 809 living in Solva (Office of National Statistics, 2004), bringing the population to a total of 2,606 people. More women live in the area (1371), compared to 1,235 men, as indicated in Tables 21 and 22 (Office of National Statistics; 2003, 2004).

Table 20: St David's community demographics

Parish Headcounts		St. David's and the Cathedral Close Community
All people	Persons	1797
All males	Persons	849
All females	Persons	948
All households	Households	809

Table 21: Solva community demographics

Parish Headcounts		Solva Community
All people	Persons	809
All males	Persons	386
All females	Persons	423
All households	Households	361

These demographics are going to be compared with the study dataset demographics to establish the representativeness of the sample.

7.4 Data collection methods

As discussed in Chapter 3, a number of methods have been used to complement the photographs captured by the research participants. No trends emerged from the use of these methods, apart from the techniques that *a priori* include an additional technique in the way they have been traditionally applied: for example, in photovoice, (Laughlin et al., 2004, Wang et al., 2004b). On the same note, no trends were identified when complementary methods were associated with scientific fields. Complementary techniques mostly used have been: written text during the photo taking, interview after the photo taking and focus groups.

7.4.1 Methods used: the VEP triad

In this project, the aim was for participants to link their photographs to their thoughts and emotions and to offer planning suggestions. A number of researchers in the VEP literature suggested that in order to ensure that they convey the meaning participants want them to convey, photographs should be accompanied by complementary techniques (Gemini and Boccia-Artieri, 2007, OPENspace, 2005). Additionally, it was considered important to collect as much information from the participants as possible and compare it with that collected from multiple sources, thereby achieving what Decrop (1999) suggested as

triangulation of data sources and methods. Triangulation is used to strengthen the study findings (Patton, 1990) by showing that several independent sources converge on them; or at least do not oppose them (Decrop, 1999). This was the reasoning behind the 'VEP triad'; participants were asked to fill in a questionnaire with demographic data and some general questions from the researcher and then were given cameras and photo-diaries to note the key features of their photographs and explain why they decided to capture each one. The questionnaires and diaries are presented in Attachments 14.1 to 14.8.

Rather than interviewing the participants after the photo-taking process as Jultla (2000) and Markwell (1997) did, participants were given diaries to make notes while they were capturing their experiences on film (Garrod, 2008a). According to Bolger et al. (2003, p. 580), diaries are used to record ongoing experiences, and provide the opportunity to examine "social, psychological and physiological processes within everyday situations". Concurrently, diaries acknowledge the significance of the contexts within which these processes develop (Bolger et al., 2003). Reis et al. (1994) recognise two benefits which led to the decision to utilise diaries as a complementary method to photography. The first, and fundamental, benefit of diary research is that it permits the examination of accounted events and experiences in their ordinary context, allowing the researcher to collect more information than would be possible with more traditional methods. Secondly, the time that passes between the lived experience and its account is minimal, so the possibility of retrospection is reduced (Reis et al., 1994).

VEP is used to collect data on people's lived experiences at that moment in time, not retrospectively, which is one of the reasons that digital cameras were not used. Hanieh and Walker (2007) suggested that digital photography would have been easier and quicker, and that the quality of the photographs would be better. However, they also suggested that participants would be able to delete or manipulate the photographs. It was thus decided that for this study, disposable cameras would be used as they would facilitate the capturing of photographs that would represent participants' lived experiences without the chance of them being manipulated.

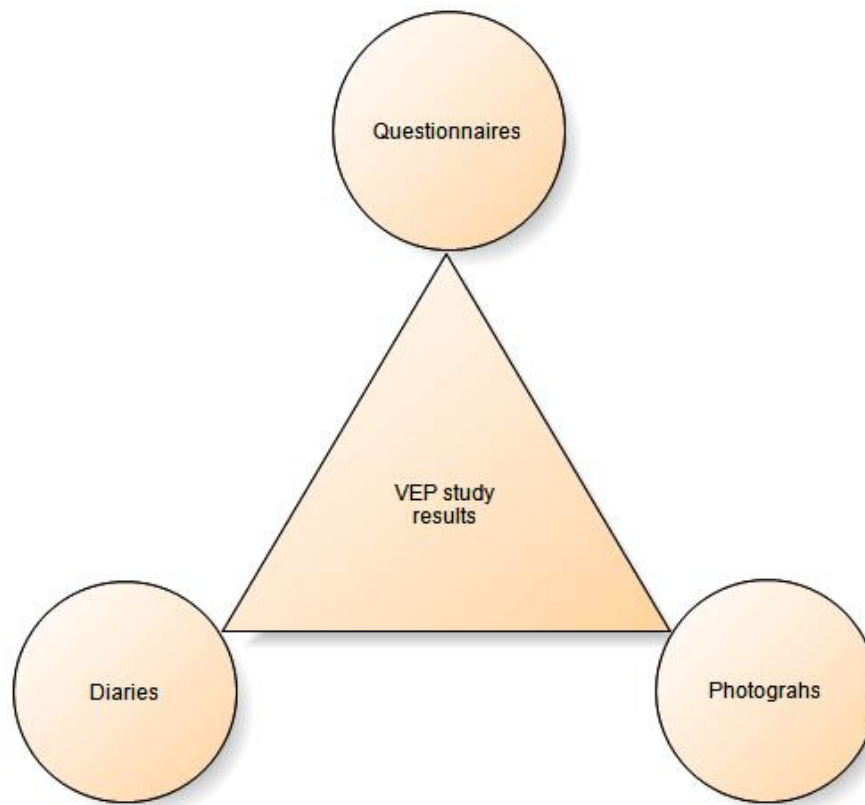


Figure 11: The VEP triad

Lastly, the third component of the triad was a questionnaire survey method, where demographic data was collected and open-ended questions were asked. A relationship between the researcher and the participants had to be established as this method requires commitment from both sides (Bijoux and Myers, 2006, Haywood, 1990), and that had to be established in the survey process. Following the first pilot study, it was realised that the survey lasted 20 minutes on average. This meant that not all the questions that could be asked would fit in the survey questionnaire. Consequently, and having taken into account the fact that a visitor survey was performed at the same time, and that socioeconomic data for the local population existed from the census, only basic demographics such as gender and age group were collected, as this would be the easiest way to compare the two datasets. Additionally, there were a limited number of questions the participants could be asked, as

they wanted to get on with their plans and thus, retaining their interest in and commitment to the project was important.

7.4.2 Methods not used

There are a number of other methods that could be used according to the literature. It was important in this study to capture the participants' thoughts and feelings while they lived the experience, as this was considered to be helpful in planning (Cherem and Driver, 1983), so it was decided that conducting photo-elicitation interviews could be a risk, as participants could have forgotten why they decided to capture each photograph (Castleden et al., 2008, Thompson et al., 2008). Furthermore, focus groups were not the preferred option, as some people like to be more exposed than others: subsequently, a focus group may re-introduce a degree of inequality, as participants' individual voices can be lost in the multitude (Clark-Ibanez, 2004). Planning can be a very sensitive issue, particularly in a community setting, and something that participants might not want to discuss in public, so using a focus group would defy the objective and create bias where the aim is to minimise researcher bias (Jurkowski, 2008).

7.4.3 Questions asked in the questionnaire phase

The questionnaire survey was conducted for three main reasons: first, to explain the aims, objectives and details of the survey and ask people to participate; and second, it was considered appropriate to ask participants directly what they thought and felt about the area. Based on the tourism planning literature, participants were asked questions that would give VEP the opportunity to be used as a tourism planning tool: they were asked to help with the assessment of the assets of the area and to comment on potential change, positive or negative (Lavery, 2002, Hall, 2008). The participants' perceptions about their participation in the planning process were also considered important for this study and was therefore one of the questions asked. They were asked the same questions they were invited to answer with their photographs and diaries, again for the purposes of triangulation (Decrop, 1999).

Table 22: Questions asked in the questionnaire survey

Tourists	Locals
Question 1: Are you a tourist or a day visitor? Question 2: Can you please give the first three words that come to mind when you think of Pembrokeshire Coast National Park? Question 3: What is your main activity during your visit? Question 4: Why have you chosen to visit Pembrokeshire Coast National Park? Question 5: What is it that you value most about this area? Question 6: Have you visited Pembrokeshire Coast National Park before? Question 7: Is this the start, middle or end of your holiday? Question 8: Are you going to spend all your holiday in the St David's area? Question 9: Are there any aspects of the area you don't like? Question 10: How might the area be improved? Question 12: Our National Parks are under a lot of pressure. Are there any aspects of the area that if changed would mean that you would not choose to come back to Pembrokeshire Coast National Park for your holidays?	Question 1: Do you live here all year round or do you own a holiday home? Question 2: How long have you lived in St David's Peninsula? Question 2: Can you please give the first three words that come to mind when you think of Pembrokeshire Coast National Park? Question 4: Is your job related to the tourism industry in any way? Question 5: What do you think is special about Pembrokeshire Coast National Park? Question 6: What is it that you value most about this area? Question 7: Do you think that your views as a resident are taken into account about the area planning? Question 8: Are there any aspects of the area you don't like? Question 9: How might the area be improved? Question 10: Given the chance would you ever think of moving elsewhere in this country? Question 11: Our National Parks are under a lot of pressure. Are there any aspects of the area that if changed would mean you wouldn't enjoy living in Pembrokeshire Coast National Park any more?

The third reason was that, according to the literature on VEP research, one of the drawbacks of this type of research is the commitment it requires from the participants (Goodhart et al., 2006, Johnsen et al., 2008, Markwell, 2000a). It was evident from the

pilot studies that a bond between participants and researcher was established in the survey phase: people discussed the importance of planning and most of them, according to the return rate, appreciated the importance of the research study, was a good indicator that they would be more likely to complete the task.

To begin with, the researcher sought the agreement of all potential participants to take part in the study, providing an extensive and detailed explanation of the process involved, and copies of the participants' photographs were offered as an incentive. There were a total of 12 questions in the questionnaires, excluding questions about participants' contact details, and demographic information (Table 23).

7.4.4 Questions asked in diary and photographs phase

Similarly, in this phase, participants were asked questions that would contribute to the tourism planning process as described in Lavery (2002) and Hall (2008). They were invited to assess the natural and man-made assets of the area and to comment on potential change, positive or negative (Hall, 2008, Lavery, 2002).

In the diary component of the 'VEP triad', participants were encouraged to comment on the methodology, as their feedback was considered important for the methodological side of the study. They were therefore asked if they had taken all the photographs they wanted and they were invited to name places or experiences they could not photograph. A copy of the diaries can be seen in Appendix 14.6. Following these questions, the main body of the diary comprised 12 pages, one for each photograph requested and a few blank pages for notes. Participants were invited to name the key feature of the photo, explain if it has a positive or negative connotation and the reason(s) they had taken it. They were asked to rate its impact on their experience and then they were asked to either identify what would spoil their experience of the area, if it was a positive image, or what would enhance it, if the image had a negative connotation.

7.4.5 Interviews with planners

Two interviews were held in order to help the researcher understand the planning and the way tourism planning is implemented in Pembrokeshire Coast National Park. The interviewees were Mark Horner, Tourism Development Officer in Pembrokeshire County Council, Sarah Middleton, Planning Development officer in Pembrokeshire Coast National Park and Phil Lees, Park Ranger in Pembrokeshire Coast National Park. Phil Lees and Sarah Middleton were interviewed simultaneously. The researcher sought their views on the usefulness of VEP in planning and tourism planning. These interviews are not going to be used in the data analysis process but only as additional data to clarify the planning and tourism planning mechanisms in the study area. Additionally, the views expressed on VEP are going to be presented in the discussion chapter, as evidence to support the use of VEP in a tourism planning context. The questions asked are presented in Appendix 14.13

7.5 Study implementation

Three pilot surveys were undertaken in July and August 2006. Each involved a random sample of 10 tourists. Every fifth person passing in front of the researcher outside the Tourist Information Centre in St David's was asked to participate. If the fifth person was a member of a group, the member of the group whose birthday was next was asked to participate. Depending on the person's answer, the researcher either noted their approximate age and other obvious details, such as if the person was a member of a group, if they were on holidays with friends or family, or if the person declined to participate. Participants were then informed about the purpose of the study and asked to fill in a short open-ended questionnaire. After the interview, the researcher provided the participants with a research pack that comprised a bag, a folder, a coded camera (the first photograph was taken by the researcher to show the camera code number, which also corresponded with the diaries and the questionnaires (Photograph 1), a coded photo-diary, an explanatory letter and a pen. The participants were asked to capture 12 photographs, based on data from previous studies, and they were also informed that they could use up the rest of the film as an incentive, as a copy of all the photographs would be sent to the participants. Except for

Garrod's study (2008a), very few studies included information about the number of photos the participants were required to capture.

The purpose of the first pilot study was to determine whether the material put together was user- friendly, and whether it worked well in the field. The researcher asked the participants to return the camera and photo-diary to the Tourist Information Centre staff. Eight out of the 10 participants returned their camera and photo-diary.

The photo-diary, questionnaire and information letter to participants were adapted very slightly after observations made by the researcher, and the participants' views were taken into account; this modified questionnaire was then used in the second pilot study, where the same sampling technique was used. The changes were mainly in the questionnaire, where questions were made simpler. Also, a model photo and answer was added in the diary, in English and Welsh. The participants were asked again to return the camera and photo-diary to the Tourist Information Centre staff.



Photograph 1: Camera-coding process

The changes to the questionnaires, diaries and letters from the first pilot study were considered successful: the feedback received from participants and the questions asked indicated that they were not trying to understand the task but ensure they do it well. The only change to the third pilot survey was the return method: a stamped and addressed envelope was included in the participants' research packs. Five out of 10 participants returned their cameras and diaries within two weeks of the day the pack was given to them, and two more participants replied within six weeks. For the main study it was therefore decided that the researchers would be asked to return the cameras and diaries in drop-in boxes: If they found that difficult, they would have to send their cameras and diaries back at their own expense. The cost of each research pack, including stamped and addressed envelopes that were used in some cases, was approximately £7.

The time spent in the survey process was approximately 24 minutes with each tourist and 30 minutes with every local. The survey questionnaires and samples of the diaries for tourists and locals used in the main study can be found in Appendices 14.1-14.10.

7.6 Ethical considerations

Approval from the Institute of Rural Sciences Ethics Committee needed to be obtained for every research project that included primary research at the University of Wales, Aberystwyth. An application to the committee was therefore submitted, that included a brief description of the proposed research and potential ethical issues it could entail. As this project started in early 2006, there was little consistent ethical guidance for researchers involved in visual sociology research (Tolich, 2010), as the statement of ethical practice from the British Sociological Association Visual Sociology Group (2006) was published later in the year (Wiles et al., 2008). As a result, a common sense approach was used to address the ethical issues of this research project. This was based on reviewing the literature, considering the Data Protection Act (1998) and the statement of ethical practice of the British Sociological Association (2002).

Three main issues were identified and addressed during the planning stages. These were copyright issues (Wiles et al., 2008), ensuring the participants' anonymity (Johnsen et al.,

2008) and child safety (British Sociological Association, 2006). As the photographs needed to be analysed and therefore kept at the University, the consent of the participants was sought. They were therefore asked to agree for the photos to be copyrighted to the University of Wales, Aberystwyth. Although they were not given consent forms to sign as suggested in the literature (Wang and Burris, 1997, Wiles et al., 2008), they were given a research pack that included a letter that explained the research processes in detail and they were asked to hand over the copyright of the photographs to the University. It was therefore assumed that if cameras and diaries were returned, participants were giving their consent.

Participants were asked to participate under the condition of anonymity. However, according to Johnsen et al. (2008), participant anonymity can be jeopardised in many ways in VEP research. Places as well as people might be identified by people familiar with the area and fellow community members, photographs might reveal that people were in certain places in certain times, and might also depict people involved in illegal activities, an argument also supported by Hubbard (1994). In this VEP project, where participants were invited to show their likes dislikes capturing photographs of their community, maintaining participant anonymity was of paramount importance. The contrary could result in negative implications for them, as members of the community. This was ensured by photographs, diaries and questionnaires being kept in separate locations. Furthermore, in the letter included in the research pack, it was clearly indicated that the photographs would only be kept for three years after the end of the project, when the researcher was bound with the obligation to destroy them.

Ethical issues that involved children participation either as participants or as subjects of photographs captures were tackled in two ways. Firstly, it was suggested by the Ethics Committee that only participants over the age of 16 should be allowed to participate. Additionally, it was clarified in the accompanying letter that photographs including children who could be identified would only be used in the analysis stage. If it was considered necessary for photographs with children to be made public, parental consent would be sought. This did not prove to be necessary, as due to the plethora of photographs collected, alternative images could be used in most cases. The only cases photographs with children were made public, were when it was impossible to recognise the child-subject of the photograph. Photographs where children's presence was incidental were only

photographs depicting crowds of visitors, where it was impossible to distinguish members of the crowd.

During the analysis and the dissemination of the results, the British Sociological Association Visual Sociology Group (2006) ethical practice statement had been published and was consulted. The ethical considerations noted in the planning process were re-evaluated under this new light and were regarded as satisfactory.

7.7 Data processing and analysis

7.7.1 Quantitative analysis: Methods

As Darlington et al. (1973) suggest, for any particular set of data, there are numerous hypotheses that can be tested about the relations between two sets of variables, and different statistical techniques are used to investigate different hypotheses. In the case of the qualitative dataset, which comprised coded components of a randomly selected sample of 500 photographs, which is one third of the whole dataset, a statistical method needed to be identified to study the relations between two sets of variables, with each set containing more than one variable. One of the objectives of the statistical analysis was to minimise the number of variables needed to explain the relationship between the sets of variables (Darlington et al., 1973), in order to reduce the coding to a manageable amount. Additionally, the method chosen to interpret the dataset should be able to ordinate and describe multivariate observations (Albrecht, 1980).

A number of authors (Albrecht, 1980, Campbell, 1980, Harris, 1985) advocate that using multivariate analysis can put emphasis on generating rather than testing hypotheses. In this case, where the hypotheses have already been generated, a multivariate analysis method needed to be used, that would build on the *a priori* knowledge of the hypotheses (Johnson et al., 2007). Additionally, the second objective was to identify a method that would facilitate the graphical representation of the interrelationships between the sets of variables. Rao (2005, 1948) introduced the concept of canonical coordinates. This theory suggested that both the objectives set for the multivariate analysis of the dataset could be achieved: high-dimensional data can be reduced in order to be graphically represented. A

decision was therefore made to consider Canonical Variate Analysis (CVA) for the data analysis.

Canonical Variate Analysis is the only technique that handles data in which either set X or Y can include one or more variables and the variables in either set may be continuous, categorical, or mixed (Darlington et al., 1973). This means that it is appropriate for the type of data collected. In addition, according to the literature, CVA has been extensively used in the past (predominately in biology) to compare differences between multivariate populations (two or several) with regard to individual variations between the populations (Albrecht, 1980, Causton, 2008). In cases where more than two populations are involved, CVA is used to most effectively summarise the overall differences among the populations, and to maximise the probability of “suitably assigning an unknown to one of many populations” (Albrecht, 1980). Similarly, CVA had been used in psychology (Brown et al., 1980) and in a tourism context (Tran and Ralston, 2006). Tran and Ralston (2006) used CVA in their research on subconscious tourist motives in order to relate their three motive variables to the four preference variables simultaneously. Other researchers in a number of disciplines suggest that CVA is optimal in terms of maximising a correlation statistic between two sets of variables (Bussell et al., 2008, Chatfield and Collins, 1980, Darlington et al., 1973, Russell et al., 2000,).

A number of researchers also argue that CVA is useful for data visualisation, in order for interrelationships to be evaluated (Johnson et al., 2007) and the basic structure of complex datasets to be revealed (Albrecht, 1980). CVA allows the projection of clusters in two or three dimensions (Hammer and Harper, 2006). Albrecht (1980) explains how CVA helps visualise the dataset on a plot. He regards CVA as a succession of rotational and rescaling transformations of the original variables which protect the integrity of the data while allowing the researcher to interpret them (Albrecht, 1980). He further suggests that, by using CVA, an effect is created as if the

“coordinate system defined by the original descriptor variables is suspended in air such that the investigator can walk around it until the most favorable vantage point is located for viewing the differences among the populations. Canonical Variate Analysis simply

defines the most favorable vantage point as being related to the greatest statistical separation among the populations” (Albrecht, 1980)

It is, however, suggested that whether the analysis will be able to lead to meaningful interpretations or not depends on the specifics of the problem, the purpose of the study and the knowledge, background and expertise of the researcher (Albrecht, 1980).

Finally, in Brown et al. (1980) (psychology) and Tran and Ralston (2006) (tourism), CVA was used, amongst others, because the researchers had *a priori* knowledge of the dataset. Both studies worked on expectancies based on interview data, which helped the researchers construct a set of hypotheses. This is also supported by other non-social science researchers, who suggest that the optimal use of CVA suggests prior knowledge of the data (Alsberg et al., 1998, Johnson et al., 2007). In the case of the dataset for this project, during the conceptualisation phase of the study, hypotheses emerged based on the tourism planning theory as well as from the survey with the participants. As a result of these reasons, CVA was considered the best data analysis technique for the photographs.

There were suggestions that Principal Component Analysis (PCA) could also be useful as another multivariate analysis technique for data visualisation and dimensionality reduction (Johnson et al., 2007, Schultz et al., 2004, Taylor et al. 2002). However, even in the cases that patterns are observed, with PCA, no measure of significance is provided (Johnson et al., 2007). Additionally, if PCA was used, it would not have been possible to test the hypotheses constructed from the participant interviews, as PCA is an unsupervised technique (Martens and Neaes, 1989).

7.7.2 Qualitative analysis: Methods

The analysis method for the qualitative data considered to be the most appropriate fit with the research questions and the aims and objectives of this study was a thematic analysis. For this phase of the study, a deductive approach was employed (as per Levent and Paraskevas, 2008), as the hypothesis to be tested was clear: VEP would be tested as a planning tool, and should be able to contribute to the tourism planning process. Themes had, therefore, been created almost at the same time as the research questions. The themes

were: assessment of the assets of the case study area, identification of problems and suggested solutions, identification of contentious issues. Additionally, participants' attitudes towards VEP were another theme.

All the photo-diaries and questionnaires were transcribed and all the 1495 photographs were analysed in conjunction with their description in the diaries (see Appendix 14.6). Sub-categories of the original themes were developed; the analysis of this dataset was a dynamic process as themes were emerging through reviewing the transcripts a number of times. Due to the size of the dataset, the need to analyse it in depth and to keep track of all the themes, the qualitative software NVivo was used. The software allows the researcher to create a number of nodes and classify the text (Richards, 1999) and generally to interact comfortably with the dataset (Bringer et al., 2004). It also allows quantitative data to be used as attributes and be attached to text. Consequently, all the diaries and questionnaires were imported to NVivo and demographic data as well as user group data, activities and other preferences were attributed to the text. This gave the researcher the opportunity to query the dataset in a number of ways.

Finally, in order to establish similarities and differences in locals' and tourists' perception of the study area, a series of chi-square tests were performed. These tests were often between two observed and expected sets, so the Yates correction for continuity test was used.

7.8 Conclusion

This chapter discussed in detail the processes which led to the design and implementation of the research project. The starting point was the second aim of the study: To demonstrate the potential of VEP in tourism planning research through its application in a tourism planning context in St David's Peninsula, in Pembrokeshire Coast National Park.

The Chapter started with a discussion on the research philosophy of the study; it was concluded that since this study is methodological, deciding on a research philosophy was not of utmost importance. This is an exploratory piece of research; it offers insights into

the application of and analysis of visual techniques, and explores the appropriateness of VEP as a participatory tool to assist tourism planning decisions.

Next, the research sampling technique was established, as well as the ‘VEP triad’-the tools used for the data collection process. Because of the importance of capturing participants’ verbatim interaction with the landscape, the decision was made that the photo-taking should be accompanied by photo-diaries for participants to note the key features of their photographs and the reasons their photographs were captured, as well as to make planning suggestions. The implementation process of the study was then presented, describing the three pilot studies and the changes that followed and that lead to the production of the final diaries, questionnaires and the decision to use drop-in boxes for the return of the cameras. Finally, the data analysis process was discussed, where the analysis methods for the quantitative and qualitative analyses were presented.

8 RESULTS: CANONICAL VARIATE ANALYSIS

8.1 Introduction

This Chapter discusses the use of Canonical Variate Analysis (CVA), the method used to analyse the 1,495 photographs captured by study participants, local community members and visitors. All the photographs and some data from the questionnaire survey were used to construct the dataset for this analysis. This analysis serves two main purposes, which underline the innovative aspect of this piece of research: the first is to associate the photographs with the photographers, without using qualitative analysis. In other words, this is an attempt to associate particular features with particular kinds of people and to investigate differences of opinion for different user groups within the same area: for example residents and tourists, and newcomers and long-timers, by analysing the data in a quantitative fashion. The second aim is to examine if a quantitative analysis of the photographs can show anything about the photographs with no additional information: are photographs useful as stand-alone data or do the accompanying diaries give them value?

In order to achieve these aims, a number of objectives were identified. The first objective was to investigate whether, by interrogating the photographic evidence, the messages that people were trying to send about their experience of the place could be revealed and what the appropriate coding system of the photographs should be in order to achieve this. The second objective was to narrow down the variables so that they would be coded to a manageable amount. The third objective was to test a set of hypotheses constructed by the knowledge of tourism planning issues in the area, the existing academic theory and the data collected from the survey. This objective is twofold, as in some cases the results of the CVA analysis would be tested against the background of academic tourism literature to identify areas of common ground.

This chapter starts by introducing a brief description of the data used for this analysis. The next section is dedicated to coding the dataset and discusses the methods used to select the variables and the variables that were used to code the photographs. The third part of the chapter presents the findings of the analysis, followed by the discussion of the meaning of and potential future uses for the findings, as well as the methodology adopted in this study.

8.2 Description of the dataset

The total number of participants, return rate and time spent with each participant are presented in Table 24.

Table 23: Study dataset in numbers

Total number of participants	278
Overall return rate	64.7%
Average survey time per participant	21 minutes
Number of photographs analysed	1496

The average time spent with local participants was significantly longer compared to the tourists (30 minutes for locals, 24 minutes for tourists). That was calculated by timing a sample of interviews/ questionnaires: it amounted to approximately 98 hours (four days) of face-to-face interviewing. In some cases, the researcher spent more than two hours with some participants, mainly locals, and considerably more than the average time with tourist participants. A total of 1495 photos were included in the analysis, as two sets of photos were returned after the analysis had started. The return rate was 76.5% for the tourists and 51.2% for the locals.

This part of the analysis could only utilise data that were either quantitative or could be converted to quantitative data. The data used was extracted by coding the answers to the questions below. There are three reasons these questions were used. The first is that the answers to them could be grouped effectively and researcher interpretation was minimal. The second reason is that one of the objectives of this analysis is to compare photos captured by different user groups, so the questions and the answers should be comparable. The third reason was the decision to run a satisfactory number of tests and get the maximum amount of information from the data collected: the data collected from the rest of the questions asked in the survey would be used in the analysis of the survey and the in-

depth analysis of all the elements of the technique together. Of the questions asked, only those that could be quantified were included in the analysis:

Table 24: Survey questions data drawn from for the quantitative analysis

Tourists	Locals
Question 3: What is your main activity during your visit?	Question 2: How long have you lived in St David's peninsula?
Question 4: Why have you chosen to visit Pembrokeshire Coast National Park?	Question 4: Is your job related to the tourism industry in any way?
Question 5: What is it that you value most about this area?	Question 5: What do you think is special about Pembrokeshire Coast National Park?
Question 6: Have you visited Pembrokeshire Coast National Park before?	Question 6: What is it that you value most about this area?
Question 7: Is this the start, middle or end of your holiday?	Question 9: How might the area be improved?
Question 8: Are you going to spend all your holiday in the St David's area?	Question 10: Given the chance would you ever think of moving elsewhere in this country?
Question 10: How might the area be improved?	Question 11: Our National Parks are under a lot of pressure. Are there any aspects of the area that, if changed, would mean you wouldn't enjoy living in Pembrokeshire Coast National Park any more?
Question 12: Our National Parks are under a lot of pressure. Are there any aspects of the area that, if changed, would mean that you would not choose to come back to Pembrokeshire Coast National Park for your holidays?	

In addition, details about the age groups and the gender of the participants were used in the analysis. The total number of questions in the questionnaires was 12, excluding questions about participants contact details, age, gender, etc. A copy of the questionnaire can be found in Appendices 14.1 and 14.2.

8.3 Coding for CVA



Photograph 2: Photo-coding quadrant

8.3.1 Methodology

One of the aims of this methodology is to associate the photographs with the photographers, without using qualitative analysis. It was therefore considered imperative to maintain the integrity of the data and avoid every possible researcher bias. It was decided that instead of the researcher constructing the variables according to her own interpretation of the face value of the photographs, it would be more objective if the coding system was based on interviews with the general public.

8.3.2 Interviews

The interviews took place in Aberystwyth over a period of one week, from 3 May to 9 May 2008. Thirty random photographs were chosen from the dataset and were stuck on a board that could be easily transferred. The board was approximately 1m x 80cm and could hold

a maximum of 30 photographs: this is why 30 photographs were used. A stratified sampling technique was used with data drawn from the UK 2002 census. This was considered appropriate as Aberystwyth is a UK holiday destination and locals as well as tourists would be in Aberystwyth at that time of year. The interviews took place in three different locations in Aberystwyth in order to find people from all age groups and user groups of the area: the town square, which is a crossing that locals and tourists of all ages were likely to pass by, the Arts Centre, which has a panoramic view of the city and attracts locals, students and visitors: and the beach, which is likely to attract local people, visitors and students. The participants were asked to choose five photographs and describe what they saw in each photograph. A digital recorder was used to capture the descriptions. The interviews were then transcribed by the researcher and groups of variables were constructed.

8.3.3 Variables

In the process of identifying the variables for the coding process, seven sets were produced. After each set was produced, its selection was challenged by the researcher's supervisory team and an improved version was produced, which was again challenged and so on. The final set of 30 variables that would be used as a basis for the coding were identified in the seventh attempt and can be seen in Table 26.

Table 25: Thirty variables identified after the interviews

A. Overall percentage	
Water	Natural and man-made features: sea, river, marina, jetty, harbour
Sky, blue	
Sky, clouds	
People	
Trees	
Vegetation	Grass, fern, bracken
Flowers	
Beach	Shingle, sand, when tide is out
Rocks/ hills	In the distance and when this is what was captured, natural features
Signs	Road sign, walking path signs, cycling signs, advertisements, speed signs, etc
Animals	
“Coastal Path”	
Heritage buildings	St David’s Cathedral, Treffin’s Mill, Solva Mill, etc
Other buildings	
Means of transport	
Other man-made features	Roads, fences, tomb stones, car parks, rubbish bins, benches, chairs, tables
Rubbish	
Tourism paraphernalia	Wind breaks, beach mats, tents, umbrellas
B. Specific, units	
People	Standing, sitting, engaged in activities
Trees	
Signs	
Dogs	
Horses	
Other animals	Mammals, insects, birds, excluding people
Heritage buildings	St David’s Cathedral, Treffin’s Mill, Solva Mill, etc
Other buildings	
Rubbish bins	
Cars	
Boats	
Flowers	

8.3.4 Coding

Initially 500 randomly selected photographs were used, which was the sample also used for the blind double-coding: these were coded according to all 30 variables that were identified in the previous stage. According to the objectives of this part of the analysis, the variables needed to be narrowed down to a manageable amount. Coding 500 photos according to 30 variables took approximately two months. However, it was crucial to maintain the integrity of the dataset, so a number of CVAs were conducted and it became apparent that the 12 variables finally used were responsible for 95% of the total original variations. Coding the remaining photographs using 12 variables took approximately four months. The 12 variables that were finally used in the coding are described in Table 27:

Table 26: The 12 variables used in the CVA coding

Variable no. 1	blue sky (proportion)
Variable no. 2	cloudy sky (proportion)
Variable no. 3	people (proportion)
Variable no. 4	animals (proportion)
Variable no. 5	car interior (proportion)
Variable no. 6	other man-made features (proportion)
Variable no. 7	tourism paraphernalia (proportion)
Variable no. 8	people (number)
Variable no. 9	signs (number)
Variable no. 10	horses (number)
Variable no. 11	heritage buildings (number)
Variable no. 12	flowers (number)

8.4 Findings

8.4.1 Interpreting the data

The statistics computed in CVA are the canonical correlations and canonical weights of the original variables. The first canonical correlation is the highest correlation found between a weighted combination of X variables and a weighted combination of Y variables (Darlington et al., 1973). Darlington et al. (1973) describe the mechanics of CVA as follows:

“...those combinations are the first canonical variates, and the weights constituting them are the first canonical weights, which are the elements of the first canonical vectors. The second canonical correlation is the highest correlation that can be found between X and Y weighted composites which are uncorrelated with the first canonical variates. These are the second canonical variates”.

Canonical Variate Analyses are typically conveyed as bivariate plots of one canonical variate versus another, or as three-dimensional plots (Albrecht, 1980). Canonical Variates are plotted against each other, allowing associations between sample groups to become visible (Johnson et al., 2007). The mean of each sample class is plotted on each CV, and it is usually surrounded by a confidence area. The confidence area is circular because “each population, having been transformed to CVs, has a variance of unity and, CVs are uncorrelated with one another” (Johnson et al., 2007). Quinn and Keough (2002) describe the confidence circle as an interim calculation of the population mean which, according to Johnson et al. (2007), is equivalent to confidence intervals in the univariate situation: if the 95% confidence circles are plotted around each mean, the significantly different sample groups can be seen on the plot.

The software used to run the CVAs for this project was devised by Dr Causton, from the Institute of Biological, Earth and Rural Sciences. Dr Causton teaches Statistics for Research Biologists at Postgraduate level and has a long history of publications where his software was used to run CVAs (Bussell et al., 2008, Johnson et al., 2007).

8.4.2 Hypotheses

A number of CVAs were run in order to test the hypotheses set, according to the initial survey of the participants. The 12 hypotheses tested were:

Hypothesis 1: There are significant differences between the photographs taken by local people who were born in St David's compared to the photographs of those who moved into the area.

Hypothesis 2: There are significant differences between the photographs taken by local people who would be willing to move elsewhere compared to the photographs taken by local people who would not move away from the area.

Hypothesis 3: There are significant differences between the photographs taken by local people with tourism-related jobs compared to the photographs taken by local people with non-tourism-related jobs.

Hypothesis 4: There are significant differences between the photographs taken by local people who prioritise different things in terms of what they regard as special about their local area.

Hypothesis 5: There are significant differences between the photographs taken by first-time visitors to the area compared to the photographs taken by visitors who have previously been to the area.

Hypothesis 6: There are significant differences between the photographs taken by tourists whose main activity differs.

Hypothesis 7: There are significant differences between the photographs taken by tourists whose main reason for visiting the area differs.

Hypothesis 8: There are significant differences between the photographs taken by tourists depending on whether they were at the beginning, middle or end of their holiday.

Hypothesis 9: There are significant differences between the photographs taken by repeat and first-time visitors depending on the stage of their holiday.

Hypothesis 10: There are significant differences between the photographs taken by tourists who spent all their holidays in St David's compared to those who would combine their visit to St David's with other places.

Hypothesis 11: There are significant differences between the photographs taken by members of the local community compared to visitors according to what they value the most about the area.

Hypothesis 12: There are significant differences between the photographs taken by locals and tourists depending on their view about possible improvements that could occur in the area.

All the CVAs were initially run with the maximum amount of data collected that could be used as variables in the analysis. Except for all the different variables per hypothesis, the age group data and the gender data were included in the analysis. An example of CVAs 2 and 3 with the age groups and gender data is provided in Figures 12 and 13 below. All the hypotheses tested were initially tested with the data and gender data. In Figures 12 and 13, even though some groups seem to have significant differences to other groups, patterns could not be deciphered and these graphs were not considered to be utilising the potential of either the technique or the dataset. A decision was therefore made that in some CVAs, gender and age data would not be used at this stage of the analysis.

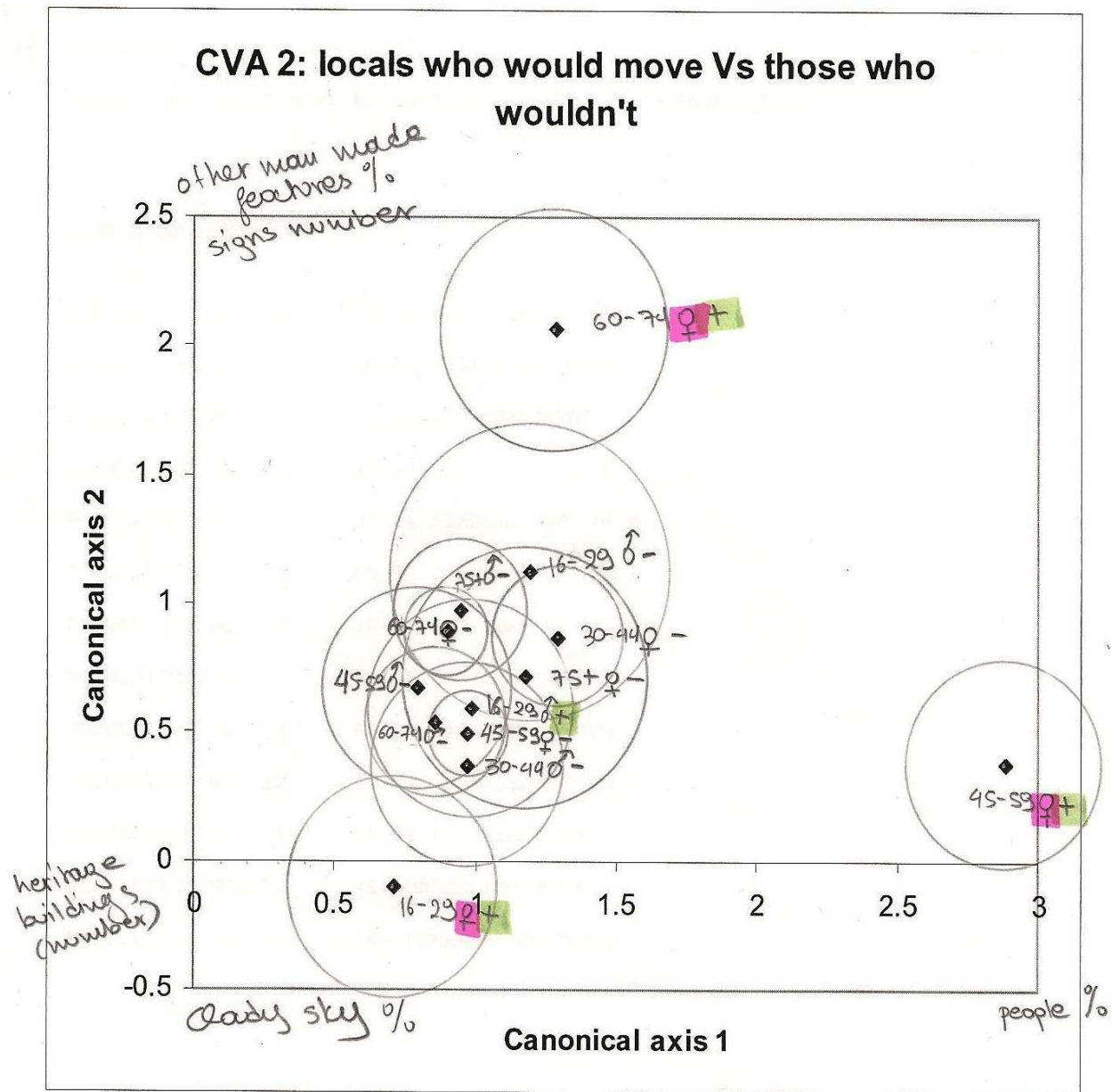


Figure 12: Locals who would move vs. who those who would not (CVA2) and gender data

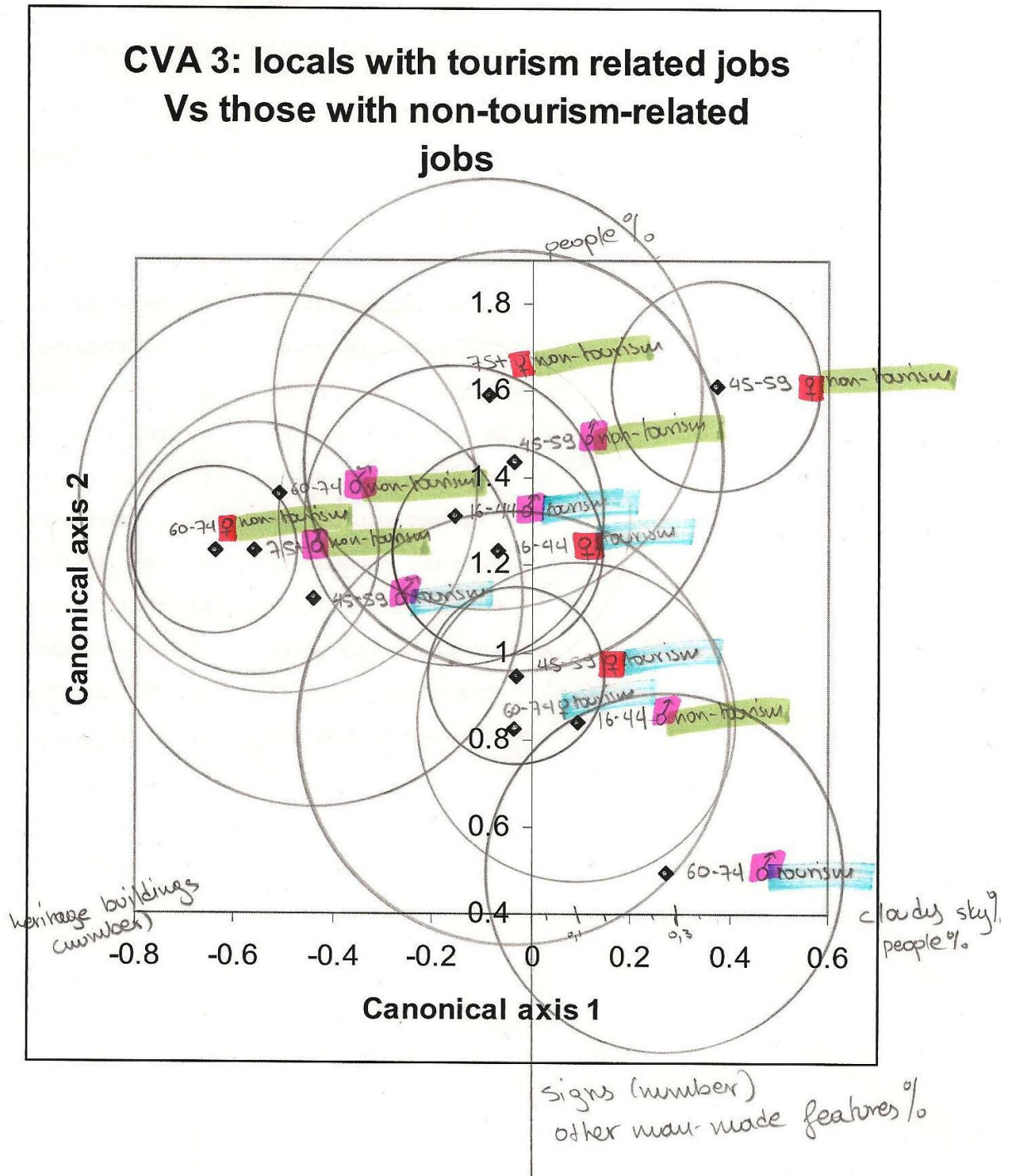


Figure 13: Locals with tourism related jobs vs. locals with no-tourism related jobs (CVA3) and gender data

8.4.3 CVAs

8.4.3.1 CVA 1:

The hypothesis for CVA1 was that there are significant differences between the photographs taken from local people who were born in St David's compared to the photographs of those who moved into the area. Nine populations were used in this CVA. The populations are as follows:

Table 27: CVA1 populations

Population no. 1	locals 16-29 incomers
Population no. 2	locals 16-29 natives
Population no. 3	locals 30-44 incomers
Population no. 4	locals 30-44 natives
Population no. 5	locals 45-59 incomers
Population no. 6	locals 45-59 natives
Population no. 7	locals 60-74 incomers
Population no. 8	locals 60-74 natives
Population no. 9	locals 75+ incomers

CVA1 is one of the CVAs where age groups were used. CVA ordination plot for analysis performed on four derived Canonical Variates explains 86.5% of the total original variation. Each point represents population means along the CV axis. Circles correspond to 95% confidence limits for each population mean. The original variables weighing more on Canonical Axis 1 are percentage of blue sky and percentage of people to the left and number of flowers and percentage of cloudy sky to the right. The original variables weighing more on Canonical Axis 2 are percentage of cloudy sky towards the top of the graph and percentage of other man-made features and number of signs towards the lower end of the plot. It can be seen in Figure 14 that the related hypothesis was correct, which means that the photos taken by locals who were born in St David's were different to those

captured by those who came to live in St David's. Additionally, as can be seen in Figure 15, the photos of locals who were born in St David's tend to contain more sky and people compared to the "incomers" photos which tend to include more flowers, man-made features and signs. It is also interesting that a notional line can be drawn to divide the locals who were born in St David's from the "incomers".

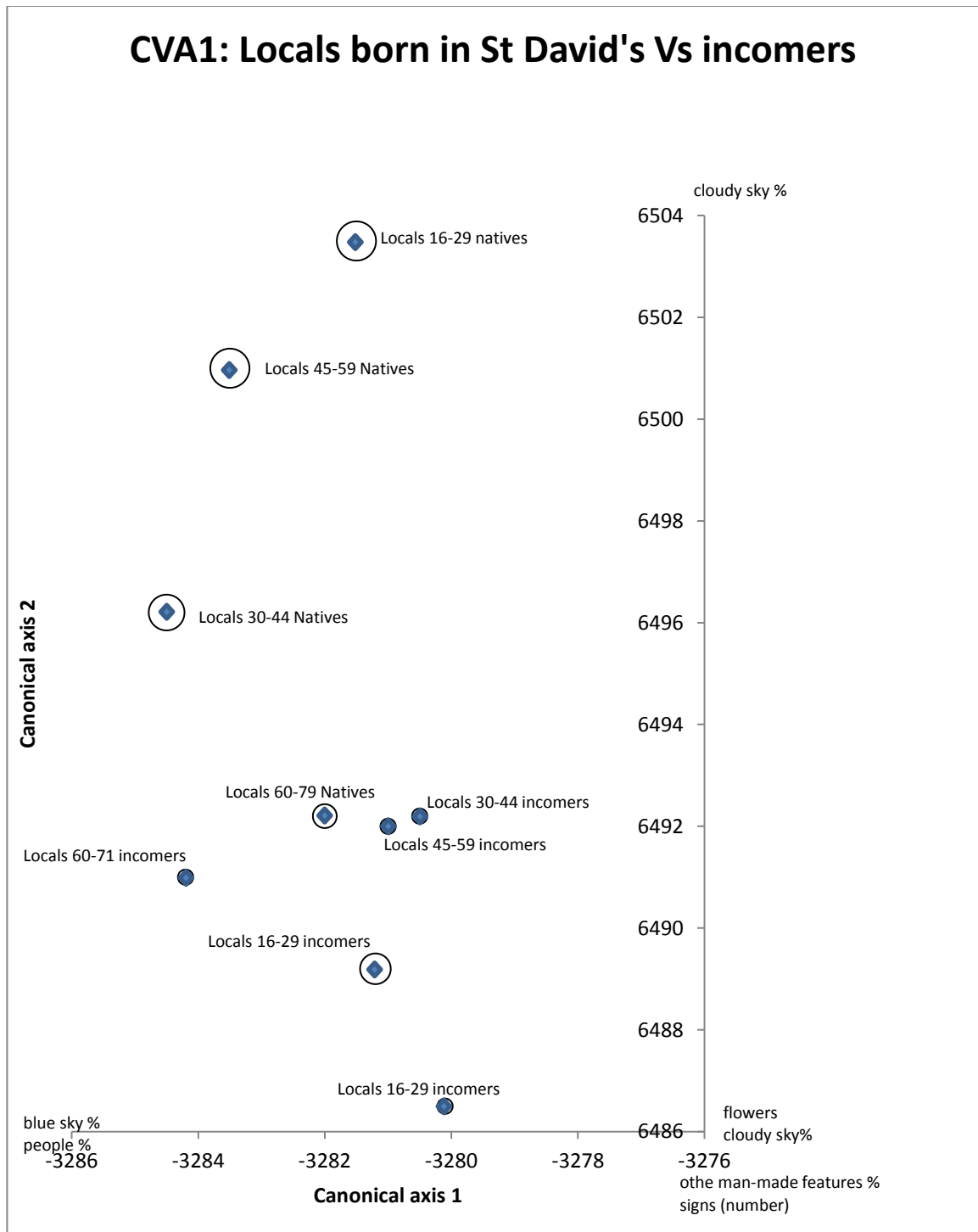


Figure 14: CVA1 Locals born in St David's vs incomers



Figure 15: CVA 1 Locals who were born in St David's vs incomers with dividing line

8.4.3.2 CVA 2: Locals who would move elsewhere vs those who would not

The second hypothesis was that there are significant differences between the photographs taken from local people are willing to move elsewhere compared to the photographs taken by local people who would not move away from the area.

The two groups of photographs are distinctively different, with locals who would be willing to move away from that area capturing more heritage buildings and horses and locals who would not like to move photographing more people and blue sky. The plot explains 100% of the total original variation (Figure 16).

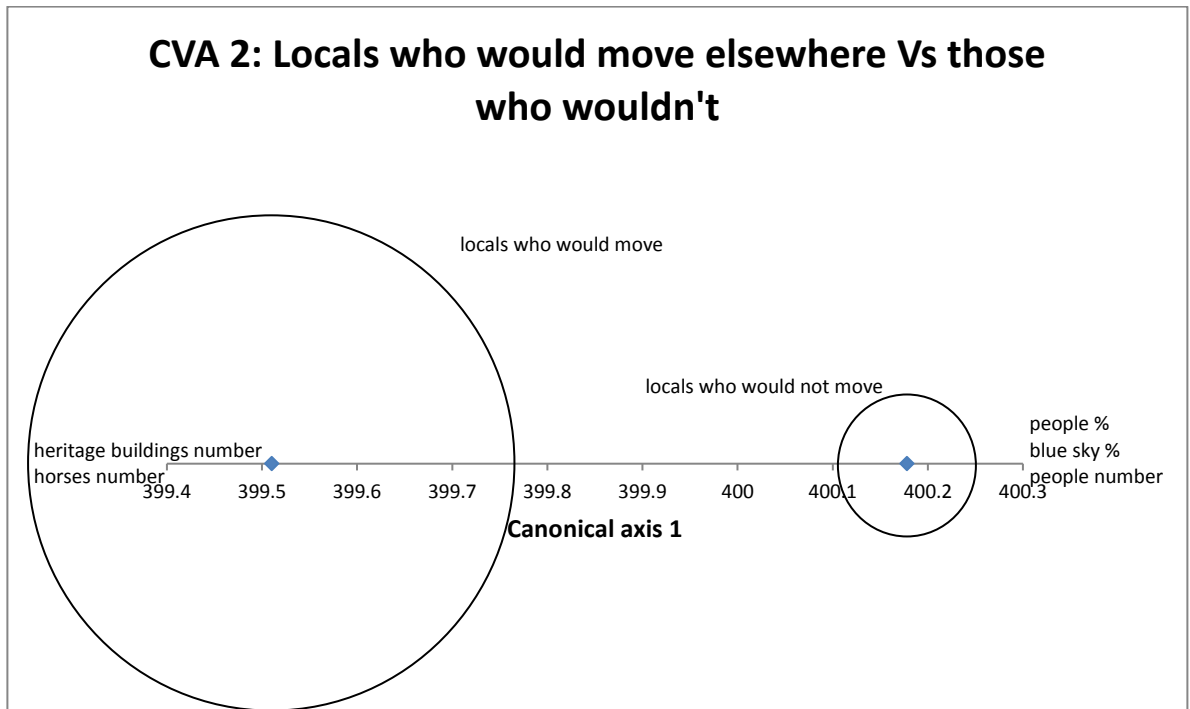


Figure 16: CVA2 Locals who would move elsewhere vs those who would not

8.4.3.3 CVA 3 Locals with tourism related jobs vs those with non-tourism related jobs

CVA 3 compared photos by the populations in Table 29. The hypothesis that there is significant statistical difference in the photos taken by these three groups proved to be correct. There is significant statistical difference in the photographs taken by the three groups.

Table 28: CVA3 populations

Locals with tourism related jobs
Locals with non-tourism related jobs
Locals who consider themselves as having a job that is partly tourism related.

The plot explains 100% of the total original variation. The third group tends to take photos with more blue sky and the interior of their car, the second group tends to photograph more man-made features and cloudy skies and the first group tends to include more man-made features, flowers, sky and people in their photos. (Figure 17)

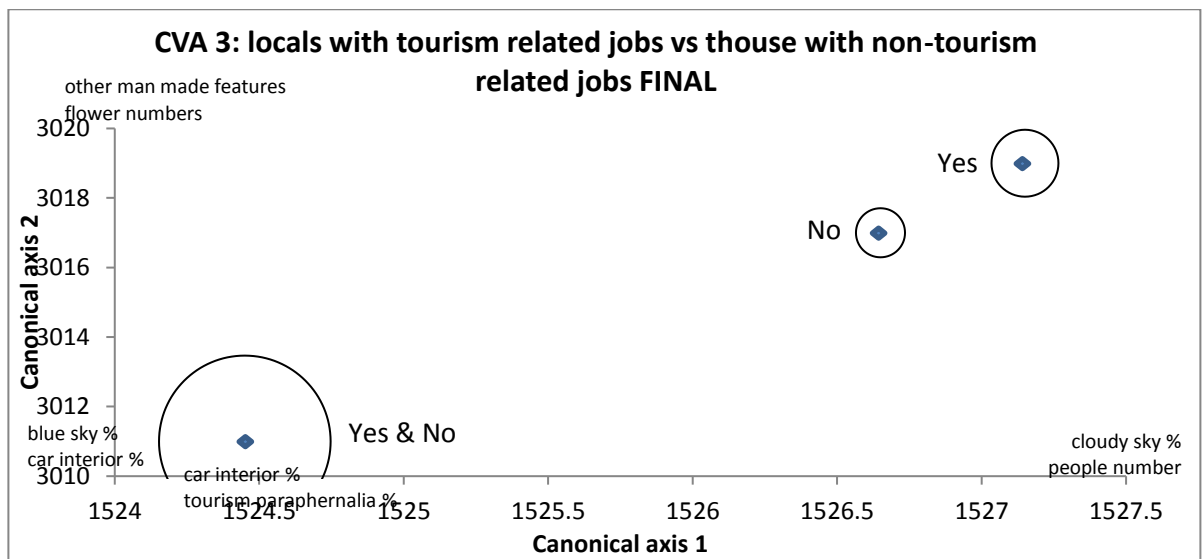


Figure 17: CVA3 Locals with tourism related jobs vs locals with non-tourism related jobs

8.4.3.4 CVA 4 Locals, what is special about their area

CVA 4 was run to test if local people with different ideas about what is special about the area were taking different photos. There were five groups of local people: Those who thought i) heritage, ii) community, iii) beauty and location, iv) no overdevelopment and quality of life and v) other special features were special about the area. The fourth hypothesis proved to be correct, as there proved to be a significant statistical difference between all the groups above. The populations for this CVA are as follows:

Table 29: CVA 4 populations

Population no. 1	community
Population no. 2	heritage/culture
Population no. 3	no overdevelopment/quiet/safe
Population no. 4	location/scenery/beauty
Population no. 5	other

The plot explains 92.4% of the total original variation: and locals who think that heritage and culture are the most important aspect of the area tend to take photos with people, manmade features as well as heritage buildings. Also, people who think that the biggest asset of the area is its quietness and its sense of security tend to photograph people and heritage buildings as well. Local participants who think that the area's location, scenery and beauty are special tend to include sky and people in their photographs. The photos of local participants who consider the community as special include more blue sky, other community members and in some cases, part of their car interior. The more generic group entitled "other" has included blue sky and people as well as a higher proportion of car interior in their photographs (Figure 18).

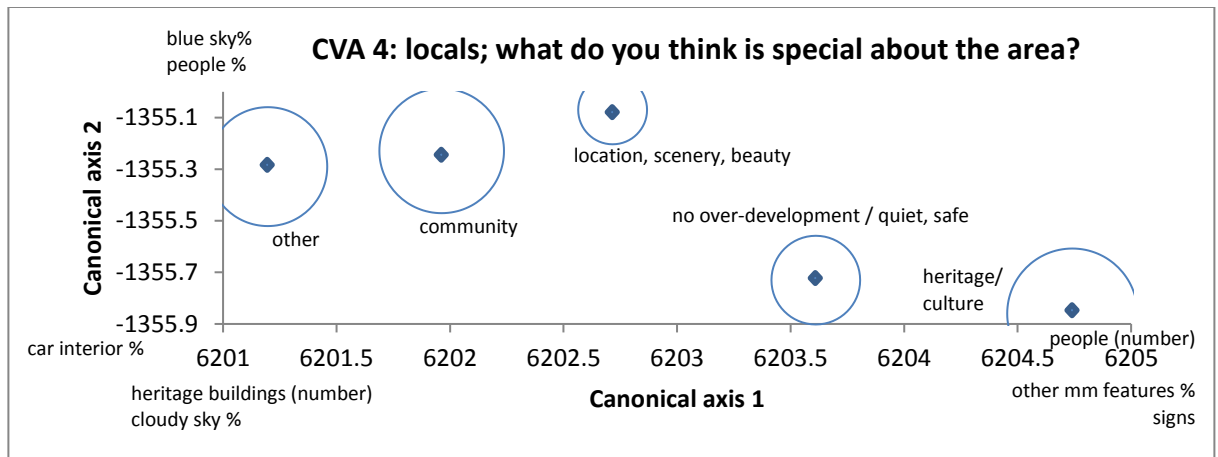


Figure 18: CVA 4: Locals: what do you think is special about the area?

8.4.3.5 CVA 5 Repeat visitors vs. first time visitors

The fifth hypothesis was that there are significant differences between the photographs taken by first time visitors to the area compared to the photographs taken by visitors who have previously been to the area. This hypothesis proved to be wrong as there was no statistical significance between the photographs taken by people who had visited the area before and people who were asked to participate during their first visit in St David's peninsula. The plot explains 100% of the total original variation (Figure 19).

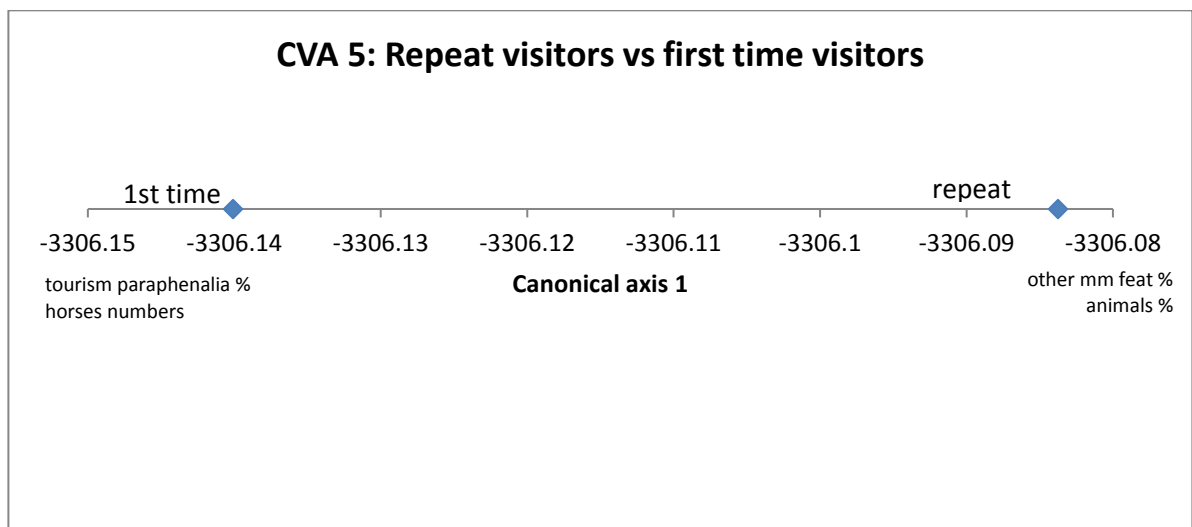


Figure 19: CVA 5 Repeat visitors vs. first time visitors

8.4.3.6 CVA 6 Tourists' main activity

CVA 6 tested the differences in photos captured by tourists grouped according to their main activity. The seven groups are as follows:

Table 30: CVA 6 populations

Number of populations = 7	
Population no. 1	walk
Population no. 2	beach and sea
Population no. 3	other
Population no. 4	walking and sightseeing
Population no. 5	walking and beach and sea
Population no. 6	sightseeing
Population no. 7	three or more

As per Figure 18, there is no overlap of the confidence circles for any of the populations, which means that the hypothesis that there are significant differences between the photographs taken by tourists whose main activity differs is correct. CVA ordination plot for analysis performed on three derived Canonical Variates explains 83.8% of the total original variation. Tourists, whose main activity is walking and going to the beach, as well as those who are in the area to walk and sightsee, tend to include more animals, people and car interiors in their photographs: a factor which needs further investigation. Tourists who are in the area to sightsee only include more heritage buildings, other man-made features and flowers in their photos, as can be seen in Figure 20.

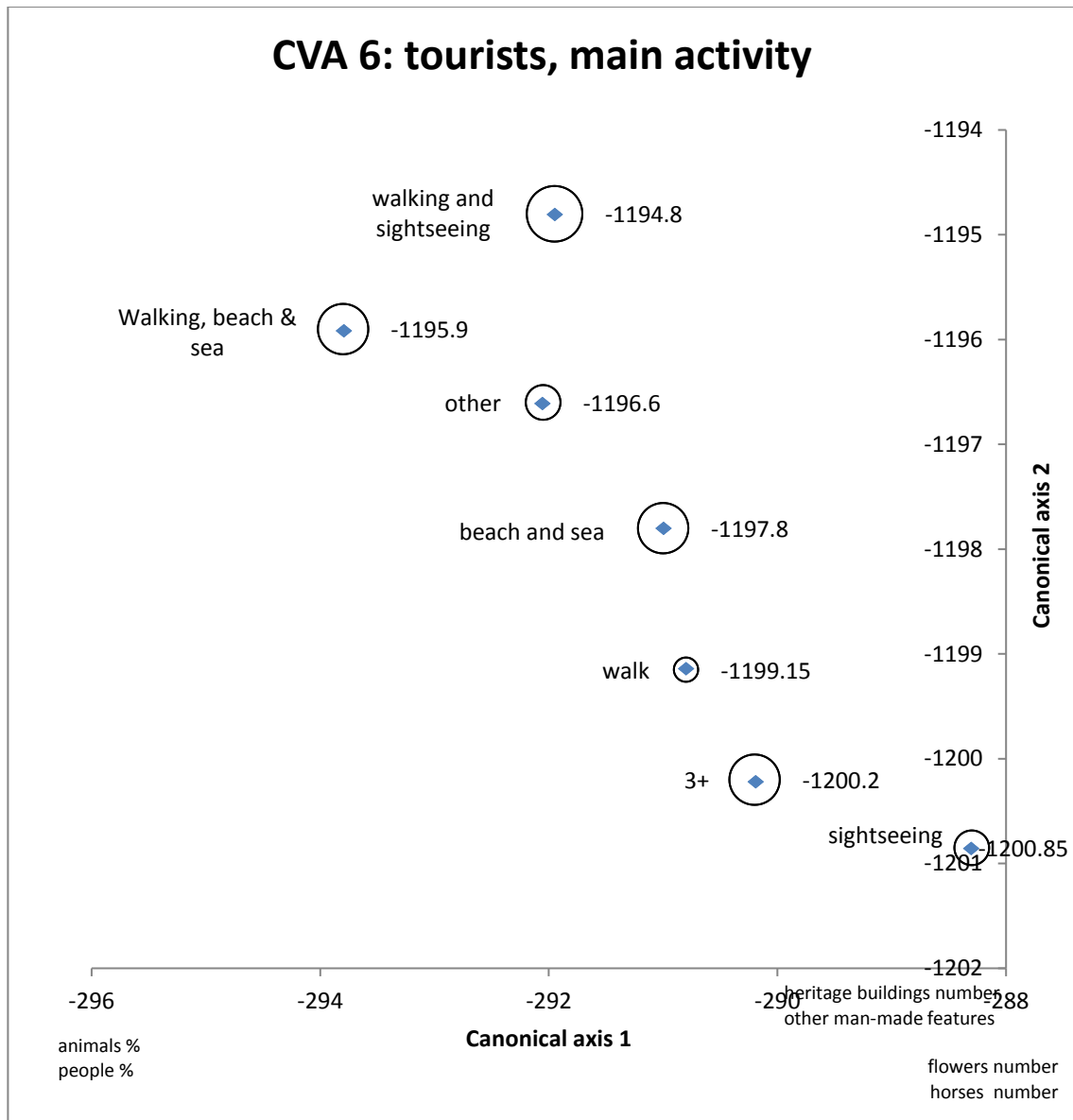


Figure 20: CVA 6 Tourists, main activity

8.4.3.7 CVA 7 Tourists, reason for visit

The hypothesis for CVA 7 was that there are significant differences between the photographs taken from tourists whose main reason for visiting the area differ. The hypothesis proved right, as there is statistical difference in the photos taken by eight groups of tourists, depending on the reason for their visit. The reasons for people's visits were: Scenery and location, family reasons, particular activities the place was ideal for, repeat

visitation, proximity to place of residence, word of mouth, they had not visited the area in the past: and other reasons. The plot (Figure 21) explains 84% of the total original variation. Visitors who came to the area in order to participate in activities included more people and blue sky in their photos. Visitors who were interested in the scenery included people and tourism paraphernalia as well as sky and man-made features in their photographs.

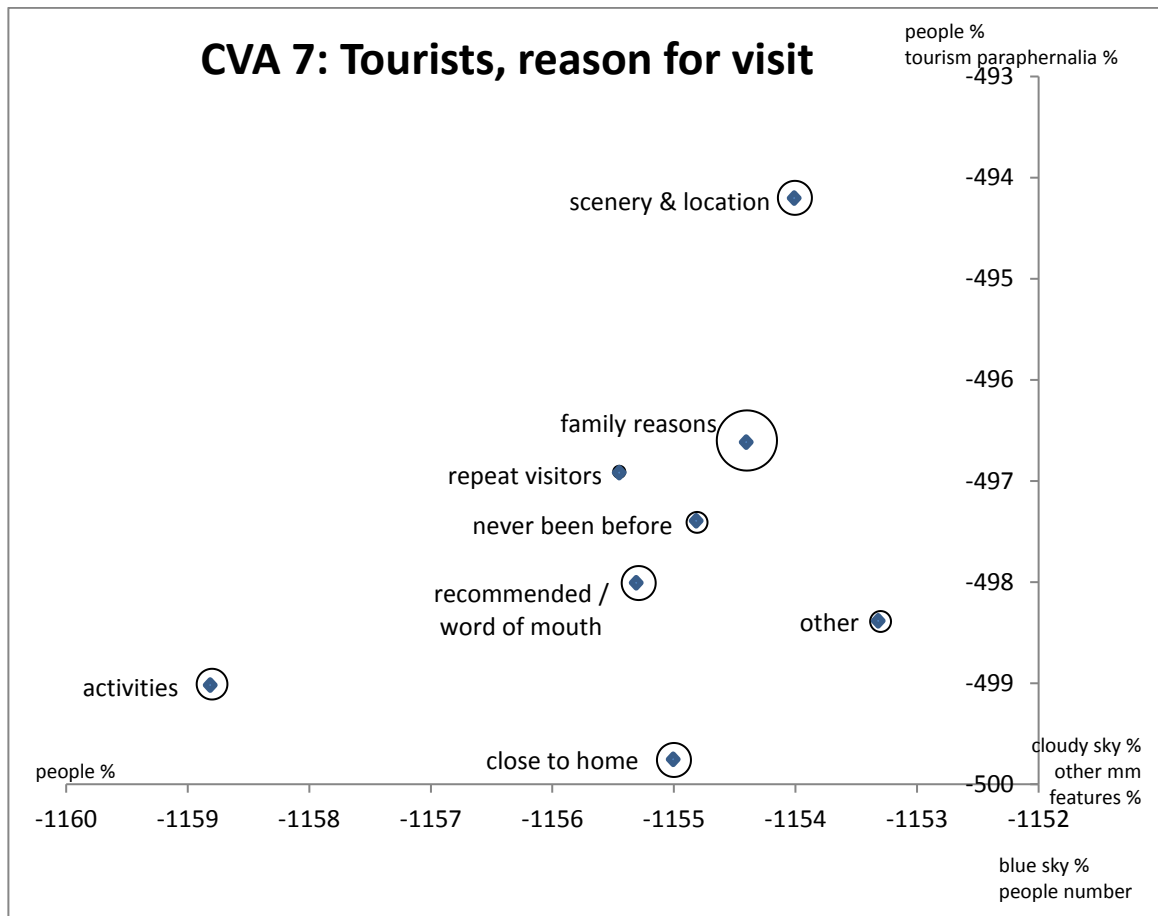


Figure 21: CVA 7 Tourists, reason for visit

8.4.3.8 CVA 8 Tourists, stage for holiday

CVA 8 showed significant statistical difference in the photos taken by tourists depending on the stage of the holiday they were at, at the time they agreed to participate in the research project. Tourists at the beginning of their holiday tend to photograph the sky and people

more, but this seems to change toward the middle and the end of the holiday, where people tend to include more flowers, man-made features and the interior of their car in the photographs. Figure 22 explains 99.9% of the total original variation.

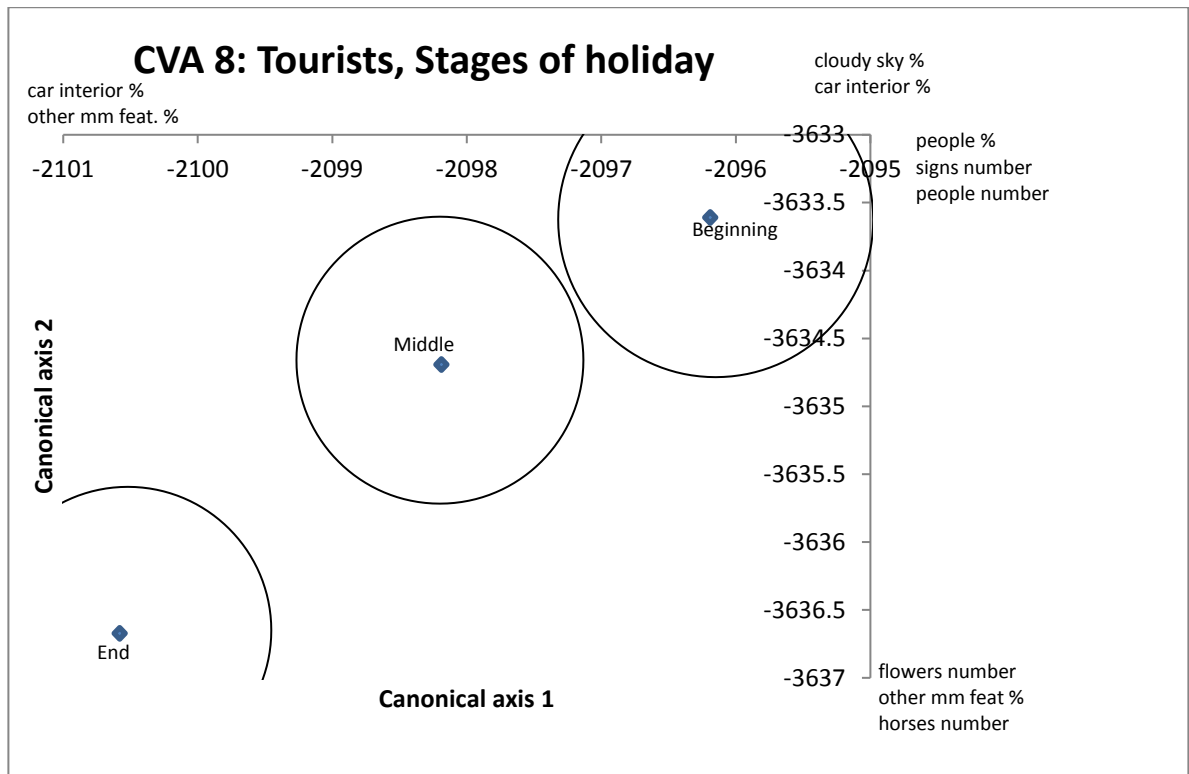


Figure 22: CVA 8 Tourists, stage of holiday

8.4.3.9 CVA 9 Tourists, repeat or first time visit and stage of holiday

CVA 9 compared photographs taken by tourists depending on the stage of their holiday and whether they had been to the area previously or not. The six following groups were formed:

Table 31: CVA 9 Populations

Number of populations = 6	
Population no. 1	first time beginning
Population no. 2	first time middle
Population no. 3	first time end
Population no. 4	repeat beginning
Population no. 5	repeat middle
Population no. 6	repeat end

The ninth hypothesis proved to be correct, which means that there are significant differences between the photographs taken by repeat and first time visitors depending on the stage of their holiday, as can be seen in Figure 6.12. The plot explains 85.5% of the total original variation. Repeat visitors in the middle of their holiday tend to include man-made features, animals and sky in their photographs. At the other end of the axis are repeat visitors at the beginning of their holiday, who tend to capture flowers, people and tourism paraphernalia. Photographs taken by first time visitors who are in the beginning and middle of their holiday are not statistically significant. Both groups include flowers, people and manmade features in their photographs. It seems that the stage of the holiday of the participants spreads along Canonical Axis 1.

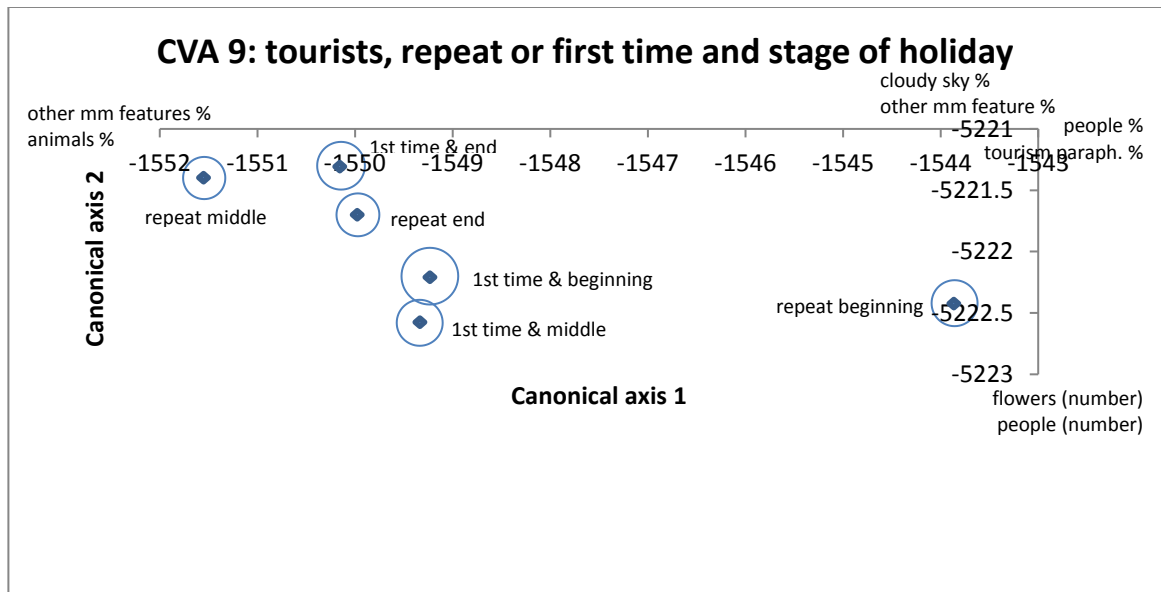


Figure 23: CVA 9 Tourists, repeat or first time and stage of holiday

8.4.3.10 CVA 10 Tourists, all holidays in St David's or combined

The tenth hypothesis was that there are significant differences between the photographs taken from tourists who spent all their holidays in St David's compared to those who would combine their visit to St David's with other places. In Figure 6.13 the confidence circles cannot be seen on the graph as their diameter exceeds the limits of this graph. The confidence circles overlap, which means that there is no statistical difference between photographs captured by people who would spend all their holidays in St David's peninsula and those who would visit other places as well.

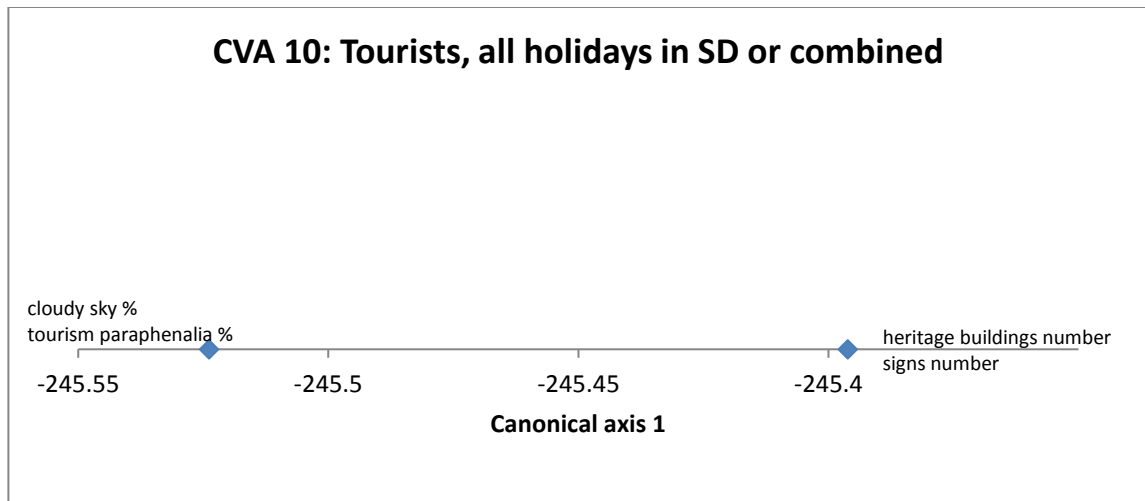


Figure 24: CVA 11 Tourists; spent all their holiday in St David's or combined visit

8.4.3.11 CVA11

The eleventh CVA compared photographs taken by locals and tourists. The groups were allocated according to people's perception about what they most value about the area. Eight groups were formed as per Table 28:

Table 32: CVA 11 populations

Locals	Tourists
No overdevelopment	No overdevelopment
Quality of life	Quality of life
Location	Location
Community	Other

As per hypothesis 11, there are significant differences between the photographs taken by members of the local community compared to visitors, according to what they value the most about the area. The only two groups whose photographs were not statistically significant are locals who appreciate the limited scale of development in the area and tourists who appreciate the quality of life in the area. The plot (Figure 6.14) explains 87.7% of the total original variation. The two groups who were placed opposite on both axes are tourists who most value the fact that the area is not overdeveloped and locals who most

value the sense of community in the area. Participants who fall into the first of these groups tend to include more people in their photographs, and participants in the second group tend to include more blue sky and manmade features.

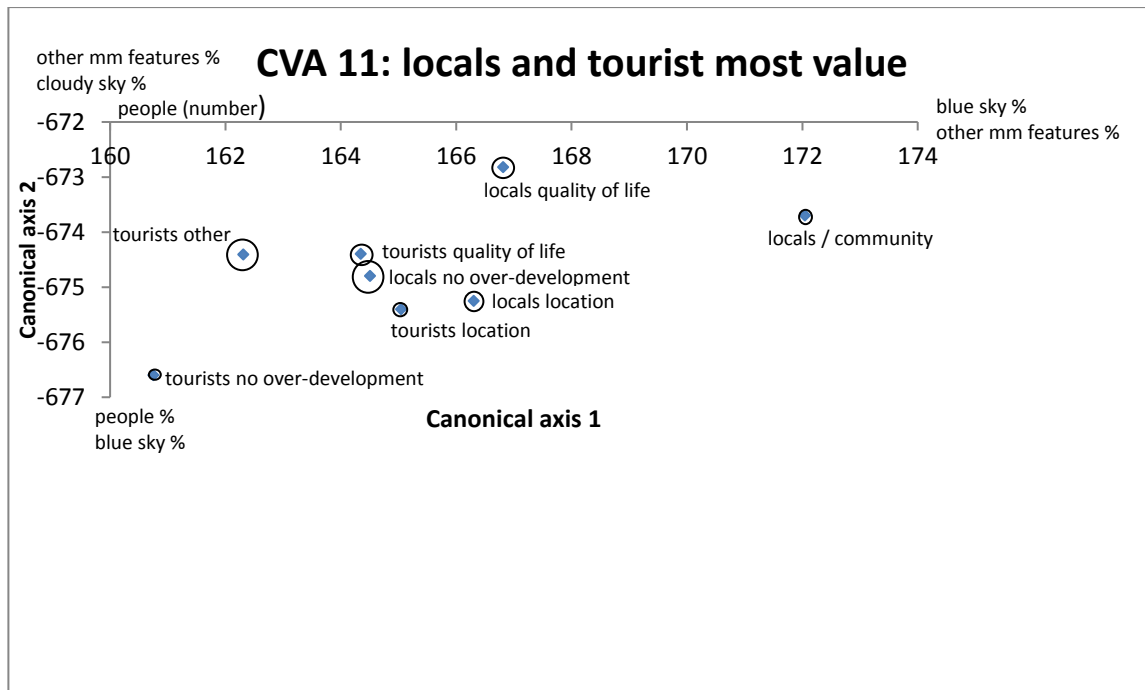


Figure 25: CVA 11 What locals and tourists most value

8.4.3.12 CVA12

The last CVA compared photographs taken by locals and tourists, who were grouped according to their attitude towards potential improvements to the area. The groups were the following:

Table 33: CVA 12 populations

Locals	Tourists
Second homes-planning	Second homes-planning
Recreational developments	Keep it as it is
Keep it as it is	Recreational developments
Traffic- parking- public transport	Traffic- parking- public transport
Other	Other

All but two groups were statistically different: locals who think recreational developments will benefit the place and locals who think the place should remain as it is tend to take similar photographs according to the analysis. Additionally, tourists tend to take photos with more people, man-made features, blue sky and tourism paraphernalia, as can be seen in Figure 6.15, as they tend to spread towards the upper part of the graph. Locals tend to photograph more animals and blue sky and they tend to spread towards the lower end of the graph. CVA ordination plot for analysis performed on three derived Canonical Variates explains 86.7% of the total original variation.

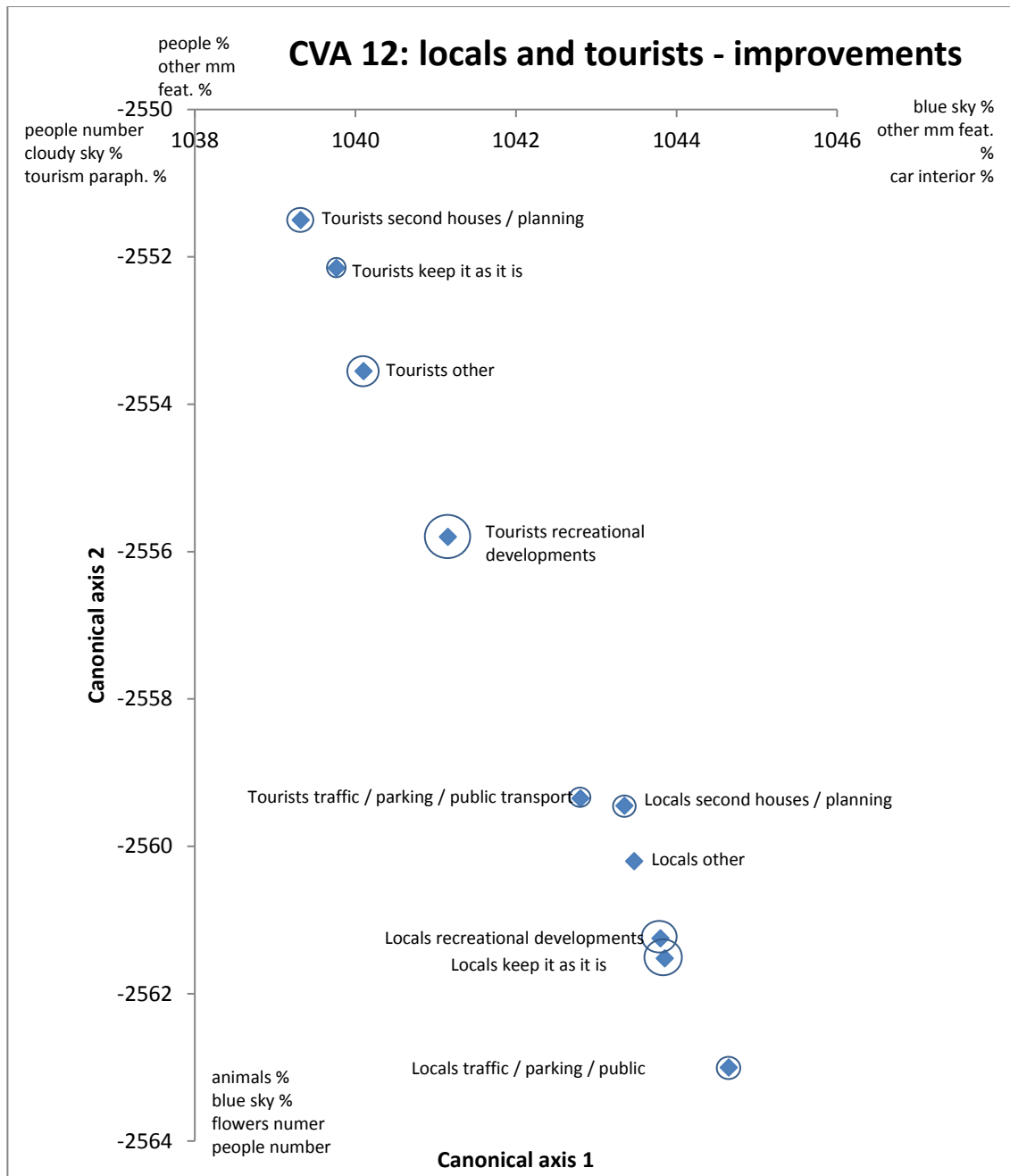


Figure 26: CVA 12 Locals and tourists, improvements

8.4.4 Blind double-coding CVA

In order to verify the validity of the coding of the photographs, a third of the photographs were blind-double coded by Iwona Cichon, a PhD tourism researcher. Iwona coded the 500 randomly chosen photographs the principal researcher had used to narrow down the

number of the original 33 variables to 12. Both sets of coding were plotted using the participants' age, gender and area user group orientation (tourist or local). The hypothesis was that the researchers' coding was similar, which means that there would be no statistically significant difference between the populations. As per Figures 35 and 36, all but two sets of populations overlapped: 16-29 male locals did not overlap, neither did 45-59 female locals. After careful examination of both spreadsheets, a difference was identified in the way the two researchers perceived the colour of the sky: Nika considered the sky to be blue far less often than Iwona did. This can be attributed to the fact that Nika is from Greece and Iwona is from Poland. However, an overall 73.3% of similarity in the coding was observed.

Table 34: CVA 13 populations

Number of populations = 24	
Population No. 1	Iwona 16-29 Male Locals
Population No. 2	Iwona 30-44 Male Locals
Population No. 3	Iwona 45-59 Male Locals
Population No. 4	Iwona 45-59 Female Locals
Population No. 5	Iwona 60-74 Female Locals
Population No. 6	Iwona 16-29 Female Tourists
Population No. 7	Iwona 30-44 Male Tourists
Population No. 8	Iwona 30-44 Female Tourists
Population No. 9	Iwona 45-59 Male Tourists
Population No. 10	Iwona 45-59 Female Tourists
Population No. 11	Iwona 60+ Male Tourists
Population No. 12	Iwona 60+ Female Tourists
Population No. 13	Nika 16-29 Male Locals
Population No. 14	Nika 30-44 Male Locals
Population No. 15	Nika 45-59 Male Locals
Population No. 16	Nika 45-59 Female Locals
Population No. 17	Nika 60-74 Female Locals
Population No. 18	Nika 16-29 Female Tourists
Population No. 19	Nika 30-44 Male Tourists
Population No. 20	Nika 30-44 Female Tourists
Population No. 21	Nika 45-59 Male Tourists
Population No. 22	Nika 45-59 Female Tourists
Population No. 23	Nika 60+ Male Tourists
Population no. 24	Nika 60+ Female Tourists

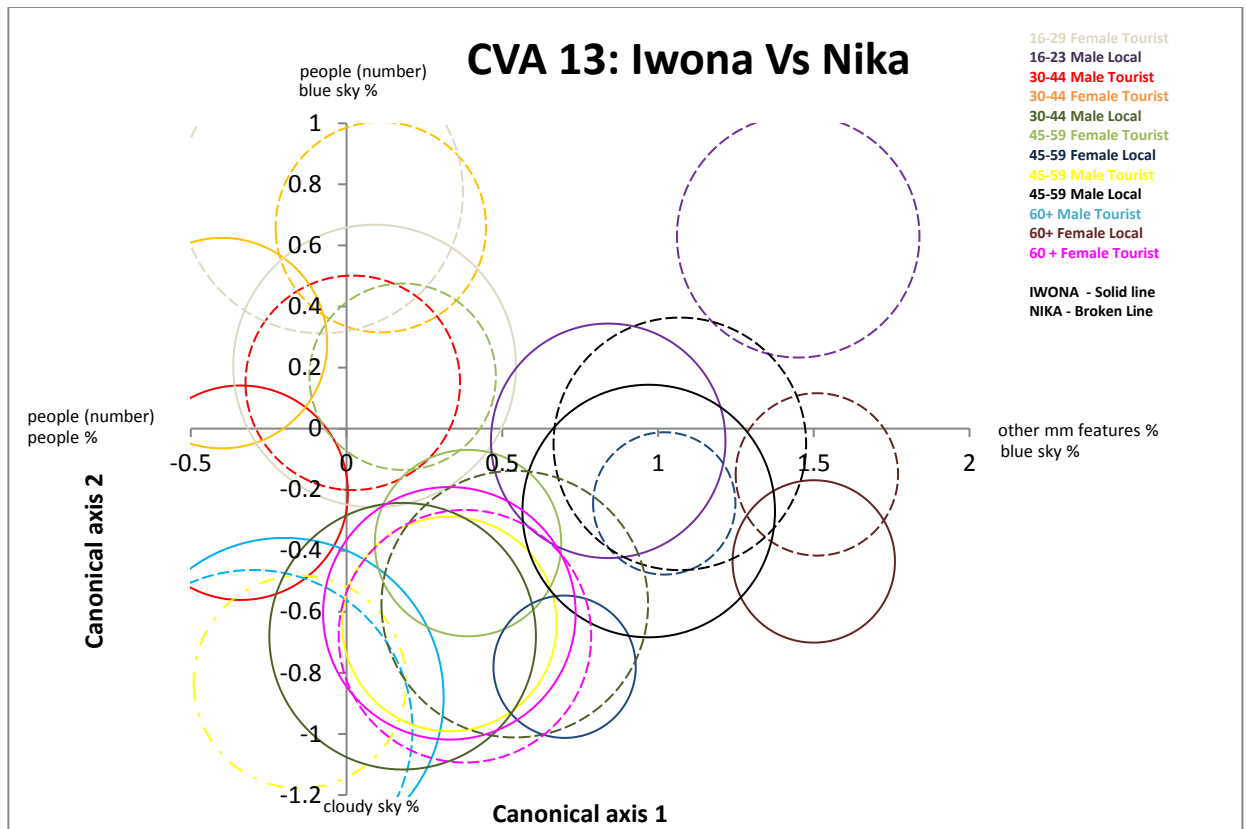


Figure 27: Blind double-coding CVA

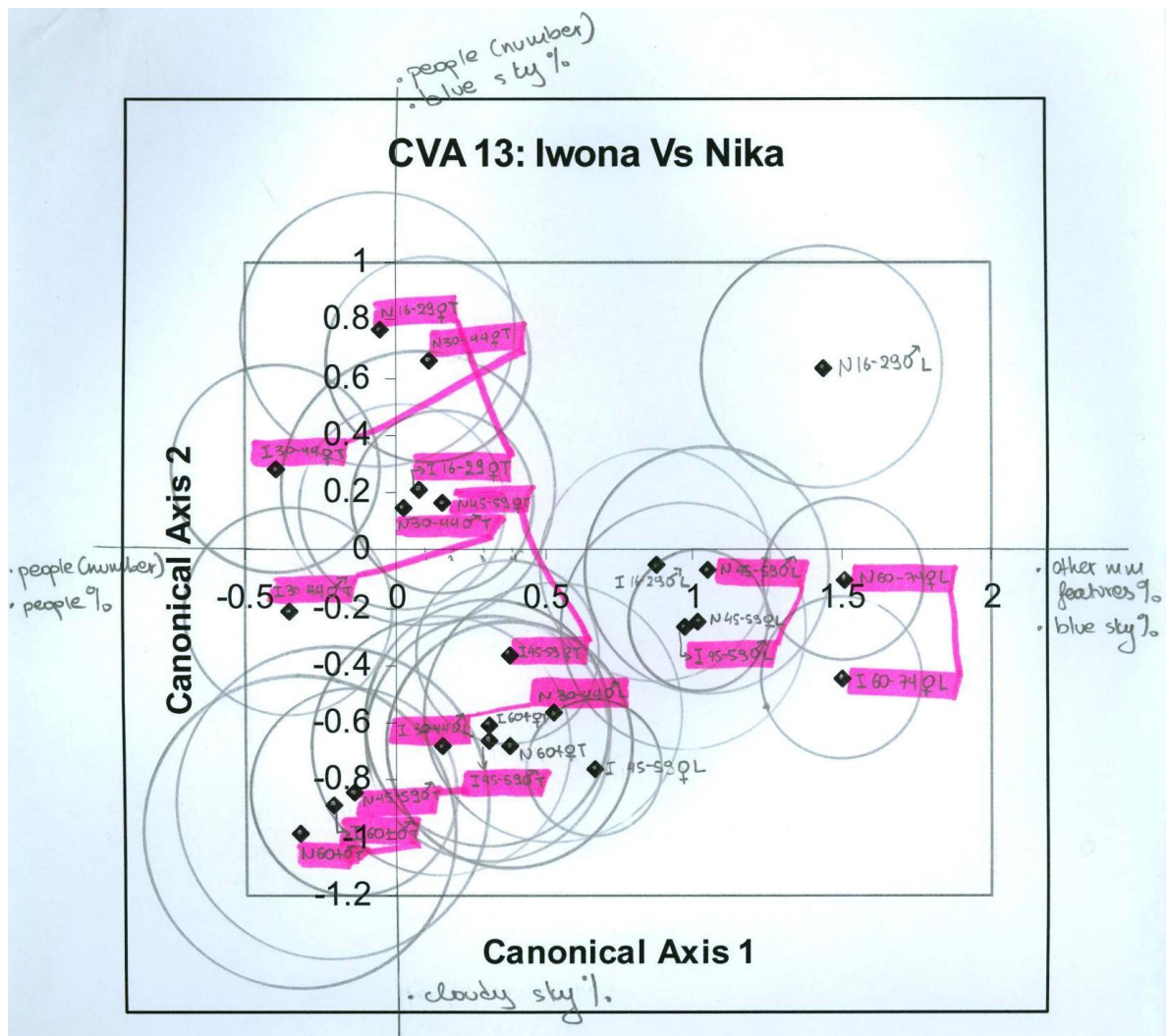


Figure 28: Bind double-coding CVA with researcher's notes

8.5 Discussion

The first aim of this analysis was to associate particular features with particular kinds of people and to investigate differences of opinion among different user groups of the same area by analysing the data in a quantitative fashion. Even though this experiment had never been performed before, it was proved that out of the 12 hypotheses tested, only one proved to be incorrect. In the rest of the tests performed, occasionally there were different groups of people whose photographs were similar, but overall the conclusion that can be drawn is that people photograph different things depending on the reason they are in the area, and

this can be statistically proven using quantitative data. This outcome links to the second aim of this analysis, which is to establish if the photographs are useful as stand-alone data or if the accompanying diaries give them value. It is clear from the analysis that photographs *can* exist as stand-alone data and link directly to the participants. This dataset and analysis can potentially be used in tourism marketing in several ways: however, it is difficult to establish how they can be used as a tool to assist tourism planning without the accompanying questionnaires. The meaning the photographs tried to convey; that is, the reasons why they were captured, was not examined here, as no qualitative data were used and photos were examined on the basis of their face value: a count of squares of what was in the photographs. It can be argued that the only way a quantitative analysis of the photographs can be used to assist tourism planning is indirect. However, there is a lot of potential for this method and numerous applications for its use as a marketing tool, which will target specific groups according to their visual preferences and distinctive characteristics. It can therefore be used in a destination's marketing campaign to target specific groups of people, who will be the type of tourist the destination will want to attract. According to Tran and Ralston (2006), there are unconscious needs for achievement, affiliation and power, which are related to preferences for adventure, and cultural and eco-related tourism. These unconscious needs can be identified and visualised using Volunteer Employed Photography.

One of the objectives of this analysis was to narrow down the variables the photographs would be coded against to a manageable amount. It took the researcher almost two months to code 30 variables for 500 photos, which would not be considered cost effective if the methodology was to be suggested to a tourism destination board. Using Canonical Variate Analysis, the variables were reduced from 30 to 12: this shows that certain aspects of the photographs were common to all participants: and that these aspects could not be used to differentiate between photographs. It is therefore possible to narrow down the number of variables to the most important ones in order to save time. There are also new computer software packages available that can identify and count aspects in a photograph.

8.6 Conclusion

In Chapter 8, the use of a quantitative analysis method called Canonical Variate Analysis (CVA) was examined: CVA was used to associate particular features with particular kinds of people and to investigate differences of opinion among different user groups of the same area by analysing the data in a quantitative fashion. CVA shows the differences between groups by plotting them on a bivariate plot which indicates what the main factors that constitute the differences are. It became apparent that there are significant differences in the photographs captured by different groups of people. It also emerged that gender and age, the basic demographic criteria the study used to be compared to the census and the Visitor Survey, did not play a major role in participants' decision of what to photograph. On the contrary, gender and age blurred the picture. When these demographic criteria were either removed from the equation, or only one was used, clearer results emerged. A total of 1,495 photographs, which constitutes the complete dataset of photographs, were coded for the CVA analysis and analysed in a quantitative fashion. The coding system and the related process were presented in this chapter.

This chapter also proves that photographs can be generally used as stand-alone pieces of data and that they do not necessarily need the diaries to make them credible: however, the strength of the 'VEP triad' is enhanced if they are. It could be argued that demographic data need to be collected and that the diaries are invaluable if VEP is used to assist tourism planning decisions. Finally, the use of CVA and the reasons behind the differences in the photographs need to be investigated further; this is suggested in the concluding Chapter as one of the issues that should be further pursued in the future.

9 RESULTS: QUESTIONNAIRES, DIARIES AND PHOTOGRAPHS

9.1 Introduction

This second chapter in the results section presents the results of questionnaires, photographs and diary exercises. It comprises three parts: first is the introduction, where in addition to an explanation of the structure of the chapter, the dataset is described with details about the participants' profiles based on user group – whether they are locals or tourists. The second part focuses on the main findings. These are broken down into five categories which consist of data collected from questionnaires, photographs and diaries grouped into categories entitled: “What makes living visiting and living in the area enjoyable?”, “Problems and solutions”, “What would enhance your experience of the area?”, “What would spoil your experience of the area?” and “General comments”. The formation of these categories directly results from the hypotheses formed in the beginning of the research process, as well as the aims and objectives of this study, which were then translated into questionnaire categories, and questions that participants were invited to answer through their photographs and diaries. The third part consists of concluding remarks based on the findings.

9.1.1 Profile of local participants

The 51.2% return rate resulted in the return of 66 sets of cameras and survey booklets (Table 36).

Table 35: Return rate, locals

Return rate	51.2%
Number of returned cameras	66
Number of photos analysed	679

A comparison between the demographics of the project participants to the population of St David's and Solva Wards according to the census of 2001 (Office of National Statistics, 2004, Office of National Statistics, 2003) shows that project sample is representative of the population in terms of age, as presented in Table 37. However, the sample is not representative in terms of gender.

Table 36: Demographics of local participants compared to the 2001 census

	St David's Ward	Solva Ward	Total	Tourism planning project	X² test result
All people	1797	1420	3217	61	
Males	849	722	1571 (48.8%)	21 (34.4%)	X ² =4.95 Df=1 p-value=0.25 Significant difference
Females	948	698	1646 (51.2%)	40 (65.6%)	
16-29	236	242	478	8	X ² =3.069 Df=4 p-value=0.54 No significant difference
30-44	302	235	537	9	
45-59	422	319	741	20	
60-74	320	232	552	16	
75+	227	138	365	8	

An effort was made to collect information about the length of the participant's residency in the area, as the initial plan was to compare the age group of the participant with the number of years the participant has lived in the area. During the survey period the researcher came across the following phenomenon: people who were born in St David's Peninsula answered the question with one of the following: "I was born here and have lived here with my wife for 18 years" (L124), or "my family has lived in the area since 1100" (L138). It was almost impossible to get a straight answer to the question without asking for the participant's exact age. Furthermore, the responses from people who were not born in St David's included "I have lived in St David's for 45 years but I am not local". People born in St David's (14 participants) ensured they were clear on that fact, and people who moved to the area usually claimed that they were not from the area, ensuring they acknowledged the true locals. Most of the research participants were not born in St David's (47 participants): however, in most cases their children were, and could thus be considered

true locals, according to the study participants. Additionally, local people who came from the area were very keen to talk about their family history and their connection to the area.

Based on the hypothesis that the impacts of tourism are felt more acutely by participants whose jobs are not related to the tourism industry (Angeles Oviedo-Garcia et al., 2008, McGehee and Andereck, 2004), it was considered that asking the participants about the relationship of their job to the tourism industry would help examine their attitudes towards tourism planning. According to Allen et al. (1993) residents in communities with high tourism volumes and low economic activity were more negatively disposed towards tourism. Additionally, according to McGehee and Andereck (2004) those who accepted the negative impacts of tourism and were supportive of more tourism also identified the need for tourism planning. Of the local participants, 36.4% work in hotels, restaurants and galleries. A further 48.5% work in jobs that are not related to the tourism industry: or are retired, while 7.6% (including the owner of the local hardware store, a shop assistant, a farmer and a complementary therapist) feel their jobs are partly related to the tourism industry.

As tourism planning is the focus of this project, participants were asked if they feel their views are taken into account in the area planning. A number of local participants found it difficult to answer this question, as can be seen in Figure 29. L77 illustrates this point with their answer: “I don’t express my views on the subject of area planning”. However, the participant in the next question singles out planning issues that are not tackled, and suggests changes to planning issues. A high percentage of the answers have a negative connotation (48.5%) and 30.3% of responses have a positive connotation.

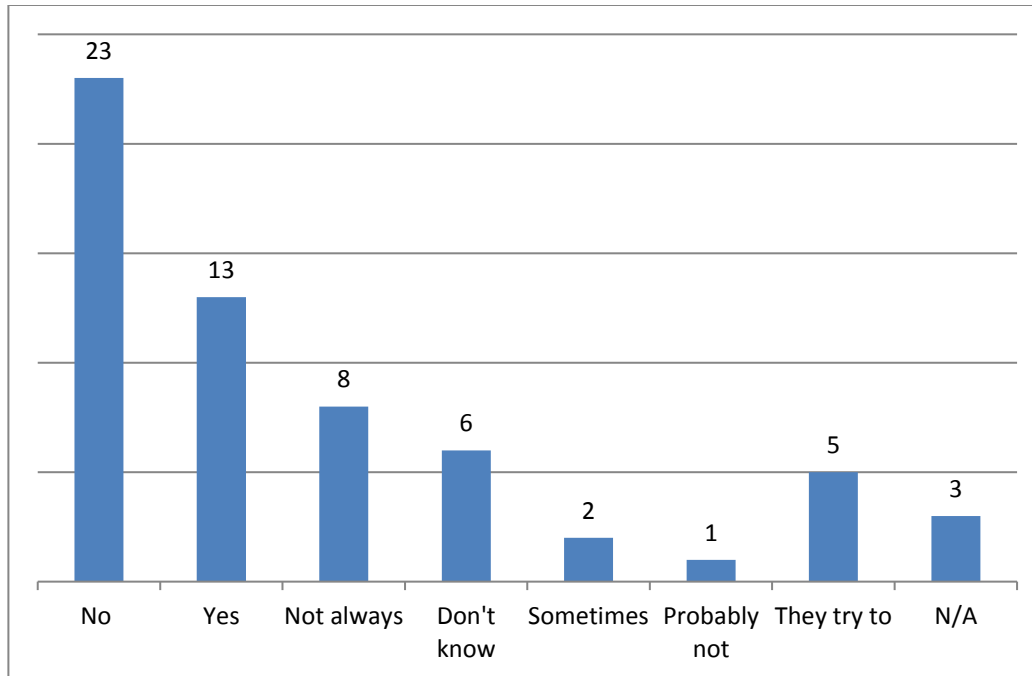


Figure 29: Are residents' views taken into account about the area planning?

In accordance to the suggestions about things that should and could change in the area, 19.7% of the participants said that they would move away given the chance. There was no pattern in the justification given by the 13 participants who would move elsewhere: four of them said that they would move elsewhere if they either got a job or their job required them to relocate. Three participants suggested that they would move elsewhere because the area now receives too many tourists and gets too busy. The rest of them gave different answers such as “I would move if I was given a lot of money” (L47), and “there is loads to see elsewhere in the world” (L13). The vast majority would not move away (71.2%); however, here there is a pattern in the justification. Nineteen of the respondents suggested that they would not move away because they love the area and they are happy living there: two of these said they left but came back. Thirteen participants said that they would not leave the area because this is their land: they are settled and happy with their friends and family. Nine participants did not justify their reply and three of them said that they are too old to move away.

9.1.2 Profile of tourist participants

The 76.5% return rate resulted in the return of 114 sets of cameras and survey booklets. Not all the photos and survey questionnaires were used, as additional information was asked from the participants and only those who replied within two months of the additional request for information were included in the analysis (Table 38).

Table 37: Return rate, tourists

Return rate	76.5%
Number of returned cameras	114
Analysed	78 sets
Number of photos analysed	817

Men and women were recruited and the sampling accords to the 2008 Visitor Survey (Horner, 2007) in relation to gender and age groups, which means that the results of this project can be generalised (Table 39).

Table 38: Demographics of tourist participants compared to the 2008 Visitor Survey

Tourist participants	Tourism planning project	Visitor survey	X² test result
Men	50.6%	50.8%	No significant difference
Women	49.4%	49.2%	
18-24 year olds	2	50	X ² =1.996 Df=5 p-value=0.84 No significant difference
25-34 year olds	13	158	
35-44 year olds	16	236	
45-54 year olds	19	240	
55-64 year olds	16	237	
65 + year olds	12	222	

Important information about visitors to the area can be found in the Pembrokeshire County Council Visitor Survey (Trembath and Tennstedt, 2008). This includes participants' social grade: 63% of visitors were from the higher social grades (bands A/B/C1) compared with just over half of the UK population (54%). Only 17% of visitors fell into social grades D/E compared to the whole UK population³ (25% respectively). It was noted that compared to 2004 results, more visitors from social grade bands D/E visited in 2008 (17%) compared to 2004 (8%).

It has to be noted that Trembath and Tennstedt (2008) suggest that in the Visitor Survey social grade bands should not be assumed to be a true reflection of disposable incomes, but one of job roles, as participants were not asked about their earnings but about their job roles. The main activities participants in this study were engaged in during their holiday are presented in Figure 30.

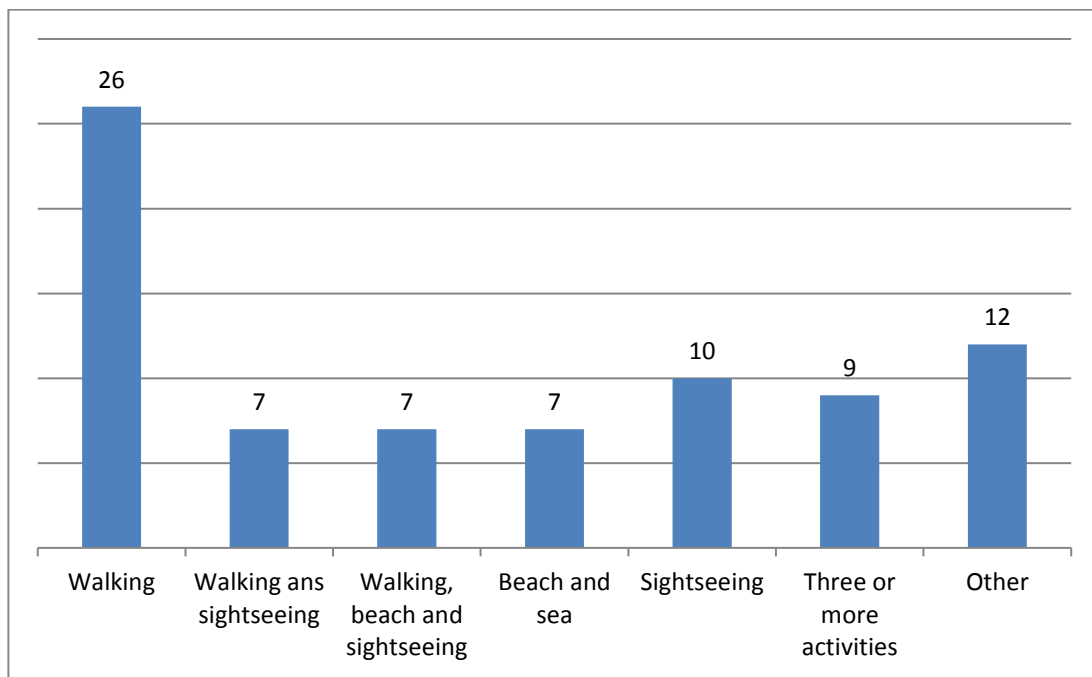


Figure 30: Main activity

The majority of the participants (28.2%) were repeat visitors to the area, with some of them taking pride in the fact that holidaying in the area is a family tradition (V33). Participant V77 has been holidaying in the area with their family for 34 years. The reasons people chose to holiday in PCNP can be seen in Figure 31. Only one of the tourist participants own a holiday home in the area (V63).

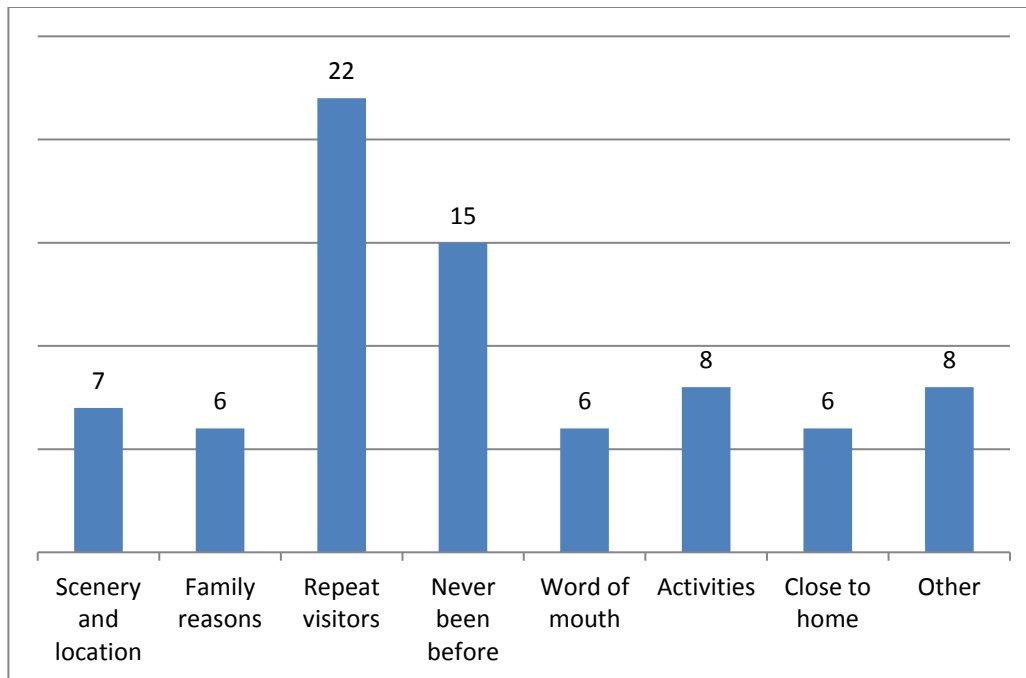


Figure 31: Reason for visit

9.2 Main findings

This section of Chapter 9 comprises the main findings of the study. Answers to questionnaire questions are presented first in each section, followed by the presentation of relevant findings that result from the analysis of the photographs and the diaries. Where possible, answers from both user groups are compared and contrasted in the same section.

9.2.1 What makes living in and visiting the area enjoyable?

9.2.1.1 Questionnaire results

Two questions were used to indicate aspects that make the area enjoyable to live in and visit. The first was only asked to the local participants: it invites them to share what they consider special about the Pembrokeshire Coast National Park. A number of responses were given and five groups of responses were formulated. Figure 32 graphically represents the answers according to the participants' first responses: participants have often suggested more than one special quality of the area. Figure 30 groups the first responses based on the

aspect that holds primary importance for the participant concerned. The most common response supplied by 47% of participants was that they considered the area's location, scenery and beauty its most special aspect. The second most popular special quality of the area (15.1% of the participants) was that it is safe, quiet and not overdeveloped. A further 10.6% of the participants considered the community to be of primary importance and 7.8% of the participants consider the heritage and culture of the area as its most special aspects. Even though the participants responded to the question, they do not necessarily express what is special to them in their answers: an example of this is L88, who suggested that “birdwatching and walking opportunities” were the special qualities of the area, which indicates that some participants responded to a more general question: “what do people generally consider special about this area?”

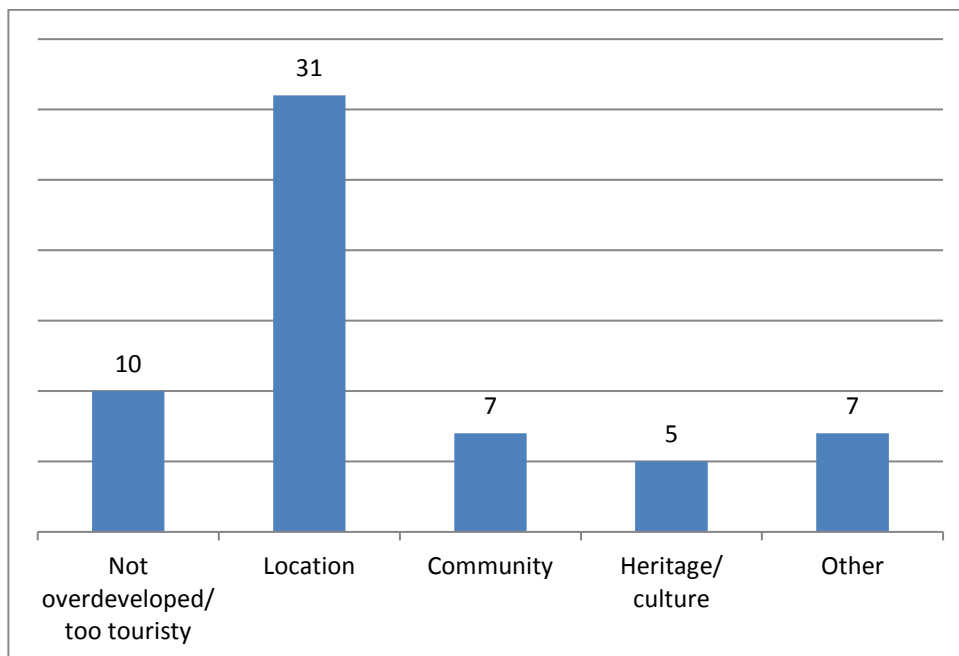


Figure 32: Local participants: what do you think is special about the area?

The second question was asked to participants in both user groups, who were invited to identify what they considered the most valuable aspect of the area (Figure 33).

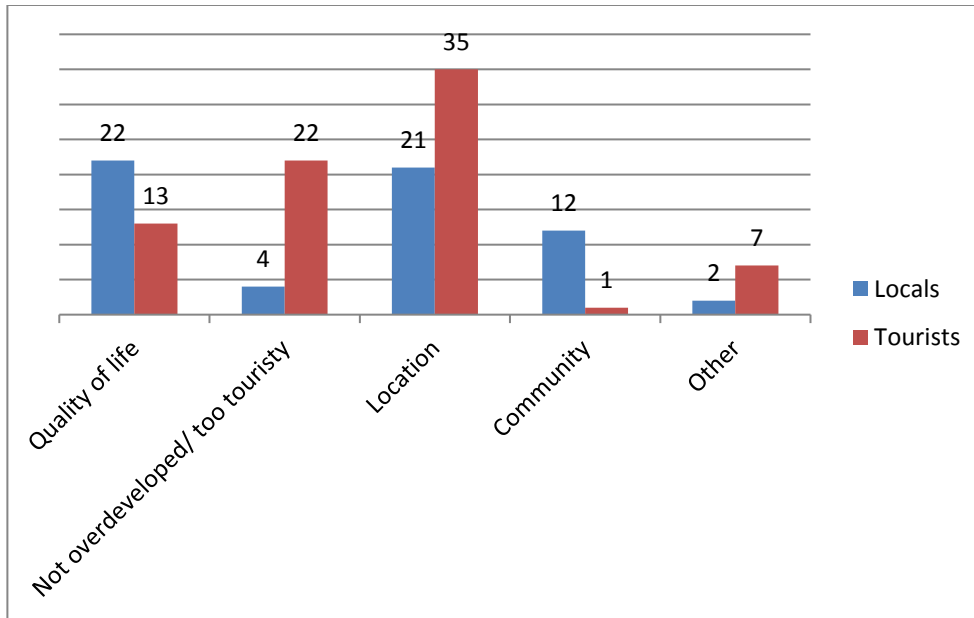


Figure 33: What is it that you value the most about this area?

Table 39: Chi-square test for not overdeveloped

$$X^2=10.54$$

$$Df=1$$

$$p\text{-value}=0$$

Significant difference

Table 40: Chi-square test for quality of life

$$X^2=6.83$$

$$Df=1$$

$$p\text{-value}=0$$

Significant difference

Table 41: Chi-square test for location

$$X^2=1.553$$

$$Df=1$$

$$p\text{-value}=0.2$$

No significant difference

The categories formulated were quite similar to the previous question: however, when people were asked to single out the aspect they considered most valuable, they responded differently. Location still scored high with local participants: however quality of life, which is linked to the location, came first. There is no statistical difference in the way participants of both user groups appreciate the location as can be seen in Table 40. It is therefore more likely for locals to be less disapproving of development compared to the tourists, who feel more strongly that it will harm the area (Table 41). Also, the quality of life in the area seemed to be more important to locals compared to tourist participants (Table 42). A statistical test was not run for the “community” category, as the number of tourists who considered it as something they value in the area was negligible.

The most popular answer that was given by 33.3% of the local participants was quality of life. This category included answers like safety, openness, sense of peace, and fresh air. The next most popular answer was location, which accounts for 31.8% of the answers and included natural beauty and scenery. Twelve participants (18.2%) valued the community or fellow community members the most. Four participants considered the most important aspect of the area is that it is not overdeveloped or too touristy: while two participants did not answer the question. Almost half of the tourist respondents (44.9%) valued the location of the area, its natural beauty and unspoilt coastline. A number of tourists (28.2%) valued the fact that the area is not overdeveloped and that it does not attract too many tourists, whereas 16.7% of the respondents valued the quality of life the area has to offer. This category groups more sensuous characteristics such as tranquillity, safety, peace, quiet and freedom.

9.2.1.2 *Diary and photographs results*

All the local participants contributed to the category entitled “What makes living and visiting the area enjoyable?” Their responses were classified in four major categories, of which three were significantly more popular as can be seen in Table 43. Information for this theme was collected from photographs and diary descriptions that depicted enjoyable aspects of the lives of the local community and the visitors’ holidays. This category

answers directly the questions put to local participants: “What do you enjoy about living in the area? What do you like? What gives you a sense of place?” and to tourist participants: “What do you like about the area? Why have you chosen to visit this area? What makes your visit enjoyable?” Participants answered using their photographs and diaries. Therefore, each comment in this part of the analysis corresponds directly to a photograph: everything the participants like has a photographic representation and its own “locale” (Stedman et al., 2004). The themes were devised in the same way as for the previous theme: photographs and descriptions were thoroughly examined and appropriate themes were drafted. Then comments and photographs were allocated to themes, and shifted if the themes needed changing. The photographs and comments were examined separately for each user group.

Table 42: What makes living in the area enjoyable?

What makes living in the area enjoyable?	What makes visiting the area enjoyable?
Important places for local community members 61	Important places for tourists 77
Local pride 59	
Things that make life enjoyable 48	Things that make visiting the area enjoyable 71
People 9	People 25
Other 8	

A general observation from the comments in the tourist diaries is that they were on average not as extensive as the locals’: more photographs were taken but the analysis and reflection in some diaries lacked depth. However, that is compared to the locals who were very meticulous and committed to the task. It is evident from Table 39 that the themes discussed were similar; however, locals went to greater depths in their diaries, which were so insightful that numerous more categories were devised for them. As a result, the tourists’ comments and photos cover a smaller area compared to that covered by the locals (Figure 32).

If the two analyses were integrated for similar results to be presented together, the data collected from the tourists’ diaries could easily be lost amongst the plethora of categories generated from the locals’ comments. The results are therefore explained separately.

Attention will be drawn to the main similarities and differences prior to the detailed presentation of the results.

Tourists and locals approach issues with different mindsets. This is made obvious in the “things that make living or visiting the area enjoyable” theme, where very few similar things are suggested: namely the Celtic Coaster local bus service and local arts and crafts. Chi-square tests were performed to identify similarities and differences in the importance of the area assets for the two user groups where similar categories were formulated, as can be seen in Figure 34. The degrees of difference in all the tests are Df=1. The tests indicate that that:

- Tourists appreciate the presence of the Celtic Coaster service more than locals ($\chi^2=4.04$, $p\text{-value}=0.04$)
- Local arts and crafts are equally important to participants from both user groups ($\chi^2=0.1$, $p\text{-value}=0.74$).
- The area’s general natural assets are of equal importance for the enjoyment of the area for locals and tourists ($\chi^2=4.23$, $p\text{-value}=0.03$).
- However, beautiful views and scenery seem to be more important to tourists for their enjoyment of the area ($\chi^2=5.06$, $p\text{-value}=0.02$).
- Tourists and locals equally enjoy the sea, bays and harbours ($\chi^2=0.33$, $p\text{-value}=0.56$).
- Vegetation and wildlife ($\chi^2=2.38$, $p\text{-value}=0.12$) and rock formations and geology ($\chi^2=3.51$, $p\text{-value}=0.06$) are equally important to both user groups.
- The sensuous qualities of the area ($\chi^2=21.74$, $p\text{-value}=0$) and man-made landmarks ($\chi^2=18.67$, $p\text{-value}=0$) are more important to the local population compared to the tourists.

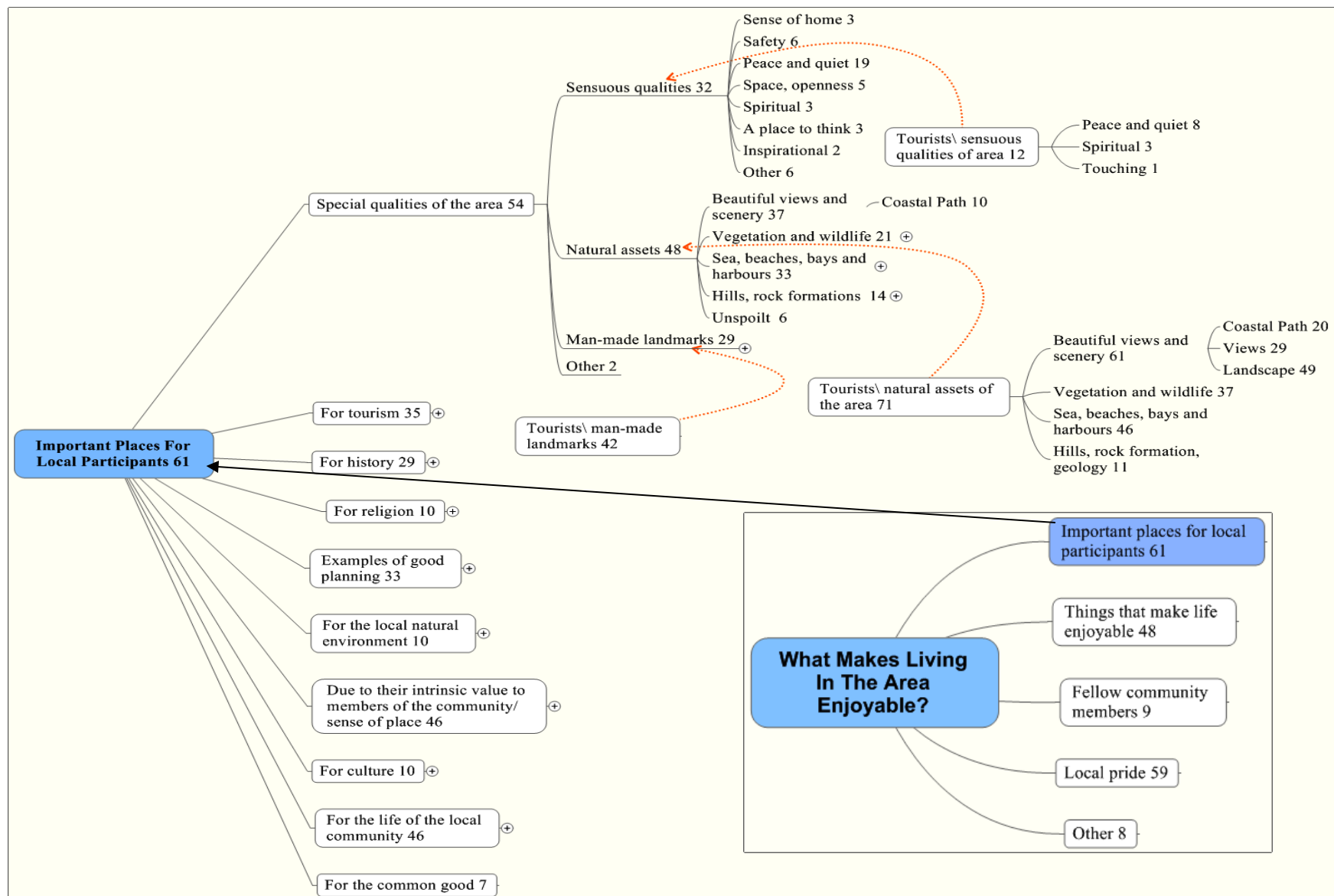


Figure 34: Important places for local participants and the focus of tourists' photographs and references

Legend: Tourists, in comparison to local participants, have only addressed the issues indicated by the red arrows. These indicate where each group of tourists' comments would sit in, in relation to locals' comments.

9.2.1.2.1 What makes living in the area enjoyable?

a Important places for local community members

Local community members indicated a diversity of important places in their photographs, and in their diaries they specified the reasons for their importance. Based on reasons given for photographing important places, 10 categories were created (Figure 35). Photographs are one of the best tools to convey multilayered meanings (MacKay and Couldwell, 2002, Okamoto et al., 2006); therefore the ‘local’ photographers took advantage of this special quality and in most cases gave multiple reasons for photographing each place. These themes will be discussed in order of importance.

i. Special qualities of the area

Fifty four participants photographed places in St David’s Peninsula because of their special qualities: these qualities were further broken down into three categories: natural assets, sensuous qualities and man-made landmarks. It is imperative to determine groups of aspects of the area that are important to participants to help draw conclusions. In the “natural assets” category, 48 participants referred to the natural assets of the area 138 times. A number of natural assets were photographed and described (Figure 35). In the sensuous qualities category there are 50 comments from 32 participants. Photograph 2 belongs to this group as it is a visual representation of safety according to participant L49. In the man-made landmark category, most of the comments and photographs are about St David’s Cathedral, followed by St Non’s Chapel, views of St David’s, the Cathedral Bell Tower, Bishop’s Palace and other man-made features.



Photograph 3: Main Street Solva, 3 a.m. (L49)

"I am a retired lady but felt safe taking this picture in the street at 3 a.m. because our village is virtually crime free. I feel safe anywhere in the village at any time of the day or night. This feeling of safety is very, very important." (L49)

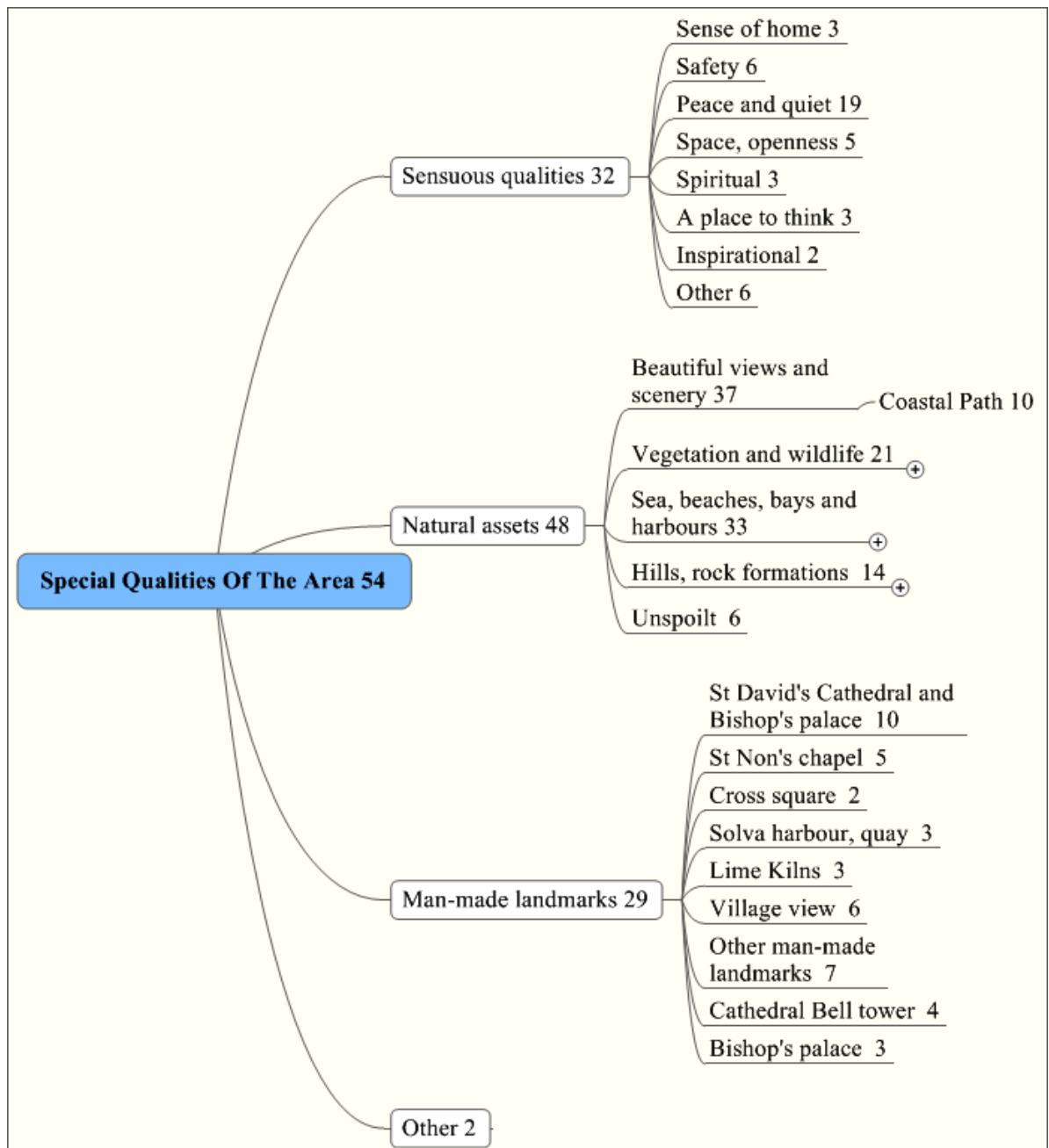


Figure 35: Special qualities of the area

ii. Sense of place

This category is split into two subcategories: one aims to make the analysis site-specific, to identify which views depict “sense of place”, and the second aims to examine what “sense of place” means to the participants. A number of places in the area make participants feel at home, as can be seen in Tables 44 and 45 and Figure 36.

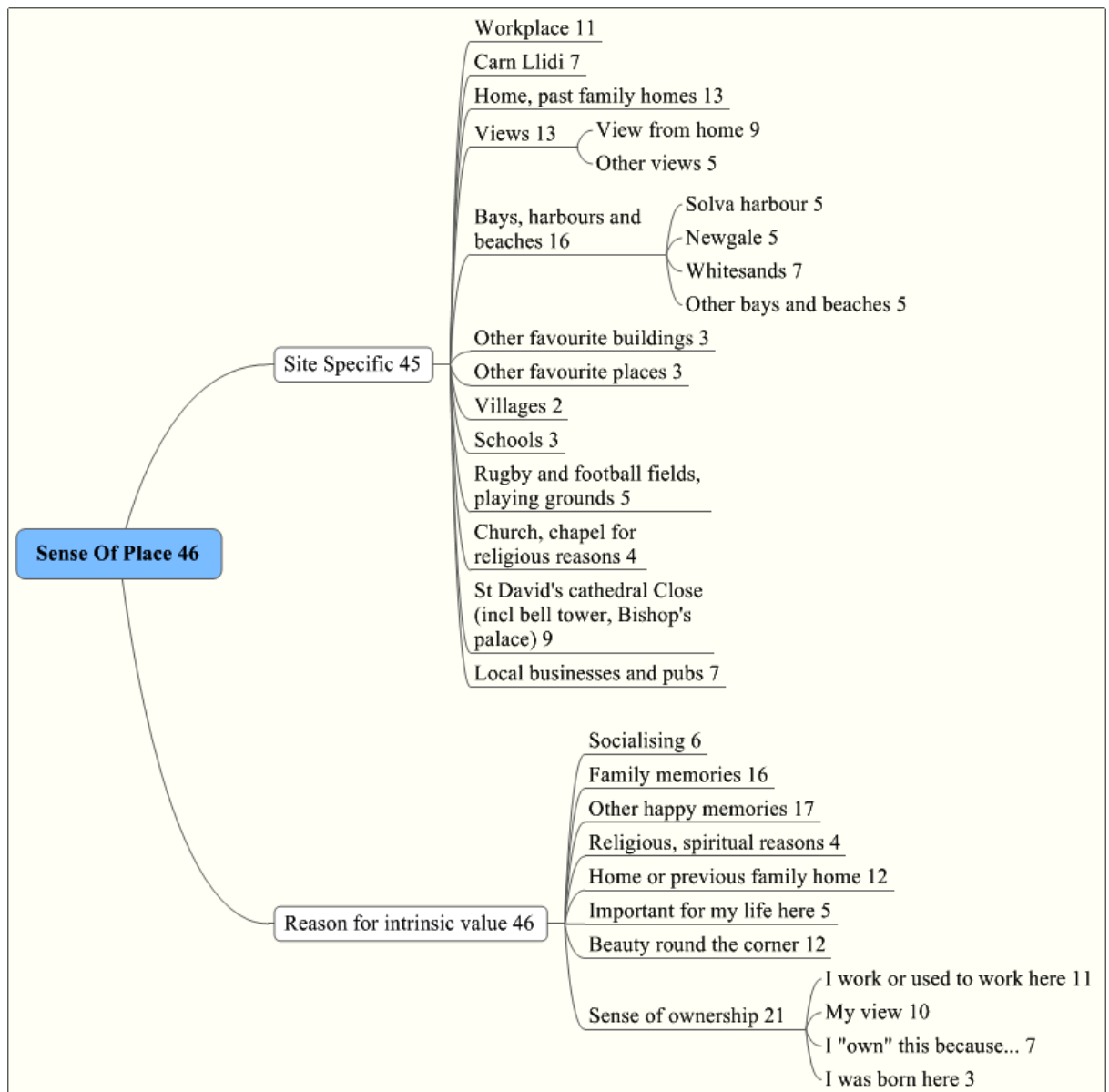


Figure 36: Sense of place

Places that give locals a sense of place and reasons they give are shown in Tables 40 and 41.

Table 43: Sites that give locals a sense of place

Places photographed	Number of participants	Number of references
Local businesses and pubs	7	10
St David's Cathedral Close (including Bell Tower, Bishop's Palace)	9	10
Church, chapel for religious reasons	4	7
Rugby and football fields, playing grounds	5	6
Schools	3	3
Villages	2	3
Other favourite places	6	9
Other favourite buildings	3	3
Bays, harbours and beaches	16	28
Views	13	17
Home, past family homes	13	17
Carn Llidi	7	7
Workplace	11	14

Table 44: Why do these places give you a sense of place?

	Number of participants	Number of references
Socialising	6	8
Family memories	16	28
Other happy memories	17	34
Religious, spiritual reasons	4	5
Important for my life here	5	6
Home or previous family home	12	14
Beauty round the corner	12	19
Sense of ownership	21	27

This part of the results is important as it explains place attachment and demonstrates local knowledge, and flags up places people feel strongly about, which is important to planners

(Stewart et al., 2003). A number of moving stories came up, which also highlights the bond between researcher and participant VEP research facilitates (Miller and Happell, 2006). The caption of a photograph of St David's Cathedral by participant L9 (Photograph 3) reads: "The Cathedral. I used to sit by the bell tower looking down at the cathedral with my friends and have a chat and giggle. One of my friends has since passed away so they're treasurable memories".

A number of other photographs with moving, emotional captions were taken. The theme entitled "sense of ownership" includes photographs of their homes, their workplace, the view from their home and the houses they were born in.



Photograph 4: St David's Cathedral (L9)

iii. Community life

Forty six participants captured important places for the life of the community in their photographs. Most of them show community activity places, such as the Cross Square, the Solva Memorial Hall, the pub, the Cathedral and other locations/places the community look after. Thirteen participants photographed places that bring in local income, be it their

own business, such as the Mathias Hardware store, or others. The next sub-category consists of photographs that depict “things” that make the life of the local community easier, such as CK’s supermarket, without which people would have to drive 16 miles to get to the nearest supermarket in Haverfordwest: the doctor’s surgery and the Post Office. A further category entitled ‘fishing and boating’ includes photographs of Solva Harbour as the only working harbour in the area and Porthclais Harbour: both are important for the local community either because they own a pleasure boat or a fishing boat. Thirteen photographs of play equipment in parks were also captured by nine community members, three of which were funded and developed by the local community. Schools, local homes and other important places for the local community were also captured in photographs.

iv. Tourism

This set of comprises photographs that show what local people consider to be the area’s tourism assets. These photographs and the accompanying comments are broken down into four themes: boating, fishing, surfing and other activities, the beauty of the area (mainly of the coastal path, beaches and coves), those that present or discuss amenities, and local landmarks. Amenities photographs include a multitude of places that offer services such as parking, the Tourist Information Centre, and the cathedral café.

v. Examples of good planning

This category is again broken down into three sub-categories. The two most popular are the site-specific category, which includes specific sites that are well-looked after and are presented in Table 46, and the “reasons for giving these examples”.

Table 45: Good planning examples

	Number of participants	Number of references
CK's supermarket	2	2
Tourist Information Centre	3	3
Private properties	12	15
St David's Cathedral and Bishops palace	4	6
Beaches, coves, harbours	7	10
Protected islands	3	3
Solva Lime Kilns	4	4
St David's Primary School	2	2
Solva Harbour Clubhouse and Boathouse	2	3
St David's airfield	3	3
Coastal Path	2	2
Villages	3	4
Other	10	12

Most of the comments stem from the good restoration and protection of the sites pictured. Specifically, most of the positive comments were about development which is in keeping with the local environment. There were also positive comments on help given to the local community by the local authorities to develop assets important for the livelihood of the community, such as playgrounds and the supermarket.

Fifteen residents commented positively on 18 occasions on the state of the environment in the park. The National Park Authority has mechanisms to protect the environment, to assess it and to maintain the state of the park, considered positive by some residents. In addition, there are a number of positive comments on the designation of National Park status and the fact that this acts as a 'safety valve' alongside strict planning regulations that stop unsympathetic development and protect the environment. Finally, the funding provided to local businesses such as the Solva Woolen Mill was flagged up as positive action taken by the County Council and the Park Authority.

The National Park Authority, the local authority and other authorities such as Cadw were mentioned as impacting very positively on the area either by restricting development or by funding much needed local projects.

vi. History, culture and religion

A number of photographs were taken to showcase the history of the area, its culture and the religious history, as can be seen in Tables 47 to 49.

Table 46: Comments on photographs that illustrate the history of St David's Peninsula

	Number of participants	Number of references
Cathedral and Bishop's Palace	12	16
Iron Age settlement, St David's Head	2	2
St Non's Chapel	4	5
Solva Lime Kilns	5	8
Generic references to history	6	7
Local trade history	6	8
Other historic places	7	8
Other chapels and churches	2	2

Table 47: Comments on photographs that illustrate the culture of the area

	Number of participants	Number of references
Cross Square	2	2
Arts (examples of exceptional architecture, community supportive of artists, inspiring views)	8	11
St David's Cathedral	3	4
Other	2	3

Table 48: Comments on photos that illustrate the religious roots of the area

	Number of participants	Number of references
St David's Cathedral	5	6
Whitchurch Church	1	1
St Non's Chapel	2	2
St Aidan's Church	2	2

vii. Common good and “environmentally friendly” aspects of the area

Eight participants took photographs and commented on 13 occasions on environmentally friendly buildings and provisions in the National Park such as environmentally friendly local businesses: and NP initiatives such as conifer-tree removal which enhances the natural habitat of the area. Participants photographed the lifeboat station in St Justinian’s, the police station and the lifeguards in Whitesands as examples of people who are on duty for the common good.

b Local pride

Strong indications of local pride emerged from many of the comments relating to life in St David’s Peninsula. A “local pride” theme was therefore constructed, which consists of 13 sub-categories. Two indicative examples are: “I love the Cathedral – my parents were married here 70 years ago on October 30th 1937” (L128), and “...but a difficult one this



Photograph 5: "From costal path looking across Ramsey Sound to Ramsey Island" (L99)

photo! I scattered my husband’s ashes here: a beautiful spot (we’d had our last picnic here and he’d chosen the spot). He’d far rather be here than have a gravestone. I’m certain of that” (L99, Photograph 4). Table 50 contains the sub-categories and the number of

participants who commented on photographs in this sub-category as well as the number of references.

Table 49: Comments on photographs that show local pride

	Number of participants	Number of references
Mine	46	139
Spiritual place	10	11
Artistic and cultural place	7	10
Local community	7	10
Local community achievements	13	17
Local community focal points	15	21
Unique in the area	11	13
Local schools	5	5
Solva is a working harbour	10	13
Beautiful area, aspect	47	142
Historic	29	53
Excellent quality local produce	6	8
Other	12	18

c Things that make life enjoyable

Forty eight participants have made 125 comments on things that make life enjoyable in St David's Peninsula. Most comments referred to the unspoilt character of the area, and photographs of the natural environment were captured. Also, photographs of arts galleries suggest that the area is supportive of the arts and photographs of the natural beauty from which artists draw their inspiration were taken. There were a number of photographs of animals such as Welsh Blacks, Ethel the cow, ponies and alpacas, accompanied by comments like "Welsh wildlife is fascinating!" (L25, Photograph 5).

The category "mostly used by locals, not tourists" comprises comments about things and areas used mainly by the local community, not the tourists, which are considered 'little secrets', such as the pub "where all the locals get together, when all the tourists have gone especially in the winter" (L50, Photograph 6).



Photograph 6: "Alpaca and Neil. Welsh wildlife is fascinating!" (L50)



Photograph 7: "My local pub an landlord" (L50)

The sub-categories in this theme are presented in Table 51.

Table 50: Comments on photographs that depict things that make life enjoyable

	Number of participants	Number of references
Will not change - can't change	6	12
Mostly used by locals, not tourists	8	11
Unspoilt	9	16
Celtic coaster	5	6
Animals	7	12
Welsh language, dual language signs	2	3
Local produce	5	6
Community activities	7	9
Art, galleries, support for art	9	14
Sunsets	7	8
Other	17	23

d People

Fifteen comments by nine participants refer to photos of people. Eight of them are of friends, five of other local people: three depict the “true” local life and two are of family members. The “real night life” of St David’s photos depict a number of young men are shown drinking and dancing in fancy dress, again an indication that a camera is less intrusive than a researcher’s physical presence (Clark-Ibanez, 2004, OPENspace, 2005).

9.2.1.2.2 What makes visiting the area enjoyable?***a Tourists***

The three main themes identified (Figure 37) are presented in order of popularity.

- A. Important places for tourists
 - i. Natural assets (71 tourists, 293 references)
 - a) *Beautiful views and scenery (61 tourists, 148 references)*

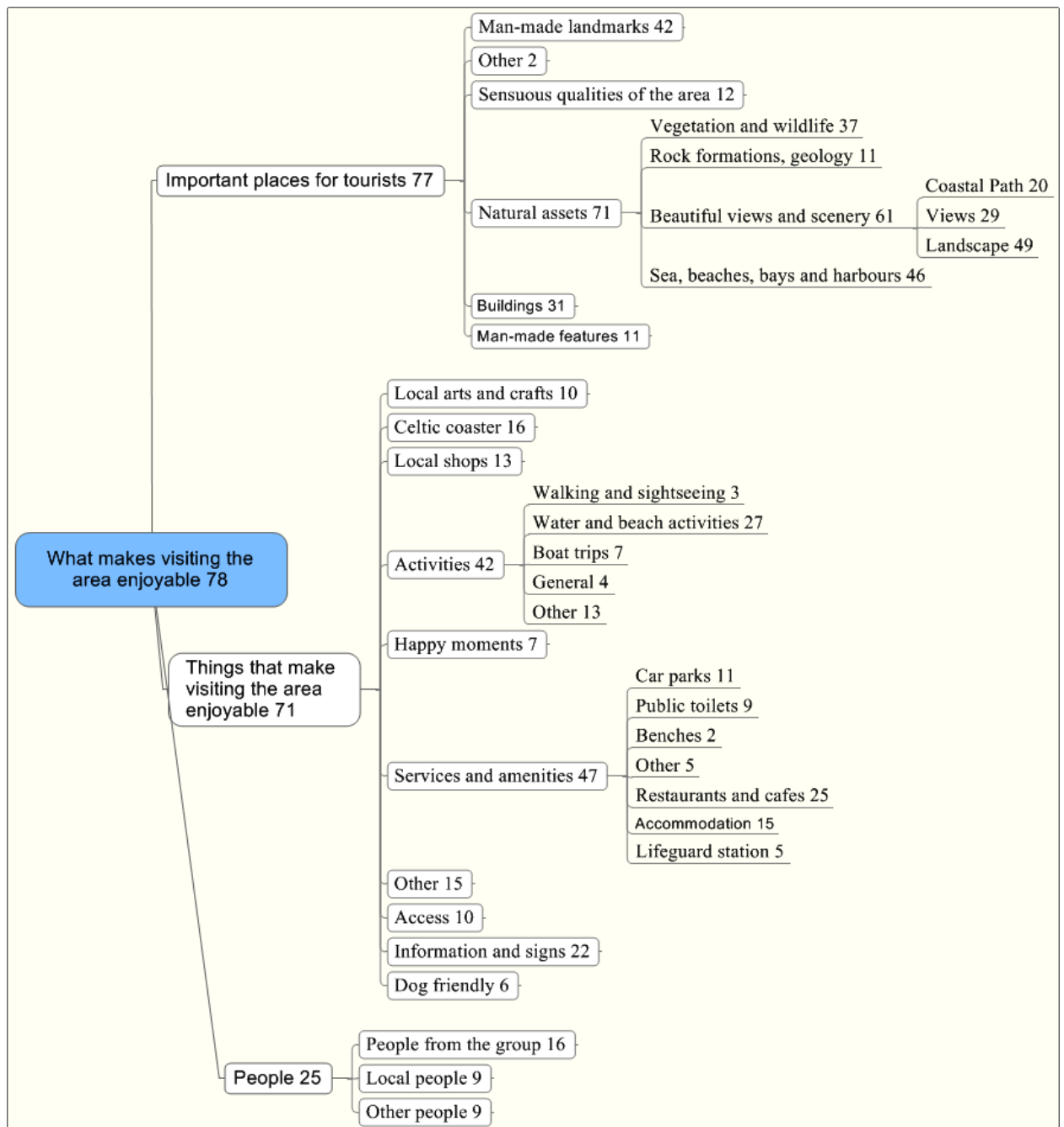


Figure 37: What makes visiting the area enjoyable?

Photographs and comments under the sub-category “landscape” include photographs and subsequent comments of the generic landscape or photographs that were described as landscape shots. Such photographs were captured by 49 participants. Photographs that were taken to show specific aspects of the landscape such as bays and beaches are coded

under the relevant theme. These photographs usually do not have a key feature. The sub-category entitled “views” includes photographs by 29 participants and their comments. These photographs are not classified under landscape as the view is the key feature and is singled out as the aspect of the area that makes participants’ visits enjoyable. Photographs always include the coast or the sea and some of them are of sunsets in Whitesands, which are claimed by some participants to be the most beautiful sunsets in the world. The sub-category “Coastal Path” comprises 25 photographs captured by 20 participants. It includes photographs that depict the landscape but with the Coastal Path being the key feature. People comment on the opportunity the Coastal Path gives them to enjoy the breathtaking landscape of Pembrokeshire.

b) Sea, beaches, bays and harbours (46 tourists, 91 references)

Photographs of Whitesands, Solva Harbour, Porthgain, Caerfai and Newgale are under this theme. The participants photograph bays and beaches to show their appreciation of the landscape and their enjoyment of being by the sea or being involved in water activities.

c) Vegetation, animals and wildlife (37 tourists, 53 references)

All sorts of wildlife were photographed, including insects, wild ponies, dolphins and seals as well as farm animals. Flowers, shrubs and bracken were also photographed. In instances where participants could not photograph the animal they wanted they took a photograph of something to remind them of their experience. An example is participants who did not manage to take photographs of seals or dolphins they saw on their boat trip to Ramsey Island, so photographed the boat that took them to the island instead.

d) Rock formations and geology (11 tourists, 14 references)

The category includes photographs that depict the interesting geological features of the area: photographs of rock formations, hillsides, caves, rocks of peculiar colours comprise this category.

ii. Man-made landmarks (42 tourists, 70 references)

Participants photographed historic buildings and features, with by far the most photographed building being St David’s Cathedral. The Bishop’s palace, the Celtic Cross in St David’s square, the Cathedral Bell Tower and the lime kilns in Solva were the most photographed historic features.

iii. Buildings (31 participants, 38 references)

This category comprises photographs that depict buildings that participants found aesthetically pleasing. The most photographed ones were the lighthouse on Stumble Head and the Lifeboat Station in St Justinian's, both accompanied by comments on their importance of the safety for the area users, and a grass-roofed cabin on the coastal path accompanied with comments on it blending perfectly with the landscape. Photographs of the Tourist Information Centre are included in this category and photographs of traditional Welsh cottages people liked.

iv. Sensuous qualities (12 tourists, 15 references)

Photographs and comments in this theme (16 photographs) highlight the peace, quiet and the remoteness of the area. Participants capture an aspect of the area and add the sensuous quality meaning by commenting about it in their diaries

v. Man-made features (11 participants, 21 references)

Photographs that depict man-made features (that are not buildings) that make people's holidays enjoyable are grouped here. There are no clusters of photographs of a particular feature here: photographs are of the playground in St David's, the park and artwork, benches and other aspects that make people enjoy their visit.

B. Things that make visiting the area enjoyable

This category consists of 10 subcategories of photographs and comments about aspects of the area that make people's visits enjoyable. Figure 38 shows that two themes are by far the most popular: the "services and amenities" theme with 71 photographs and 84 comments by 47 participants and the "activities" theme with 72 photographs and 82 comments by 42 participants.

i. Services and amenities

This theme includes photographs and comments of the following (Table 52). References to the themes below are at times more in number compared to the number of photographs. This is because participants sometimes make a number of comments on the same photograph or make comments not linked to photographs. However, the key feature in almost all of the photographs (95%) is the service or amenity in the first column Table 50.

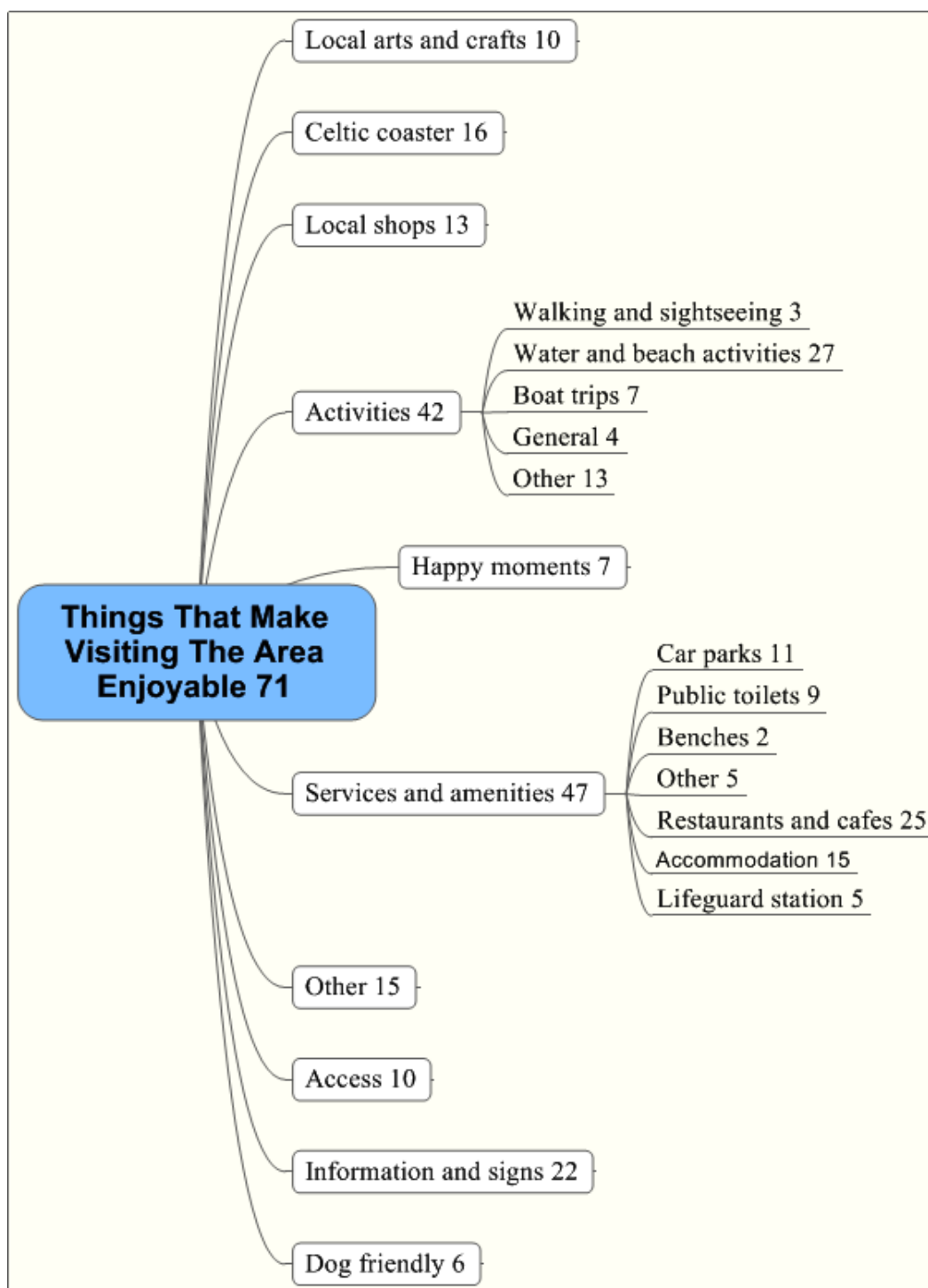


Figure 38: Things that make visiting the area enjoyable

Table 51: Services and amenities that make visiting the area enjoyable

Service/amenity	Participants	References	Photographs
-----------------	--------------	------------	-------------

Restaurants and cafés	25	32	26
Accommodation	15	17	15
Car parks	11	11	10
Public toilets	9	11	8
Lifeguard station	5	7	5
Benches	2	3	2
Other	5	5	4

ii. Activities

This theme comprises photographs and comments as shown in Table 53. In this theme most photographs show the activities taking place (Photograph 8). The rest of them are photographs of objects or the environment that relate to activities such as buckets and spades or photos of kayaks and canoes. The “general” theme includes photographs that are of no specific activity but are taken to reflect activities. An example is a photograph by V1 (Photograph 7) who entitles it “land usage” and considers it as important because it is “good to see lots of activities going on and people enjoying themselves in spite of the weather”.



Photograph 8: "Land usage" (V1)



Photograph 9: "Mackerel fishing" (V38)

Table 52: Activities that make visiting the area enjoyable

Activity	Participants	References	Photographs
Water and beach activities	27	49	47
Boat trips	7	8	6
General	4	4	3
Walking and sightseeing	3	3	3
Other	13	17	15

iii. Information and signs (22 participants, 28 references, 28 photographs)

This theme consists of photographs that either depict directional signs, or are sources of information: such as the photograph by participant V95 of the RSPB ranger who was giving a talk about wildlife protection and sustainability, and a photograph by participant V84 of the “Coast to Coast” newspaper: a publication for visitors that informs of available activities and areas to visit in the National Park (Photograph 9). The rest of the themes that comprise the “things that make your holiday enjoyable” category are presented in Table 54.

Table 53: Things that make visiting the area enjoyable

Things that make holidays enjoyable	Participants	References	Photographs
Celtic Coaster bus service	16	20	14
Local shops	13	27	20
Local arts and crafts	10	16	13
Access	10	12	12
Happy moments	7	8	7
Dog friendly	6	8	7
Other	15	18	16



Photograph 10: Coast to coast publication (V84)

C. People

The photographs and comments in the “people” theme can be seen in Table 55. In this theme, with very few exceptions (one comment in the first category and four comments in the second category), the key features are the people. Most participants photographed their family members or their friends while engaged in some kind of activity to show how they enjoy the area. Some of these photographs have an emotional load such as a photograph by V90 (Photograph 10): “Islands. [...] holidays are also about the people you go with!” and Photograph 11.



Photograph 11: "Rocky headland and husband!" (V90)



Photograph 12: Family holidays (V61)

Table 54: People who make participants' holidays enjoyable

People	Participants	References	Photographs
People in the same group	16	41	40
Local people	9	11	8
Other people	9	10	10

Photographs of local people who made their holidays enjoyable include photographs of the lifeguards, the assistants in the Tourists Information Centre and “Will the Fish’s” van who provided the participants with cleaned and prepared shellfish, a highlight of their visit. Photographs of other people include people climbing and walking and enjoying the landscape. This theme might include photographs of members of the participants group who were not specified as such.

b Locals

Even though the questions “What do you like about the area? Why have you chosen to visit this area? and What makes your visit enjoyable?” were directly posed to tourist participants, some of the locals while emphasising the importance of tourists in the area took some photographs and made comments on aspects of the area they think are important for the tourist experience. Their ideas of what make the tourists’ visit enjoyable in Pembrokeshire Coast National Park can be seen in Table 56.

Table 55: Aspects of the area locals think make holidays enjoyable

Aspects of the area	Participants	References	Photographs
Nature and landscape	11	14	12
Historic places	11	11	11
Services	3	3	3
Water activities	2	5	5
Other	5	5	4

9.3 Problems and solutions

9.3.1 Questionnaire results

Two questions asked in the questionnaires of both locals and tourists were designed to reveal the participants' feelings on problems they experienced in the area and to collect their ideas regarding ways to improve them. These questions were "Are there any aspects of the area you don't like?" and "How can the area be improved?"

Only two local participants chose not to answer this question, whereas 59.1% of the study participants answered that there are aspects of the area they do not like (Figure 39). Aspects of the area participants do not like are presented in Table 57 Out of the 39 local participants who said there are aspects of the area they do not like, three did not give any further information. Twenty participants suggested that there are no aspects in the area they do not like. The majority of the tourist respondents (64.1%) answered that there is nothing about the area they do not like. A chi-square test showed that it is more likely for tourists to say that there is nothing in the area they dislike compared to the local participants ($X^2=13.42$, $Df=1$, $p\text{-value}=0$)

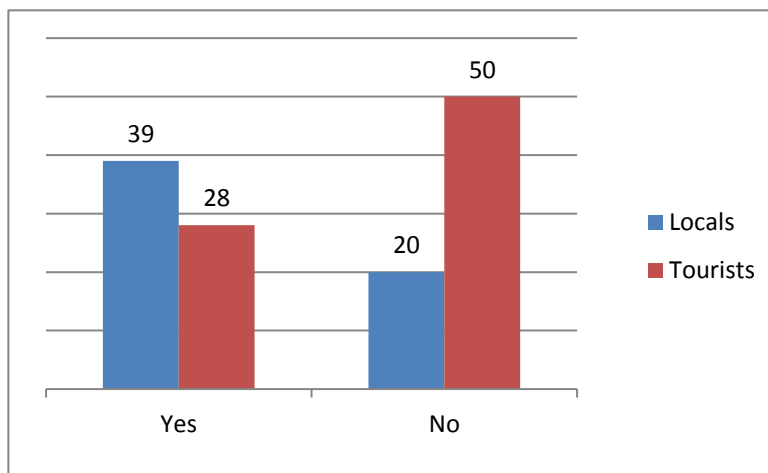


Figure 39: Are there any aspects of the area you do not like?

Table 56: Aspects of the area participants do not like

Aspects of the area local participants don't like	Aspects of the area tourist participants don't like
Holiday homes (8)	Dog mess (3)
Heavy traffic (6)	Caravan parks (3)
Insufficient parking (6)	Too many cars(3)
Inflated house prices(6)	Oil refinery (3)
Too many tourists (6)	Too many tourists (2)
Lack of funding to cover the needs of the community (3)	Bad weather (2)
Seasonal work (3)	Narrow roads (2)
No entertainment alternatives (3)	Lack of local produce, lack of parking, second homes, small roads, bad meals, traffic wardens, lack of disable access (one mention each)

Answers to “How can the area be improved?” are graphically represented in Figure 40. A chi-square test showed that tourists are more likely to suggest that the area should remain as it is compared to the local participants who answered this question (Table 58). There were no significant differences between the two user groups in the rest of their answers (Tables 58 and 60). Although 20 local participants suggested that there are no aspects of the area they do not like, only five did not suggest any improvements and 11 suggested that the area should remain as it is. The rest of the participants suggested improvements consistent with the responses to the previous question “Are there any aspects of the area you don't like?” The category “other” consists of two answers, one of which is that there should be more expenditure on small businesses and the second which is in accordance with the answer to Question 8, is to introduce extended opening times for the shops once a week.

Table 57: Chi-square test results for "keep it as it is"

$X^2=16.29$
Df=1
p-value=0
Significant difference

Table 58: Chi-square test results for traffic, parking, and public transport

$X^2=1$
Df=1
$p\text{-value}=0.2$
No significant difference

Table 59: Chi-square test results for planning and second homes

$X^2=1.99$
Df=1
$p\text{-value}=0.15$
No significant difference

The answers tourists gave were grouped in the same categories as the locals' answers for comparison, as their answers were similar. The most popular category here was the third most popular with the local participants but it does not directly answer the question. When tourists were asked how the area can be improved, 51.3% answered that it should be kept as it is. The group represented as "other" includes suggestions such as serving "medieval food in castles" (V21) and facilitation of access to more German newspapers (V68). Surprisingly, only two participants (V2, V33) considered more recreational developments as an improvement.

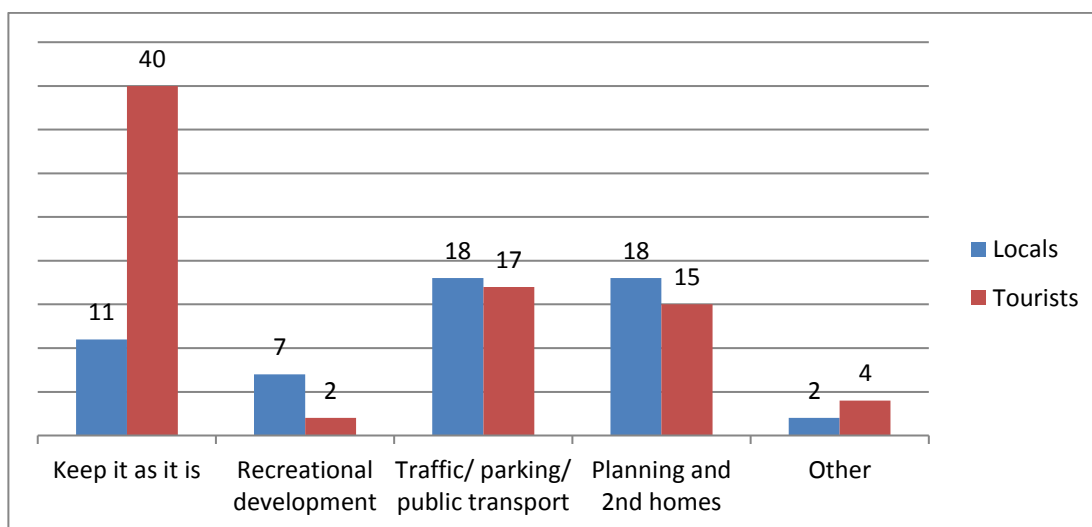


Figure 40: How can the area be improved?

9.3.2 Diary and photographs results

The majority of local participants (93.4%) identified and discussed one or more problems, and in most cases proposed solutions. The local participants addressed a very wide span of issues that range from absence of battery recycling facilities (L13) to highly politicised issues such as political pressures from the Countryside Council for Wales to close the Solva fishing grounds and the attempts being made to turn the area into a marine theme park (L149). The problems raised are divided into 10 categories (Figure 39). These categories are then broken down into sub-categories and proposed solutions are presented in tables. The problems identified are presented starting from the most mentioned to the least mentioned.

The majority of the tourists who participated in the study identified one or more problems (84.6%) and most of them suggested solutions. The issues identified cover a wide range, from housing for the local community to insufficient maintenance. Compared to the locals, their answers were not as extensive and not always as well thought through, although there are exceptions. Generally, the dataset shows the participants enjoyed the task, but they approached it in a more superficial manner compared to the locals. They identified 16 areas that could be improved (see Figure 41 and Table 61). In Table 61, the areas of suggested improvements are presented in order of importance per user group.

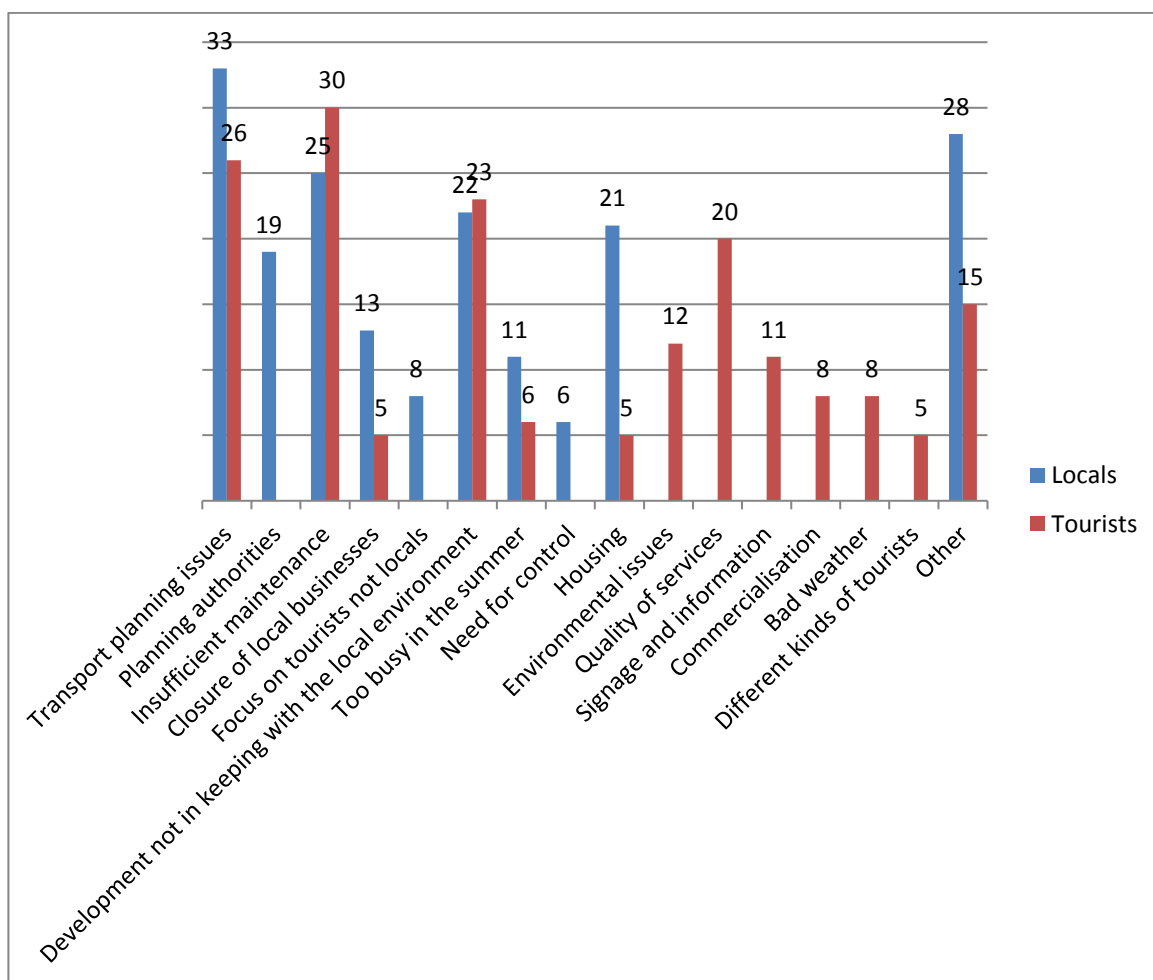


Figure 41: Identified problems

Table 60: Identified problem categories

	Locals	Tourists
1	Transport planning issues	Insufficient maintenance
2	Insufficient maintenance	Transport planning issues
3	Development not in keeping with the local environment	Development not in keeping with the local environment
4	Housing	Quality of services
5	Planning authorities	Environmental issues
6	Closure of local businesses	Signage and information
7	Too busy in the summer	Commercialisation
8	Focus on tourists not locals	Too busy in the summer
9		Housing
9		Closure of local businesses
9		Different kinds of tourists

9.3.2.1 *Transport planning issues [59 participants (33 locals, 26 tourists), 168 references (107 locals, 61 tourists)]*

Three issues dominate this category. These are in order of popularity: parking, traffic issues and public transport in St David's Peninsula. Participants from both user groups attached the same significance to these issues, as the order of significance was the same for both groups. Chi-square statistical tests were conducted for all the issues and subcategories: there are significant differences in the way locals and tourists view the transport problems in St David's peninsula. This issue seems to be expressed more strongly by the local participants ($X^2=6.04$, $Df=1$, $p\text{-value}=0.01$).

9.3.2.1.1 *Traffic issues (44 participants: 26 locals, 18 tourists)*

The most frequently cited problem was the high volumes of traffic. Tourists discussed traffic issues in St David's, Solva and access to Whitesands beach. Locals were more detailed in their approach: a chi-square test showed that they were more worried about traffic issues compared to the tourists ($X^2=6$ $Df=1$ $p\text{-value}=0.01$). Ten participants on 32 occasions addressed traffic issues in Solva. Lower Solva and Upper Solva are linked by the village high street, where the church, shops and school are located. This road is very narrow, and especially in the summer it is often impossible to drive through. Participant L136 photographed a house that had tiles taken off its roof by a passing high-sided lorry (Photograph 12). Locals and tourist commented on the lack of pedestrian crossings and the difficulties they find in crossing the road.



Photograph 13: "House on the corners of the bridge" (L136)



Photograph 14: "Chelsea tractors" (V107)

Ten local participants also highlighted that traffic volume in St David's is problematic, especially in the summer. Locals and tourists suggest that the main street is also a through road that connects Haverfordwest to Fishguard. During the summer, with the influx of tourists and coaches stopping in the middle of the street, traffic can come to a standstill. A participant linked the coaches with usually older tourists and characterised them "the

Granny Brigade” (L89). On the one hand they provide much needed support to the local economy but on the other hand there is urgent need for transport planning in order to address the needs of locals and tourists.

Finally, six locals and six tourists mentioned that roads are becoming more dangerous as they were not designed for today’s volumes of traffic. In particular, the large four-wheel-drive vehicles that dominate the narrow Pembrokeshire lanes are considered an increasing health hazard to cyclists, walkers and even small-car drivers and are referred to as “Chelsea tractors” by V107 (Photograph 13). Participants’ suggestions for solving traffic issues can be seen in Table 62.

Table 61: Suggested solutions for traffic issues

Problem	Solutions and number of participants who suggested them
Traffic in Solva	• Heavy through-traffic should bypass Solva (2 locals, 1 tourist). • Action the road widening scheme that has already been planned (1 local). • Pedestrian crossing (2 locals). • Speed bumps (1 local, 1 tourist). • 20 mph speed limit (2 locals). • One way system in parts, like road works arrangement (1 local, 1 tourist). • Restrictions to slow traffic down (1 tourist) • Solva: Traffic lights (1 tourist)
Traffic in St David's	• Stop all coaches going round St David's (2 locals, 1 tourist). • Ban on traffic through St David's during high season (1 local). • Promote public transport (1 local). • Employ traffic warden all year round (1 local, 1 tourist). • Make certain areas resident-only parking zones (1 local). • Significantly reduce or abolish car parking charges to encourage use (1 local). • Widen Glasfryn Lane and signpost as functional bypass (1 local, 5 tourists) • Make park and ride compulsory and make shuttle buses available for the elderly and disabled (3 tourists) • Pedestrian crossings (4 tourists) • Pedestrianise high street (1 tourist)
Traffic in the peninsula	• Park and ride service to the beach (1 tourist) • Better (3 tourists) and cheaper (1 tourist) public transport • Car parks outside the centres (1 tourist) • Hire traffic planners to solve the problems in the area! (1 tourist)
Dangerous roads	• The issue of four wheel drive vehicles is a national issue and should be dealt as such (1 tourist) • Ban 4x4s from narrow roads and small car parks (2 tourists) • Higher tax for 4x4s (1 local, 2 tourists) unless people need them for their jobs (farmers) • More footpaths (1 tourist) • Delivery vehicles to be restricted to early morning deliveries (1 tourist) • More cycle routes for bikes only (1 tourist)

9.3.2.1.2 Parking issues (29 participants: 18 locals, 11 tourists)

Parking in the peninsula is a problem for both user groups, considering that 91% of tourists arrive in the area in their own car, motor home or motorcycle (Trembath and Tennstedt, 2008). However, this issue seems to be more disturbing for the local population, following a chi-square test (Table 63). Tourists raised two issues with regards to parking: the lack of parking and the time wasted in waiting to park and the high cost of parking in the area. Locals were again more detailed in their approach but touched upon the same issues, especially in St David's, as Solva has a free car park which is full most of the time according to the participants.

Table 62: Chi-square test results for parking issues

$X^2=4.92$
Df=1
$p\text{-value}=0.02$
Significant difference

Parking is an ongoing issue in St David's. Local people feel dominated by tourists, particularly during the summer months, when it is impossible to park and go about their daily lives. Furthermore, locals are not given free parking slots: in fact free parking ceased with the imposition of a £2.70 fee without any consultation or warning.

Parking in Solva is also discussed by nine participants. Solva is the only free car park in the area and is situated next to the harbour. Although there are two more car parks in Upper Solva, there are still not enough parking spaces for the number of tourists who visit Solva. As a result, locals cannot park to go to work. Further, when tourists are unable to find a parking space they just drive on to St David's and important revenue is lost. Finally, three local participants commented on Whitesands Bay parking and the lack of parking spaces reserved for locals who work in Whitesands. Table 60 captures the suggested solutions.

Table 63: Solutions for parking issues suggested by participants

Issue	Solutions and number of participants who suggested them
Parking in St David's	• Double yellow lines (1 local) • Residents' parking permits (3 locals, 1 tourist) • Help for people with cars who live on main streets (1 local, 1 tourist) • Whitesands passes to act as permits for St David's (2 locals) • Season tickets for those who live and work in St David's (1 local)
Parking in Solva	• Identify area to use as overflow car park (4 locals) • Reserve parking spaces for residents and workers all year round (1 local) • Better signage in car park would save space (1 local) • Losing a small amount of harbour bed could extend the car park by enough to just about cope (1 local) • A secondary car park (close to the mill), a short walk from the harbour, could work as an overflow car park (2 locals) • Start charging for car park (1 local)
Parking in St David's Peninsula	• Hotel rates should cover all parking rates (1 tourist) • Parking fees should be lower (20p an hour) (1 tourist) • Extra unobtrusive parking (2 tourists) • Better public transport, park-and-ride to the coast (1 tourist)

9.3.2.1.3 Public transport issues (6 locals, 2 tourists)

Even though Pembrokeshire is a National Park, the connections to the rail network and the bus routes that connect Pembrokeshire to the rest of Wales are insufficient for the number of people who visit the area. However, there is potential in the park and ride system and the Celtic Coaster, which takes walkers to several parts of the Coastal Path, to ease the traffic issues in St David's Peninsula. According to the participants, the park-and-ride system needs to be extended and advertised more.

9.3.2.2 *Insufficient maintenance [55 participants (25 locals, 30 tourists), 137 references (66 locals, 71 tourists)]*

This category comprises comments on aspects of the area that are not looked after properly. It seems that despite locals and tourists identifying relevant problems, it is equally likely for tourists and locals to raise an issue on insufficient maintenance of the area as shown by the chi-square analysis conducted (Table 65). As can be seen in Figure 42, litter and dog faeces are issues concerning both groups (Tables 66, 67). The litter issue seems to be much more important for the visitors compared to the locals (Table 67). Locals worry more about uncared-for buildings and generally more practical rather than aesthetic issues.

Table 64: Chi-square test results for "insufficient maintenance"

$X^2= 0.09$ Df=1 p -value=0.7 No significant difference
--

Table 65: Chi-square test results for "litter"

$X^2= 5.6$ Df=1 p -value=0.01 Significant difference

Table 66: Chi-square test results for "dog faeces"

$X^2= 2.7$ Df=1 p -value=0.09 No significant difference
--

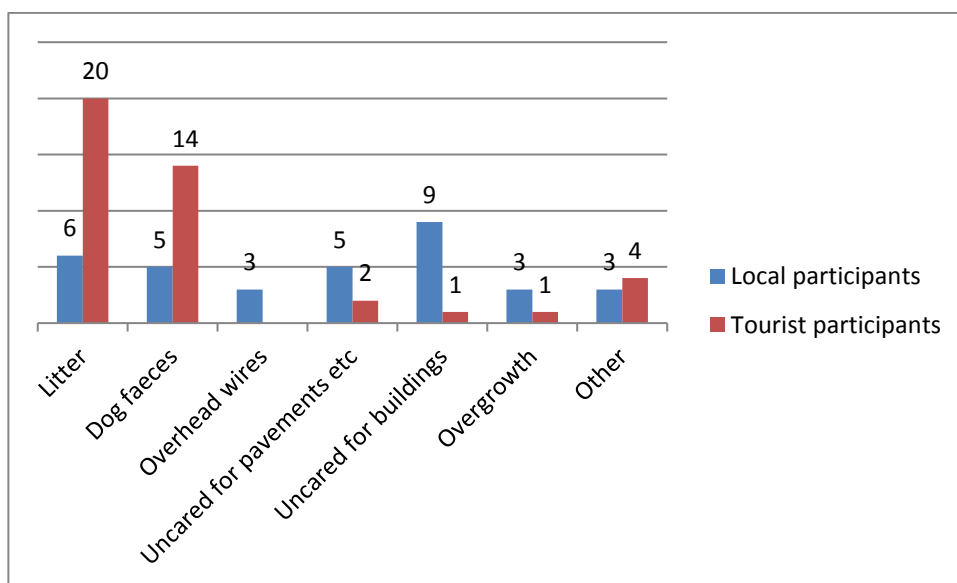


Figure 42: Insufficient maintenance

Litter is the most popular sub-category. Litter and refuse collection especially in the summer months is an issue for the locals, who organise beach clearing sessions. Tourists seem to feel more strongly about this issue: they made relevant comments on 35 occasions, amounting to a significant 30.3% of all participants and 26% of tourist participants who identified a problem (Photograph 14). The main issues in the category are litter occasionally found on the Coastal Path, overflowing bins and lack of recycling bins and dumps (Figure 42).



Photograph 15: "Coffee cup/litter amongst grass" (V106)

"Obviously seeing any litter isn't pleasant however it's actually refreshing to see so little litter in the St David's area and around the beaches and coastline" (V106)

Dog mess is a big issue for both user groups. Most beaches in St David's Peninsula have imposed a dog ban from May to September: however dogs are not banned from the footpath and it seems that in a vicinity of 100 metres from every car park the area is littered with dog mess, according to locals and tourists. The 21.2% of tourist participants who reported a problem, referred to dog mess as a problem on 28 occasions.

Derelict buildings (especially the old school canteen) is an issue local people have raised many times: three participants feel that since there is lack of social space for the local youth, these buildings could be regenerated and used for this purpose. Shabby pavements and corners are small features that need attention but participants feel they are important for the image they project. There are overhead electricity cables in St David's and Solva, which are considered an eyesore, as well as dangerous. However, these issues were very rarely, if at all, commented on by tourist participants. Suggested solutions are presented in Table 68.

Table 67: Solutions to insufficient maintenance issues

Issues	Solutions and number of participants who suggested them
Litter	• Better recycling facilities (1 local, 3 tourists) • Refuse bins in central places such as the harbour of Caerfai and ‘out of the way’ places such as St Justinian’s where there are none (1 local, 5 tourists). • Check on tankers throwing litter overboard (1 local). • Educate people more about recycling (1 local) • Put up notices asking people to leave the path as they found it (2 tourists) • Larger bins (1) • Create more awareness (4 tourists), Posters on the negative effect of litter on wildlife (2), a national TV campaign (1), Information flyers (1)] • More litter sweeps (2 tourists) • Empty bins more regularly (2 tourists) • Black bags available on the spot for people to tidy up after their day out (2 tourists)
Dog faeces	• Make sure refuse sacks (biodegradable) and more bins are available (1 local, 6 tourists) • Signs should be bilingual (Welsh and English) (1 local) • “Shoot the dog, put the dog owners in a plastic bag and hang them in the brambles for 2 years as a deterrent to others” (L149). • Initiate an advertising campaign to ask people to report the offenders and prosecute (1 local) • Avoid certain beaches on hot days! (1 local). • Dog bans (1 tourist) • Education. Dog owners must be made aware of the impact their animals have on other members of the public (3 tourists) • Don’t ban dogs from the beach as responsible owners would be penalised unfairly (1 tourist) • Discreet, but firm signs explaining the penalties for not cleaning up after dogs (2 tourists) • Hefty fines (2 tourists) • Wardens to hand out fines (2 tourists)
Uncared for buildings (locals)	• Old School canteen to be used as a youth club (3). • The Council can explore if there is any way to support the residents to repair and improve the appearance of their homes (1) • People should groom their places a bit (1)
Uncared for pavements and shabby corners (locals)	• Bring specialists to attend to issues such as smelly drains (1) • Street lighting to be used (1) • Tarmac or pave pathways (4) • Wooden rails in places (1)
Overgrowth (locals)	Look after the hedges and overgrowth but with the local character in mind: “I <u>hate</u> the annual trimming by machine which ends up making Pembrokeshire look like Berkshire” L63.
Overhead wires (locals)	Find money and put them underground (3)

**9.3.2.3 *Development not in keeping with the local environment [45 participants
(22 locals, 23 tourists), 128 references (70 locals, 58 tourists)]***

This is an area of concern for both locals and tourists. A chi-square test was performed (Table 69): it seems that both user groups are equally likely to raise issues that fall into this category. A second chi-square test was run to investigate significant differences between the user groups regarding the development of buildings: here it seems that local participants are more likely to provide concerns (Table 70). However, as can be seen in Figure 41, some issues are only discussed by one user group and not the other.

Table 68: Chi-square test results for “development not in keeping with the local environment”

$X^2= 0.67$
Df=1
$p\text{-value}=0.41$
No significant difference

Table 69: Chi-square test results for "buildings"

$X^2= 4.23$
Df=1
$p\text{-value}=0.03$
No significant difference

Buildings that are not in keeping with the local environment were discussed by all participants: locals, however, elaborated more. They flagged up the shop in Whitesands and the St Non’s apartments as not in keeping with the local environment. Locals and tourists raised questions about how planning permission is given more than once (“another rule for the Park, another rule for the people (L84)”. A characteristic example is Bob Marshall Andrew’s house (L84), which is locally known as the ‘teletubby’ house: “it used to be a wooden hut. Marshall Andrews, Q.C., M.P., obtained planning permission for this intrusive and wholly inappropriate structure adjacent to the PCNP coast path”. The most popular solution to problems like this is to demolish the ‘monstrosities’.

Participants discussed the negative impact of aspects of buildings that are not in keeping with the character of the area on their enjoyment of the area. In order to tackle these aspects, locals suggested small changes such as painting parts of the houses, changing windowsills and tiles and planting trees in front of buildings. One participant suggests that it is too late for some of these buildings: however a change of policy is necessary (Figure 43).

Most of the tourist participants commented on the obtrusiveness of caravan parks and their impact on the landscape of the area. Local participants did not comment negatively on caravan parks.

Four local participants felt that the area is being anglicised, as Welsh signs are being replaced by English ones. It is suggested that in order to retain the character of the area, signs need to be bilingual, Welsh names need to be cherished and people who live in the area should learn to speak Welsh. Tourists did not register this as a negative. Other issues include the obtrusiveness of car parks and excessive signage. Suggested solutions are listed in Table 71 below.

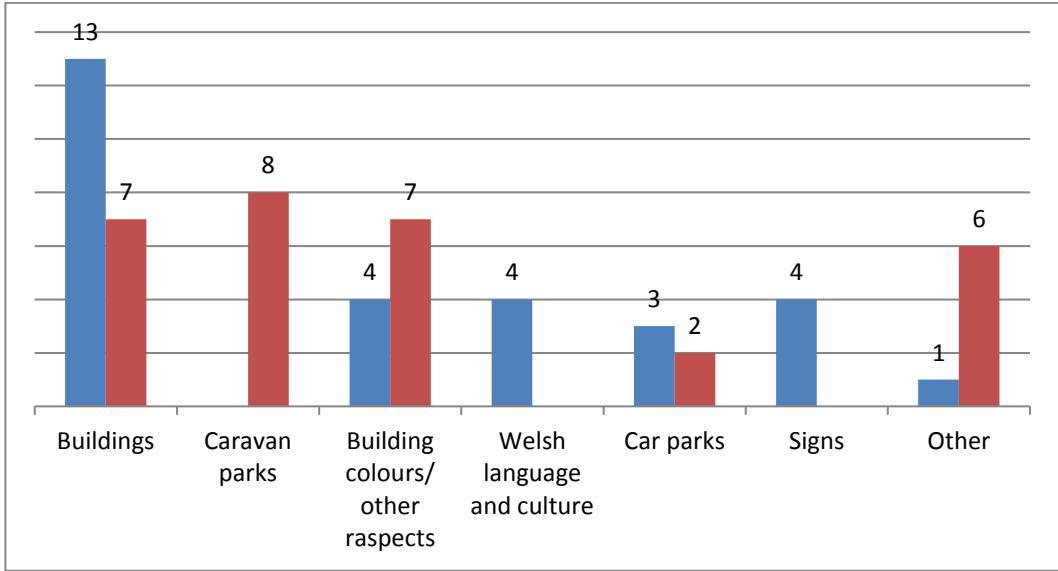


Figure 43: Development not in keeping with the local environment

Table 70: Solutions to tackle development or actions not in keeping with the character of the area

Issue	Solutions and number of participants who suggested them
Buildings not in keeping with the character of the area	• Planning decisions should be made by people immediately local to the site (1 tourist) • Tree planting in front of this house (1 local) • A garden with lawn and a nice colour would suit the lifeguard station in Whitesands (1 tourist) • Relocate the surf shop from St David's to Whitesands (1 tourist) • Demolish the monstrosities (5 tourists) • Change of policy (1 local)
Aspects of buildings that are not in keeping with the character of the area,	• The National Park Authority should regulate building colours (2 tourists, 1 local) • The colour should be changed (4 tourists, 1 local) • Replace plastic windows with wood (2 locals)
Obtrusive caravan parks (tourists)	• Tree planting in front of caravan parks (1) • Get rid of caravans (1) • Limit number of campsites, make them bigger instead (1) • Get rid of old caravans (1) • Make sure they are out of sight from the Coastal Path (2) • They should have a noise limit to stop disturbing other holiday makers (1)
Obtrusive car parks	• Extend park and ride and encourage people to walk more (1 tourist)
Preserve Welsh language and culture (locals)	• Keep Welsh house names (2) • Keep Welsh signs (1) • Keep traditional architecture (1) • Use traditional materials (1) • People who live in the area should learn the language (1)
Tourists eating on the lawn next to the gravestones in St David's Cathedral (tourists)	• Ban people from eating here (2 tourists)
Plastic agricultural bags blots on the landscape	• Educate the framers in sustainable agriculture and being in keeping with the scenery (1 tourist)

9.3.2.4 *Housing*

Housing [26 participants (21 locals, 5 tourists), 50 references (43 locals, 7 tourists)]

Following a chi-square test, the housing issue is more likely to be raised by locals compared to tourists (Table 72). However, tourists seem to be aware of the housing issue in the area. Local and tourists participants discussed the second home issue and the lack of affordable housing.

Table 71: Chi-square test results for "housing"

$X^2= 17.66$
Df=1
$p\text{-value}=0$
Significant difference

According to local participants, 70% of houses in Solva and 60% of homes in Pendergast Street are holiday homes. Locals and tourists suggest the community cohesion is under threat, as local people sell their homes and move away due to holiday homes pushing up house prices. This creates a vicious circle as local young people cannot afford to buy houses, so the properties are sold to people outside the community as holiday or retirement homes.

Locals and tourists discussed the lack of affordable housing in the area, which they consider linked to the second homes issue. Initially, there is provision for council houses: however, they are often sold on as expensive second homes. One local participant refers to the case of a detached house with no parking in St David's, sold for over £550,000, which no local can afford. The solutions suggested by the participants are presented in Table 73.

Table 72: Solutions to the second home and lack of affordable housing issues

Issues	Solutions and number of participants who suggested them
Second homes (locals)	• More employment, development in leisure facilities (1) • Affordable housing for young locals (3) • Two-tiered price system (2) • Purchase covets on private properties restricting the sale to locals (1) • Quota price, capping (1) • Increase council tax on second homes (1) • Government intervention is necessary (1 local, 1 tourist)
Lack of affordable housing	• More employment and development of leisure facilities. This issue should be a priority for the authorities. • Make sure affordable housing is available for the local community, even if that does not appeal to tourists with “big money” (V107).

9.3.2.5 *Quality of services (20 tourists, 36 references)*

Participants discuss problems relating to the service aspects of their holidays (Figure 44). The first of four sub-categories within this theme is expensive services. Four participants considered the restaurants in St David’s and Solva overpriced and two said that that charging to visit the Cathedral makes it expensive for a family.

The inappropriate attitude of some local business owners was raised. Two participants complained that shops close early, at five o’clock, which does not give them enough time to shop: they mentioned that shop owners should be more considerate, bearing in mind that this is area is financially supported by tourism. Furthermore, two participants mentioned that there were no restaurants open in the evening in September. Three examples of poor customer service were highlighted and one participant stated that it was difficult to find a restaurant that would accommodate their large dog. No solutions to these issues were suggested; however, the nature of the problems suggests obvious solutions such as better customer service.

The third sub-category consists of complaints about cleanliness, especially toilets and campsite facilities. Finally, some participants found issues such as Internet booking and lack of disabled toilets challenging.

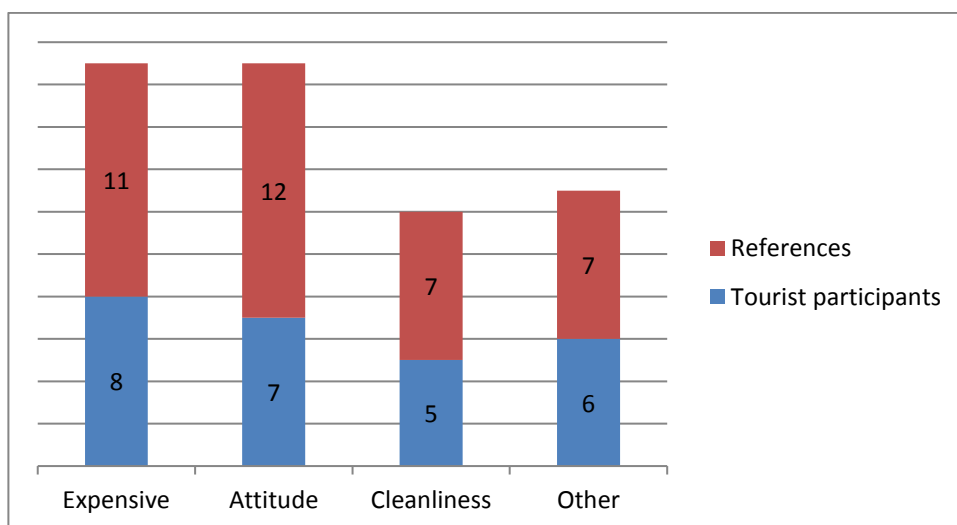


Figure 44: Problems with the quality of services

9.3.2.6 Planning authorities (19 locals, 43 references)

Comments under this theme are about planning decisions that are not in favour of the local community (Figure 45) and are registered from 31.1% of the local participants. One example is the new Sutherland Gallery, which is situated at the top of the village adjacent to the Tourist Information Centre, and owned by the National Park Authority. At the bottom is the Cathedral with its own café. These are designed to attract more tourists to support the economy: however, the small cafés on the high street were not considered or consulted when this plan was conceived and implemented. In addition, a number of examples of buildings that really should not have been given planning permission are cited: the inference is that the planning authority had its own agenda in these cases (wealthy landowners are granted permission over the less wealthy ones). This also applies to the Bluestone development, a property of Centreparks, partly built within the National Park. After a battle of appeals between the Council for National Parks and the Welsh Assembly Government: the latter decided to fund Bluestone prior to it obtaining planning permission. On the other hand, other people struggle to get planning permission for small structures such as balconies, decks and roofs.

Seven participants suggest that the local community is not consulted on planning issues. The examples of the Quickwell Hill car park and the considered closure of Withy Bush

Hospital are raised again. Six participants feel that funding is given to those projects the planning authority feels are important to the community, rather than what the community actually needs (L47, Photograph 15). For instance, the community struggles to maintain the Solva Memorial Hall and the Solva skate park, both important locations for the community. Suggested solutions are presented in Table 74.

Table 73: Solutions to problems caused by planning authorities

Issues	Solutions and number of participants who suggested them
Difficulties to get planning permission	• Replace windows, doors, roofs, and balconies.
Decisions not in favour of the community	• Fairness and consistency must prevail. • Revoke the Bluestone development and any other large commercial pressures on the National Park integrity. Fight to protect the park! • The Sutherland Gallery café should be closed as there are enough cafés in the area. • For planning consent for Bluestone inside the Park Boundary to be withdrawn immediately.



Photograph 16: Solva skate park (L47)

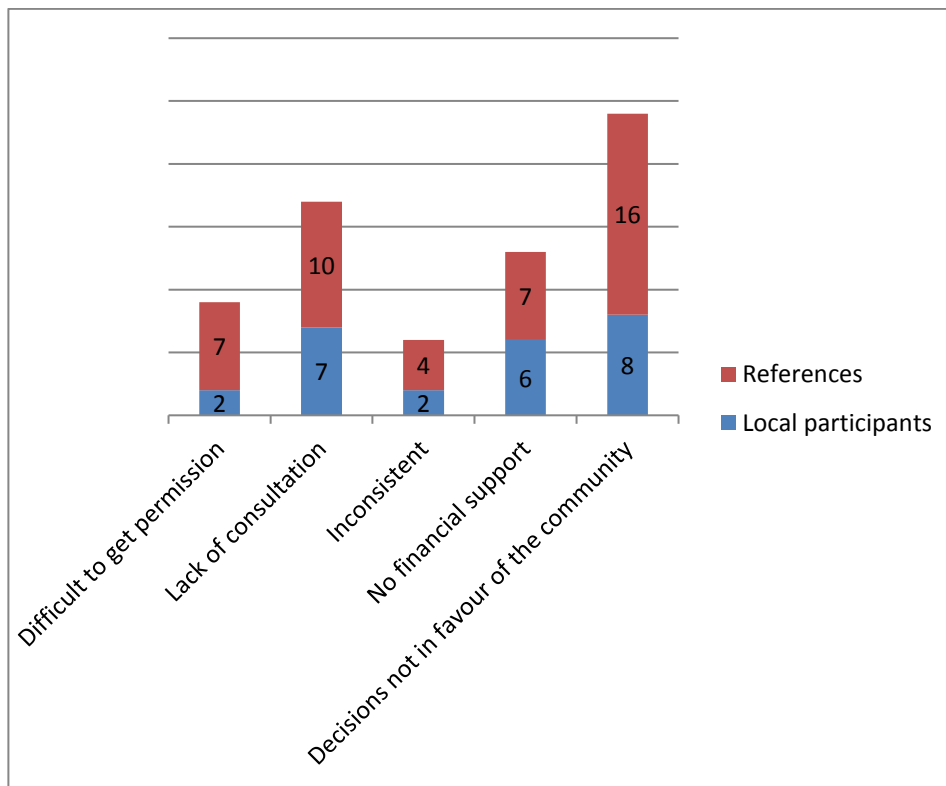


Figure 45: Problems caused by planning authorities

9.3.2.7 Closure of local businesses [18 participants (13 locals, 5 tourists), 31 references (20 locals, 10 tourists)]

The closing down of traditional shops suggests that St David's is essentially for the tourists and not for the locals (L14). A number of local businesses have closed in recent years, including St David's Assemblies factory, which affected more than 70 families. Additionally it is suggested that the authorities provide no help to support the farming and fishing communities in the area: local participants believe the main focus of the authorities is on tourism.

Tourists depicted a few of examples of local shops replaced by new trendy shops, as well as farm shops and other local businesses. In fact, one of the participants photographed a Tesco store to showcase the negative impact of supermarket chains on small businesses, and commented in the diary: "Tesco's has made holiday self-catering life much easier, even though local shops have surely suffered. We often order ahead online so that deliveries arrive as we do" (V33).

A chi-square statistical test showed local participants are more preoccupied about the closure of local businesses ($\chi^2=6.74$, Df=1, p -value=0). Solutions suggested by participants can be seen in Table 75.

Table 74: Solutions against the closure of local businesses

Issues	Solutions and number of participants who suggested them
Closure of local businesses (locals)	• Relax National Park planning policies (1) • The tourist season must be extended by offering more facilities (1) • More can be done to encourage local shops selling local produce (1) • Discourage cut-price supermarkets (1) • Some supermarkets do it to an extent, but there will have to come a time when priority is given to locally-grown produce (1) • Walk to the local shops and do the shopping even if it costs a little more (1 tourist)

9.3.2.8 *Area too busy during the summer (17 participants (11 locals, 6 tourists), 29 references (19 locals, 11 tourists)*

Traffic jams, busy beaches, four wheel drive vehicles, camper vans and insufficient parking make the lives of the local community and visitors difficult during the peak season and this seems to be an issue equally raised from both user groups (Table 76). The numbers of visitors are considered to be unbalanced between summer and winter. It is very interesting to see what participants actually consider “too many” and this can be seen in their photographs. Some tourist participants mention that they know that the area is very busy in the summer and the spirituality is lost, so they visit in September. Table 77 shows participants’ proposed solutions.

Table 75: Chi-square test results for "area too busy during the summer"

$X^2= 3.41$ Df=1 p -value=0.06 No significant difference

Table 76: Solutions for the overwhelming number of summer visitors

Issue	Solutions
Area too busy during the summer (locals)	• Visitors should be more evenly distributed throughout the year. • In order to avoid overcrowding on the most famous beaches, an advertising campaign to encourage people to visit other beaches. • There should be a cap on the number of people each beach can take.

9.3.2.9 *Environmental issues (12 tourists, 26 references)*

The vast majority of the comments (eight participants, 18 comments) under this theme concerns the presence of boats and speedboats that take tourists on trips from St Justinian's to Ramsay Island, a mile offshore. A number of boat trip companies operate in the area, including the Royal Society for the Protection of Birds, which is the only company that is allowed to go ashore on Ramsay Island, an RSPB reserve. Participants feel that there are too many boats, and boat trips, which may have an impact on natural habitats. Speedboats, considered purely for the enjoyment of the tourists, were also cited as a cause for concern, particularly in relation to their impact on wildlife (Photograph 16).

Two participants considered the existence of Milford Haven Oil Refinery a threat to the area. Tankers can be seen passing towards Milford Haven and the potential for another oil spill disaster would be catastrophic for the environment. Table 78 lists suggested solutions to the problems discussed above.

Table 77: Suggested solutions to environmental issues

Issue	Solutions and number of participants who suggested them
Boat trips to Ramsey Island	• Strict control and enforcement (3) • Limit to the number of boat trips and boats (4) • Speedboats should not be allowed. Normal boats are less intrusive (2) • Prioritise local fishermen over recreational users (1) • Make sure boats are WiSe (Wildlife Safe) accredited (1) • Ensure companies promote responsible tourism (1)
Tankers passing close to Skomer Island	• Use another route (1)



Photograph 17: "Rigid inflatable boats. Too many speeding around island. Noise and visual pollution [...]" (V95)

9.3.2.10 *Signage and information (11 tourists, 22 references)*

Two sub-categories of problems were identified under this theme. The first comprises eight participants' comments on the insufficient information available about aspects of the Park such as tides, history of buildings, names of bays and beaches, geological features, and ocean currents that have affected the area including its history. The second sub-category comprises comments on lack of signage to services such as public toilets and the Tourist Information Centre in St David's. Suggested solutions are listed in Table 79.

Table 78: Solutions to lack of signage and information problems

Issue	Solutions and number of participants who suggested them
Insufficient information and lack of signage	• More information about the tide, more display boards – old photographs of what these buildings once were, names of bays, cliff area, geology, ship wrecks, flowers (8) • Weather-resistant information plates and better signage to direct tourists to local amenities (2)

9.3.2.11 *Commercialisation (8 tourists, 8 references)*

The cathedral shop and the café, the Sutherland Gallery and the new Tourist Information Centre café are examples used by participants to demonstrate what commercialisation means to them and to highlight that it can prove detrimental for the area. Three participants who are repeat tourists noticed that the area has already started shifting towards being more “trendy” and expensive (V95, V89, V29). Table 80 shows suggested solutions.

Table 79: Suggested solutions to tackle commercialisation

Issue	Solutions and number of participants who suggested them
Commercialisation	• Control the number of visitors and keep the park/island protected (1) • Strong, enforceable legislation (1)

9.3.2.12 *Planning focuses on tourists rather than locals (8 locals, 11 references)*

Examples such as the Celtic Coaster bus services that used to work only from Easter to November, crafting exhibitions during the summer that squeeze out of the City Hall local societies such as the Historical Society, the run-down school and all the money spent to open a new gallery adjacent to the Tourist Information Centre are used by participants to illustrate why they feel the authorities plan for the tourists and not for the locals. Table 81 provides suggested solutions

Table 80: Suggestions – how to focus planning on the community

Issue	Solutions and number of participants who suggested them
Planning focuses on tourists rather than locals	Local people, not the planners, should be given the money to use it for their local communities’ needs (3) Support should be provided for clubs, societies, and further education (2).

9.3.2.13 *Bad weather (8 tourists, 10 references)*

Bad weather was considered typical for a holiday in Britain (Photograph 17), as described by V106: “Bloody miserable British weather and constant rain that inhibits one’s holiday.

Just a typical factor of the average holiday in the UK – hohum!” (Photograph 18). The only solution suggested was more rainy day activities such as indoor crafts and sports facilities.



Photograph 18: Bad weather (V106)



Photograph 19: Bad weather (V94)

9.3.2.14 *Need for control (6 locals, 11 references)*

This theme comprises comments on the perceived need for more policing and more responsible attitudes towards the community and fellow tourists especially during the summer months. Small-scale vandalism and drunkenness should be tackled by more policing and considerate pub landlords.

9.3.2.15 *Different kinds of tourists (5 tourists, 11 references)*

Tourists wearing football t-shirts displaying the St George's Cross who embarrass other English people, parents buying their children £300 wetsuits for the beach trying to impose a dress code on other tourists, holidaymakers with large motor homes, tourists who don't follow the "rules" when camping and inconsiderate dog owners were photographed by research participants in a bid to highlight the differences in cultures among tourists. Tourists described above are not welcome and are also described as embarrassing to those who feel that, because of their behaviour, properly-behaved tourists are unfairly "penalised" in a multitude of ways, from being branded nationalists, to being seen as inconsiderate to others and the environment. As a result, freedoms such as camping and taking dogs on holiday might be taken away. No solutions were suggested here: however, suggestions were made depending on the problems indicated in the appropriate theme, such as "dog faeces" and "commercialisation".

9.4 What would enhance your experience of the area?

The ideas participants offered for improvements in this context provided answers to the question. A total of 109 suggestions on several issues came from 53 participants – 27 locals and 25 tourists. As very few photographs captured negative features of the area it was to be expected that there would only be a few suggestions for improving negative aspects. The most important outcome in this section is that half of the participants wanted the area kept as it is. Twelve locals and 14 tourists on 41 occasions urged the area planners to ensure the area is kept as it is: as one participant said, "very few things improve in nature" (L88 diary). Also, participants' exhortations should be noted: some interact with the researcher in a way that implies that participating in this exercise could make their voices heard by

planners and policy makers. An example of this is participant L125 who notes: “No changes here please. Leave it as it is”.

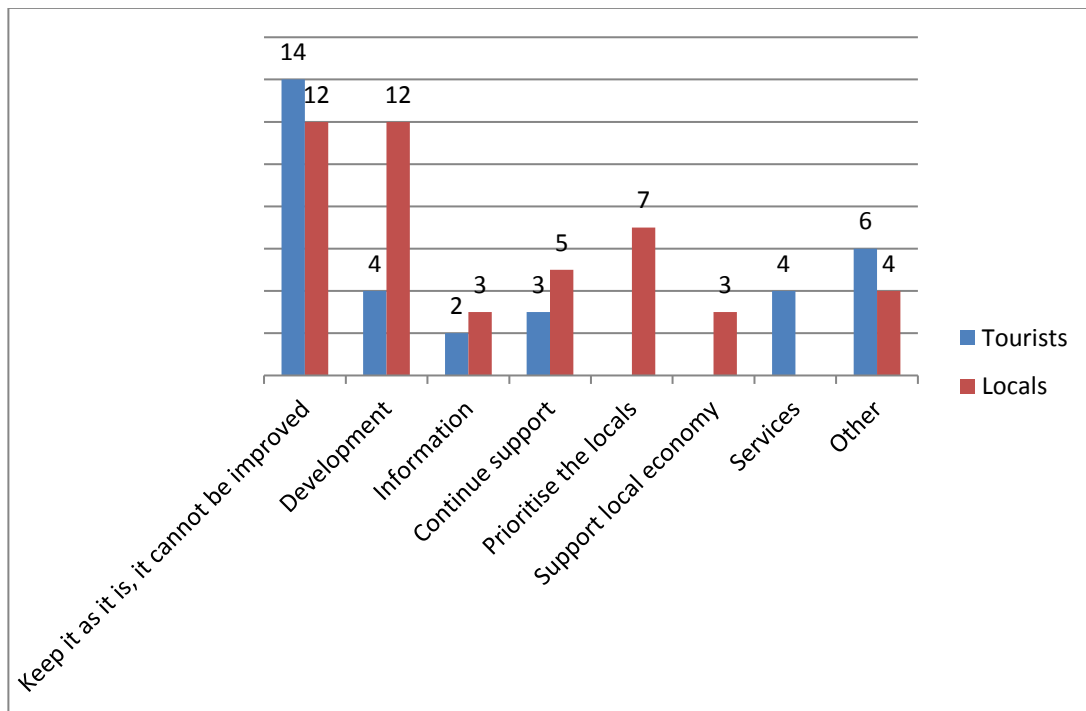


Figure 46: What would enhance your experience of the area?

Participants mainly focused on seven issues (Figure 46). Four categories comprise comments made by locals and tourists, and will be discussed first, and three categories only comprise comments by one user group. Chi-square statistical tests were run in the groups where more than five responses per user group were given, for differences between tourists and locals to be identified.

9.4.1 Keep it as it is

Figure 44 shows that local people made the same number of comments in the “keep it as it is” and “development” categories and are the most popular categories in the locals’ comments. The comments in this category are all similar. The roles of the PCNP authority, Cadw and Welsh Heritage are highlighted.

The “keep it as it is” category is by far the most popular amongst the tourists responding to this question. A comment representative of this category comes from V117: “Save for blue sky, I don’t think that this can be improved – keep as is”. Also many short answers were received that read “no change” or “no change please”. A chi-square test shows that there is no significant difference between locals and tourists in this category (Table82): the suggestion “keep it as it is” can come from participants from either group is verified.

Table 81: Chi-square test results for "keep it as it is"

$X^2= 1.28$
Df=1
$p\text{-value}=0.25$
No significant difference

9.4.2 Development

“Keep it as it is” and “development” were of the same significance for local participants. It can be argued that more locals are in favour of some sympathetic development, compared to the tourists. From the locals’ point of view, comments in “development” are classified into four categories. The most popular category includes suggestions for minor developments such as the improvement of access to “Goulthorp roads”, by adding some steps for ease of access to the beach from the coastal path and railings at some dangerous spots along the path. The next group of comments on development includes comments on the upkeep of the area: historic places such as old mills that require some attention, and cycleway extensions. Three participants comment that any kind of development must be in keeping with the local environment. Finally two participants commented on the need for some recreational development of some kind, one suggesting a leisure centre where the Assemblies factory used to stand and the other developing the Rugby club into a disco.

Only four tourists made comments that fell into the “development” category. Four tourists made four suggestions for things like swimming pools for rainy days, drying machines and surfboards for hire. Only two participants in this category suggested minor improvements such as public toilets on the beach.

A chi-square test was performed here as well to investigate if there is significant difference between local and tourist participants' attitudes to development, as the number of locals willing to accept or asking for some kind of development is bigger compared to the tourists. The null hypothesis was that a wish for the area to be developed, albeit in a fashion that is in keeping with the environment and is "mild", is expressed universally, regardless of the user group the participant belongs to. The chi-square statistic is $X^2 = 7.11$ and the p value = 0, which is above the conventionally accepted significance level of significance, so the null hypotheses is rejected: there is a significant difference between local and tourist participants in their attitude and wish for development. It can therefore be claimed that local participants are more positive towards some developments in the area compared to the tourists.

9.4.3 Continue support

Five locals commented on the need for continued support from the authorities to continue good practice that has already been established with funding the Celtic Coaster bus service. Also, more support and funding for the local police, and features such as the skate park, would be welcomed by the local community. Three tourists also suggested that support to ongoing projects should be extended, such as the Celtic Coaster and the local playgrounds.

9.4.4 Information

Three local participants suggested that more information/signage would be welcome: for instance, information plaques at key architectural features such as the lime kilns in Solva would be of educational value to locals and tourists. Two tourists suggested that more information in the form of information boards and plaques about flora and fauna and more free newspapers and informative magazines.

9.4.5 Prioritise the locals

Seven local participants flagged up the need to give priority to the local community. The issue of the local character and language come up here, as well as the need to encourage

local families to stay in the area. The case of Porthgain is given as an example, which earned the PCNP Authority a lot of support amongst the locals. The Authority purchased the whole village from the quarry owners enabling tenants to buy their houses.

9.4.6 Other

Three local participants suggested that they would welcome more support for the local economy: fishing, farming and small local businesses should be supported as they are very important to village life. Two of the “other” issues mentioned are relevant to area planning: that a dog ban on beaches should be extended to the whole year and that better traffic management would greatly benefit the area. Four tourist participants suggested more services such as extending opening hours of some cafés and increasing the number of days a week the farmers’ market was held. The category “other” requests more access to parts of the park and more puffins.

It can therefore be concluded that a small proportion of the research participants suggested potential improvements for the area. This can be explained by two facts. It is clear that there are not many things they wanted changed, supported by the comments urging that the area remains as it is. The limited suggestions here can also be attributed to the fact that participants perceived that question as theoretical. The participants spent limited time suggesting improvements: or may have considered there were no problems. However, they focused on suggesting solutions to problems they faced during their stay or in their everyday lives and this can be seen in the “Problems and solutions” part of the analysis.

9.5 What would spoil your experience of the area?

Answers included in this theme were obtained from answers to the hypothetical question “What would spoil the experience of the area?” when participants had identified an aspect of the area they liked or felt attached to. Answers to the questionnaire questions “Are there any aspects of the area that if changed, would mean that you wouldn’t choose to come back to PCNP for your holiday?” and “Are there any aspects of the area that if changed, would mean you wouldn’t enjoy living in PCNP anymore?” are also included. The same

question was asked both in the questionnaires and the photo-taking part of the research and the results will be compared here.

9.5.1 Questionnaire results

The analyses of the responses to the questionnaires resulted in four main themes which are the same for locals and tourists and appear in the same order of importance in both user groups (Figure 47). The first three groups were subjected to chi-square tests to investigate if there are significant differences between local and tourist participants in what would spoil the area for them. In all cases the chi-square statistic is below the conventionally accepted significance level of significance, which means that there are no significant differences between what the participants feel that would be detrimental in their enjoyment of the area. The category entitled “Changes will not affect my feelings about the area” was not subjected to a chi-square test as the numbers of answers in the groups are small and that could lead to a statistical error. A graphic representation of the questionnaire results can be seen in Figure 47.

The most popular answer was that overdevelopment would spoil the experience of the area for both user groups. Twenty locals suggested that if the area was overdeveloped or developed in ways that do not complement it, they would not enjoy living in PCNP any more, as illustrated by L19: “I think more development around the coastal areas and beaches would spoil the natural beauty”. Thirty two tourists also consider such changes as reasons that would deter them from coming back to PCNP for a holiday. The second most popular response (18% of locals and 32% of tourists) is against commercialisation and more tourism development. A very interesting category of responses follows, where participants simply did not accept the suggestion that any major changes could take place, due to the protection status of the area and the determination of the National Park Authority to stop inappropriate development, which show people’s strong belief and support of the area’s protection status and control mechanisms. Finally, the category entitled “Changes will not affect my feelings about the area” were in most cases paired with references to the area’s protection status, which can explain that people might not consider it possible for destructive changes to take place.

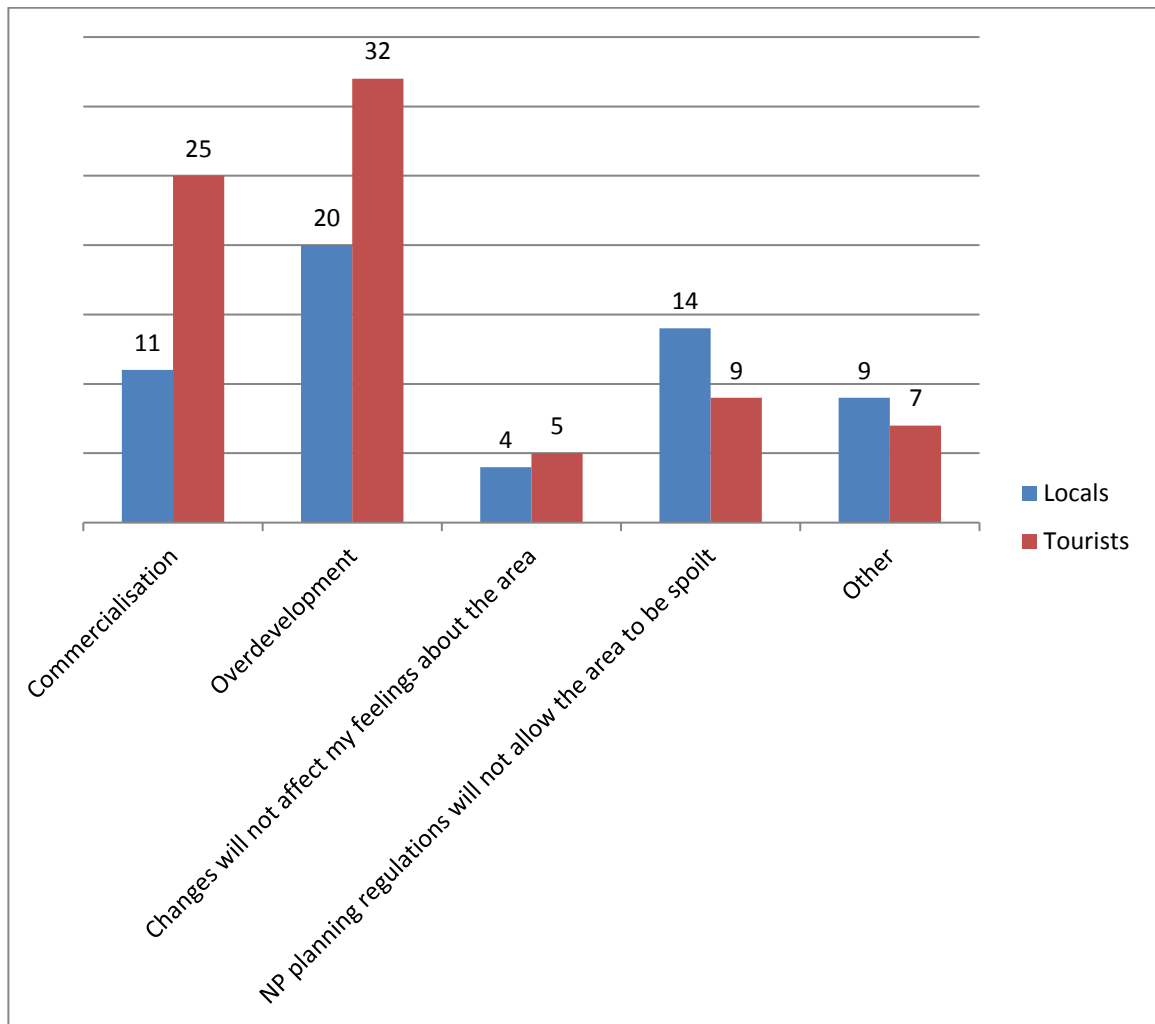


Figure 47: Questionnaires: changes that would be detrimental to participants' enjoyment of the area

9.5.2 Diary and photographs results

In analysing the diaries it became apparent that more answers to this question were obtained compared to its opposite: “What would enhance the experience of the area?” This can be explained by the fact that participants capture far more positive than negative photographs and this question is based on their photographs depicting aspects deemed by those taking them to be positive. A total of 124 participants (54 locals and 70 tourists) made 671 suggestions (253 locals, 416 tourists) of aspects of the area that, if changed, would detract from their enjoyment of living or holidaying in the area (Figure 48).

The results will be presented in order of popularity according to the total number of participants per category. Table 83 shows the categories in order of popularity per user group.

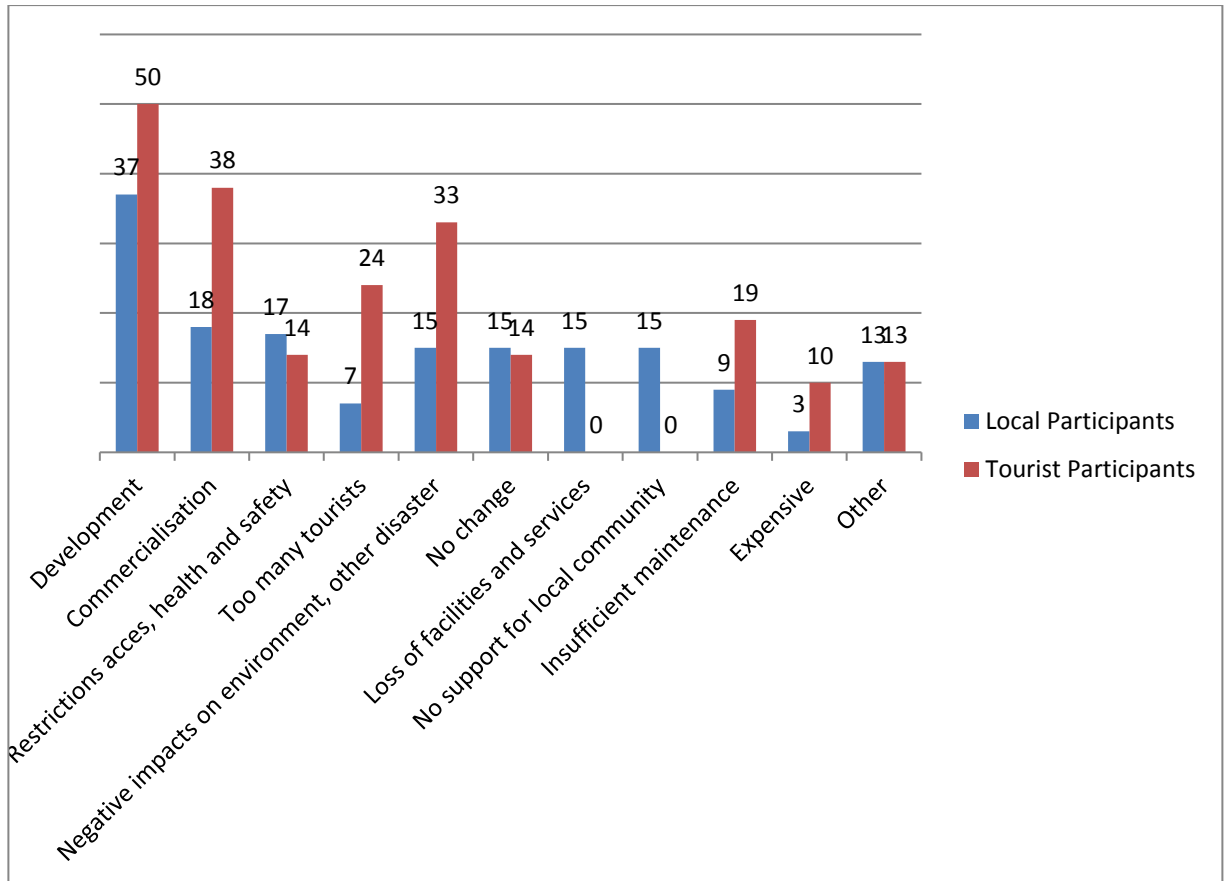


Figure 48: Diaries, changes that would be detrimental to participants' enjoyment of the area

Table 82: Changes that would have a negative impact on participants' enjoyment of the area in order of importance per user group

	Locals	Tourists
1	Development	Development
2	Commercialisation	Commercialisation
3	Restrictions: access, health and safety	Negative impacts on the environment
4	Negative impacts on the environment	Too many tourists

5	No change	Insufficient maintenance
6	Insufficient maintenance	Restrictions: access, health and safety
7	Too many tourists	No change
8	No support for the local community	
9	Loss of facilities and services	
10		Too expensive

9.5.2.1 *Development (37 locals, 50 tourists)*

Development is the most common answer, with 68.5% locals and 71.4% tourists suggesting that some kind of development would impact on their enjoyment of the area. The most common unwanted development for local participants is buildings not in keeping with the character of the area and more buildings in general. Another development considered inappropriate by local and tourist participants is widening the road, as this would mean easier access and consequently more tourists. Tourists do not want to see wind farms, more holiday homes, hotels, shops, marinas, campsites, tents, and caravans, as they would detract from the character of the area and would definitely be for the worse. Other unwelcome developments would be tarmacing the Path for better access, and a leisure complex.

A chi-square test was performed here as well to investigate if there is significant difference between local and tourist participants' attitudes to development. The null hypothesis was that opposition to development is expressed universally, regardless of the user group the participant belongs to. The chi-square test shows that there is no significant difference between local and tourist participants in their attitude towards development (Table 84).

Table 83: Chi-square test for "development"

$X^2= 0.17$
Df=1
p-value=0.6
No significant difference

9.5.2.2 *Commercialisation (18 locals, 38 tourists)*

Commercialisation was the next most resisted development: most participants approach the issue in a general fashion suggesting that commercialisation would affect the area negatively. A number of local participants give specific examples such as modernisation of existing buildings, excessive numbers of speedboats, water scooters, jet skis, ice-cream vans, MacDonald's, and advertising signs. L28 suggests that if the area becomes more commercialised, "visitors might leave for somewhere else". MacDonald's, Tesco, Sainsbury's, more shops, more cafés, more "holiday let cottages" (V115), too many boats, jet skis, and amusement parks are all examples of what tourists would not like to see: their current non-existence is why they choose to visit this area.

A chi-square test was performed to investigate if there is significant difference between local and tourist participants' attitudes towards commercialisation. The null hypothesis was that the commercialisation was undesirable regardless of the user group the participant belongs to. Following a chi-square test, it can be claimed that tourist participants are more negative towards commercialisation of the area compared to the locals, even though participants in both user groups are against the commercialisation of the area (Table 85).

Table 84: Chi-square test results for "commercialisation"

$X^2= 5.25$
Df=1
$p\text{-value}=0.02$
Significant difference

9.5.2.3 *Negative impacts on the environment (15 locals, 33 tourists)*

Forty eight participants suggested that any kind of pollution or action that would affect the flora or fauna of the area, including littering, would have a very negative effect on them. The oil refinery is mentioned a handful of times so are disasters such as foot-and-mouth disease, as locals were not allowed to walk in the countryside during the last outbreak. Issues mentioned by tourists include water pollution, oil spills, cutting down trees to allow better views from holiday apartments, boat trips that affect the wildlife and noise pollution.

A chi-square analysis was also performed here and it was concluded that negative impacts on the environment would make a big difference to tourists (Table 86).

Table 85: Chi-square test results for "negative impacts on the environment"

$X^2= 4.75$
Df=1
$p\text{-value}=0.02$
Significant difference

9.5.2.4 *Too many tourists (7 locals, 24 tourists)*

Seven local participants pointed out that too many tourists in the area have a negative impact on the everyday life of the community and the area is “taken over by them” (L9). Twenty four tourists said that more tourists visiting the area would impact on the enjoyment of their holiday. The Coastal Path would get too crowded, there would be too many boats and surfers, the roads would be even busier and the atmosphere of privacy the area offers would be destroyed. A chi-square test reveals that an influx in the number of tourists would spoil the area more for the tourists compared to the locals (Table 87)

Table 86: Chi-square test results for "too many tourists"

$X^2= 7.35$
Df=1
$p\text{-value}=0$
Significant difference

9.5.2.5 *Restrictions: access, health and safety (17 locals, 14 tourists)*

Several kinds of restrictions were mentioned by 31 participants that would potentially detract from their enjoyment of the area: the most commonly cited was restricted access to the Coastal Path. Participants also commented on the detrimental effect that health and safety measures such as handrails would have on the aesthetics of the Coastal Path, while more dog bans and less dog bans in other cases would not allow some of the participants to enjoy the area as much. More restrictions would spoil the enjoyment of the area for locals and tourists alike according to the chi-square test (Table 88).

Table 87: Chi-square test results for "restrictions: access and health and safety"

$X^2= 1.9$ $Df=1$ $p\text{-value}=0.16$ No significant difference
--

9.5.2.6 *No change (15 locals, 14 tourists)*

The “no changes please” theme was seen elsewhere in the study. It appears again here, mentioned by 15 locals on 23 occasions and by 14 tourists on 27 occasions. Rather than citing specific factors that would spoil the area for them, participants suggest that any change would be likely to affect the area, by stating that no changes should take place. A chi-square test indicates that comments in the “no changes please” category could have been made by locals or tourists (Table 89).

Table 88: Chi-square test results for "no changes please"

$X^2= 0.94$ $Df=1$ $p\text{-value}=0.3$ No significant difference
--

9.5.2.7 *Insufficient maintenance (9 locals, 19 tourists)*

This theme comprises comments by 28 participants who suggest that if amenities were left in a state of disrepair they would not enjoy the area as much. Examples under this theme include hedge trimming, neglected farmland, neglected parts of the Path and shabby buildings, as allowing them to fall into disrepair would detract from the beauty and the functionality of the amenities. The results of the chi-square test indicate that which means that insufficient maintenance would have an impact on the enjoyment of the area for both user groups (Table 90).

Table 89: Chi-square test results for "insufficient maintenance"

$X^2= 1.93$ $Df=1$

p -value=0.16
No significant difference

9.5.2.8 *No support for the local community (15 locals)*

Lack of support for the local community was raised by local participants, citing several examples. Using the arbitrary charge in the Quickwell Hill car park as an example, two participants feel that it would be disastrous to raise business rates in the same fashion. L13 says that if the area became too expensive for people to “live here, the place would be full of rich people from London – that would spoil it”: the second homes issue is discussed here as well. Decline in the fishing industry and agriculture is also mentioned, and it is suggested that political decisions lie behind this.

9.5.2.9 *Loss of facilities or services (15 local participants)*

Loss of facilities and services would be detrimental for the local community. Fifteen local participants commented on that, some suggesting that this might be a possible scenario if no solution is found for the second homes issue and if no support is shown for the local communities: the villages will be depopulated and schools and other services would close. Also, introduction of big supermarket chains would force local businesses to close.

9.5.2.10 *Too expensive*

Locals and tourists commented on charges for things such as entering the Cathedral or extra charges for parking. Such charges would change local people’s lifestyle choices and would detract from tourists’ enjoyment of the area, as it would be too expensive.

A comparison between the answers to the questionnaires and the diaries and photographs on the subject of changes shows that changes can have a negative impact on peoples’ enjoyment of the area; the two main issues raised by both user groups are overdevelopment and commercialisation. A number of conclusions can be drawn here; the first regards the

data collection method used. Questionnaires produce accurate answers to questions as verified by the answers in the diaries. However, the answers given in the diaries are richer and more diverse. They are not hypothetical: rather they are captured while the participant is experiencing the area, which may be the reason behind the lack of comments on the protection status of the area and the role of the National Park Authority, which were prominent in the questionnaire phase, but are absent in the diaries and photographs. Furthermore, the “No changes please” category reappears here, without directly answering any of the questions. Finally, it seems that tourist participants would be more affected if the area becomes more commercialised, the natural environment is degraded and if too many tourists visit the area, compared to the locals. On the other hand, locals seem to worry more about financial support to the local community and loss of services which is seen as a threat due to the increasing number of holiday homes.

9.6 General comments

9.6.1 Comments on authorities and planning issues

9.6.1.1 *Negative comments on the authorities and planning*

The majority of the comments that were made on the planning authorities and planning issues are negative and they come from both local and tourist participants. A total number of 38 participants – 33 locals and five tourists – made 75 negative comments on what they perceived to be questionable planning decisions of the authorities. These comments can be broken down into three subcategories presented in order of popularity.

The first sub-category includes comments that indicate that the local population is not a priority for the area planning authorities. Twenty five participants made 36 comments to indicate this. Twenty four of the participants are local – a relatively large number that amounts to 39.3% of the local participants in the project. Sixteen of them elaborated on the absence of local involvement in area planning. In the questionnaires, 23 locals answered that they are not consulted, 13 said they are consulted, and five said the National Park Authority is making an effort: six said they do not know and 11 said they are not always consulted. The participants were told that the information they were giving was

confidential: however some either avoided answering questions about their feelings towards the planning authorities or softened their approach when answering the survey questions. A second group of 11 local participants commented that in the area, planning is tourism-focused, while the local community is of secondary importance. Eight participants gave examples of local industries and businesses not being supported either by the central government or by other public bodies including CCW and the NPAs. The example used to showcase that the National Park Authority does give priority to local businesses is the new café in the Tourist Information Centre: “In St David’s, the cathedral is at the bottom, the National Park at the top (new gallery and café) [and] the local businesses are squeezed out” (L137 questionnaire). Four participants consider that the area is treated as a toy-area and a living museum, a view that can be connected to planning being tourism-centred. Finally, four participants make other comments that indicate they do not consider that the area is a priority for the planners. An interesting quote can be found in L77.1’s diary: “I have not studied the constitution of this or any other National Park. I presume their principal concern is to protect the countryside for the benefit of people living elsewhere in the British Isles [...]”.

The second sub-category is entitled “Authorities responsible for bad planning” which does not include all the cases of bad planning mentioned in the study, most of which are analysed in “Problems and solutions”, but only the ones that participants directly blame the authorities for. In 46 comments, 20 local participants and three tourists hold the planning authorities responsible for bad planning practices. Ten locals and two tourists comment negatively on decisions made by the local planning authorities that undermine people’s confidence in the authorities. An example is given by participant L14 (Photograph 19) who refers to the overnight increase in the car parking charges in Quickwell Hill car park from 60 pence to £3.00, with no prior consultation with the local community. It came to them as a surprise and at the time no concessions were made for the locals. Twelve participants strongly condemn planning authorities for granting planning permission to developments not in keeping with the local environment. An important dimension that can be discussed in conjunction with the group of comments entitled “Decisions that undermine people’s confidence in the authorities” is discussed by nine participants. These participants pick up on inconsistencies in planning decisions implying that planning

decisions are made under inappropriate influences: “It typifies the ‘one rule for the National Parks and another for locals’ when it comes to getting planning permission” (L72 diary).



Photograph 20: Quickwell Hill car park (L14)

The third sub-category amounts to five comments made by four participants in which their only common characteristic is the negative attitude towards the authorities. They are more general but place emphasis on issues discussed by other participants in the two previous subcategories with the main difference being that these participants are making suggestions about action that should be taken. Along those lines, participants propose that emphasis needs to be given to conservation rather than tourism (V109 diary).

9.6.1.2 *Positive comments on the authorities and planning*

A large number of positive comments on the work the local authorities and other institutions are doing are captured under this sub-category. A total number of 30

participants made 52 positive comments on the good job done in terms of planning in the area. Twenty three local participants and seven tourists commented positively on the work done by local authorities. These comments are broken down into three sub-categories.

The first sub-category comprises 27 positive comments made by 13 local participants and seven tourists acknowledging good planning practices. An example of comments in this category is that of participant V143 who comments in the diary: “On the whole we were very impressed with the efforts of the National Park to make the various sites attractive, scenic, litter-free, tidy and welcoming to the visitor”. A number of authorities were acknowledged for their good work: 13 participants praised the National Park Authority for their work (eight locals and five tourists), two acknowledged Cadw and two the National Trust and the County Council, the RSPB and the local council were also mentioned.

The second sub-category is composed of 20 comments made by 14 local participants who suggest that although the planning restrictions might be strict, they acknowledge the need for them as they protect the area from inappropriate development. As L46 suggests in his/her questionnaire: “The National Park [Authority] are doing a good job. They might be unpopular when they don’t let you build but they help keeping the area unspoilt”. The final sub-category includes seven comments from an equal number of participants who have seen an improvement in the way their views are taken into account by the local planning authorities, although some acknowledge that there is still work to be done (L84 questionnaire).

9.6.1.3 *General comments and suggestions*

The third sub-category under “Comments on authorities and planning issues” incorporates 35 comments made by 27 participants, 14 tourists and 13 locals. These comments do not have a positive or negative underpinning but suggest the way planning should be done and that the authorities should operate according to the project participants. Eight participants discuss issues that have been raised elsewhere: however, they suggest the best way forward on issues ranging from the Council’s responsibility to help the locals maintain their homes to a good standard and planning restrictions that should be strictly enforced so that the area

stays intact to imposing restrictions on conventional farming so that organic farming is valued more. These suggestions are not incorporated in the solutions category in the results as they do not identify already existing problems or discuss solutions: rather, they run along the lines of: “The scenery can be conserved by restricting planning permission for high rise flats etc” (V134 diary).

The second sub-category is entitled “Importance on the area’s protection” which consists of nine comments made by eight participants that highlight the importance of the protection of the area for the day to day lives of the locals, the enjoyment of the tourists and the protection of wildlife. The third sub-category is a very interesting one as it comprises views by six tourists on the necessity for planning decisions to incorporate the local views and planning to be done for the locals by the locals. These views are very similar to the ones expressed by local participants under the “Locals are not a priority” sub-category. The fourth sub-category consists of comments made by five participants and highlights the responsibilities of the planning authorities. The fifth and final sub-category includes disparate comments such as comments from three participants who suggest that they could be involved in the local area planning if they wanted to, one participant who worries about the local post office being shut down, and a participant who says that there is nothing to worry about as there is plenty of room for everyone.

9.6.2 Participants’ views on change

This second category of the “General comments made by participants” consists of 74 comments made by 55 participants on change in the area, 26 by local participants and 29 by tourists. Participants seem to have several views on change with an overarching suggestion that change is almost always for the worse, as can be seen from the titles of the subcategories that comprise this group of comments. These comments were largely made in the diaries (40 out of 74 comments), when participants were commenting on what would improve the area or what would spoil it. Twenty six of the comments on change were made when participants were answering the last questions of the questionnaires: “Are there any aspects of the area that if changed you wouldn’t enjoy living in Pembrokeshire Coast National Park anymore?” or “Are there any aspects of the area that, if changed, you wouldn’t choose to come back to Pembrokeshire Coast National Park for your holidays?”

This category consists of seven subcategories listed in order of popularity. The most popular sub-category is entitled “Change is unlikely because of the area’s protection status”. The second category includes suggestions from participants who do not want to see any changes taking place in the area. The third sub-category consists of comments that compare Cornwall to Pembrokeshire based on changes that are either not going to happen because of the conservation status of Pembrokeshire, or changes that are happening at the moment and act as a reminder of those in Cornwall. The fourth category is entitled “The area can’t be spoilt” and suggests that participants whose comments are included in this category feel that change cannot take place that might alter certain aspects of the area. The next category is composed of comments that suggest that change will not stop the participants in question from visiting the area. The sixth category incorporates general comments on change and the participants’ approach towards change. In this category participants raise issues that will be touched upon in the findings and suggestions of this research project. The final sub-category of this group contains comments that suggest that the area is perfect and no change can improve it.

9.6.2.1 *Change is unlikely because of the area’s protection status*

This sub-category should also be taken into account when discussing tourism planning, as it clearly shows how people feel about the protected area status and what they expect from such a designation. This is a very popular category, with 32 participants and 36 comments: these participants consider changes in the area that are not in keeping with the local environment as unlikely to happen because of its protection status. This sub-category clearly indicates people’s trust in institutions such as the National Park designation, the National Trust and the CCW. It also indicates a slight confusion about the bodies that have responsibility over certain areas, whether historic sites or wider geographical areas. Twenty one people find it very unlikely that changes may happen as the area is a National Park. It is also mentioned in four cases that an area is protected because the National Trust owns it. In six cases the protection status is not specified and in further eight cases several organisations are referred to. However, there are cases where participants have mentioned the protection status elsewhere and tried not to be repetitive. Additionally, being unaware

of the data analysis process, the lack of reference to the designation or to the body responsible for enforcing planning restrictions might mean that participants are so familiar with the status quo that they consider its mention redundant.

It is of interest to this analysis to explain where the comments within this category were found in the dataset. A query run in the dataset showed that 19 local participants and 12 tourists feel that there cannot be changes not in keeping with the environment because of the strict enforcement of planning laws. Twelve of the local participants and two of the tourists made a relevant comment at some stage in their photo-diaries. Interestingly enough, out of these 14 participants, 11 answered the question “What would spoil it for you?” by saying that certain things that would spoil the enjoyment of the area for them cannot happen due to the planning restrictions posed by the area’s designation. Additionally, 17 participants (seven locals and ten tourists), when asked in the open-ended question “Are there any aspects of the area that, if changed, you wouldn’t enjoy living in Pembrokeshire Coast National Park anymore?” or “Are there any aspects of the area that if changed you wouldn’t choose to come back to Pembrokeshire Coast National Park for your holidays?” again answered that it is unlikely for the area to change because of the tight National Park regulations. Some participants mention certain changes that would spoil the area but then dismiss them as impossible, such as: “If it were heavily commercialised. But it is a National Park after all” (V100, questionnaire). Eight participants –five locals and three tourists– do not even discuss potential inappropriate development and answer straight away that change cannot spoil the area. An example of this approach is that of participant L38, whose answer to the above question in the questionnaire reads: “No, this is a National Park, not a lot can be changed”.

9.6.2.2 *Pembrokeshire compared to Cornwall*

During the data collection process and especially in general discussions on the project and its aims, participants and other people who happened to be in the area at the time very often compared Pembrokeshire to Cornwall. This is also reflected in the dataset, albeit not as frequently as in the oral communication with participants. This group of comments is included in the category “Participants’ comments on change” as the basis of comparison

between Cornwall and Pembrokeshire is either the prevention of change that could lead to the phenomenon of overdevelopment as witnessed in Cornwall, or changes taking place in Pembrokeshire that could result in the area becoming as overdeveloped and problematic as Cornwall.

Nine participants compared the two areas. One participant (L142, questionnaire) finds them very similar in terms of their geomorphology and this might explain the reasons behind the comparison. Additionally, both areas are tourism destinations and this could be another reason to spark comparison. Pembrokeshire is compared to Cornwall, with Cornwall being considered an example of bad, excessive development by seven participants. The main difference in the two, as noted by five participants, is that Pembrokeshire is a National Park and therefore stricter development regulations are in place and the area is not overdeveloped. As participant L137 mentions in their diary “If this was not protected by the National Park I would fear the kind of development Cornwall has seen during the last 20 or 30 years”. Two participants, one local and one tourist, compare the two areas from a different perspective: they feel that changes that are slowly taking place could be the “start of a form of gentrification that has blighted places like New Quay, Cornwall” (V149, diary), with problems like inflated house prices and holiday homes as a result of the ongoing commercialisation of the area.

9.6.2.3 *Keep the area as it is*

The third most popular sub-category in the “Participants’ general comments” category includes participants’ comments that urge that the area be left as it is. Twelve participants made 20 comments calling for the area to be left alone. Out of these comments, 16 were used in answering the question “What could be done to improve the area” and three were given as part of the answer in the last question of the questionnaire, “Are there any aspects of the area that if changed you wouldn’t enjoy living in Pembrokeshire Coast National Park anymore?” or “Are there any aspects of the area that if changed you wouldn’t choose to come back to Pembrokeshire Coast National Park for your holidays?”. The recommendation is usually “Please leave it as it is” (V114 diary) or “It is best left as it is” (L136 questionnaire) and it addresses the researcher as an intermediary between those who

might possibly want to spoil the area and themselves. This subgroup was placed here as this recommendation is not answering an already existing problem, so it could not be received as a solution and thus placed in the “Problems and solutions” part of the analysis. It answers people’s fears of any future change.

9.6.2.4 *The area cannot be spoilt*

The fourth sub-category comprises comments made by eight participants in 12 instances, where participants do not feel that any change can have an impact on the area. Some of the participants give reasons like the geography of the area and the unchanging nature of the elements that construct the area’s beauty. However, in some cases the source of the participants’ confidence is not revealed: for example, the unchanging nature of the St Justinian’s port as mentioned in V134’s diary is just taken for granted. It might be useful to consider that the area earned the National Park designation 57 years ago and it is likely that this status and the protection it entails is also taken for granted by residents and visitors.

9.6.2.5 *Nothing will stop me from coming to Pembrokeshire*

The fifth sub-category includes comments made by five tourist participants in their answer to the last question in the questionnaire where they were asked if they would be put off from coming back if changes occurred in the area. Two answers are a straightforward “No” (V36, V44). The rest of the answers suggest that they will not be stopped from coming back to the area for their holiday, two of them because they feel that it cannot change that much, and the third because the motive of their visit is not the area per se but local community members.

9.6.2.6 *General comments on change*

This sub-category consists of five comments on change made by four local participants. These comments are of a more general nature and examine the issue of change from a philosophical angle. Local participant L14 mentions in his diary: “All they [the

photographs] reveal to me is a grumpy old man behind the view finder who likes everything the way it was, and shakes his head at change”. On the same note, another local participant states that “Nothing in my mind would like to change this part of Solva” (L38, diary). This dilemma has been expressed by other participants in a more dynamic way, as can be seen in the category entitled “Problems and solutions”, and is very nicely phrased by participant L14: “How is what is valuable to be preserved without turning a working environment into an exhibit?”. Additionally, two participants note the changes in rural life and wonder if this is the only way things can be done: and subsequently if tourism is the only way to earn a living when residing in the area. This is a political issue and will be discussed extensively in the economic aspects of tourism planning in the findings and suggestions of this research project.

9.6.2.7 *The area cannot be improved*

This is the final sub-category in this group and it consists of two comments made by two tourist participants. Both find all aspects of the area perfect so they cannot see any way they can be improved. This group could potentially be considered along with the third sub-category of this group entitled “Keep the area as it is”. The comments under this heading are positive on certain aspects of the area but, like comments in the “Keep the area as it is” sub-category, they cannot be added under suggested improvements. Comments from both categories could be added to the “What could spoil the area?” category if the answers were reversed. An example of that could be regarding answers from both subcategories as “Any change would spoil the area”. However this will be examined in the next stage of the analysis where information from the whole spectrum of answers will be brought together to present the findings of the research project.

9.6.3 Acknowledgement of importance of tourism in the area

This is an interesting group of comments, as 17 participants in this study acknowledge the importance of tourism for the area in 23 instances. All but two participants who have commented on this issue are members of the local community. Nine comments on the

importance of tourism were made when local people were asked to discuss the importance of the images they had captured. The comments of this group were broken down into three categories. The categories, in order of popularity, are: comments with positive underpinning, comments with negative underpinning and visitors' comments.

The first sub-category includes comments such as "This is what attracts the tourists and without them we would have a very quiet summer and no money brought to the area" (L42, diary). Most of the participants (12 sources and 14 references) who commented on the importance of tourism for the economic survival of the area do so with a positive underpinning. However, it is worth noting that tourism is commented upon in a positive manner only because of the understanding of it as a necessity and not as a matter of choice. It is also worth mentioning that all comments refer to the necessity of tourism only as an economic contributor to the local economy.

The second sub-category consists of six comments made by five local participants who do realise the economic importance of tourism for the area but do not like this dependence. Two of them see the growth in the importance of tourism occurring in conjunction with the decline in agriculture and the fishing industry and three participants see tourism as an income generator which brings along problems like traffic congestion and large numbers of people gathered in a small place. Additionally, a further comment made by one of the participants referred to above is that activities that are not popular with groups of locals and tourists, and which have potential negative consequences for the environment, only take place for the sake of the economic benefit they bring to the area. It would be sensible to hypothesise that the participants who made negative comments about the dependency of the economy of the area on tourism are people whose income is not generated by activities related to tourism. Three participants whose income is entirely dependent on tourism talk about the dependency of the area on tourism in a negative fashion, whereas four participants whose jobs are not related to tourism talk about this dependency with a positive underpinning.

The final sub-category consists of comments made by visitors about the dependency on tourism. One visitor just mentioned it as a fact without taking a stance. However, it is worth citing the second visitor's comment which is "I don't quite understand why shops close at

5pm. Quite early considering that it is so popular among tourists” (V10, diary). The visitor appreciates the importance of tourism for the area, albeit in a rather demanding fashion and - despite the fact that five o’clock is the closing time for all shops in rural areas – thinks that shops should stay open to serve the tourists’ needs.

9.7 Conclusions

As shown using chi-square statistical tests, the sample used in this study is representative and therefore generalisable for tourists visiting the area and for locals in terms of age groups but not in terms of gender. A wide range of planning issues was discussed by local and tourist participants: problems were identified and solutions were suggested. This analysis has shed light on the similarities and differences between the two groups’ likes and dislikes about the area, what changes they would like to see and what changes would have a negative impact on their enjoyment of St David’s Peninsula.

The results presented in this chapter show that this study can fulfil its objectives in both its methodological and tourism planning dimensions. In terms of tourism planning results, an insight into how local people want their area to be developed has been obtained and their feelings towards the area planning and the planning authorities have been established. Additionally, much data indicate their attitude towards living in an area with strict planning regulations. Furthermore, the reasons why tourists choose to visit the area time after time have been discussed, as well as their experiences and expectations. In terms of the methodological dimension of this research project, the richness of the dataset has been demonstrated. A plethora of further analyses can be done using this dataset. The richness of the data collected is a great strength of the research technique used, which was strengthened further by the use of questionnaires and diaries, which allow for deeper understanding of participants beliefs and perceptions as well as triangulation.

One of the most important outcomes of the analysis and the added value of this technique is that in the questions that directly relate to a photograph, a pictorial representation of what people actually ‘mean’ is captured and presented. Answers not directly related to a specific photograph have a photograph as a starting point of elaboration, meaning that

issues can be more locale-specific, and that abstract meanings or meanings that convey different things to different people (such as too many tourists and boats, or too few shops) can be correctly categorised.

Another crucial issue that arose from the analysis was the added value of the different techniques used. Photographs capture part of the participant's experience as experienced when the shutter is clicked. Then, in the diary, the participants are given the opportunity to reflect on their photograph. In the questionnaire they express their crystallised views on what they are asked. As shown in the analysis, these methods complement each other. An example of this is the answer of the local participants to the questionnaire question "Do you feel your views are taken into account in the area planning?" Either because of the researcher bias or because participants had not realised what their views were, 48.5% of them gave answers with a negative connotation. However, the answers were even more negative when they were in the photo-taking process: 54.1% commented negatively on the planning authorities. The issue of the value added by the use of different techniques will be further examined in the discussion. Finally, the points raised in this chapter will form the basis for the refinement of the participants' suggestions, which will be presented in the discussion chapter.

10 RESULTS: COMMENTS ON VOLUNTEER-EMPLOYED PHOTOGRAPHY

10.1 Introduction

As suggested when introducing the ‘VEP triad’, the photo-diaries were designed to be used and analysed in conjunction with the cameras and photographs, as the shots captured by the participants are described in them. Psychology and social inclusion studies are the only ones where photographs are used without any complementary methods to explain why the participants chose to capture the images they presented to the researchers (Graziano, 2004, Rapport et al., 2007, Warren, 2002). Additionally, the surveys were conducted, among other reasons, to give direct responses to the issues investigated using VEP research. Consequently, the survey responses and the diary responses should be qualitatively analysed together to identify common themes. Because of this, the photo-diaries are the component of the research which is least suitable for solo analysis. The only part of the diary data that can be analysed on its own without compromising the the analysis is the part where participants were invited to comment on VEP.

Comments on the methodology were drawn from 62 sources. The vast majority of the comments on VEP were written in the diaries in the area entitled “Is there anything you would like to add that would make this research method more user-friendly/more productive?” Some comments were also left in the area entitled “Please feel free to make any other comments here”. Both of these areas are at the back of the diary. Comments left in the second area were mainly suggestions on the analysis, additional photo descriptions and lists of photos captured.

The comments on the methodology were grouped into four categories: positive comments, negative comments, apologies and suggestions for the future use of VEP. They are listed according to their popularity among the participants. It is considered that the apologies could also be included in the positive attitudes participants have towards the use of VEP.

10.2 Positive participant attitudes towards the use of VEP

The majority of the participants who commented on the methodology did so positively, with 39 participants making 50 positive references. The “positive aspects of using VEP” category has seven subcategories, which will be listed here in order of popularity.

The first category includes comments made by 20 participants, which indicates that a personal relationship between the researcher and the participants was established. Having spent more than half an hour interviewing each participant in most cases and the participants going away with a camera and notebook having taken on the task, it seems that a relationship that goes beyond politeness has been established. An indicative example of comments in this category is made by participant V109: “Hi Nika, good to meet you in Whitesands. Good luck with some small plane flying”. During the initial interview, the researcher and the participant discussed small plane flying and the researcher’s fear of small planes, which was then jokingly used in the participant’s notes and which definitely suggests the development of a more personal relationship. Another example is when a local participant, L47, who, having taken a few photos, takes a photo of a pint of beer in a nice pub beer garden and notes: “Will you excuse me for a minute? All this picture-taking has made me thirsty”. A couple who participated in the project later sent the researcher a postcard to wish her good luck with her PhD: similarly other participants sent books, postcards and letters on more than five occasions, to express their support. This sub-category is broken down into two subsets, in both of which the same observation can be made: the first one consists of wishes to the researcher for successful completion of the project and the subsequent doctoral thesis. The second subset consists of comments made by three participants with offers of future help with the study.

The second sub-category includes notes from 14 participants expressing the hope that that their contribution is going to prove helpful for the completion of the project. The third sub-category groups together opinions expressed about a “good project idea”. Comments in this group include “It is very well thought out – I enjoyed it, I hope the responses I made were clear” (L28), “You have conducted yourself with distinction. Not forced anyone take part, but given us the opportunity to voice/ picture our loves and hates of where we live” (L51) and “This appears to be a well thought out research project” (V146).

The fourth sub-category comprises 10 references by nine participants who enjoyed participating in the project. This observation is also made in the literature (Thoutenhoofd, 1998). The fifth and sixth subcategories are significantly smaller: the fifth consists of four comments and the sixth of three comments. The fifth sub-category consists of comments made by participants who would like to see the results of the project either in a paper format, an exhibition or even as postcards touched up by local artists. The sixth sub-category is entitled “Made me stop and think”. Garrod (2007) observed that it is common for participants to comment that VEP makes people think about what their lens is capturing and why.

The final category includes 13 references by 12 participants who could not be categorised in one group as their subjects and natures are significantly different. This category is worth closer examination as there are significant observations that can be made about the variety of positive aspects people see in the use of VEP. Two participants mentioned that they would like to see the project duplicated and the results taken into account by the authorities. One comment included in this category shows that this method can empower people belonging to disadvantaged social groups, as discussed in Wang et al. (2004a). The participant notes “I should never have agreed to doing it but you caught me on a good day! I suffer from depression and I am bipolar. I’ve tried my best and managed a few. I hope that’s ok”. Another issue that is discussed in the literature is that this methodology tends to attract people who are over-researched sceptics towards surveys (Castleden et al., 2008) “We do not normally participate in “surveys”: mostly they are marketing publicity gimmicks.” (V148).

10.3 Negative comments on the use of VEP

Thirty one participants made 39 negative comments related to the use of VEP. These comments were divided into two categories: the first being “General negative comments on the methodology”, with 19 participants making 23 negative references and the second being “Project-related negative comments”, with 15 participants making 17 negative comments. The distinction between the two categories was made on the basis that the

project-related negative aspects of using VEP are issues that can be tackled in future uses of the technique.

The “General negative comments on the methodology” class is divided in three subcategories. The first sub-category is entitled “Not enough time available to take photographs that reflected our experience”, where 12 participants felt they did not have enough time to take the required photographs and made 13 references to this. Thought was given to whether this sub-category should be here or should be placed with the project-related negatives; however, it was decided that it will be placed here for two reasons, the first one being that the participants were not given a return date and the second reason is that even if they were restricted by the time they had left in the area, it can be argued that people in other projects were given only a few hours to complete the task (Haywood, 1990). However, it can be argued that people could have felt that if they had spent two weeks in the area, then just taking 12 photos on their last day to represent their experiences would not do justice either to their holiday experience or the area, as explained by participant V90 who says that “These are just of places we were in for 24 hours of our holiday”.

The second sub-category under “General negative comments on the methodology” is the bad weather sub-category. Eight participants referred to the bad weather conditions: three said that they would have taken more photos had the weather been better, while another three said that the photos would have been different in terms of light and clarity if the weather was better. These negative aspects could also have been categorised under project-specific negatives but weather is always a variable in open-air research areas.

Four participants discussed other general negative issues and were grouped in the category “other”. These comments included one participant noting that there were areas that photographs were not allowed, as also noted in Haywood (1990) and one participant saying that a camera can easily be forgotten, also noted in Booth and Booth (2003). Another participant noted that it is not politically correct to photograph children in an effort to explain that she would have loved to take a photo of kids playing in the rock pools but did not. One a more general note a participant reflected that using such an open method, it could be difficult for participants to imagine changes that could spoil the area.

The “Project-specific negative aspects of VEP” category is divided into five subcategories. As mentioned above, these negative aspects can be tackled using the lessons learnt for this application of VEP. The first sub-category is the most popular where seven participants in eight instances commented that they found the photo-numbering method confusing. The disposable cameras handed out to the participants were reversely numbered and participants were asked to note the number of each photo on the relevant diary page. However, this proved to be confusing as participants were using their incentive photographs at the same time, which made the task complicated. This issue can be tackled by asking participants to only describe the photos in order and skip the numbering.

The second sub-category is the one where five participants comment on the challenges posed when asked to take a photo and make notes on it at the same time: some because it was raining; some because they tried to remember the photos and make comments at a later stage, and others because they found the task a bit complicated. However, the decision to ask participants to make comments *en vivo* is justified by the objectives of this research project, as it is very important for this project to capture the feelings and thoughts of the participants as they are experiencing them. A possible way to tackle this issue could be to use digital recorders instead of pen and paper, but that could pose a whole new set of challenges.

The following three subcategories consist of comments made by each of two participants. The first category includes two participants who found 12 photos to be too many for the project. The number of photos asked for could be fewer, or more, and this depends on a series of parameters that differ from project to project. The second two participants commented on the inability of the disposable camera to capture certain shots. Digital cameras could be used to tackle this issue; but again, other challenges might occur (Hanieh and Walker, 2007) The final two participants commented on two different topics: one felt that 12 photos were not enough and the other one was unclear about the photos he would receive as his incentive.

10.4 Apologies

In 24 cases from 22 photo-diaries, participants apologised to the researcher: they were grouped in five categories. The first group of seven participants apologised for taking less

than the required number of photographs. One participant was unsure as to whether he had reached the required number of photographs and apologised in case he had not. Participants tended to give a reason for not completing the task, which usually would be not enough time or bad weather. The second group consists of four participants who were late in returning their cameras and diaries. The third group of four participants apologised for their bad handwriting: the fourth, which consists of three participants, were unsure about the photo numbering on the diary and the last group, which consists of four participants, apologised for different reasons, such as small variety of places in photos captured, inability to write good quality comments and limited effort made to fulfil the task.

The apologies could also be a part of the positive aspects of VEP as the participants could be apologising to the researcher for various reasons, which may include the establishment of a personal relationship with the researcher or possible appreciation of the methodology. However, the reasons are not always clear, even though there is a trend [as seen in the positive aspects of VEP and as will be seen further] that shows that a personal relationship between the researcher and the participants is established using VEP (Rhodes et al., 2008).

10.5 Suggestions on the use of VEP

Data for this class were obtained from 12 references in 11 photo-diaries. Five participants made suggestions on the data collection process, with three of these suggestions being on the number of the shots that should be requested and the type of camera that should be used. One local participant suggested that 12 photos were too many, while another felt that 12 photos were too few. One participant felt that it would have been better if he had used his own digital camera to take the photographs. A local participant suggested an additional questionnaire while another raised the issue of the natives and locals who were not born in St David's Peninsula, suggesting that both groups should participate in the study.

Two participants made suggestions on the possible uses of the photos in exhibitions and on postcards in the future, and two participants made other comments such as discussing the results with Cadw, and offered extensive comments on the analysis of qualitative data.

10.6 Conclusions

This part of the analysis focused purely on how VEP was perceived by the study participants. As this study is a methodological one, this component of the results is important, as VEP is tested for its appropriateness as a tourism planning tool that strives to promote participation, it should aim to be both user friendly and inviting for the participants. The reception of VEP in this study is largely positive.

A number of positive aspects of VEP that were observed in other such studies were confirmed here. VEP allows the participants to express themselves in their own way, (see L47's comment on having his beer in the pub beer-garden), which is appreciated by the research participants. A number of participants expressed how they had enjoyed participating in the study and asked to be informed of the results. Additionally, it allowed people to participate who usually would not have for various reasons.

Some negative comments were received both on the practicalities of the project and on some more substantial issues. Issues such as bad weather and not enough time to represent their experience as they wished were the main issues. However, other issues such as the use of photography, and ethics, came up. Project-related negative issues again reflected some of those that had previously appeared in the VEP literature, such as difficulty in juggling pen and paper when out and about, the quality of the photographs from disposable cameras and the numbers of photographs requested.

Overall, the participants' experience using VEP in a national park setting was considered positive. The researcher received constructive criticism as well as. Some participants were very engaged with the study and provided the researcher with advice on the data analysis process and for future applications of VEP.

11 DISCUSSION

11.1 Introduction

Participation in planning has been advocated as a way to solve problems that impact on the life of communities (Adaman and Devine, 2006, Kruger, 2007, Owen, 2002). It is a contentious topic, as participation can be interpreted in different ways in different settings (see discussion in Greenwood and Lambie, 1999, about the differences in the meaning of participation in different economic systems: also Adaman and Devine, 2006). This study endeavours to examine the appropriateness of the use of VEP in assisting tourism planning and how this method can be applied using St David's Peninsula as the case study area. It is not within the scope of the study to expand on the philosophical debate on whether achieving real and inclusive participatory planning can be achieved in a capitalist economy. However, this study hopes to present a tool that can be used in participatory tourism planning, based on the contention that participatory organisations can be successful in generating definitions of interests that are collective rather than individual (Bennett, 1995). Adaman and Devine (2006) urge people to participate in the running of society and the economy rather than leaving the market forces and the economic ruling class in charge.

Yates et al. (2010) suggest that participatory planning has been used in short-term decision making on future actions and that a landmark shift is now taking place from participatory planning to participatory management that includes implementation and evaluation as well as decision making. Tourism planning has come a long way from the 'traditional' plan-orientated reputation (Lavery, 2002). Tourism planning can include implementation and monitoring. It can be proactive and receptive to community needs, and should recognise planning and implementation as one single, ongoing process (Hall, 2008).

One of the aims of this Chapter is to demonstrate that VEP can be used to assist tourism planning. As an experience assessment tool it can contribute to stages one, "Analysis of previous development and existing tourism resources": two, "Evaluation of the position of tourism", and as a result to stage three, "Formulation of a tourism policy" of Lavery's (2002) tourism planning stages. According to Hall's (2008) typology, VEP can contribute in the "Potentiality analysis" and "Detailed assessment of economic, social and

environmental sustainability” as it can help identify and assess the area’s tourism natural and built assets, and its strengths and weaknesses as experienced by the area user groups. It can identify problems experienced by the area user groups as well as conflicts, and constraints to tourism development. It can also contribute to the “Detailed assessment of infrastructure and resource support” step, as it can help identify key tourism infrastructure required and provide for visitor and local needs, including transport infrastructure and infrastructure necessary to manage tourism impact.

The above will be achieved by discussing how all the objectives of the study have been met: the discussion of the first three objectives will establish the theoretical soundness of VEP and its appropriateness as a tool that can assist tourism planning decisions. The discussion of the remaining three objectives will demonstrate how this study generated appropriate and sufficient data to inform tourism planning decisions.

11.2 Aim 1: To provide a critique of VEP, to examine the appropriateness of its use in assisting tourism planning, and to identify best practice

VEP is a technique that if used with thoroughness can promote participation in the tourism planning process and provide great insight into people’s lived experiences (Luttrell, 2007, Markwell, 2000b). The theoretical soundness of this technique will be discussed below, examining how each of the objectives of this study was achieved. The research to fulfil this aim was bibliographical, as the theoretical appropriateness of VEP as a tool to assist tourism planning decisions had to be established prior to its use on the ground. The findings of the analysis performed to fulfil the second aim of this thesis, which was to use VEP on the ground, have confirmed the theoretical appropriateness of VEP in its use as a planning tool, which is the first aim of this thesis

11.2.1 Objective 1: To develop a typology of methods through an investigation of the previous uses of VEP techniques across the range of social science disciplines.

Prosser (1998) suggested that visual image research is fragmented and it lacks totality. This claim was validated following a thorough literature search for research that uses VEP techniques. This fragmentation made it difficult to access studies that had previously used such techniques in the tourism [and other social science] fields. Although 163 studies were finally collected that were published between 1977 and 2008, it is highly likely that there are other studies that have not been used due to the lack of an ‘umbrella term’ – a term from which these could be identified. These studies use VEP techniques under different names: they are used in similar ways across many disciplines. Thirty technique names have been identified to date (Table 65).

Part of this objective was to develop a typology that would help researchers gain a better understanding of the existing techniques. This typology table is presented here, in Table 91: it details the techniques chronologically and also presents the complementary techniques they are used with. Unfortunately, it was impossible to deliver a typology that would include combined information of the field, technique name and complementary technique used due to the lack of unanimity and lack of information about the criteria the choice of complementary techniques was based on, according to the field and the technique involved, as can be seen in the typology in Table 91. An examination of the table shows that there are no distinct subsets of similar techniques. This demonstrates that there is nothing special about any of the techniques that would distinguish them from the rest; essentially, they are the same technique, albeit with different names.

Table 90: VEP typology: techniques in chronological order of publication with complementary methods

Year 1st pub.	Technique	None	Log during + other	Logs during	Logs + focus group	Logs and interview	Interview, focus group, logs	Interview and focus group	Interview + other	Interview after	Focus group + other	Focus groups	VEP secondary method	Not specified	Other	Total number of studies
1977	Visitor-Employed Photography		1	4				1	1	1		1	1	1	1	11
1977	Photographic presentation self-			1											1	3
1979	Photography	2		4		2	1			4		1	6	3		22
1981	Autophotography	2	1	7	1	1			2	1	1		2	5	2	25
1983	Phototherapy			2						1						2
1988	Photo-projective method			2					1							3
1989	Photo-communication								1			1				1
1991	Native image making						1						1			3
1993	Self-directed photography			1		2				1						5
1993	Self-portrait photographs			1						1						1
1994	Child photography			2					1						1	4
1994 2001	Photo-novella			1												2
1995	Photo-journals, focus dyads								1							1
1998	Reflexive photography									1						2
1998	Photo-evaluation	2		1						1						2
1998	Photovoice		1	3	3	2	1	4	1	6	5	14		3	1	44
1999	Auto-driven photo-elicitation												1		1	2
1999	Photo-essays									1			2			3
1999	Resident-employed photography		1	1							2					
2000	Community photography															1
2003	Participant-directed landscape imaging									1						
2003	Diary-photography, diary-interview						1									
2003	Photo-elicitation									1			3		1	5
2004	Auto-driven photo-elicitation												1		1	2
2004	Participatory photography					1		1		3						7
2005	Photo-diary							1	1					2		4
2005	Participant-generated images, photo-elicitation												1			1
2006	Volunteer-employed photography					1										1
2006	Visual narrative									1						1
2007	Visual Voice							1								1
	Total number of studies	6	4	30	4	10	3	8	10	25	6	17	18	14	9	163

11.2.2 Objective 2: To demonstrate the value added that VEP can bring to research through a critique of the merits of different approaches to VEP.

11.2.2.1 *Characteristics of successful participatory tourism planning tools*

Studies that advocate the use of certain tourism planning tools usually focus either on tourists (Butler and Waldbrook, 2003, Cherem and Driver, 1983, Cherem and Traweek, 1977, Oku and Fukamachi, 2006, Schuster et al., 2004) or on locals (Stedman et al., 2004, Wearing et al., 2009a, Wearing and Wearing, 2001). It is rare to find participatory tourism planning tools that focus on both user groups (Garrod, 2007, Jutla 2000). It seems, however, that there are some distinctive characteristics that describe successful participatory tourism planning tools, or participatory techniques that can inform tourism planning decisions; not all tools have all the characteristics described below, and their usefulness depends on the questions they are used to address.

Tourism planning tools that promote participation usually provide opportunities for the community expertise to be acknowledged and used. Researchers recognise that communities have the necessary skills, knowledge and ideas to be partners in the research process (Wearing et al., 2009b, Wearing et al., 2009a) and they are included in the tourism planning process by being offered a potentially ‘equal’ voice (Daconto and Sherpa, 2010, Garrod, 2007, Spencer, 2010). Additionally, they help identify priorities for each participant and analyse similarities and differences (Spencer, 2010). Addressing fundamental differences is likely to reduce the possibility of conflict in the future (Wearing et al., 2009a). Garrod (2007) suggests that identifying potential or actual problems can help in the tourism planning process. According to Spencer (2010), a tool that can help to develop a consensus of group opinion can be useful in a tourism planning context; in planning situations such information can help to set priorities and focus efforts.

Furthermore, allowing participants to express themselves and their cultural perspectives using their language and symbols and letting the participants to choose their topics, assists in allowing participants to prioritise and include what they want to be considered in the research process rather than what the researcher feels should be included (Samuels, 2004).

Researcher bias is minimised if participants are allowed to be independent (Garrod, 2007, Wearing et al., 2009a).

Experiential data are considered to be useful in the tourism planning process according to Oku and Fukamachi (2006) and Garrod (2007); it is helpful to tourism planners to know how the public experience landscapes based on the interactions between human behaviour and landscape perception. Furthermore, it is important for the tourism planning process to obtain good quality information and rich datasets according to Rifkin (1996).

A number of additional characteristics of successful participatory tourism planning tools include building participants' self-confidence (Wearing et al., 2009b), identifying perceptually interesting spots in the environment (Trawick, 1977, Garrod, 2007) and from the tourists' perspective, analysing tourist satisfaction (Garrod, 2007) and developing profiles of the groups of tourists who visit, which can then be incorporated into area market profiles (Butler and Waldbrook, 2003).

Jutla (2000) suggested for effective tourism planning, those concerned need to identify the various ingredients which come together to construct the essence of a place. The place cannot be modified or developed successfully without this knowledge. The opposite would risk the destruction of its valuable characteristics.

11.2.2.2 *Should VEP be used to inform tourism planning decisions, according to the literature?*

Researchers involved in VEP studies in several fields suggested the technique is underutilised (Garrod, 2008a, Jutla, 2000, Oku and Fukamachi, 2006). Particularly in the tourism and planning fields, the suggestion that VEP should be used is more prominent: Glover et al. (2008) suggest that when discussing landscape values, participants find it easier to answer using photographs than by responding to open-ended questions. Stedman et al. (2004) similarly said that using photographs to assess a place contextualises the discussion as it places it in a specific locale: and Taylor et al. (1995) suggest that VEP is an objective measure of feature importance. Based on these suggestions and the power of

the photographic medium, it was decided that the use of VEP as a tool was considered appropriate to inform tourism planning decisions.

11.2.2.3 *VEP demonstrates participants' perceptions of the area*

One of the stages of the tourism planning process involves physical, environmental and economic situation analysis (Acerenza, 1985, Simpson, 2001, Lavery, 2002, Ruhanen, 2004). VEP can contribute to situation analyses in multiple ways, specifically because of the use of photographs. Participants can contribute to the physical and environmental situation analysis and can elaborate on the economic situation (an example is the photographs of the St David's Assemblies factory captured by the participants of the study), with the added advantage of demonstrating their own point of view. As suggested by Cherem and Driver (1983), Cherem and Traweek (1977) and Garrod (2008a), participants can identify interesting spots in the environment, positive or negative, based on their perception.

It can be argued that this will lead to biased conclusions as each participant's perspective is different. Tourists' photographs have been used in tourism research and it is common ground that the person who captures a photograph can construct reality, as it is only a snapshot of a whole and it excludes as much as it includes (Urry, 2002). On the other hand, photographs represent the real world just as writing or painting do (Prosser, 1998). In tourism planning an evaluation of the situation is useful, as is an understanding of how the user groups who live and visit the area feel about it. Taylor et al. (1995) suggest that participants can demonstrate their perception of the area as this involves a dynamic interaction between people and the environment linked with the psychology of the observer, and is immersed in the environment within which it is being experienced. Haywood (1990) also suggests that the use of VEP is appropriate in tourism as it shows how we interpret the world and the environment and all the relationships that occur within them; therefore it can demonstrate how participants experience a place.

As Prosser (1998) suggests, the photographer has to be accepted as a subjective element; and this is precisely the technique's strong point as it is the *participants'* subjective nature,

their political, cultural, social, and economic circumstances, that VEP aims to investigate (Armstrong, 2005, Berman et al., 2001, Clark, 1999, Rhodes et al., 2008, Wang and Redwood-Jones, 2001). Although one of the aims in tourism planning studies is to achieve a state of intersubjectivity among the studied participant groups (Wearing et al., 2009a), or at the very least, common ground based on participants' subjective perceptions, the potential absence of commonalities should also be considered. Turning a blind eye to heterogeneity in user groups does not help tourism planning. VEP can achieve both: as a tool to collect subjective views and perceptions, it can identify common ground as well as collect detailed information that clarifies the expression of participant' subjective perceptions of the area.

Although this bibliographic analysis was the basis for the implementation of the VEP study in St David's Peninsula, it can be argued that following the analysis of the results of the VEP case study, it can be confirmed that participants' perceptions of the area can be captured using VEP: an examination of the combination of photographs and diaries collected during the study confirms this (demonstrated in Aim 2). Participants have a chance to show what they mean by beautiful, busy, crowded, exhilarating and safe (see Photograph 2).

11.2.2.4 *VEP empowers participants*

Wearing et al. (2009a, 2009b) argue that a useful participatory tourism planning tool acknowledges and uses community expertise. The area user groups, as would be more appropriate in St David's Peninsula, have the skills, ideas and knowledge to be partners in the research process, and researchers using VEP recognise that communities have the necessary skills, knowledge and ideas for this (Wearing et al., 2009b, 2009a). They are in control in more ways than one. Participants are empowered by doing the capturing (Bijoux and Myers, 2006, Castleden et al., 2008, Dakin, 2003, Miller and Happell, 2006, Traweek, 1977).

Participants are given the opportunity to bring forward a pure and authentic account of their experiences (Germain, 2004, MacKay and Couldwell, 2002, McIntyre, 2000) without

clouding them with the planner's preconceived ideas. According to Garrod (2007) and Wearing et al. (2009a), giving participants the independence to express their views is an asset for a participatory tool that can be used to assist tourism planning decisions. The physical distance between researchers and participants minimises the bias and reverses the power relationship between them (Jurkowski, 2008); it gives more power to the participant. Consequently, because they are given the choice to include or exclude things (Berman et al., 2001, Bolton et al., 2001, Jones, 2004), participants leave out shots that the planner's preconceived ideas could possibly include or exclude. Therefore, VEP can work as a bridge between the planners' and the participants' perception of the world (Samuels, 2004).

According to Daconto and Sherpa (2010) and Spencer (2010) another useful property for a tourism planning tool is the opportunity for participants to have a more substantial voice in the process. Depending on how it is used, VEP has the potential to empower under-represented groups such as deaf people (Thoutenhoofd, 1998), people with learning disabilities (Germain, 2004), children (OPENspace, 2005), people with poor language skills (Berman et al., 2001, Bijoux and Myers, 2006), illiterate people (Boal, 1979, Buss, 1995, Dollinger and Clancy, 1993, Graziano, 2004, Moss et al., 2007) or people who "sometimes don't know how to say things" (Stefano et al., 2005, p 3). Therefore, VEP also compares positively with Wearing et al.'s (2009b) idea that it is a positive asset for a planning tool to help build participants' self confidence. This is one of the most prominent advantages of VEP that has been identified in a numbers of studies and fields (Bijoux and Myers, 2006, Grey, 1995, Lemon, 2006).

Chenoweth (1984) suggests that VEP can be empowering as one of the studies he presents was used to influence public policy. As discussed in the beginning of this chapter, the ideas of some photovoice researchers who suggest that research can be a catalyst for social change seems to have crossed the boundary between research and activism. The emotional element of the visual is undeniable (Berman et al., 2001, Carlson et al., 2006, López et al., 2005): it is hard to ignore poverty (Gonzalez, 2003) and child labour (Bolton et al., 2001), just as it is impossible to deny traffic congestion (Garrod, 2008a), or enjoyment of a beautiful setting (Traweek, 1977) when they appear before one's eyes. Therefore, by the use of photographs, people can educate planners and other professionals about their

realities and what needs to change (Wang and Burris, 1997), can help build new partnerships with power-holders (Rhodes et al., 2008) and inform policy (Stefano et al., 2005, Strack et al., 2004).

Again, it can be argued that following the analysis of the results of the VEP case study, it has been shown that VEP can empower participants and build their self confidence; a characteristic example is L89 who said that she rarely participates in research because she is bipolar but she enjoyed this one.

11.2.2.5 VEP: a tool to collect experiential data

According to Garrod (2007) and Oku and Fukamachi (2006), the ability to enable landscape experience data collection based on interactions between human behaviour and landscape perception is an asset for a tourism planning tool. VEP is a technique that allows participants' diverse experiences to be recorded (Taylor et al., 1995). Participants take photographs of their world: they give the research an insider's perspective (Bijoux and Myers, 2006, Streng et al., 2004) that could well have remained hidden without the use of participant-generated photos (Luttrell, 2007, Markwell, 2000b, Newman and Kanjanawong, 2005). The information obtained using VEP is verbatim and real-time: it is captured while participants are experiencing the situation (Chenoweth, 1984, Gemini and Boccia-Artieri, 2007, Markwell, 2000a).

Researchers and consequently planners are able to gain access to otherwise inaccessible situations without a camera in the hands of the participants: people's intimate interactions in a family setting for example would be altered by the presence of a researcher (OPENspace, 2005). Researchers are in a way "taught" aspects of the participants' lives (Clark-Ibanez, 2004, Markwell, 2000b, Samuels, 2004, Singhal et al., 2004).

At the same time as living the experience, participants think about the subjects of the photographs more and reflect on their experiences and the information they need to collect as mentioned by a large number of researchers (Aubeeluck and Buchanan, 2006, Foster-Fishman et al., 2005, Noland, 2006, Radley and Taylor, 2003a). Additionally, the task they

were recruited to perform sharpens their observation, as they endeavour to fulfil the task to the best of their ability (Garrod, 2007, Lockett et al., 2005, Stedman et al., 2004). Participants have been quoted saying that using VEP made them see their area with a different eye (Stedman et al., 2004).

Collecting good quality information and obtaining rich datasets (Rifkin, 1996) is important for a successful participatory tool that aims to assist tourism planning decisions, as they can be used to inform tourism planning decisions in a multitude of ways using the photographs and the complementary data. VEP enables researchers to get the best insight possible in the participants' lives. and perspectives in words and images: and allows the collection of very rich datasets (Aubeeluck and Buchanan, 2006, Damico, 1985, Rhodes et al., 2008). VEP is ideal to capture people's perceptions of places in great detail, because, according to Jutla (2000), people think visually. In addition, the meaning they are trying to convey can be understood better if demonstrated visually. Despite Warren's (2002) suggestion that intangible meanings such as "community" and "freedom" could be communicated successfully with word-based techniques, MacKay and Couldwell (2004) and Stedman et al. (2004) suggest that photographs can convey complex and multilayered meanings. Other researchers have a diametrically opposite opinion to Warren's (2002): meanings such as awe, mystery and beauty (Loeffler, 2004), inclusion and values (Moss et al., 2007) and pain (Boal, 1979) cannot be successfully described using words but can in photos. In support of this and with special reference to the experience of landscapes, Jokinen and Veijola (2003) suggest that photography allows better description of a landscape and the feelings experienced compared to word-based techniques, and Glover (2008) feels that photographs express landscape values better than word-based methods. Surely, it is much easier to understand what somebody means when they show a photograph to demonstrate a very busy beach, compared to writing that they thought that beach was overcrowded. Expressions such as "crowded", "too many" and "busy" are used frequently when describing experience of place but they have different meanings for different people. Using photographs, this meaning is made explicit.

VEP can be an enjoyable research technique that can promote participation in the tourism planning process. Rydin and Pennington (2000) suggest that participation in planning is in

urgent need of promotion and that it is often perceived that there is a lack of interest on the part of the communities. Middleton (Interview with S. Middleton and P. Lees, 2008), a Pembrokeshire Coast National Park planner, suggested that local people understand the importance of planning only too late, when a planning decision cannot be reversed. On one hand, the planning authorities hold the view that they actively seek participation (Kirk, 2010) whereas on the other hand, the study participants feel that they are not given an opportunity to participate in the planning process and that their views are not taken on board. VEP has in the past enjoyed enthusiastic participation when applied in a number of fields (Booth and Booth, 2003, Kaplan et al., 2007, MacDougall et al., 2004). Castleden et al. (2008) suggest that this research technique can help overcome research fatigue mainly because of the interest the photographic element of VEP sparks. Participants often welcome the opportunity to share their views and represent themselves (Armstrong, 2005, Rhodes et al., 2008, Ziller and Lewis, 1981). Furthermore, more creative people might find it uninteresting to participate in planning processes online or to attend meetings: however, photography gives people freedom to express themselves in a new way (Hubbard, 1994).

Strack et al. (2004) and Johnsen et al. (2008) commented on the participants' enjoyment in participating in their studies and on the sense of pride they had when sharing their photographs. If the pride felt over what their photographs have captured is combined with the pride they feel about their local area, or the area where they chose to holiday (or have been choosing to holiday for a number of years), this can enhance participation and result in very rich datasets. Thoutenhoofd's (1998) study with deaf children and the Stedman et al. (2004) study that examined place attachment proved that participants are more motivated to participate when they are given the opportunity to present something they are proud of. Participant L51 in this study commented: "Thank you for allowing me to show off my home area. There is nowhere in this world any better and I hope we can continue to make it attractive to our visitors without having to change just for the sake of it. We need to progress but we don't have to keep up, this is the magic and attraction of this unique area."

Using VEP can make people more committed to the study, as they are more involved in the research process compared to traditional research techniques (MacKay and Couldwell,

2004, Miller and Happell, 2006). Additionally, having decision-making powers by being the ones doing the capturing makes participants feel valued and trusted, and more willing to participate (López et al., 2005). In addition, a degree of intimacy is created between participants and researchers after the participants have taken their photographs, as participants share aspects of their lives they would not share with strangers (Castleden et al., 2008, Miller and Happell, 2006, Streng et al., 2004), which is particularly helpful in tourism planning at a regional level.

In this study, 1,496 participants' photographs and their accompanying diaries formed the dataset that resulted from the photo-taking process, where participants captured their verbatim experiences of the area. As presented in the results section, the return rate compared to other studies is lower; the average for other studies is 80.4%, while in this study it is 64.5% (76.5% for tourists and 51.2% for local participants). However, this is an average of 27 studies that have presented their return rates, just a small percentage of the number of studies found. Generally, it is a satisfactory return rate and it can be argued that participants were committed to the project; bearing in mind that it was a demanding undertaking. Their comments showed enjoyment and pride in the results.

11.2.3 Objective 3: To safeguard the quality of VEP research by developing best practice guidelines for its use.

This objective is met by devising the best practice guidelines for VEP. These are presented in a table and then thoroughly discussed. Some of them seem quite basic, however based on the practice observed in the VEP study publications it was felt that these guidelines should be detailed in order to obtain better quality VEP research and more informative publications

11.2.3.1 *Best practice guidelines for VEP studies and subsequent publications*

The following guidelines were compiled following an analysis of the VEP studies (Figure 49). This includes some basic steps that should be followed in every research study and subsequent publication. This shows the state of VEP research at present: some very high quality studies have been conducted but also a large number that lack the data to prove

their rigorousness. These findings are in agreement with Decrop's (1999) observation that in qualitative research researchers often avoid to explain how their methods are sound, which results in qualitative research often branded as "bricolage" or "art" (Decrop 1999, p. 160). If these guidelines are followed, there is no doubt that in the very near future a large pool of studies will be collected, benchmark studies will be acknowledged and a solid base of research studies will respond to Prosser's (1998) call for a totality that will encompass and unify the VEP side of image-based research. As a result the best practice guidelines will have to be revisited and refined to more specific best practice guidelines that will result from a wider body of research. For the time being, however, it is imperative that researchers should consider the following:

1. VEP should be based on reliable and current data
2. Sampling techniques should be presented and justified
3. Number of participants should be presented and justified
4. Completion rates should be included in publications
5. The number of photos that participants were asked to capture should be mentioned
6. The number of photos captured should be mentioned
7. The number of photos used in the analysis should clearly specified
8. Complementary techniques should be referred to and justified
9. The choice of camera should be discussed
10. Researchers should aim for cross-disciplinary referencing
11. The use of photographs not captured specifically for the study should be avoided
12. Positive results should be reported
13. The VEP umbrella should be used.

Figure 49: Best practice guidelines for VEP and subsequent publications

11.2.3.2 *VEP should be based on reliable data*

It has now been established that VEP can be used to inform tourism planning decisions; However, according to Butler and Waldbrook (2003) planning tools must be based on reliable, current and comprehensive data. This view has support from a number of fields, including education (Howe and Eisenhart, 1990), medicine (Malterud, 2001), tourism

(Jamal and Hollinshead, 2001) and regional studies (Markusen, 2003). Jamal and Hollinshead (2001) focus on the depth and rigour that qualitative research can achieve. Although debate surrounds its validity and reliability, there are many criteria against which qualitative research should be compared, which differ from the positivist criteria of ‘truth’, ‘validity’ and ‘reliability’. Markusen (2003) acknowledges that in regional studies, many analyses rely on anecdote or singular case studies, while other types of research are ignored. Methodology is often not discussed adequately: results are not made accessible to policy makers and planners, and therefore are not subject to the rigours of evidence. There has traditionally been a reluctance from some researchers to accept visual sociology as a study field in its own right (Prosser (1998), a trend that has now appeared to shift. However, in order to utilise the full potential of visual methodologies including VEP, it is in the interest of the related field that studies are undertaken and published based on reliable, current and comprehensive data. Wang (1998) discussed how the marginalisation of social scientists who used photovoice as their research was not perceived as ‘serious’. However, one wonders if they are marginalised because of their choice to use VEP or because of how their research is conducted and published.

Markusen (2003) suggests that there has been an increase in “fuzzy concepts” – concepts that have more than one meaning and can be interpreted in different ways by different people – and attributes it to the increase in the number of publications that lack the necessary quality and evidence. That is most definitely the case in some publications that have used VEP, as shown by the results of the literature analysis. One study (with only one participant) published in an academic journal described the experience of one child with a camera (Cavin, 1994). Rather than promoting the use of VEP by demonstrating how it can yield rich and robust results, some crucial elements of the research process are omitted from a large number of publications for various reasons. Indicatively:

- Sampling techniques

In total, 95% of studies used sampling techniques that could not produce generalisable or robust results, either because of the small sample size or because of the way the sample was chosen while 39.5% of the studies did not even specify their sampling technique. Convenience sampling was used in most cases: an example is the percentage of studies

that used students and schoolchildren (20.4%). This was prominent in psychology, where despite the fact that VEP was first used in 1977 (Ziller and Smith, 1977), which means that it is now a well-established tool of personality assessment and should probably be tested with the general public or patients, it is still being used with university students on whom the researchers have a high degree of dependence. Furthermore, the researcher avoided bias because of the distance between researcher and participant (Jurkowski, 2008) which is reinforced because of the relationship between the two.

- Number of participants

The data presented in some studies were so few that even the number of participants was omitted in 30 studies.

- Completion rates

Despite the participant enjoyment (Johnsen et al., 2008, Strack et al., 2004) which results in more participants agreeing to take on the task (Armstrong, 2005, Rhodes et al., 2008) as witnessed by researchers, this cannot be expressed in numbers, as completion rates are not included in an astonishing 83.3% of the studies. This is particularly surprising as 61.7% of the studies were conducted in order to test the methodology.

- Other missing data

Other data that should be considered necessary in the evaluation of the methodology and the success of the study were not always included: 62.3% of the studies did not provide any information about the number of photos that participants were asked to capture, only 25.3% of the studies gave the number of photos captured, and only 16% made the number of photos used in the analysis explicit.

- Incentive

The lack of information discussed above in conjunction with the high degree of dependence in personality assessment studies, made it impossible to evaluate the use of incentives in VEP studies, although only 38 studies used incentives such as theme park tickets, photo prints, and extra credits in university modules.

11.2.3.3 *Need for complementary techniques*

Unfortunately, no clear pattern of complementary techniques by field or by technique name was identified from the analysis of the VEP studies collected. On the contrary, there is confusion at two levels. Firstly, it was impossible to identify a pattern of complementary techniques per field or technique name, and secondly, there is a lack of clarity on the use of the technique names (Markusen, 2003). In particular, it is unclear if the researcher is referring to the photo-taking process or to the whole set of tools used in the study. Hopefully, by using the typology presented above and by being specific about their study particulars, similar problems will be avoided in the future. Despite the confusion the use of complementary techniques has caused, their acceptance as necessary is almost universal.

Researchers have recognised the power and potential of the use of participant-generated images in tourism planning and other fields, as photos have the ability to ‘talk’ instead of the participants who “sometimes don’t really know how to say things” (Stefano et al., 2005, p. 3). Participants invite researchers to see for themselves (Radley and Taylor 2003a: Warren 2002). They allow more locale precision (Stedman et al., 2004) and they specifically show what the participant means, making it explicit and visual (Bolton et al. 2001: Killion and Wang 2000: Mizen 2005). They can even convey abstract meanings successfully (Glover et al., 2008, Loeffler, 2004, Moss et al., 2007).

However, photographs only represent objective reality when taken at face value, without characterisations and assumptions. As already demonstrated, VEP is a technique that can facilitate the collection of perceptions in a visual fashion. Photographs are small pieces of reality (Urry, 2002) and grasp only one moment in place and time (Crang, 1997): they need to be kept in context otherwise there is a risk of misinterpretation. The subjective element of human perception has to be acknowledged and accepted and VEP should only be used if that is what is being researched. Germain (2004, p 173) insists on the importance of “validating communication”; in other words ensuring that the photographs convey the message the participant intended to send, so complementary techniques are necessary. A

number of researchers have suggested that the meaning of the photographs is not necessarily evident so some form of explanation is crucial for coding them (Carter and Mankoff, 2005, Haywood, 1990, Groves and Timothy, 2001, Loeffler, 2004). This argument is further strengthened by Thompson et al. (2008), Castleden et al. (2008) and Carter and Mankoff (2005) who held interviews and focus groups so long after the photos were taken that participants struggled to remember why each photograph was captured. Given the long time delay between capturing the photographs and the interviews, this might suggest that the complementary techniques chosen could be characterised as inappropriate. Complementary methods can also be regarded as inappropriate if they do not allow the participants to voice their perspective or if their voice is lost in the multitude. Clark-Ibanez (2004) therefore suggests that individual voices can be lost if photographs are discussed in a group setting, which is a point to be considered in tourism planning where sensitive information participants might want to present can be compromised if the complementary method chosen is a focus group. However, it can be argued that a well-managed focus-group could encourage issues to be brought out.

A combination of tools is suggested for various other reasons. Gemini and Boccia-Ariteri (2007), Garrod (2008b) and OPENspace (2005) encourage the use of VEP as verbatim recording of the participants' experience that should be accompanied with other techniques in order to capture the visual aspect of the experience, as well as the emotion it evokes, by recording those while capturing the photographs. Furthermore, using complementary techniques allows triangulation to strengthen the study design (Patton, 1990, Decrop, 1999).

Psychology was the only discipline where no complementary techniques were used in some of the studies. It is difficult to say without being a specialist if they captured the information they sought from the photographs alone: however, in other fields and disciplines, the use of complementary techniques is advisable. An example of their necessity is the following photograph by participant L49 (Photograph 20, Chapter 9.6.1.1). It would have been highly unlikely for anybody else apart from the participant to explain the reason the photograph was captured. It is possible that without the participant's diary to give meaning to the photograph it would be considered unusable.

11.2.3.4 *New techniques and referencing across disciplines*

Prosser (1998) calls for a totality that will encompass and unify image-based research: the divisions artificially imposed by disciplines, media used and challenging intellectual landscapes should be set aside. However, this is not made easy by the approach of certain researchers. Markusen (2003), in an effort to identify reasons that lead to “fuzzy” concepts, cites published research that is not of a very high standard and does not include evidence, a statement which finds Decrop (1999) in agreement. This argument is valid in VEP research, as 20 of the studies collected in this study declared the techniques they worked on as original. Incidentally, the last of those studies was published in 2007 (Moss et al., 2007). Fifteen studies made no reference to other techniques that had use participant-generated images in the past and 67.5% of the studies did not make reference to articles from different disciplines. Wang (1996a) copyrighted ‘photovoice’ which was first used as a term in 1996 and has never referred to any other techniques that used participant-generated images as relevant, although they had existed for almost 20 years before her first publication using photovoice.

It is difficult to explain this situation: claim to fame or inadequate review of the literature on the researchers’ part could be assumed. Regardless of the reason, however, researchers are strongly advised to avoid ‘reinventing the wheel’ and making the same mistakes as others, to put their work into perspective, to identify methods, ideas and information that can be relevant to their project, and to build on the platform of existing knowledge and ideas. The starting point for every study should, therefore, be a sound literature review (Afolabi, 1992, Bourner, 1996). This can allow for one umbrella, a common starting point and establishment of a robust tool that can be used in multiple ways, but with one central characteristic: the use of participant-generated images.

11.2.3.5 *VEP with photos not taken for the research*

Two of the studies used in the analysis have used photographs captured by the participants but not specifically for the research project they are used for (Markwell, 1997, Groves and Timothy, 2001). In tourism in particular, it is natural for tourists to take photographs and a large bank of photographs could be used in VEP studies. The appropriateness of the use of these photos obviously depends on the aims of the study; however, before deciding to use photographs not captured for a specific research project, certain issues have to be contemplated. Urry (2002), Berman et al. (2001), Kaplan et al. (2007) and Jones (2004) agree on the subjective character of photographs and their ability to exclude as much as they include. Paired with Markwell's (1997) suggestion that the snapshots captured might not be representative of a tourist's experience but can be driven by the desire to demonstrate that he or she experienced a dream holiday, and Edward's (2001) view that holiday photographs can be staged to capture happy moments, the use of holiday photographs for VEP detracts from some of the power of the technique to record experiences verbatim. On the other hand, they can be used if holiday happy moments are the focus of the study.

Markwell (1997) and Urry (2002) also argue that the tourism industry can shape a destination image by 'imposing' certain images of a destination. People sometimes tend to return home having photographed exactly the sites they had seen on postcards or in tour operator brochures prior to their departure, which had driven their decision to visit the destination. Through their holiday snapshots, therefore, they are reproducing the images that made them choose the particular destination. If the photos used in VEP are holiday snapshots, the authenticity of the experience is compromised: if Markwell's (1997) and Urry's (2002) arguments are accepted, it could be argued that a tour operator brochure analysis would yield the same results.

11.2.3.6 *Reporting positive results*

Reporting positive VEP results should be encouraged and used as a means to convince sceptics about the robustness and the real-life applications of VEP studies. Numerous

positive developments have taken place following the use of VEP by using the power of the photographs and the results from the studies. Some examples are homeless people who found their own accommodation (Wang et al., 2000), the establishment of a feeding scheme for schoolchildren over the weekend to combat absenteeism (Mitchell et al., 2006), and Fotokids projects growing with exhibitions in Britain, Germany and Spain (Gonzalez, 2003).

However, the fact that VEP is only a tool that can be used, as every research tool, to inform decisions, policies and influence people in power has to be clear to researchers and participants. Thus getting such a close insight of people's lives generates a new responsibility: protecting them from thinking that participating in a research project, intense as it might be with such obvious results, does not guarantee change. Hence it will be suggested that Wang et al. (2000) should reconsider the goals of photovoice: a claim that a study aims to act as a catalyst for social change and mobilise policy makers is misleading. Social problems have been successfully addressed when they have been confronted by mass social movements (Kruger, 2007). Of course, research helps to raise issues, but the claim that movement towards social change can be achieved by using photovoice or any other kind of research tool can romanticise participation (Mitchell et al., 2006, Wang, 1998, Wang et al., 1996b), raise expectations and result in people feeling more hopeless and disempowered (Strack et al. 2004), accompanied by a sense of cynicism (Wang et al. 1998). Albeit a tool with a lot of potential, VEP still is only a tool. Romanticising participation, raising expectations and leaving participants feeling disappointed and disempowered are indications that the research code of conduct was not followed or was inappropriate.

11.2.3.7 *Using the VEP umbrella*

The confusion over the names of the techniques used, the types of complementary techniques utilised, the field, and some researchers' over-zealous attitude to publish should be left aside for the sake of strengthening visual sociology as a social science field and techniques that have used participant-generated images in particular, responding to

Prosser's (1998) and Becker's (1995) calls. It is therefore suggested, that since there are no groups of techniques that distinctively belong to certain disciplines and not others, or that use certain complementary techniques and not others, that the 'umbrella term' Volunteer-Employed Photography should be used. This term was chosen for two main reasons. The first one is that it keeps the same initials it was given in the first study it was used in, in Traweek's PhD thesis (1977), VEP-for Visitor-Employed Photography. The second reason is that by replacing Visitor with Volunteer, it allowed other area user groups to use VEP without specifying it as something visitors use. Consequently, Volunteer-Employed Photography is a research tool that utilises participant-generated images, and ideally complementary methods, to allow an insight into participants' verbatim experiences.

11.3 Aim 2: To demonstrate the potential of VEP in tourism planning research through its application in a tourism planning context in St David's Peninsula, in Pembrokeshire Coast National Park

As stated in the introduction, this part of Chapter 11 aims to show how VEP can be used in, and contribute to, the tourism planning process in practice, demonstrating that this methodology can facilitate data collection that can help identify and assess the area's tourism assets (natural and built) and its strengths and weaknesses as experienced by the area user groups. Its potential to identify problems experienced by the area user groups as well as conflicts and constraints to tourism development will be demonstrated. Additionally, it will be demonstrated that VEP can be used to identify key tourism infrastructure required to cater for visitor and local needs, and to manage tourism impact. After demonstrating that all the above have been achieved, it will be suggested that VEP can be used as a tool to inform tourism planning decisions.

The need for participatory tourism planning in national parks stems from the importance of local support towards the protection of the area (Holdgate, 2003). A reason for the designation of National Parks is recreational use (Bishop et al., 2004), which implies that by definition, an economic development planning decision has been made *a priori*: tourism revenue is a source of income for the local communities. The national park designation therefore implies that the area the host community and the tourists are linked by an economic relationship. Balancing the needs of the two user groups makes tourism planning challenging: the local community need to be happy in their setting and tourists should feel comfortable during their visit, as the opposite would result in revenue reduction (Tudor and Williams, 2003).

Rydin and Pennington (2000) suggest that the lack of participation in the planning process is often perceived as a lack of interest on the part of the local communities. According to Middleton and Lees (2008), the National Park Authority is constantly trying to find new ways to involve the community: however, people often do not realise the importance of planning until unwanted development has already been granted permission. Planning tools such as town, village and parish design statements and village appraisals have been introduced as an answer to the international concern to pursuit subsidiarity but have

brought a degree of confusion (Owen, 2002). However, this demonstrates a degree of willingness to participate in the planning process, albeit restricted to providing guidance on the appearance of new development (Owen, 2002). These and other tools, in conjunction with invitations to write to the National Park commenting on planning applications, through local Town and Community Councils, flyers, leaflets, websites, and other group-led processes, are used. Consultation is central in the process to adopt the Local Development Plan, according to Julie Kirk, PCNP planner (Kirk, 2010).

When asked if they feel their views are taken into account in the planning process, most of the local participants (48%), responded negatively. A possible explanation is that their views in the cases they were involved with did not change the outcome of the process they participated in (Interview with S. Middleton and P. Lees, 2008). However, a lack of information on what the Authority is responsible for can lead to confusion. An example is the second home issue which pushes up house prices. Participants of this study, and the community as a whole, feel that there is an urgent need for the planning authority to intervene on this matter. Sarah Middleton and Phil Lees also think that this is an issue (Interview with S. Middleton and P. Lees, 2008): it was not taken forward in the previous Development Plan as it was considered to be a Central Government decision. During the consultation on the Affordable Housing Delivery Statement (Pembrokeshire County Council, 2009) the representative of St David's City Council raised the second home issue and suggested management policies be put in place in order to retain housing for the community. The response from the Officer was that currently there are no means of controlling homes through planning policy (Pembrokeshire County Council, 2009). There is therefore a confusion that can lead to frustration and disappointment towards the wrong authority. Phil Lees gave the example of dog faeces and jet skis: collecting dog faeces is the responsibility of the County Council: the Rangers are not allowed to handle waste. The boundary of the National Park is that the low water mark and the sea is the responsibility of the County Council, so the Park Rangers cannot do anything about irresponsible Jet Ski users. However, another explanation is that no effective participatory planning mechanisms are in place: participatory planning expands the public's potential of influencing decisions and can also be used as an instrument to minimise or manage conflicts (Kangas and Store, 2003). Additionally, it appears that the planning authorities

are reacting to planning applications rather than working in partnership with the community to reach consent on the development of the area.

The National Park Authority sees tourism planning as the responsibility of the County Council (Interview with S. Middleton and P. Lees, 2008). Mark Horner (2008) (Pembrokeshire County Council Tourism Development officer) suggested that the interaction with the tourists is obtained through the County Council, Visit Wales and Visit Britain websites, as well as through the Pembrokeshire Tourism and Pembrokeshire Tourism Association websites. Tourist Information Centres are also the responsibility of the County Council. Furthermore, the County Council funds the Visitor Surveys. It was suggested that questions about planning and tourism planning would be better answered by the National Park planners. It thus appears that there is not a holistic approach towards tourism planning in Pembrokeshire. The National Park planners deal with the land-use planning and the County council with marketing and tourism planning: things like tourism planning policy and its implementation appear incidentally dealt with one of the two authorities, usually the County Council, and the locals and tourists complaining to National Park planners and rangers.

11.3.1 Objective 4: To demonstrate the potential of VEP to provide detailed and informative datasets and contribute to future research by using VEP in a specific case study context

A general observation is that although tourists have taken more photos on average, the reflection was richer and more in depth in the locals' diaries. Locals seem to have spent more time on the project compared to the tourists, judging from the detail in which they completed their diaries and the time they spent filling in their questionnaires. It is natural for tourists to take photographs: it is after all part of being a tourist (Markwell, 1997, Markwell, 2000a, Urry, 2002). It is not the same for local participants though. When they agreed to participate, they knew that they were taking on a demanding task. That possibly explains their lower completion rate.

11.3.1.1 *Potential of VEP to provide detailed evidence*

Dollinger (2001) suggests that techniques that use participant-generated images do not offer quantitative accuracy but they do generate rich qualitative data (Dollinger and Clancy 1993; Germain 2004). The combination of the power of the images combined with the power of the research process returned to participants offered greater depths of insight and discussion according to Perry (2006). This is the case in this VEP study: although the dataset was described and a series of findings were presented, it is still felt that the richness and subsequent potential of the dataset has not been demonstrated in full. The dataset collected is so extensive that it is impossible to demonstrate its depth without actually allowing the readers to “ask” the dataset themselves and by seeing the photographs. Beneath all the results, there are further layers that can be obtained, depending on what the researcher wants to find out. Use of the qualitative software NVivo8 has allowed the researcher to create a multilayered dataset (Bringer et al., 2004), where each participant diary is allocated certain properties that result from the questionnaire survey. These properties include the demographic information linked to each participant but also include other information obtained in the interview process, such as “Aspects of the area” participants do not like, which were coded so that they could be used in the CVA and NVivo analysis (Figures 50 and 51).

The diaries were imported into NVivo8 and analysed as described in the results section. An example of the emerging themes in the “Problems and solutions” category can be seen in Figure 49. The dataset can be investigated and cross examined using the attributes and all the themes presented in the data analysis section. Contrary to suggestions in Oviedo-Garcia et al. (2008) that the impacts of tourism are felt less acutely by those who benefit financially from tourism, for example, local participants in the study whose income is based on tourism still think that too many tourists visit the area during the summer (Table 92). The suggestion they make is for the tourism season to be extended and to promote the area as an all-year destination.

Table 91: Is your job related to the tourism industry? (NVivo8 matrix query)

	Too busy in the summer
1 : Is your job related to the tourism industry (LOCALS) = Yes and No	1
2 : Is your job related to the tourism industry (LOCALS) = Yes	9
3 : Is your job related to the tourism industry (LOCALS) = No	1

Matrix queries can be run for all kinds of data that have been input in NVivo. For example, a query about the age of local participants who would move elsewhere shows that of the eight participants aged between 18 and 29, six would move elsewhere. This is 42.9% of the participants who would move away given the opportunity (Table 93).

Table 92: Would you move elsewhere/ age group matrix (NVivo8 matrix query)

	Would you move elsewhere (LOCALS) = Yes	Would you move elsewhere (LOCALS) = No
1 : Age group (LOCALS) = 18-29	6	2
2 : Age group (LOCALS) = 30-44	0	9
3 : Age group (LOCALS) = 45-59	4	16
4 : Age group (LOCALS) = 60-74	2	14
5 : Age group (LOCALS) = 75+	2	8
Total	14	49

11.3.1.2 *Added value of each complementary technique*

As already demonstrated in the discussion for Objective 3, ensuring that the photographs convey the message they were intended to convey by the participants is of paramount importance in tourism planning research (Germain, 2004). Complementary techniques are therefore necessary (Carter and Mankoff, 2005, Haywood, 1990, Groves and Timothy, 2001, Loeffler, 2004). This study is designed in such a way that all its three components – questionnaires, photographs and diaries—are inseparable and cannot stand alone (Figure 52).

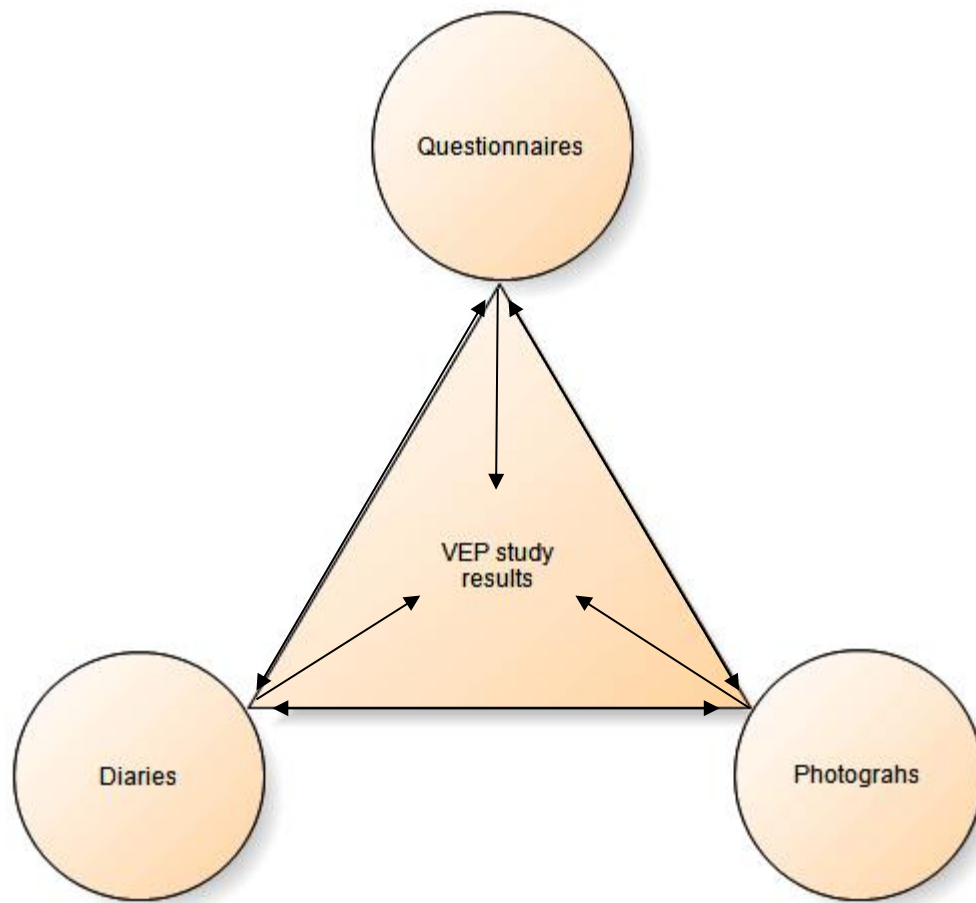


Figure 50: VEP triad: interaction between its components

11.3.1.3 *Photographic component*

Although the power and impact of photographs has been established, some researchers only use them as prompt, a memory jog for their participants to elaborate on their experiences (Clark-Ibanez, 2004, Loeffler, 2004), perhaps unconsciously regarding them as data of secondary importance. In VEP for tourism planning, photographs are arguably data of primary importance. Photographs can be used as evidence of good planning, of bad planning, or as evidence that action needs to be taken to tackle the ‘dog faeces on the coastal path’ issue (Interview with M. Horner, 2008). According to Jutla (2000) people think visually and consequently the meaning they are trying to convey can be understood better if it is demonstrated visually. An excellent example of that is Phil Lee’s (Interview with S. Middleton and P. Lees, 2008) reaction when he was shown the photographs the

study participants had taken. Phil, a Park Ranger for many years, knows the area very well and apart from the fact that he could tell where the photographs had been taken (Stedman et al., 2004), he could also tell what the problem was, and where there was one, without being told what the photograph was about. Furthermore, photographs help quantify comments such as “too many tourists”, as such statements are subjective. The title caption of Photo 21 below reads: “Congestion in key beauty spots” (V72). This, to participant V72, is a congested beauty spot, whereas to somebody else it might not seem congested.

It is therefore necessary to use a complementary technique to record the reason behind each “click”.



Photograph 21: "Very beautiful spot but increasingly spoilt by traffic and large numbers of people doing organised outdoor pursuits" (V72)

11.3.1.4 *Diaries component*

Diaries were chosen to accompany the photo-taking process as they could give participants the chance to record information while they were experiencing the landscape: they did not pose any technical challenge and finally, it was unlikely for a participant in the area to be illiterate, according to the Visitor Survey (Trembath and Tennstedt, 2008) and the census

(Office of National Statistics, 2003, Office of National Statistics, 2004). While doing the photo-taking and experiencing the landscape, the diaries helped participants record their answers to the hypothetical scenarios “What would spoil the enjoyment of the area for you?” and “What would enhance the experience of the area for you?” Rather than having to imagine what would spoil the area for them while discussing it with a researcher, as they would do when filling in a questionnaire or participating in an interview, they could more easily place themselves in a hypothetical scenario.

11.3.1.5 *Questionnaires component*

As with the diaries, the questionnaire design was based on two parameters: the first was to collect information about planning and tourism planning practices in the area and the participants’ experiences of living in and visiting St David’s Peninsula. The second parameter was that the technique would be tested as a tourism planning tool so the design incorporated a kind of “fitness” test, which means that practically, the questions asked related to “fitness” of the technique. An example is “What would enhance your experience of the area?”, a question directly related to Hall’s (2008) eighth step in the regional tourism planning process entitled “Detailed assessment of infrastructure and resource support”, which amongst others aims to identify infrastructure required to support investment and provide for visitor and local needs, including transport infrastructure. Additionally, demographic information was collected using the questionnaires, as well as other data, thus offering the opportunity to strengthen the study using triangulation (Decrop, 1999).

11.3.1.6 *Assessment of VEP*

11.3.1.6.1 *Participants’ assessment of VEP*

Participants’ assessment of VEP was positive overall. Through their responses, participants verify the strengths of the technique as reported in the literature. Participation was considered a great opportunity to express their views (Armstrong, 2005, Rhodes et al., 2008). Many participants thought the study was well thought through and admitted that the

photo-taking process made them stopped and think (Radley and Taylor, 2003a, Foster-Fishman et al., 2005, Aubeeluck and Buchanan, 2006, Noland, 2006).

The negative comments mainly concerned logistics such as participants thinking that 12 photos were too many or not enough, confusing photo-numbering and the inadequacy of the disposable camera to capture the shots participants would have liked to capture. Judging from the average number of photos captured (11.13 per local participants, 10.47 per tourist), and from some comments that 12 photos were too many, 12 photographs is considered viable for this type of project. Unfortunately it is impossible to compare this to the literature as there are very few studies that include this type of data. The difficulty with the numbering is something that can be avoided in future research. The comment on the use of disposable cameras is a very interesting one: Hanieh and Walker (2007) suggested that digital photography would have been easier and quicker, and that the quality of the photographs would be better. However, they suggest that participants would be able to delete or manipulate the photographs, and this might misplace the emphasis on the quality of the photograph rather than the spontaneity. Finally, it was also suggested that it was tricky trying to walk around taking photographs and writing at the same time using a pen and paper. Voice recording could be tried in future research: however the principle should be that the recording should take place at the same time as the experience, not later.

11.3.1.6.2 Comments by people involved in planning, tourism planning and park management

Mr Mark Horner, County Council Tourism Development officer, Ms Sarah Middleton, National Park Planning officer and Mr Phil Lees, National Park Ranger, were approached, shown the photographs and informed about the research. They were all asked to comment on the potential of VEP as a technique that can promote participation in the tourism planning process. Again, their comments were in line with those in VEP literature that support further use of VEP.

Positive comments include the potential to understand where people have been during their holiday. Photographs can work as evidence (Berman et al., 2001, Carlson et al., 2006,

López et al., 2005) causing greater impact compared to written text. It was also suggested that this technique can be used to demonstrate things that are working and things that are not, unlike a table of statistics. In other words, it is considered possible that it can effectively be used to influence public policy (Chenoweth, 1984 , Interview with M. Horner, 2008). VEP can be used to identify planning issues (Interview with S. Middleton and P. Lees, 2008): Phil Lees suggested that “it is a sort of a planning for real thing, isn’t it? Walking around your village, what you like, vernacular architecture, what you don’t like.” It was considered that with appropriate parameters in place that would make the research more specific, it can actually help in the planning process (Interview with S. Middleton and P. Lees, 2008).

On the other hand, this study was thought to be too generic, touching upon issues from dog faeces to holiday homes. Ms Middleton suggested that to have a photograph of something, it has to be there already: in planning “we are talking about concepts sometimes”. However, it can be argued that VEP can be used to evaluate the landscape values prior to any development. An issue that everybody raised, however, was that of staff time, as this method was considered time consuming (Damico, 1985, Haywood, 1990, Kaplan et al., 2007), and staff time was considered a major factor by all three interviewees. They also stressed that representative sampling should be ensured if the study was to assist planning, as the results would need to be generalisable.

11.3.2 Objective 5: To establish similarities and differences in the viewpoints and experiences of the locals and tourists by assessing the area’s built and natural environment and their related uses

Although Lavery (2002) and Hall (2008) describe the situation analysis differently, they agree that it is a necessary step in tourism planning. In this study, the participants were asked in the questionnaires what they consider assets of the area, and they were later asked to photograph them and discuss them in their diaries. A large dataset has therefore been obtained with participants’ comments on the area’s assets as well as an extensive photographic inventory of the participants’ interaction with the landscape, an asset for a tourism planning tool according to a number of researchers (Castleden et al., 2008,

Chenoweth, 1984 , Dakin, 2003, Stefano et al., 2005). The data also reveal differences in the perception of the place per user group, age group, attitudes to development and so on, as the results of CVA and the thematic analysis show.

11.3.2.1 *What makes living in and visiting the area enjoyable?*

The area's general natural assets are of great importance for the enjoyment of the area for locals and tourists alike. However, the sensuous qualities of the area are more important to the local population compared to the tourists. Locals, as one would expect, demonstrate strong place attachment, and according to Stedman et al. (2004), it is more likely for local community members to participate when they are given the opportunity to present something they are proud of. According to Stewart et al. (2003), VEP is a good for highlighting places that people feel strongly about, which is important to planners.

Tourists were less emotionally attached to the area; however they also captured photographs with a strong emotional element, usually depicting their family or pets. As suggested in a study by OPENspace (2005), a number of photographs that were captured here would not have been captured in the presence of the researcher.

The analysis demonstrated differences between the ways locals and tourists see and experience the area. Although their photographs look similar, the reasons each photo was taken might differ significantly. An example is two photos of Cross Square and their descriptions (Photographs 22 and 23). At first sight they look similar but their captions demonstrate a difference in the way the same place is experienced by a member of the local community and a tourist.

The caption under Photograph 23 reads: "This ancient stone cross is a focal point for the community– the St David's day events are held here and meeting for the 'coming together' after tragic events such as the tsunami.". The caption under photo 3 reads: "It's a good thing, to obtain the old documents of the former societies, which lived in this country. Especially it's a good thing, to obtain the Celtic roots of the Welsh culture." The Cross Square has a historic interest for the tourist participant who approaches it with an

archaeological interest and sees it as a relic from the past. On the contrary, it is very much a part of the everyday life of people in St David's as can be concluded from the number of local participants who photographed it and made very similar comments.



Photograph 22: Cross square (L28)



Photograph 23: Cross square (V25)

A second example is the following set of photographs:



Photograph 24: "Holiday cottage/woodland at little Haven" (V21)



Photograph 25: "St David's, St Non's apartments" (L56)

The diary entry under Photograph 24 by tourist participant V21 reads: "It's a great advantage that tourists get the possibility of choosing their accommodation in small residences and not in big holiday resorts, which spoil the landscape in south of Europe." The diary entry under Photograph 25 by local participant L56 reads: "Until 1968 this area comprised an elegant early C19 gentleman's house set in substantial garden, the site of a medieval Hospice for Pilgrims to the Shrive of St David. Subsequently, the house, enlarged by three colossal wings, traded as a hotel, but in 2006, after decline and bankruptcy, was redeveloped as 15 luxury apartments inappropriately set in a sea of concrete and black tarmac. Although one wall of the original house has been 'preserved', it is no longer relevant to the whole dreadful suburban development. With so many second homes, and properties bought as investment and rented out as holiday lets, St David's, out of season, is dangerously close to becoming yet another North Pembrokeshire ghost town."

The second home issue is a major one for the local community: the majority feel very strongly about it but it is an issue that needs to be solved at the national level (Cheyne and Freeman, 2006). Locals feel that it erodes community coherence and causes all sorts of

problems such as lack of affordable housing; and young locals unable to buy or rent a house are forced out of the area. On the other hand, the tourist participant enjoys living in a real house rather than a hotel. Except for demonstrating differences in landscape values between locals and tourists, the above photographs also show the need for complementary techniques in VEP, as the photographs are in principle very similar but tell a very different story.

11.3.2.2 *What would spoil the area for you?*

In the process of identifying the area's strengths (Gunn and Varr, 2002, Hall, 2008), participants were asked to indicate what would spoil the area for them using VEP. A large number of participants (32) considered any detrimental change impossible, due to the area's National Park designation.

Both user groups agreed that more buildings, wind farms, holiday homes, hotels, shops, marinas, campsites, tents, and caravans would spoil the area for them, as they would detract from the character of the area. Widening the road would make the area more accessible but would bring in more tourists as a result. A leisure complex is also mentioned as an unwelcome development, although it would be a welcome addition to the area by two tourists and three locals. Both user groups also mention commercialisation, with tourists giving it significantly more mentions as an unwelcome change. Commercialisation is perceived as modernisation of existing buildings, excessive numbers of speedboats, water scooters, jet skis, ice-cream vans, MacDonald's, and advertising signs. Both user groups also mentioned negative environmental issues: however tourists appeared to be more concerned than locals. The presence of too many tourists would be a problem mainly for tourists. According to Oviedo-Garcia et al. (2008) and McGehee and Andereck (2004) the more locals are dependent on tourism, the more they are unlikely to complain about negative impacts of tourism. Issues such as loss of facilities and services, second homes and insufficient support for the local community were only raised by local participants.

11.3.2.3 CVA results

This method was used to identify differences in photographs captured by different groups of people. CVA is used to assist in discrimination or identification of structures and inter-relationships of multivariate statistical populations (Bussell et al., 2008). It also allows a reduction in the dimensionality of multivariate data. CVA is based on identification of more than one multivariate population underlying the data (Causton, 2008). In this case, background information such as origin and preferences were used.

Twelve CVA tests were performed. A general comment is that frequently age groups complicated the analysis and made it impossible to decipher any patterns. In those cases, the analyses were run again excluding age groups.

CVA 1 tested if there were differences in the photographs captured by locals born in St David's compared to locals who moved into the area. The results showed that there are statistically significant differences between photos taken by locals who were born in the area, compared to locals who moved in the area. Locals who had moved into the area tended to take photos with more flowers, man-made features and signs.

CVA 2 compared photographs taken by locals who would move elsewhere with those from locals who would not. There are significant differences between the photographs of the two groups. The first group take photos with more heritage buildings and more horses, whereas the second group photographed more people and blue skies.

CVA 3 compared photos captured by i) locals with tourism-related jobs, ii) locals with non-tourism related jobs and iii) locals who consider themselves as having a job that is partly tourism-related. There is significant statistical difference in the photographs taken by the three groups. The third group tends to take photos with more blue sky and the interior of their car, the second group tends to photograph more man-made features and cloudy skies and the first group tends to include more man-made features, flowers, sky and people in their photos.

CVA 4 was run to test if local people with different ideas about what is special about the area were taking different photos. There were five groups of local people: those who

thought i) heritage, ii) community, iii) beauty and location, iv) no overdevelopment and quality of life and v) other special features, were special about the area. There proved to be a significant statistical difference between all the groups above.

CVA 5 was run to establish potential statistical differences in photos taken by people who visited the area for the first time and those who were repeat visitors. No statistical difference was found.

CVA 6 tested the differences in photos captured by tourists grouped according to their main activity. Seven groups were formed. There was significant statistical difference between all the groups of tourists.

CVA 7 proved that there is a statistical difference in the photos taken by eight groups of tourists, depending on the reason for their visit. The reasons for people's visits were: Scenery and location, family reasons, particular activities the place was ideal for, repeat visitation, proximity to place of residence, word of mouth, they had not visited the area in the past, and other reasons.

CVA 8 showed significant statistical difference in the photos taken by tourists depending on the stage of the holiday they were at, at the time they agreed to participate in the research project. Tourists in the beginning of their holiday tend to photograph the sky and people more, but this seems to change toward the middle and the end of the holiday, where people tend to include more flowers, man-made features and the interior of their car in the photographs.

CVA 9 compared photographs taken by tourists depending on the stage of their holiday and whether they had been to the area previously or not. Six groups were formed and the photographs were statistically different.

CVA 10 showed that there is no statistical difference between photographs captured by people who would spend all their holidays in St David's Peninsula, and those who would visit other places as well.

CVA 11 compared photographs taken by locals and tourists. The groups were allocated according to people's perception about what they most value about the area. Eight groups were formed (Table 94):

Table 93: Groups for CVA according to what people value most

Locals	Tourists
No overdevelopment	No overdevelopment
Quality of life	Quality of life
Location	Location
Community	Other

There was significant statistical difference between all the groups except locals who appreciate the limited scale of development in the area and tourists who appreciate the quality of life in the area.

The last CVA compared photographs taken by locals and tourists, who were grouped according to their attitude towards potential improvements to the area, shown in Table 95.

Table 94: Groups for CVA according to their attitudes towards improvements to the area

Locals	Tourists
Second homes – planning	Second homes – planning
Recreational developments	Keep it as it is
Keep it as it is	Recreational developments
Traffic – parking – public transport	Traffic – parking – public transport
Other	Other

All but two groups were statistically different: locals who think recreational developments will benefit the place and locals who think the place should remain as it is tend to take similar photographs according to the analysis. Additionally, tourists tend to take photos with more people, man-made features, blue sky and tourism paraphernalia, whereas locals tend to photograph more animals and blue sky.

11.3.3 Objective 6: To demonstrate the potential of VEP for conflict resolution by identifying problems and issues in the case study area as experienced by locals and tourists.

11.3.3.1 *Problems and solutions*

The trend observed in other parts of the study, that local participants' responses are more thorough compared to the tourists, is observed in this section as well. This part of the study is of great importance, as each comment corresponds to a photograph of a problem, which in most cases corresponds with one or more solutions. Horner (2008) and Middleton and Lees (2008) found the photographs that raise issues very powerful and very useful as evidence to influence planning decisions, which is in agreement with Chenoweth's (1984) view. Stedman et al. (2004) suggested that photographs make the discussion more locale-specific: this suggestion is evident in the case of the problems identified by the study participants (Figures 50 and 51). Participants identified the following problems and suggested solutions:

- Transport planning issues

Locals are more worried about traffic and parking issues compared to tourists. They feel the area is dominated by tourists during the summer months and that they are being treated as second rate citizens, as there are no parking spaces allocated and no discounts in the parking charges for locals and the Celtic Coaster buses does not work during the winter. Tourists are more worried about parking charges. An extensive list of solutions was compiled.

- Insufficient maintenance

Both user groups raised insufficient maintenance issues, but issues tended to be different per user group. Locals are more worried about practical rather than aesthetic issues: overhead wires, uncared-for pavements and buildings, and overgrowth, whereas tourists worried more about litter and dog faeces on the Coastal Path.

- Development not in keeping with local environment

More locals raise issues in this category. Tourists seemed to worry more about caravan parks. Locals feel that signs can be intrusive whereas tourists comment on the lack of signage in the area.

- Housing

Locals are more worried about the housing issues, although some awareness of the impacts of holiday homes and inflated house prices is noted in some tourists' responses. A very large proportion of the houses in the area are second homes: in fact, 70% of homes in Solva are holiday homes. Research on non-metropolitan migration shows that it is highly selective in terms of socio-economic status, ethnicity and age (Boyle et al., 1998). As a result, the local community cohesion changes and the area is becoming "anglicised" (Photograph 26, L 149). Cheyne and Freeman (2006) and Hall and Müller (2004) argue that second homes contribute to the creation of 'elite landscapes'. As a result, participants feel that planning authorities are not doing anything to tackle the problem Pembrokeshire (Pembrokeshire County Council, 2009), the County Council regards it as a planning issue (Interview with M. Horner, 2008): the National Park Authority has no powers to do anything about this apart from ensuring there is affordable housing available (Interview with S. Middleton and P. Lees, 2008) and the Government is very reluctant to tackle it.

Participants also identified the closure of local businesses and the influx in tourists in the summer problematic. Several issues only concern the local population. Local participants feel they are not the priority for the planning authorities in the area, with more than half of local participants supporting this view. The example of the new Sutherland Gallery, a Tourist Information Centre expansion is considered by many as an arbitrary decision that never went through proper consultation. One of the issues highlighted was that the new gallery has got a café, and there is another café at the end of the High Street, in the Cathedral, so the local businesses in the middle are competing with the County Council and the cathedral rather than being helped by them. Furthermore, a high-profile tourism planning and land-use planning case, that of the Bluestone development, was also used as an example to show that the locals are not consulted and their views are not taken into account: and that there is "one rule for the Park, another rule for the locals" (L84). According to Elgammal and Jones (2008, p 203), the planning application process for the

Bluestone development, an artificial holiday village whose boundaries fall partly within the boundaries of Pembrokeshire Coast National Park, was marred by “extensive cross-membership of the two planning authorities with elected members from the local authority forming the majority of members on the National Park authority without reciprocal membership from the National Park authority on the local authority.” The Celtic Coaster bus that only works from Easter to November and the arbitrary overnight £2.70 rise in the Quickwell Hill car park were used to demonstrate that planning focuses on tourists, not locals.



Photograph 26: Tirmynyda/ Thimbles End (L149)

“This house in Solva used to be called “Tirmynydd”— an English chap from Birmingham bought it as a Holiday home/ letting business. 70% of houses in Solva are holiday homes (not good— too many). To add insult to us, he changed a nice Welsh name (Tirmynydd) to an English one (Thimble’s End). The whole nature of the village is changing: new houses built not in keeping. Welsh road and house names changed to English” (L149)

Environmental issues that mainly have to do with speedboats in St Justinian's were raised as problems by tourists only. Tourists think that there is lack of signage, and information and commercialisation are issues that need to be tackled. As with environmental issues, locals do not think that commercialisation is a problem although it is something that they are against on a theoretical level. Finally bad weather and "embarrassing" and inconsiderate fellow-tourists are regarded as problems.

11.3.3.2 *Identify key tourism infrastructure required and provide for visitor and local needs*

The most popular answer to "What would enhance the experience of the area" was that the area should be kept as it is. However, comments on some minor, sympathetic development followed, which includes better access to places (tarmac, steps), better upkeep of the area (extension of cycle routes), and recreation for rainy days. This question was included in the questionnaires and diaries in order to collect data to inform the "Detailed assessment of infrastructure and resource support" regional tourism planning step (Hall, 2008).

11.4 Concluding remarks

This Chapter has aimed to bring together all the results and refine them in a discussion that focused around the two aims of the study: the theoretical and practical application of VEP as a tool that can inform tourism planning decisions.

To fulfil the first aim, the approach adopted was to collect all the studies that the researcher could. This resulted in 163 studies published from 1977 until 2008. These studies were found under 30 different names in different fields, with little or no difference in the philosophy behind each technique. Following Prosser's (1998) observation that visual research is compartmentalised, a typology was created that includes all the techniques using participant-generated images that the researcher could identify. These were then ordered chronologically, and the complementary data collection method they were more likely to use was shown: the researcher suggests that all future research using these techniques should be put under the umbrella of Volunteer-Employed Photography.

Following that, the possibility to use VEP to inform tourism planning decisions was explored. The advantages and disadvantages of using VEP were collected from the studies that had the technique and were analysed using NVivo. Then the advantages of VEP were compared with the qualities that a participatory tourism planning tool should have in order to be effective in informing tourism planning decisions while encouraging participation: it was concluded that VEP could indeed be used effectively as a tourism planning tool.

The second phase was to use VEP in St David's Peninsula, in the Pembrokeshire Coast National Park, an area of dramatic natural beauty with a ratio of approximately 143 tourists per resident. Because of its designation, PCNP Authority needs to cater for locals and tourists in the planning process. According to the Environment Act (1995), National Parks in England and Wales have two statutory purposes:

- To conserve and enhance the natural beauty, wildlife and cultural heritage
- To promote opportunities for the understanding and enjoyment of the special qualities of National Parks by the public

Simultaneously, the National Park Authorities have the duty to seek to foster the economic and social well being of local communities within the National Parks. Consequently, through their designation, an economic development planning decision has been made *a priori*: a source of income for the local communities is tourism revenue. Due to the decline in agriculture, the dependency on tourism is growing. Jobs in Pembrokeshire are by and large seasonal and low paid. The large volume of tourists visiting the area in conjunction with the small high season and dependency of the area on tourism puts the area, the host community, the visitors, the area land-use planners and tourism planners (who seem to be the same people) under strain. VEP was used in the area to explore how well it can record people's views while they are experiencing the landscape: it was used to record problems and solutions, positive and negative aspects and suggestions for improvement. The study was designed to test VEP in terms of its potential to inform tourism planning decisions. VEP fulfils the criteria and has been successfully used to collect data that can help the tourism planning process as demonstrated in Figure 55, above, against Hall's (2008) 13 steps in a regional planning process for tourism.

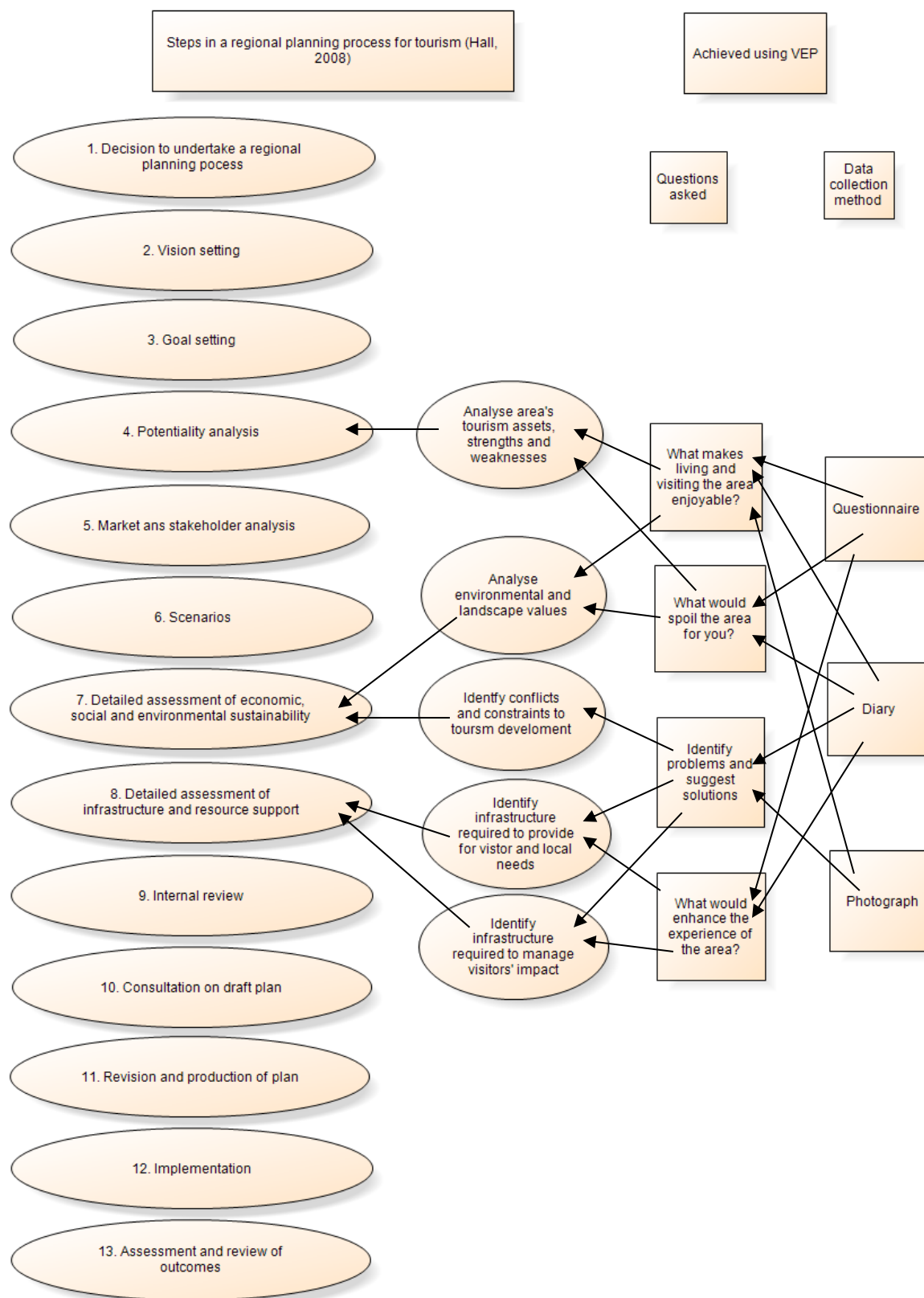


Figure 51: Using VEP to inform tourism planning in St David's Peninsula

12 CONCLUSIONS AND RECOMMENDATIONS

12.1 Introduction

As outlined in Chapter 1, this thesis has two aims of equal weighting. The first aim is to provide a critique of VEP, to examine the appropriateness of its use in assisting tourism planning, and to identify best practice. The second aim is to demonstrate the potential of VEP in tourism planning research through its application in a tourism planning context in St David's Peninsula, in Pembrokeshire Coast National Park.

Chapter 2 examined the use of photography in social science research with a special focus on the use of photography in tourism. The use and importance of photography in tourism and tourism research was demonstrated. Chapter 3 presented an extensive collection of studies that have used VEP, and provided the background analysis for the establishment of a VEP typology and best practice guidelines presented in Chapter 11. In Chapter 4, the positive and negative aspects of the use of VEP were presented. Chapter 5 outlined the literature in the area of tourism planning and planning in National Parks and underlined the complexities of planning and the requirement for participatory planning practices.

The case study area was presented in Chapter 6, and Chapter 7 outlined the methodology used in the study. Chapters 8, 9 and 10 presented the results of the study and Chapter 11 capitalised on the results and argued the theoretical and practical appropriateness of VEP as a tourism planning tool. Additionally, the typology of VEP studies was presented as well as best practice guidelines for the use of VEP.

VEP incorporated three data collection methods which are used as a triad, the 'VEP triad', and it is suggested that complementary methods should be used to gather additional data to ensure that the participants' photographs are not misinterpreted (Pearson and Ralph, 2007), unless the research question suggests that this should not be the case.

12.2 VEP in St David's Peninsula: the researcher's assessment of VEP

12.2.1 Difficulties experienced

As suggested by many researchers who have used VEP, the data collection and the data analysis process are very time consuming (Haywood, 1990, Kenney, 1993). The process of organising the whole research process, distributing cameras, collecting cameras, familiarising participants with the code of ethics, transcribing questionnaires, diaries, interviews, coding photos for the quantitative analysis and the thematic analysis were very demanding in terms of time (Clark-Ibanez, 2004, Hanieh and Walker, 2007, Kaplan et al., 2007). However, as Damico (1985) comments, the findings are worth the efforts.

The task was time consuming for the participants as well, which probably explains the lower return rate from the local participants. According to Moffit and Robinson-Vollman (2004) and Booth and Booth (2003), the task might be neglected as participants might get distracted by issues of more immediate concern. Furthermore, it might be natural for the tourists to roam the landscape, camera in hand (Markwell, 2000a), but this is not necessarily the case with local participants, which explains why significantly more photos captured by local participants included parts of their car interior or car mirrors. However, the locals who completed their tasks usually spent more time on the project compared to tourist participants.

The cost of the cameras, research pack, photo development, and postage was indeed an issue (approximately £7 per pack), as commented on by Castleden (2008) and Kenney (1993). In addition, the cost of broken cameras was a problem as well, as approximately one in 10 cameras were not working, although the researcher ordered cameras of different brands and of good quality. In order to make sure the cameras handed out to participants were working and also ensure the diaries would correspond with the photographs, the researcher took the first photo in each film (Photograph 1). Other researchers have also discussed the issue of lost or broken cameras and consequently the loss of data (Moffitt and Robinson-Vollman, 2004, Germain, 2004). The researcher was made aware of a broken camera once, after it was given to participants, and she provided them with another one. Issues such as low quality photographs occurred in this research study as well (Garrod,

2007), as disposable cameras do not allow good resolution, and are not indicated for landscape shots.

Seasonality was indeed an issue, as mentioned in Castleden et al. (2008). One of the few negatives participants commented on with regards to VEP was that differences in weather limited their choices and had an impact on their wish to be outdoors, let alone take photographs.

Finally, perhaps the second greatest challenge following the time requirements was the interaction with participants. VEP is indeed an interesting technique that helps overcome research fatigue (Castleden et al., 2008); however some local participants in St David's consider that they are over-researched and that nothing good ever comes out of it.

12.2.2 Ethical dimensions

A number of researchers discussed the ethical issues surrounding research using photographs and especially photographs taken by research participants. It was therefore considered imperative to take on board the guidelines from the Ethics Committee and the British Sociological Association Visual Sociology group (2006), and issues raised in the literature (Wang et al., 2000, Jurkowski et al., 2007). A range of steps were taken to tackle identified ethical issues, as described in Chapter 7.6. However, although all precautions were taken, the researcher considers that the richness of information obtained from this methodology, the creation of a more intimate relationship between the researcher and the participants (Castleden et al., 2008, Miller and Happell, 2006) and the potential to combine information obtained from photos, questionnaires and diaries, can be very revealing for the lives of the participants. Therefore, an issue that was noted was that although the data collected was willingly given by the participant, it can be very revealing and is ultimately left to the discretion of the researcher not to use certain information.

Furthermore, an issue that requires a lot of thinking by the research team is how to manage participants' expectations. As this task requires a lot of effort and commitment, it needs to be made clear who commissions the research, how the results are going to benefit the local community and how they are going to be disseminated. In this study, the researcher felt

uncomfortable conducting this research for academic purposes rather than as a real planning exercise, as some participants were very enthusiastic and it was feared that they could be expecting the results to have an impact on the way planning consultations in the area are conducted. Indeed, the results will be offered to the disposal of the National Park Authority and the County Council, but it is then up to them to use them. Although it was clarified that it was only an academic exercise and all it could offer was a set of photo prints and a copy of the thesis and subsequent publications to the PCNP Authority and the County Council, it was feared that the community may feel betrayed (Wang, 1998).

12.2.3 Aspects of the research process that resulted in the study being a positive and fulfilling experience

Overall, the implementation of the study was a very pleasant and rewarding experience and a personal relationship with some of the participants was established (Blinn and Harrist, 1991). The researcher was sent books, postcards of the area and letters from some participants, as well as a collection of comments that wished her luck with the completion of her PhD thesis.

It is difficult to know whether the suggestion that by using VEP the researcher bias is reduced (Garrod, 2007, Traweek, 1977) is valid. The researcher's first-hand experience is that after the participants left with the research pack, unless they wanted to return their cameras and diaries or *they* wanted to communicate, there was no way that they would be forced to return the pack and even more so to capture photos and make comments that would please the researcher. It is therefore safe to accept that researcher bias is significantly less compared to more traditional research methods where the researcher is present when the participants responds or fulfil the task.

It was observed that the use of photographs in the research had a positive impact on promoting participation and it promoted participation among people that otherwise would not take part in research (Harper, 2002). Judging from the photos obtained, which included photos of young locals in fancy dress, the view that researchers are given access to

situations and experiences that would not have been possible before the use of VEP research (Dollinger and Clancy 1993: McIntyre 2003: Wang and Burris 1997) is verified.

Participants indicate that one of the positive aspects of using VEP is that they reflected on their experiences, and, through having to decide on which photograph to capture, they were made to think more about the area they live in or they visit and what it means to them (Markwell, 2000a).

However, the most fascinating aspect of this study, as the researcher experienced it, was its ability to show clearly how people experience the landscape and interact with it and other user groups (Chenoweth, 1984 , Garrod, 2007, Markwell, 1997, OPENspace, 2005) and be place-specific. Identifying problems such as “traffic in St David’s” in a questionnaire is nowhere near as informative as actually reading the “Traffic in St David’s” caption and seeing a photograph of it: it is made even more specific and the suggestion on how to tackle the problem is consequently more specific.

Despite the fact that researchers who have previously used VEP noticed that there was a tendency to photograph something very beautiful a lot of times or save exposures and “burn” them towards the end of the project (Goodhart et al. 2006 : Haywood 1990: Stedman et al. 2004), this was not observed at all in this research project. The only observation of a similar nature was that three participants took photographs of what they liked and gave a general account at the end without commenting specifically on the photographs they took.

The view that photographs cannot describe ideas (Castleden et al., 2008, Okamoto et al., 2006) was not observed in this study. It was, however, noted that when people could not photograph exactly what they wanted to show, they took an alternative photograph and explained what they meant in their diaries. An example is participant V44 who did not manage to photograph the seals he saw during the boat trip to Ramsay Island and took a photograph of the boat trip ticket office instead. One participant photographed a plastic cup on the Coastal Path to demonstrate the cleanliness of the area, as this was the only piece of litter he had seen during his holiday (Photograph 14)

Finally, the researcher's reservations about using focus groups in a tourism planning research project were proved right by the participants. A number of participants requested not to be named in conjunction with their photographs as they were raising some controversial issues, although they were informed when they were given the cameras that they would remain anonymous, they insisted on this point. This confirms the point made by Clark-Ibanez (2004) that in some contexts focus groups might not be the best complementary technique as they might silence voices rather than promote participation.

12.2.4 Changes that would be suggested if the study was repeated

Following the data collection and analysis process, there are certain changes the researcher would suggest, were this project to be repeated. The first change would be to ask more specific questions. It would be easier to have a more specific task, if, for example the planning authority wanted to identify problems or aspects of the area that give people a sense of place. This was also suggested by Phil Lees in the interview when discussing the potential use of VEP as a tourism planning tool and its added value. This stems from two observations: the first one is that the knowledge that in this study, the research team comprises one researcher. The second observation is that the appropriateness of VEP has now been established. When the study was designed, VEP was considered appropriate only in theory; it has now been tested, its appropriateness established, as are the challenges that it poses. More depth could have been achieved if people were asked more specific questions but this was not known before the study was actually undertaken.

The results of the study and especially the results of CVA have shown that primarily gender and secondarily age data do not make a significant difference on the photographs people capture. On the contrary, their choice of activities, the user group they belong to, their ideas on change and development have an impact on the way they experience the national park. Gender and age were the demographic data collected for this study as they would allow comparison to other studies in order to establish the representativeness of the sample. However, it is possible that better insights would have been achieved if the demographic data collected were data about the educational level and the participants' social class; this, of course, lends itself to more research.

Finally, a return envelope would be included in each pack. As suggested following the third pilot study, the return rate is the same when a return envelope is included in the research pack. Although the researcher collected the majority of cameras and diaries in person because she was in the area; an afterthought is that researcher time could have been saved using stamped and addressed envelopes. The only downside is the possibility of losing some in the post, which, as described by a number of researchers (Germain, 2004, Clark-Ibanez, 2004), could mean loss of valuable and irreplaceable data.

12.2.5 Using NVivo

NVivo proved to be a valuable tool in the literature review process as well as the analysis. It was used as an electronic highlighter for the classification of positives and negatives of VEP (Richards, 1999). The software allows researchers to perform code-based inquiries, useful for the literature review and the data analysis and allows for more transparency in the qualitative analysis (Johnston, 2006). It is easy to use as it can directly import and modify existing documents. Without the use of NVivo8, the literature review would have taken significantly longer and the transparency that can now be demonstrated in the analysis would not have been achieved. The use of NVivo8 facilitates more interaction with the dataset (Bringer et al., 2004); however the downside of this is that it allows analysis to such a depth that the researcher can become entangled in the detail; this was observed in the data analysis process. It can allow very detailed insights but it can also easily allow the researcher to be distracted from focusing on making observations based on the whole dataset and concentrate on detailed accounts. However, in the context of planning, NVivo could prove useful with planners. Executive summaries and reports are static and can report results and details up to a certain extent. However, having a live dataset available to query, with the photographs linked to it to specify the locale for each query, might be of great use, as there are countless combinations and ideas that can be tested using the same dataset.

12.3 Contribution to knowledge

The thesis has provided new contributions to knowledge in various ways.

1. It has proved that VEP can be used effectively to inform tourism planning decisions in theory and practice. Having reviewed the literature and established the theoretical appropriateness of VEP as a tourism planning tool, it was then used in a case study context. There were a lot of valuable lessons learnt during the design and implementation of the study that should be taken into account in future studies. Despite the difficulties and things that could have been done better as established after the analysis, the most important outcome of this study is that VEP has got a lot of potential to assist tourism planners while promoting participation in the tourism planning and land-use planning processes.
2. Constituting the first attempt to collect and analyse VEP literature and put it on the map of visual sociology as a distinct research group and developing a typology of VEP research studies from their first use up to and including September 2008. This has only been the first step; this review has to be constantly updated and revisited, however, this is a first step towards Prosser's (1998) call for totality in visual sociology. This study should be used as a base to build, expand and promote the body of VEP research. Furthermore, the positive and negative conceptual and practical issues with regards to all forms of VEP have been identified and brought together. This implies that researchers can investigate if using VEP is appropriate for their studies and also that they can avoid repeating research that has already been done and past mistakes; it can save researchers from 'reinventing the wheel'.
4. This work developed best practice guidelines for the use of VEP as a starting point for other researchers to review and update. These guidelines were suggested contrary to general practice, as it was observed that basic information was missing from publications. This deemed it impossible to evaluate the appropriateness of the techniques for certain uses; in some cases researchers had to be taken on their word that the technique was used successfully. Basic information such as return rates, numbers of participants, camera used, was missing. This made it impossible for this research to propose more specific

best practice guidelines. However, it is hoped that now that VEP is suggested as an umbrella term, more studies will emerge and it will be possible to analyse them and produce new, more detailed best practice guidelines. Finally, the use of visuals in research can only be advocated strongly if robust research is published and this is imperative at this stage for the visual sociology to be further accepted and established.

12.4 Reflections on limitations

Despite the richness of the dataset being an asset of VEP (Aubeeluck and Buchanan, 2006, Miller and Happell, 2006), it posed time constraints as this richness was actively sought in the data collection and the data analysis process on one hand; while on the other hand, the study, as a doctoral thesis, was restricted temporally and financially. The number of participants, the three sets of data that had to be designed, collected and analysed, the coding process, the development of the photographs, the second survey to establish the photo-coding variables, and the correspondence with the study participants, either to return photos, to respond to questions or to request cameras and diaries back, proved extremely time consuming and bearing in mind that along the way things were tried and tested, the process lasted far longer than expected. VEP is very rewarding in terms of results, but the fact that it is so resource-intensive may possibly have an impact on its use by planning Authorities as they are under pressure for staff time (Interview with S. Middleton and P. Lees, 2008). Doing VEP requires a team of researchers and administrative help involved in various stages of the process to maximise its potential.

The second limitation of this study concerns the previous uses of VEP. With visual sociology being so fragmented, and with so many names for similar techniques, it is thought that probably more studies using VEP have been conducted which have not been identified by the researcher. However, it is hoped that due to the more extensive use of relevant techniques in recent years and the proposed typology and best practice guidelines, more studies will be initiated, and earlier studies will surface.

12.5 Recommendations for future research

Additional research is recommended along three lines of inquiry: improving the technique, planning in national parks and future research on planning and the visual element. A multitude of aspects can be tested in order to improve the use of VEP. At this stage, although there have been studies that have used VEP over the years and in certain fields it has been established as a research tool (in psychology and tourism studies it has been used since 1977), research needs to be done in order to establish best practice guidelines per field, as to the use of VEP, including decisions on complementary techniques, type of camera, analysis methods, depend on the field of research and the research questions. It does not seem likely that strict guidelines for the use of VEP can be established, nor would that be desirable; however, broad suggestions and observations such as those that have resulted from this study – that participants might feel uncomfortable to share their views in a focus groups setting, in a tourism planning context – would be very useful. Therefore, the methodology needs to be tested in a multitude of ways and in a multitude of fields. A suggestion that results from this study and not from the literature is that VEP should be used in smaller projects; with a large number of participants asking fewer, more specific questions, and with a smaller number of participants asking many questions, in order to further research the potential of VEP to deliver broad and rich datasets. Furthermore, the use of VEP with digital cameras should be tested. With digital cameras cost starting from £23 (Amazon, 2010), VEP can even prove more cost-effective if cameras can be reused, which would however, mean that participants may not return them. The use of digital cameras can ensure better quality photographs; in the context of tourism planning, photos from digital cameras with a zoom can be compared to those without a zoom. Additionally, digital voice recorders can be used instead of pen and paper diaries; even digital cameras that can also act as voice recorders could be used

The strongest suggestion for future research in a tourism planning context in Pembrokeshire Cast National Park is on improving the established channels of communication with locals and tourists and also between the National Park Planning Authority and the County Council. Tourism planning should be considered as a priority and even if it is not the responsibility of a single authority, ways should be found for it not to be exercised in a fragmented fashion. A strategic tourism plan needs to be implemented

in Pembrokeshire, as currently, certain tourism planning issues are only addressed by the market. Participation of locals and tourists in the plan should be a priority for the National Park Authority and the County Council. Furthermore, research to identify possible solutions for the second home issue would be very useful for the area. Pembrokeshire Coast National Park would also benefit from research on the impacts of the boat trips around the protected islands of Skomer and Ramsay.

Finally, the use of CVA to analyse VEP results should be investigated further. The potential of using VEP and analysing the results using CVA as a tourism marketing tool should be investigated: Markwell (1997) and Urry (2002) observed that the tourism industry can shape a destination image by imposing the destination images presented in brochures and advertisements to the public. MacKay and Couldwell (2004) suggested that keeping a visual inventory of the visitors' images of a site can be used for promotional efforts. It would therefore be useful to study whether marketing campaigns using VEP can have a better impact, and if they can be used to complement tourism planning decisions by addressing marketing campaigns to the appropriate target populations. Additionally, it was made evident that the use of CVA to analyse photographs can help identify the existence of significant differences between groups of participants. This lends itself to further investigation, possibly using qualitative analysis.

12.6 Concluding remarks

The use of images in research has long moved from the phase where their only use was to break the monotony of a text. Photographs are used in research not only as prompts to initiate discussion (Carter and Mankoff, 2005) but as the main or one of the main sources of data (Oku and Fukamachi, 2006). The use of participants' photographs to understand perception of place suggests an interesting direction for research. Understanding what the user groups of the area enjoy, seeing through their snapshots what they consider as problems, identifying the major attractions and suggesting developments for better enjoyment of the interaction with the landscape, provides opportunities for more effective, participatory tourism planning.

In this study, all the positive aspects of the use of VEP were observed. Additionally, and more importantly, the power of the combination of photographs captured by the participants with their accompanying text proved to be a combination that, in addition to vividly portraying their experiences and views, can affect the reader or viewer in a very direct and emotive way. The photographs and their accompanying text can convey strong feelings: they transfer the viewers to the place (Photograph 27), where they are invited them to feel sadness about the loss of a loved one, content in the presences of the beauty of nature, or frustrated when they see a wheelchair user unable to access the pavement because of illegally parked cars, a result of the lack of parking spaces to cater for both locals and tourists in the high season.



Photograph 27: Jackie's ice-creams

“St David’s: Jackie’s Ice-creams. For decades- the present owner has been coming for over 21 years - each summer evening this ice-cream van drives up to the housing estate which now occupies some of the open-strip field area between the City and the Coastal footpath. He heralds his arrival by playing ‘Yankee Doodle Dandy’”, and all the children gather. This evocative sound rings out across the whole community. St David’s can now boast almost 20 eating-places where visitors can enjoy good food and buy their

ice-cream, sometimes at near-London prices. It is reassuring that the residents still have a relatively cheap and simple alternative on offer.” (L 56)

The potential of VEP has been extensively discussed in this thesis; it can prove to be a valuable tool for promoting participation in planning and tourism planning. It can produce rich datasets with a strong visual element. The time and resources involved pay off due to the quality of the data produced, so the main question is whether the Local Planning Authorities will be willing to invest the staff time and money to utilise the potential offered by VEP.

13 REFERENCES

- ADAMAN, F. & DEVINE, P. (2006) The promise of participatory planning: a rejoinder to Hodgson. *Economy and Society*, 35, 141 - 147.
- AFOLABI, M. (1992) The review of related literature in research. *International Journal of Information and Library Research*, 4, 59-66.
- AITKEN, S. C. & WINGATE, J. (1993) A preliminary study of the self-directed photography of middle-class, homeless, and mobility-impaired children. *The Professional Geographer*, 45, 65-72.
- ALBRECHT, G. H. (1980) Multivariate analysis and the study of form, with special reference to canonical variate analysis. *Integrative and Comparative Biology*, 20, 679-693.
- ALEGRE, J. & CLADERA, M. (2006) Repeat visitation in mature sun and sand holiday destinations. *Journal of Travel Research*, 44, 288-97.
- ALLEN, L. R., HAFER, H. R., LONG, P. T. & PERDUE, R. R. (1993) Rural residents' attitudes toward recreation and tourism development. *Journal of Travel Research*, 31, 27-33.
- ALSBERG, B. K., WADE, W. G. & GOODACRE, R. (1998) Chemometric analysis of diffuse reflectance-absorbance fourier transform infrared spectra using rule induction methods: application to the classification of eubacterium species. *Applied Spectroscopy*, 52.
- ALWYN, D. (2006) Tourist volume in St David's. IN BALOMENOU, N. (Ed.) St David's.
- AMAZON (2010) VIVITAR V5015 5MP digital camera.
- AMBROSIE, L. (2010) Tourism policy research: avenues for the future. *International Journal of Tourism Policy*, 3, 33 - 50.
- ANANDA, J. (2007) Implementing participatory decision making in forest planning. *Environmental Management*, 39, 534-544.
- ANGELES OVIEDO-GARCIA, M., CASTELLANOS-VERDUGO, M. & MARTIN-RUIZ, D. (2008) Gaining residents' support for tourism and planning. *International Journal of Tourism Research*, 10, 95-109.
- ANTONIONI, S., GEMINI, L. & MAZZOLI, L. (2007) Gazes on Levanto: a case study on how local identity could become part of the touristic supply. *Glancing, Glimpsing and Gazing. Tourists and Tourism in a Visual World*. Eastbourne.
- ARMSTRONG, K. B. (2005) Autophotography in adult education: building creative communities for social justice and democratic education. *New Directions for Adult and Continuing Education*, 2005, 33-44.
- ARNSTEIN, S. R. (1969) A ladder of citizen participation. *Journal of American Institute of Planners*, 35, 216-224.
- ASSOCIATION OF NATIONAL PARK AUTHORITIES (2010) Our challenges. Cardiff, Association of National Park Authorities.
- AUBEELUCK, A. & BUCHANAN, H. (2006) Capturing the Huntington's disease spousal carer experience. A preliminary investigation using the 'photovoice' method. *Dementia*, 5, 95-116.
- BAKER, T. A. & WANG, C. C. (2006) Photovoice: use of a participatory action research method to explore the chronic pain experience in older adults. *Qualitative Health Research*, 16, 1405-1413.

- BANKS, M. (2001) *Visual methods in social research*, London, Sage.
- BARNARD, F. R. (1921) One look is worth a thousand words. *Printers' Ink* (now Known as *Marketing/Communications*).
- BARRETT, S. & FUDGE, C. (1981) *Policy and action*, London, Methuen.
- BBC SOUTH WEST WALES (2010) European conservation award nomination for St Davids BBC.
- BBC WALES (Unknown) Clegyr Boia. BBC.
- BECKER, H. S. (1995) Visual sociology, documentary photography, and photojournalism: It's (almost) all a matter of context. *Visual Sociology*, 10, 5 - 14.
- BEILIN, R. (2005) Photo-elicitation and the agricultural landscape: 'seeing' and 'telling' about farming, community and place *Visual Studies*, 20, 56 - 68.
- BENNETT, S. F. (1995) Community organizations and crime. *Annals of the American Academy of Political and Social Science*, 539, 72-84.
- BERMAN, H., FORD-GILBOE, M., MOUTREY, B. & CEKIC, S. (2001) Portraits of pain and promise: a photographic study of Bosnian youth. *Canadian Journal of Nursing Research*, 32, 21-41.
- BIJOUX, D. & MYERS, J. (2006) Interviews, solicited diaries and photography: 'new' ways of accessing everyday experiences of place. *Graduate Journal of Asia-Pacific Studies*, 4, 44-64.
- BILSKY, L. (1998) Giving voice to women: an Israeli case study. *Israel Studies*, 3, 47-79.
- BISHOP, K., DUDLEY, N. & STOLTON, S. (2004) *Speaking a common language: the uses and performance of the IUCN system of management categories for protected areas* The World Conservation Union (IUCN).
- BLINN, L. & HARRIST, A. W. (1991) Combining native instant photography and photo-elicitation. *Visual Anthropology*, 4, 175-192.
- BLINN, L. M. (1987) Phototherapeutic intervention to improve self-concept and prevent repeat pregnancies among adolescents. *Family Relations*, 36, 252-257.
- BOAL, A. (1979) *Theater of the oppressed*, London, Pluto Press.
- BOLGER, N., DAVIS, A. & RAFAELI, E. (2003) Diary methods: capturing life as it is lived. *Annual Review of Psychology*, 54, 579-616.
- BOLTON, A., POLE, C. & MIZEN, P. (2001) Picture this: researching child workers. *Sociology*, 35, 501-518.
- BOOTH, T. & BOOTH, W. (2003) In the frame: photovoice and mothers with learning difficulties. *Disability and Society*, 18, 431-442.
- BOTTERILL, D. (2001) The epistemology of a set of tourism studies. *Leisure Studies*, 20, 199-214.
- BOURNER, T. (1996) The research process: four steps to success. IN GREENFIELD, T. (Ed.) *Research methods: guidance for postgraduates*. London, Arnold.
- BOWEN, E. G. (1956) *The settlements of the Celtic Saints in Wales* Cardiff, University of Wales Press.
- BOYLE, P. J., HALFACREE, K. & V, V. R. (1998) *Exploring contemporary migration*, London, Longman.
- BRENNER, N. (1998) Between fixity and motion: space, territory and place in the social production of spatial scale. *Environment and Planning D: Society and Space*, 16 459 – 481.

- BRENT RITCHIE, J. R. & CROUCH, G. I. (2005) *The competitive destination: a sustainable tourism perspective*, Oxon UK, CABI Publishing.
- BRINGER, J. D., JOHNSTON, L. H. & BRACKENRIDGE, C. H. (2004) Maximizing transparency in a doctoral thesis: the complexities of writing about the use of QSR*NVIVO within a grounded theory study. *Qualitative Research*, 4, 247-265.
- BRISTOW, H. W., BABER, C., CROSS, J., KNIGHT, J. F. & WOOLLEY, S. I. (2004) Defining and evaluating context for wearable computing. *International Journal of Human-Computer Studies*, 60, 798-819.
- BRITISH SOCIOLOGICAL ASSOCIATION (2002) Statement of Ethical Practice for the BSA.
- BRITISH SOCIOLOGICAL ASSOCIATION (2006) Visual Sociology Group's statement of ethical practice. IN BSA (Ed.).
- BRITTON, S. (1991) Tourism, capital, and place: towards a critical geography of tourism. *Environment and Planning D: Society and Space*, 9, 451 – 478.
- BRITTON, S. (2004) Tourism, capital and place. IN WILLIAMS, S. (Ed.) *Tourism: The nature and structure of tourism*. London, Routledge.
- BROWN, B. A. T., SELLEN, A. J. & O'HARA, K. P. (2000) A diary study of information capture in working life. *Conference on Human Factors in Computing Systems Archive*. The Hague, The Netherlands.
- BROWN, L. D., COLLINS, V. L., SHEPPERD, M. D., WITUK, S. A. & MEISSEN, G. J. (2003-2004) Photovoice and consumer-run mutual support organizations. *International Journal of Self Help and Self Care*, 2, 339 - 344.
- BROWN, S. A., GOLDMAN, M. S., INN, A. & ANDERSON, L. R. (1980) Expectations of reinforcement from alcohol: their domain and relation to drinking patterns. *Journal of Consulting and Clinical Psychology*, 48, 419-426.
- BURKE, P. A. & DOLLINGER, S. J. (2005) "A picture's worth a thousand words": language use in the autophotographic essay *Personality and Social Psychology Bulletin*, 31, 536-548.
- BURNS, A. (2007) Impacts of Withybush Hospital closure. IN BALOMENOU, N. (Ed.) Solva.
- BUSS, S. (1995) Urbal Los Angeles from young people's angle of vision. *Children's Environments*, 12, 93-113.
- BUSSELL, J. A., GIDMAN, E. A., CAUSTON, D. R., GWYNN-JONES, D., MALHAM, S. K., JONES, M. L. M., REYNOLDS, B. & SEED, R. (2008) Changes in the immune response and metabolic fingerprint of the mussel, *Mytilus Edulis* (Linnaeus) in response to lowered salinity and physical stress. *Journal of Experimental Marine Biology and Ecology*, 358, 78-85.
- BUTLER, R. & WALDBROOK, L. (2003) A new planning tool: the tourism opportunity spectrum. *Journal of Tourism Studies*, 1, 25-36.
- BUTLER, R. W. (1999) Sustainable tourism: A state-of-the-art review. *Tourism Geographies: An International Journal of Tourism Space, Place and Environment*, 1, 7 - 25.
- CAMPAIGN FOR NATIONAL PARKS (2007) What are National Parks? , Campaign for National Parks.

- CAMPBELL, N. A. (1980) Robust procedures in multivariate analysis I: robust covariance estimation. *Journal of the Royal Statistical Society. Series C (Applied Statistics)*, 29, 231-237.
- CARLSON, E. D., ENGBRETSON, J. & CHAMBERLAIN, R. M. (2006) Photovoice as a social process of critical consciousness. *Qualitative Health Research*, 16, 836-852.
- CARTER, S. & MANKOFF, J. (2005) When participant do the capturing: the role of media in diary studies. *Conference on Human Factors in Computing Systems Archive Proceedings of the SIGCHI Conference on Human Factors in Computing Systems Table of Contents*. Portland, Oregon, USA
- CASTELL HENLYS IRON AGE FORT (2010) Castell Henlys Iron Age Fort. Castell Henlys Iron Age Fort.
- CASTLEDEN, H., GARVIN, T. & FIRST NATION, H.-A.-A. (2008) Modifying photovoice for community-based participatory Indigenous research. *Social Science and Medicine*, 66, 1393-1405.
- CAUSTON, D. (2008) Statistics for research biologists, Canonical Variate Analysis (Discriminant Function Analysis), lecture notes. Aberystwyth University.
- CAVIN, E. (1994) In search of the viewfinder: a study of a child's perspective. *Visual Sociology*, 9, 27-41.
- CEBALLOS-LASCURÍN, H. (1996) *Tourism, ecotourism, and protected areas: the state of nature-based tourism around the world and guidelines for its development* Cambridge, Gland, IUCN.
- CHATFIELD, C. & COLLINS, A. J. (1980) *Introduction to multivariate analysis*, Florida, Chapman and Hall/ CRC.
- CHENOWETH, R. (1984) Visitor employed photography: a potential tool for landscape architecture. *Landscape Journal*, 136-143.
- CHEREM, G. & DRIVER, B. (1983) Visitor employed photography: a technique to measure common perceptions of natural environments. *Journal of Leisure Research*, 65-83.
- CHEREM, G. J. & TRAWEEK, D. E. (1977) Visitor employed photography: a tool for interpretive planning on river environments. *Proceedings of River Recreation Management and Research Symposium*. USDA Forest Services.
- CHEYNE, C. & FREEMAN, C. (2006) A rising tide lifts all boats? A preliminary investigation into the impact of rising New Zealand coastal property prices on small communities. *Kotuitui: New Zealand Journal of Social Sciences Online*, 1, 105 - 124.
- CIP (2000) What planners do. Canadian Institute of Planners.
- CLANCY, S. M. & DOLLINGER, S. J. (1993) Photographic depictions of the self: gender and age differences in social connectedness. *Sex Roles*, 29, 477-495.
- CLARK-IBANEZ, M. (2004) Framing of social world with photo-elicitation interviews. *American Behavioral Scientist*, 47, 1507-1527.
- CLARK, C. D. (1999) The autodriven interview: a photographic viewfinder into children's experience. *Visual Sociology*, 14, 39-50.
- COLLIER, J. & COLLIER, M. (1986) *Visual anthropology: photography as a research method*, Albuquerque, University of New Mexico Press.

- COLLIER, J. J. (1967) *Visual anthropology: photography as a research method*, New York, Holt, Rinehart & Winston.
- COSCO, N. & MOORE, R. (2002) Our neighbourhood is like that! Cultural richness and childhood identity in Boca-Baraccas, Buenos Aires. IN CHAWLA, L. (Ed.) *Growing up in an urbanising world*. Paris, Earthscan.
- CRABB, S. (2007) Call for Assembly intervention over future of St Davids Assemblies. IN MP, S. C. (Ed.) Milford Haven
- CRANG, M. (1997) Picturing practices: research through the tourist gaze. *Progress in Human Geography*, 21, 359-373.
- CREIGHTON, J. (1986) *Managing conflicts in public involvement settings: training manual for Bonneville Power Administration*, Los Gatos, California, Creighton and Creighton.
- CULLINGSWORTH, B. (1997) *Planning in the USA: policies, issues and processes*, London and New York, Routledge.
- DACONTO, G. & SHERPA, L. N. (2010) Applying scenario planning to park and tourism management in Sagarmatha National Park, Khumbu, Nepal. *Mountain Research and Development*, 30, 103-112.
- DAKIN, S. (2003) There's more to landscape than meets the eye: towards inclusive landscape assessment in resource and environmental management. *Canadian Geographer*, 47, 185-200.
- DAMICO, S. B. (1985) The two worlds of school: differences in the photographs of black and white adolescents *Journal The Urban Review* 17, 210-222.
- DARLINGTON, R. B., WEINBERG, S. L. & WALBERG, H. J. (1973) Canonical Variate Analysis and related techniques. *Review of Educational Research*, 43, 433-454.
- DATA PROTECTION ACT (1998), The National Archives.
- DECROP, A. (1999) Triangulation in qualitative tourism research. *Tourism Management*, 20, 157-161.
- DENZIN, N. K. & LINCOLN, Y. S. (2005) *The SAGE handbook of qualitative research*, Thousand Oaks, Sage Publications.
- DIEDRICH, A. & GARCÍA-BUADES, E. (2009) Local perceptions of tourism as indicators of destination decline. *Tourism Management*, 30, 512-521.
- DINKLAGE, R. I. & ZILLER, R. C. (1989) Explicating cognitive conflict through photo-communication: the meaning of war and peace in Germany and the United States. *Journal of Conflict Resolution*, 33, 309-317.
- DODMAN, D. R. (2003) Shooting in the city: an autophotographic exploration of the urban environment in Kingston, Jamaica. *Area*, 35, 293-304.
- DOLLINGER, S. J. (1996) Autophotographic identities of young adults: with special reference to alcohol, athletics, achievement, religion, and work. *Journal of Personality Assessment*, 67, 384-398.
- DOLLINGER, S. J. (2001) Religious identity: an autophotographic study. *International Journal for the Psychology of Religion*, 11, 71-92.
- DOLLINGER, S. J. (2002) Physical attractiveness, social connectedness, and individuality: an autophotographic study. *The Journal of Social Psychology*, 142, 25-32.
- DOLLINGER, S. J., BURKE, P. A. & GUMP, N. W. (2007) Creativity and values. *Creativity Research Journal*, 19, 91-103.

- DOLLINGER, S. J. & CLANCY, S. M. (1993) Identity, self, and personality: glimpses through the autophotographic eye. *Journal of Personality and Social Psychology*, 64, 1064-1071.
- DOLLINGER, S. J., PRESTON, L. A., O'BRIEN, S. P. & DILALLA, D. L. (1996) Individuality and relatedness of the self: an autophotographic study. *Journal of Personality and Social Psychology*, 71, 1268-1278.
- DOLLINGER, S. J., RHODES, K. A. & CORCORAN, K. J. (1993) Photographically portrayed identities, alcohol expectancies, and excessive drinking. *Journal of Personality Assessment*, 60, 522-531.
- DOLLINGER, S. J., ROBINSON, N. M. & ROSS, V. J. (1999) Photographic individuality, breadth of perspective, and creativity. *Journal of Personality*, 67, 623-644.
- DOSWELL, R. (1997) *Tourism: how effective management makes the difference*, Oxford, Butterworth-Heinemann.
- DOUGLAS, K. B. (1998) Impressions: African-american first-year students' perceptions of a predominantly white university. *The Journal of Negro Education*, 6, 416-431.
- DOWNEY, L. H., IRESON, C. L. & SCUTCHFIELD, F. D. (2008) The use of photovoice as a method of facilitating deliberation. *Health Promotion Practice*, 20, 1-9.
- DREDGE, D. & JENKINS, J. (2003) Destination place identity and regional tourism policy. *Tourism Geographies: An International Journal of Tourism Space, Place and Environment*, 5, 383 - 407.
- DYER, P., ABERDEEN, L. & SCHULER, S. (2003) Tourism impacts on an Australian indigenous community: a Djabugay case study. *Tourism Management*, 24, 83-95.
- DYKSTRA, J. (1995) Putting herself in the picture: autobiographical images of illness and the body. *Afterimage*.
- EAGLES, P. F. J. & MCCOOL, S. F. (2002) *Tourism in national parks and protected areas. Planning and management*, Oxon, UK and New York, USA, CABI Publishing.
- EDWARDS, E. (2001) *Raw histories: photographs, anthropology and museums*, Oxford, UK, Berg.
- EDWARDS, R. & WHITE, I. (1998) The Sea Empress oil spill: environmental impact and recovery. IN COMMITTEE, S. E. E. E. (Ed.) *International conference on the Sea Empress oil spill*. Cardiff.
- ELGAMMAL, I. & JONES, E. (2008) Alternative interpretations: exceptional circumstances and the Bluestone Development in Pembrokeshire Coast National Park. *Tourism and Hospitality Planning and Development*, 5, 203-214.
- EMMISON, M. & SMITH, P. (2000) *Current trends in visual research*, London, SAGE Publications.
- ENVIRONMENT ACT 1995 (C. 25) (1995) Environment Act 1995 (c. 25).
- ESTERBY-SMITH, M., THORPE, R. & LOWE, A. (1999) *Management research: an introduction.*, London, Sage Publications.
- EUROPEAN UNION (1992) Treaty on European Union.
- FAZEY, I., FISCHER, J. & LINDENMAYER, D. B. (2005a) What do conservation biologists publish? *Biological Conservation*, 124, 63-73.
- FAZEY, I., FISCHER, J. & LINDENMAYER, D. B. (2005b) Who does all the research in conservation biology? *Biodiversity and Conservation*, 14, 917-934.

- FEIGHERY, W. (2006) Reflexivity and tourism research: telling an(other) story. *Current Issues in Tourism*, 9, 269 - 282.
- FENNELL, A. & DOWLING, R. K. (Eds.) (2003) *Ecotourism policy and planning*, Oxon, CABI Publishing.
- FLICK, S. & TAYLOR, J. (1998) Attitudes of backpackers and casual day visitors in Rocky Mountain National Park. *Park Science*, 18.
- FLICK, U. (1998) *An introduction to qualitative research*, London, Sage.
- FOSTER-FISHMAN, P., NOWELL, B., DEACON, Z., NIEVAR, M. & MCCANN, P. (2005) Using methods that matter: the impact of reflection, dialogue, and voice. *American Journal of Community Psychology*, 36, 275-291.
- FREIRE, P. (1970) *Education for critical consciousness*, New York, Continuum.
- FROHMANN, L. (2005) The framing safety project. Photographs and narratives by battered women. *Violence Against Women*, 11, 1396-1419.
- GARLICK, S. (2002) Revealing the unseen: tourism, art and photography. *Cultural Studies*, 16, 289.
- GARROD, B. (2007) A snapshot into the past: the utility of volunteer-employed photography in planning and managing heritage tourism. *Journal of Heritage Tourism*, 2, 14-33.
- GARROD, B. (2008a) Exploring place perception a photo-based analysis. *Annals of Tourism Research*, 35, 381-401.
- GARROD, B. (2008b) Understanding the relationship between tourism destination imagery and tourist photography. *Annals of Tourism Research*.
- GEMINI, L. & BOCCIA-ARTIERI, G. (2007) Images of beauty and family. *Glancing, Glimpsing and Gazing. Tourists and Tourism in a Visual World*. Eastbourne.
- GERMAIN, R. (2004) An exploratory study using cameras and Talking Mats to access the views of young people with learning disabilities on their out-of-school activities *British Journal of Learning Disabilities*, 32, 170-174.
- GETZ, D. (1987) Tourism planning and research: traditions, models and futures. *The Australian Travel Research Workshop*. Burnbury, Western Australia.
- GETZ, D. & JAMAL, T. B. (1994) The environment-community symbiosis :a case for collaborative tourism planning. *Journal of Sustainable Tourism*, 2, 152-73.
- GLOVER, T. D., STEWART, W. P. & GLADDYS, K. (2008) Social ethics of landscape change: toward community-based land-use planning. *Qualitative Inquiry*, 14, 384-401.
- GODFREY, K. & CLARKE, J. (2000) *The tourism development handbook: a practical approach to planning and marketing*, London, Cassell.
- GONZALEZ, D. (2003) Young lives transformed, guided by a camera lens; Guatemalan fotokids capture pain and joy. *The New York Times*. Late Edition - Final ed. New York.
- GOODHART, F. W., HSU, J., BAEK, J. H., COLEMAN, A. L., MARESCA, F. M. & MILLER, M. B. (2006) A view through a different lens: photovoice as a tool for student advocacy. *Journal of American College Health*, 55, 53-56.
- GOODSON, L. & PHILLIMORE, J. (2004) *Qualitative research in tourism: ontologies, epistemologies and methodologies*, Dewey, Routledge.
- GRAZIANO, K. J. (2004) The power of teaching and learning with documentary photography storytelling: a photovoice case study *World Conference on*

- Educational Multimedia, Hypermedia and Telecommunications*. Lugano, Switzerland.
- GREENWOOD, J. & LAMBIE, G. (1999) Local government in Cuba: democracy through participation? *Local Government Studies*, 25, 55 - 74.
- GREY, C. (1995) *Give me a camera and I'll show you how I feel*, London, Scarlet Press.
- GROVES, D. L. & TIMOTHY, D. J. (2001) Photographic techniques and the measurement of impact and importance attributes on trip design: a case study. *Loisir et Société*, 24.
- GRUNDBERG, A. (1988) Camera; this newcomer is disposable. *New York Times*. New York ed. New York.
- GUIMOND, J. (1994) Amateurs as autobiographers: images of Jo Spence and Cindy Sherman. *Modern Fiction Studies*, 40, 573-591.
- GUNN, C. A. & VARR, T. (2002) *Tourism planning: basics, concepts, cases*, New York, Routledge.
- HALL, C. M. (1994) *Tourism and politics: policy, power and place*, Chichester, England, John Wiley & Sons Ltd.
- HALL, C. M. (2000) *Tourism planning. Policies, processes and relationships*, Harlow, Pearson Education Limited.
- HALL, C. M. (2008) *Tourism planning. Policies, processes and relationships*, Harlow, Pearson Education Limited.
- HALL, C. M. & JENKINS, J. M. (1995) *Tourism and public policy*, London and New York, Routledge.
- HALL, C. M. & MULLER, D. K. (Eds.) (2004) *Tourism, mobility and second homes*, Clevedon, Channel View Publications.
- HALL, C. M. & PAGE, S. (2002) *The geography of tourism and recreation: environment, place and space*, New York, Routledge.
- HAMMER, Ø. & HARPER, D. A. T. (2006) *Paleontological data analysis*, Malden, MA, Blackwell.
- HANIEH, E. & WALKER, B. M. (2007) Photography as a measure of constricted construing: the experience of depression through a camera. *Journal of Constructivist Psychology*, 20, 183 - 200.
- HANNA, K. M. & JACOBS, P. (1993) The use of photography to explore the meaning of health among adolescents with cancer. *Issues in Comprehensive Pediatric Nursing*, 16, 155-64.
- HARDING, D., BLAKE, I. & REYNOLDS, P. (1993) An Iron Age settlement in Dorset Excavation and reconstruction. Edinburgh University Department of Archaeology.
- HARPER, D. (1988) Visual sociology: expanding sociological vision *The American Sociologist*, 19, 54-70.
- HARPER, D. (2002) Talking about pictures: a case for photo elicitation. *Visual Studies*, 17, 13 - 26.
- HARRINGTON, C. F. & LINDY, I. E. (1999-2000) The use of reflexive photography in the study of the freshman year experience. *Journal of College Student Retention: Research, Theory and Practice*, 1, 13-22.
- HARRIS, R. J. (1985) *A primer of multivariate statistics*, New York, Sage.
- HAWKINS, H. G., RILEY, M. & GARRETT, M. (1999) Community analysis of the "Windshield Experience": use of resident employed photography in developing an

- application for national scenic by-way designation for the Ashley River Road. IN COALITION, A. R. C. (Ed.), Jim Self Center on the Future, Strom Thurmond Institute, Clemson University.
- HAYWOOD, K. M. (1990) Visitor-employed photography: an urban visit assessment. *Journal of Travel Research*, 29, 25-29.
- HEALEY, P. (1997) *Collaborative planning- shaping places in fragmented societies*, Houndmills and London, MacMillan Press.
- HERGENRATHER, K. C., RHODES, S. D. & G. CLARK (2006) Windows to work: exploring employment-seeking behaviors of persons with HIV/AIDS through photovoice. *AIDS Education and Prevention*, 18, 243-58.
- HERMANS, C., ERICKSON, J., NOORDEWIER, T., SHELDON, A. & KLINE, M. (2007) Collaborative environmental planning in river management: an application of multicriteria decision analysis in the White River Watershed in Vermont. *Journal of Environmental Management*, 84, 534-546.
- HISTORY TOURIST (2008) St David's Cathedral. History-Tourist.com.
- HOLDGATE, M. (2003) *Benefits beyond boundaries: work in the UK's protected areas*. , Council for National Parks.
- HORNER, M. (2007) Visitor Survey demographics. IN BALOMENOU, N. (Ed.) Pembroke Dock.
- HOWE, K. & EISENHART, M. (1990) Standards for qualitative (and quantitative) research: a prolegomenon. *Educational Researcher*, 19, 2-9.
- HUBBARD, J. (1994) *Shooting back from the reservation: a photographic view of life by Native American youth*, New York, New Press.
- HURWORTH, R., CLARK, E., MARTIN, J. & THOMSEN, S. (2005) The use of photo-interviewing: three examples from health evaluation and research. *Evaluation Journal of Australasia*, 4, 52-62.
- HUSSEY, W. (2006) Slivers of the journey the use of photovoice and storytelling to examine female to male transsexuals' experience of health care access. *Journal of Homosexuality*, 51, 129-158.
- INSKEEP, E. (1991) *Tourism planning: an integrated and sustainable development approach*, New York, Van Nostrand Reinhold.
- INTERVIEW WITH M. HORNER (2008) Pembrokeshire County Council Tourism Development officer. IN N, B. (Ed.) Pembroke Dock.
- INTERVIEW WITH S. MIDDLETON AND P. LEES (2008) Sarah Middleton, Planning Officer, and Phil Lees, Park Ranger, Pembrokeshire Coast National Park Authority IN BALOMENOU, N. (Ed.) Pembroke Dock.
- IOANNIDES, D. (1995) Strengthening the ties between tourism and economic geography: a theoretical agenda. *Professional Geographer*, 47, 49-60.
- IUCN (2009) WCPA categories system for protected areas task force. IUCN.
- J. FRIEDMANN (1987) *Planning in the public domain. From knowledge to action*., Princeton, NJ, Princeton University Press.
- JAMAL, T. & HOLLINSHEAD, K. (2001) Tourism and the forbidden zone: the underserved power of qualitative inquiry. *Tourism Management*, 22, 63-82.
- JAMAL, T. & KIM, H. (2005) Bridging the interdisciplinary divide: towards an integrated framework for heritage tourism research. *Tourist Studies*, 5, 55-83.

- JAMAL, T. B. & GETZ, D. (1995) Collaboration theory and community tourism planning. *Annals of Tourism Research*, 22, 186-204.
- JAMES, P. & GITTINS, W. (2007) Local landscape character assessment: an evaluation of community-led schemes in Cheshire. *Landscape Research*, 32, 423-442.
- JENKINS, D. I. & JENKINS, Q. A. L. (1998) Visions along the trail: community action and visitor employed photography in two native american communities. *Annual Meeting of the Rural Sociological Society*. Portland, http://eric.ed.gov/ERICWebPortal/Home.portal?nfpb=true&pageLabel=RecordDetails&objectId=0900000b8009511c&accno=ED425878&ERICExtSearch_SearchValue_0=ED425878&ERICExtSearch_SearchType_0=eric_accno.
- JENKINS, O. H. (1999) Understanding and measuring tourist destination images. *International Journal of Tourism Research*, 1, 1-15.
- JENNINGS, L. B. (2004) Youth perspectives on youth empowerment: informing theory and practice. *AERA* 2004. San Diego, http://convention.allacademic.com/aera2004/AERA_papers/AERA_3003_15313a.PDF.
- JOHN, B. (1995) *Pembrokeshire: past and present*, Newport, Greencroft Books.
- JOHNSEN, S., MAY, J. & CLOKE, P. (2008) Imag(in)ing homeless places: using auto-photography to (re)examine the geographies of homelessness. *Area*, 40, 194-207.
- JOHNSON, H. E., LLOYD, A. J., LUIS, A. J., MUR, L. A. J., SMITH, A. R. & CAUSTON, D. (2007) The application of MANOVA to analyse Arabidopsis thaliana metabolomic data from factorially designed experiments. *Metabolomics*, 3, 517-530.
- JOHNSTON, L. H. (2006) Software and method: reflections on teaching and using QSR NVivo in doctoral research. *International Journal of Social Research Methodology*, 9, 379 - 391.
- JOKINEN, E. & VEIJOLA, S. (2003) *Visual culture and tourism* Oxford UK, Berg.
- JONES, M. J. (2004) The effect of participation in the neighborhood academic program on the autophotographic self-concepts of inner-city adolescents. *Journal of Instructional Psychology*, 31, 188-201.
- JURKOWSKI, J., JANINE, M. & PAUL-WARD, A. (2007) Photovoice with vulnerable populations: addressing disparities in health promotion among people with intellectual disabilities. *ionHealth Promot Practice*, 1524839906292181.
- JURKOWSKI, J. M. (2008) Photovoice as participatory action research tool for engaging people with intellectual disabilities in research and program development. *Intellectual and Developmental Disabilities*, 46, 1-11.
- JUTLA, R. S. (2000) Visual image of the city: tourists' versus residents' perception of Simla, a hill station in northern India. *Tourism Geographies*, 2, 404 - 420.
- KALTENBORN, B. P., RIESE, H. & HUNDEIDE, M. (1999) National Park planning and local participation: some reflections from a mountain region in Southern Norway. *Mountain Research and Development*, 19, 51-61.
- KANGAS, J. & STORE, R. (2003) Internet and teledemocracy in participatory planning of natural resources management. *Landscape and Urban Planning*, 62, 89-101.
- KAPLAN, I., LEWIS, I. & MUMBA, P. (2007) Picturing global educational inclusion? Looking and thinking across students' photographs from the UK, Zambia and Indonesia. *Journal of Research in Special Educational Needs*, 7, 23-35.

- KEIGHRON, P. (1993) Video diaries: what's up doc? *Sight and Sound*, 3, 24-25.
- KELLER, E. F. & LONGINO, H. E. (1996) *Feminism and science*, New York, Oxford University Press.
- KENNEY, K. (1993) Using self-portrait photographs to understand self-concepts of Chinese and American university students. *Visual Anthropology*, 5, 245-269.
- KILLION, C. M. & WANG, C. C. (2000) Linking African-american mothers across life stage and station through photovoice. *Journal of Health Care for the Poor and Undeserved*, 11, 310-325.
- KIRK, J. (2010) Design statements. IN N, B. (Ed.) via email.
- KNIGHT, A., CLARK, A., PETRIE, P. & STRATHAM, J. (2006) The views of children and young people with learning disabilities about the support they receive from social services: a review of consultations and methods. Report of a review prepared for the DfES. London, Thomas Coram Research Unit, Institute of Education, University of London.
- KROEGER, S. D. (2003) The voice of students at risk. *Education : Curriculum & Instruction*. Cincinnati, University of Cincinnati.
- KRUGER, M. H. (2007) Community-based crime control in Cuba. *Contemporary Justice Review: Issues in Criminal, Social, and Restorative Justice*, 10, 101 - 114.
- LAGABRIELLE, E., BOTTA, A., DARÉ, W., DAVID, D., AUBERT, S. & FABRICIUS, C. (2010) Modelling with stakeholders to integrate biodiversity into land-use planning - Lessons learned in Réunion Island (Western Indian Ocean). *Environmental Modelling & Software*, 25, 1413-1427.
- LATHAM, A. (2003) Research, performance, and doing human geography: some reflections on the diary-photograph, diary-interview method. *Environment and Planning A* 35, 1993 - 2017.
- LAUGHLIN, L., MCPHEE, D. & POMPEO, M. (2004) Women's perspectives on poverty. Photos and stories by women on low-income in Calgary. IN PHOTOGRAPHERS, W. A. A. F. I. W. G. A. (Ed.) Alberta, Canada.
- LAUMONIER, Y., URYU, Y., STÜWE, M., BUDIMAN, A., SETIABUDI, B. & HADIAN, O. (2010) Eco-floristic sectors and deforestation threats in Sumatra: identifying new conservation area network priorities for ecosystem-based land use planning. *Biodiversity and Conservation*, 19, 1153-1174.
- LAVERY, P. (2002) *Tourism planning*, Huntington, ELM Publications.
- LEFEBVRE, H. (1976) "Reflections on the politics of space" translated by M. Enders. *Antipode*, 8, 30-37.
- LEFEVRE, P., KOLSTEREN, P., DEWAELE, M. P., BYEKWASO, F. & BEGHIN, I. (2000) *Comprehensive participatory planning and evaluation*, Antwerp, Belgium, Nutrition Unit, Tropical Medicine.
- LEMON, N. (2006) Using visual narrative for reflection. *AARE Conference*. Adelaide, <http://www.aare.edu.au/06pap/lem06537.pdf>.
- LEVENT, A. & PARASKEVAS, A. (2008) *Planning research in hospitality and tourism*, Oxford, Burlington, Butterworth-Heinemann.
- LEWIS, C. (1996) *Managing conflicts in protected areas*, Gland, Switzerland and Cambridge, UK, IUCN- The World Conservation Union.

- LOCKETT, D., WILLIS, A. & EDWARDS, N. (2005) Through seniors' eyes: an exploratory qualitative study to identify environmental barriers to and facilitators of walking. *Canadian Journal of Nursing Research*, 37, 48-65.
- LOCKWOOD, M., WORBOYS, G. & KOTHARI, A. (2006) *Managing protected areas: a global guide*, London, Earthscan.
- LOEFFLER, T. A. (2004) A photo elicitation study of the meanings of outdoor adventure experiences. *Journal of Leisure Research*, 36, 536.
- LÓPEZ, E. D. S., ENG, E., RANDALL-DAVID, E. & ROBINSON, N. (2005) Quality-of-life concerns of African-American breast cancer survivors within rural North Carolina: blending the techniques of photovoice and grounded theory. *Qualitative Health Research*, 15, 99-115.
- LUTTRELL, W. (2007) Sometimes, pictures speak louder than words. *Usable knowledge*. Harvard Graduate School of Education.
- LYKES, M. B. (2001) *Creative arts and photography in participatory action research in Guatemala*, London, Sage.
- LYONS, R. A., TEMPLE, J. M., EVANS, D., FONE, D. L. & PALMER, S. R. (1999) Acute health effects of the Sea Empress oil spill. *Journal of Epidemiology and Community Health*, 53, 306-310.
- MACDOUGALL, C., SCHILLER, W. & DARBYSHIRE, P. (2004) We have to live in the future. *Early Child Development and Care*, 174, 369-387.
- MACEWEN, A. & MACEWEN, M. (1982) *National Parks: conservation or cosmetics?*, Boston, Allen & Unwin.
- MACKAY, K. J. & COULDWELL, C. (2002) Seeing our sites through our visitors' eyes: investigating visitors' images of Motherwell Homestead National Historic Site. *Research Links, A Forum for Natural, Cultural and Social Studies*, Volume 11.
- MACKAY, K. J. & COULDWELL, C. M. (2004) Using visitor-employed photography to investigate destination image. *Journal of Travel Research*, 42, 390-396.
- MALONE, K. & HASLUCK, L. (2002) Australian youth. IN CHAWLA, L. (Ed.) *Growing up in an Urbanising World*. Paris, Earthscan.
- MALTERUD, K. (2001) Qualitative research: standards, challenges, and guidelines. *The Lancet*, 358, 483-488.
- MARKUSEN, A. (2003) Fuzzy concepts, scanty evidence, policy distance: the case for rigour and policy relevance in critical regional studies. *Regional Studies*, 37, 701 - 717.
- MARKWELL, K. W. (1997) Dimensions of photography in a nature-based tour. *Annals of Tourism Research*, 24, 131-155.
- MARKWELL, K. W. (2000a) Photo-documentation and analyses as research strategies in human geography. *Australian Geographical Studies*, 38, 91-98.
- MARKWELL, K. W. (2000b) Seeing is believing is knowing: towards a critique of pure vision: a rejoinder. *Australian Geographical Studies*, 38, 341-343.
- MARSCHNER, F. J. (1950) Major land uses in the United States. U.S. Department of Agriculture, Agricultural Research Service.
- MARTENS, H. & NEAES, T. (1989) *Multivariate calibration*, J.Wiley & Sons Ltd.
- MARX, K. (1867) The capital. www.marxists.org.
- MASON, P. (2008) *Tourism impacts, planning and management*, Oxford, Elsevier Ltd.

- MATHIESON, A. & WALL, G. (1982) *Tourism: economic, physical and social impacts*, London and New York, Longman.
- MCFARQUHAR, A. (1999) *Planning rape. Land use policy and local government finance in the UK*, London, Adam Smith Institute.
- MCGEHEE, N. G. & ANDERECK, K. L. (2004) Factors predicting rural residents' support of tourism. *Journal of Travel Research*, 43, 131-140.
- MCINTYRE, A. (2000) Constructing meaning about violence, school, and community: participatory action research with urban youth. *Journal The Urban Review*, 32, 123-154.
- MCINTYRE, A. (2003) Through the eyes of women: photovoice and participatory research as tools for reimagining place. *Gender, Place and Culture: A Journal of Feminist Geography*, 10, 47 - 66.
- MCINTYRE, N., YUAN, M., PAYNE, R. J. & MOORE, J. (2004) Development of a values-based approach to managing recreation on Canadian Crown Lands. *Working Papers of the Finnish Forest Research Institute* 2. Canada, Center for Parks, Recreation and Tourism Research.
- MIEDER, W., KINGSBURY, S. A. & HARDER, K. B. (Eds.) (1991) *A dictionary of American proverbs*, New York, Oxford, Oxford University Press.
- MILFORD, S. A., FRYREAR, J. L. & SWANK, P. (1983) Phototherapy with disadvantaged boys. *The Arts in Psychotherapy*, 10, 221-228.
- MILLER, G. & HAPPELL, B. (2006) Talking about hope: the use of participant photography. *Issues in Mental Health Nursing*, 27, 1051-1065.
- MILNE, S. & ATELJEVIC, I. (2001) Tourism, economic development and the global-local nexus: theory embracing complexity. *Tourism Geographies: An International Journal of Tourism Space, Place and Environment*, 3, 369 - 393.
- MINTZBERG, H. (1981) What is planning anyway? *Strategic Management Journal*, 2, 319-324.
- MITCHELL, C., STUART, J., MOLETSANE, R. & NKWANYANA, C. B. (2006) "Why we don't go to school on Fridays". On youth participation through photo voice in rural Kwazulu-Natal. *McGill Journal of Education*, 41.
- MIZEN, P. (2005) A little 'light work'? Children's images of their labour *Visual Studies*, 20,, 124 - 139.
- MMOPELWA, G., KGATHI, D. L. & MOLEFHE, L. (2007) Tourists' perceptions and their willingness to pay for park fees: a case study of self-drive tourists and clients for mobile tour operators in Moremi Game Reserve, Botswana. *Tourism Management*, 28, 1044-1056.
- MOFFITT, P. & ROBINSON-VOLLMAN, A. (2004) Photovoice: picturing the health of aboriginal women in a remote Northern community. *Canadian Journal of Nursing Research*, 36, 189-201.
- MOODIE, G. C. & STUDDERT-KENNEDY, R. (1970) *Opinions, publics and pressure groups: an essay on vox populi and representative government*, London, Allen and Unwin.
- MOORE, G., CROXFORD, B., ADAMS, M., REFAEE, M., COX, T. & SHARPLES, S. (2006) Incorporating local knowledge into urban environmental research: the photo-survey method *Participatory Approaches in Science and Technology* Edinburgh, Scotland.

- MORSE, J. M. (Ed.) (1991) *Qualitative nursing research: a contemporary dialogue*, Thousand Oaks: CA, Sage Publications.
- MOSS, J., DEPPELER, J., ASTLEY, L. & PATTISON, K. (2007) Student researchers in the middle: using visual images to make sense of inclusive education. *Journal of Research in Special Educational Needs*, 7, 46-54.
- MOSS, T. (1999) Photovoice - the pictures. Youth put their world on view *ChildrenFirst*.
- MULROW, C. D. (1994) Systematic reviews: rationale for systematic reviews. *British Medical Journal*.
- MYTUM, H. (2004) *Reconstruction policy and purpose at Castell Henllys Iron Age fort*, Oxford, ALTamira Press.
- NATIONAL PARKS (2010) National Parks, Britain's breathing spaces. National Parks.
- NATIONAL TRAILS (2010) Pembrokeshire Coast Path. Natural England.
- NAURIGHT, J. & SCHIMMEL, K. (2005) *The political economy of sport*, London, Palgrave Macmillan.
- NEWMAN, I. M. & KANJANAWONG, S. (2005) Using photography to cross generational, linguistic, and cultural barriers to develop useful survey instruments. *Health Promotion Practice*, 6, 53-56.
- NODA, M. (1988) *Hyohakusareru kodomotachi [Bleached Children]*, Tokyo, Joho Center Publishing Co., Ltd.
- NOLAND, C. M. (2006) Auto-photography as research practice: identity and self-esteem research. *Journal of Research Practice*, 1, <http://jrp.icaap.org/index.php/jrp/article/viewArticle/19/50>.
- OFFICE OF NATIONAL STATISTICS (2003) Neighbourhood statistics, information on: St. David's and the Cathedral Close community (parish). Office of National Statistics.
- OFFICE OF NATIONAL STATISTICS (2004) Neighbourhood statistics, parish headcounts, Solva community. Office of National Statistics.
- OKAMOTO, T., FUJIHARA, T., KATO, J., KOSUGI, K., NAKAZATO, N., HAYASHI, Y., IKEUCHI, H., NAKAGAWA, N., MORI, K. & NONAMI, H. (2006) Measuring social stereotypes with the photo projective method. *Social Behavior And Personality*, 34, 319-331.
- OKU, H. & FUKAMACHI, K. (2006) The differences in scenic perception of forest visitors through their attributes and recreational activity. *Landscape and Urban Planning*, 75, 34-42.
- OPENSOURCE (2005) Evaluation of visitor experience at Ynyslas/Dyfi National Nature Reserve final report. IN WALES, C. C. F. (Ed.).
- ORELLANA, M. F. (1999) Space and place in an urban landscape: learning from children's views of their social worlds. *Visual Sociology*, 14, 73-89.
- OWEN, S. (2002) From village design statements to parish plans: some pointers towards community decision making in the planning system in England. *Planning Practice and Research*, 17, 81 - 89.
- PAGE, S. J. & CONNELL, J. (2008) *Tourism: a modern synthesis*, London, Thomson Learning.
- PAPATHEODOROU, A. (Ed.) (2006) *Managing tourism destinations*, Cheltenham, Elgar Reference Collection.
- PARKS, G. (1966) *A choice of weapons*, New York, Harper and Row.

- PATTON, M. Q. (1990) *Qualitative evaluation and research methods*, London, Sage Publications.
- PEARSON, S. & RALPH, S. (2007) The identity of SENCos: insights through images. *Journal of Research in Special Educational Needs*, 7, 36-45.
- PEMBROKESHIRE COAST NATIONAL PARK AUTHORITY (2003) National Park Management Plan 2003-2007.
- PEMBROKESHIRE COAST NATIONAL PARK AUTHORITY (2004) The state of the park. Pembroke Dock, Pembrokeshire Coast National Park Authority.
- PEMBROKESHIRE COAST NATIONAL PARK AUTHORITY (2009-2010) Canllawiau gwasanaeth cynllunio/ Planning service guide. Pembrokeshire Coast National Park Authority.
- PEMBROKESHIRE COUNTY COUNCIL (2006) Pembrokeshire County Council tourism strategy 2006-2012. Pembroke Dock, Pembrokeshire County Council.
- PEMBROKESHIRE COUNTY COUNCIL (2009) Report of consultation on affordable housing delivery statement. Haverfordwest, Pembrokeshire County Council.
- PEMBROKESHIRE VIRTUAL MUSEUM (2006) Neolithic.
- PERCY-SMITH, B. (2002) Contested worlds. IN CHAWLA, L. (Ed.) *Growing up in an Urbanising World*. Paris, Earthscan.
- PERNECKY, T. (2010) The being of tourism. *The Journal of Tourism and Peace Research*, 1, 1-22.
- PERRY, B. (2006) Using photographic images as an interactive online teaching strategy. *The Internet and Higher Education*, 9, 229-240.
- PERTICE, M. & ARDENE ROBINSON, V. (2004) Photovoice: Picturing the Health of Aboriginal Women in a Remote Northern Community. *Canadian Journal of Nursing Research*, 36, 189-201.
- PERTICE, M. & MOFFITT, P. (2007) The dragon and the flame: an analysis of the Welsh arson campaign. IN LTD., C. R. C. (Ed.), <http://www.welshdragon.net/resources/Articles/arson.shtml>.
- PHILLIPS, A. (2002) *Management guidelines for IUCN category V protected areas*, IUCN World Commission on Protected Areas.
- PHILLIPS, D. (1986) Photography's use as a metaphor of self with a stabilized schizophrenic patient. *The Arts in Psychotherapy*, 13, 9-16.
- PIKE, S. (2002) Destination image analysis- a review of 142 papers form 1973 to 2000. *Tourism Management*, 23, 541-549.
- PORIA, Y., REICHEL, A. & BIRAN, A. (2006) Heritage site perceptions and motivations to visit. *Journal of Travel Research*, 44, 318-326.
- POSITIVE FUTURES (2006) 'End of season review' impact report. IN OFFICE, H. (Ed.).
- PROSSER, J. (1998) *Image-based research; a sourcebook for qualitative researchers*, London, Falmer Press.
- PROSSER, J. & LOXLEY, A. (2007) Enhancing the contribution of visual methods to inclusive education. *Journal of Research in Special Educational Needs*, 7, 55-68.
- PYCROFT, G. (2010) Sustainability committee planning inquiry. Cardiff, Association of National Park authorities.
- QUINN, G. P. & KEOUGH, M. J. (2002) *Experimental design and data analysis for biologists*, Cambridge, Cambridge University Press.

- RADLEY, A. & TAYLOR, D. (2003a) Images of recovery: a photo-elicitation study on the hospital ward. *Qualitative Health Research*, 13, 77-99.
- RADLEY, A. & TAYLOR, D. (2003b) Remembering one's stay in hospital: a study in photography, recovery and forgetting. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*, 7, 129-159.
- RAGGETT, P. (2000) *Solva - an introduction to village life*, Haverfordwest.
- RANDOLPH, J. (2004) *Environmental land use planning and management*, Washington, Island Press.
- RAO, C. R. (1948) The utilization of multiple measurements in problems of biological classification. *Journal of the Royal Statistical Society. Series B (Methodological)*, 10, 159-203.
- RAO, C. R. (2005) *Handbook of statistics. Data mining and data visualization*, San Diego, CA, Elsevier.
- RAPPORT, F., DOEL, M. A. & ELWYN, G. (2007) Snapshots and snippets: General practitioners' reflections on professional space. *Health and Place*, 13, 532-544.
- RAPPORT, F., DOEL, M. A., GREAVES, D. & ELWYN, G. (2006) From manila to monitor: biographies of general practitioner workspaces. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*, 10, 233-251.
- RASHED, E. & KAMAL, H. (2005) Virtual reality: a proposal for restoring Khedivial Cairo. *International Seminar on the Management of the Shared Mediterranean Heritage 5th Conference on the Modern Heritage*. Ismarmed, Egypt, <http://www.ismarmed.com/Papers/Theme4/Papers/Ehab%20Rashed.pdf>.
- RASMUSSEN, K. (2004) Places for children - children's places. *Childhood*, 11, 155-173.
- REED, M. G. (1997) Power relations and community-based tourism planning. *Annals of Tourism Research*, 24, 566-591.
- REIS, H. T., ERBER, R. & GILMOUR, R. (Eds.) (1994) *Domains of experience: investigating relationship processes from three perspectives.*, Hillsdale, NJ, Erlbaum.
- RHODES, S. D. (2006) Visions and voices: HIV in the 21st century. Indigent persons living with HIV/AIDS in the southern USA use photovoice to communicate meaning *Journal of Epidemiology and Community Health* 60, 886.
- RHODES, S. D. & HERGENRATHER, K. C. (2007) Recently arrived immigrant Latino men identify community approaches to promote HIV prevention *American Journal of Public Health* 97, 984-985.
- RHODES, S. D., HERGENRATHER, K. C., WILKIN, A. M. & JOLLY, C. (2008) Visions and voices: indigent persons living with HIV in the southern United States use photovoice to create knowledge, develop partnerships, and take action. *Health Promotion Practice*, 9, 159-169.
- RICH, M. & CHALFEN, R. (1999) Showing and telling asthma. *Visual Sociology*, 14, 51-71.
- RICHARDS, L. (1999) Data alive! The thinking behind NVivo. *Qualitative Health Research*, 9, 412-428.
- RIFKIN, S. B. (1996) Rapid rural appraisal: its use and value for health planners and managers. *Public Administration*, 74, 509-526.

- RILEY, R. & MANIAS, E. (2003) Snap-shots of live theatre: the use of photography to research governance in operating room nursing. *Nursing Inquiry*, 10, 81-90.
- RIZOSPASTIS (2009) Sweeping defecations using "social dialogue" as a Trojan Horse. In *Greek. Rizospastis*. Athens.
- ROMAN, P. (2003) *People's power: Cuba's experience with representative government*, New York, Rowman & Littlefield Publishers.
- ROMERIL, M. (1989) Tourism and the environment - accord or discord? *Tourism Management*, 10, 204-208.
- RORER, B. R. & ZILLER, R. C. (1982) Iconic communication of values among American and Polish students *Journal of Cross-Cultural Psychology*, 13, 352-361.
- ROSENOW, J. & PULSIPHER, G. (1979) *Tourism: the good, the bad and the ugly*, Lincoln, Nebraska, Century Three Press.
- RUSSELL, E. L., CHIANG, L. H. & BRAATZ, R. D. (2000) Fault detection in industrial processes using canonical variate analysis and dynamic principal component analysis. *Chemometrics and Intelligent Laboratory Systems*, 51, 81-93.
- RYDIN, Y. & PENNINGTON, M. (2000) Public participation and local environmental planning: the collective action problem and the potential of social capital. *Local Environment: The International Journal of Justice and Sustainability*, 5, 153 - 169.
- SAMPSON-CORDLE, A. V. (2001) Exploring the relationship between a small rural school in Northeast Georgia and its community: an image-based study using participant-produced photographs. Athens, University of Georgia.
- SAMUELS, J. (2004) Breaking the ethnographer's frames: reflections on the use of photo elicitation in understanding Sri Lankan monastic culture. *American Behavioral Scientist*, 47, 1528-1550.
- SANDELOWSKI, M. (1994) Focus on qualitative methods. Notes on transcription. *Research in Nursing & Health*, 17, 311-314.
- SCHICK, R. S. (2002) When the subject is difference: conditions of voice in policy-oriented qualitative research. *Qualitative Inquiry*, 8, 632-651.
- SCHRATZ, M. & STEINER-LÖFFLER, U. (1998) *Pupils using photographs in school self-evaluation*, London, Falmer Press.
- SCHULTZ, L., FOLKE, C. & OLSSON, P. (2007) Enhancing ecosystem management through social-ecological inventories: lessons from Kristianstads Vattenrike, Sweden. *Environmental Conservation*, 34, 140-152.
- SCHULZ, H., BARANSKA, M., H.-H.BELZ, RÖSCH, P., STREHLE, M. A. & POPP, J. (2004) Chemotaxonomic characterisation of essential oil plants by vibrational spectroscopy measurements. *Vibrational Spectroscopy*, 35, 81-86.
- SCHUSTER, E., JOHNSON, S. S. & TAYLOR, J. G. (2004) Wilderness experience in Rocky Mountain National Park 2002: report to RMNP. IN PARK, R. M. N. (Ed.).
- SEWELL, W. R. D. & PHILLIPS, S. D. (1979) Models for the evaluation of public participation programmes. *Natural Resources Journal*, 19, 337-358.
- SHAW, G. & WILLIAMS, A. M. (1994) *Critical issues in tourism. A geographical perspective.*, Oxford, UK and Cambridge, USA, Blackwell.
- SHEEHAN, L. R. & RITCHIE, J. R. B. (2005) Destination Stakeholders Exploring Identity and Salience. *Annals of Tourism Research*, 32, 711-734.
- SIMMONS, D. G. (1994) Community participation in tourism planning. *Tourism Management*, 15, 98-108.

- SINGHAL, A., HARTER, L. M., CHITNIS, K. & SHARMA, D. (2004) Participatory photography in entertainment- education. *Fourth International Entertainment Education Conference*. Cape Town.
- SINGHAL, A. & RATTINE-FLAHERTY, E. (2006) Pencils and photos as tools of communicative research and praxis. Analyzing Minga Perú's quest for social justice in the Amazon *International Communication Gazette*, 68, 313-330.
- SMITH, F. & BARKER, J. (2000) Contested spaces: children's experiences of out of school care in England and Wales. *Childhood*, 7, 315-333.
- SPENCE, J. (1986) *Putting myself in the picture: a political, personal and photographic autobiography*, London, Camden press.
- SPENCER, D. M. (2010) Facilitating public participation in tourism planning on American Indian reservations: a case study involving the nominal group technique. *Tourism Management*, 31, 684-690.
- ST DAVID'S CITY COUNCIL (2010) Welcome to the St Davids City Council website. St David's City Council.
- STEDMAN, R., BECKLEY, T., WALLACE, S. & AMBARD, M. (2004) A picture and 1000 words: using resident-employed photography to understand attachment to high amenity places. *Journal of Leisure Research*, 36, 580.
- STEELE, J. (2005) A new kind of Europe. *The Guardian*. London.
- STEFANO, L. A., STILWELL, C., MORRIS, C. & HENDRIKS, S. L. (2005) 'As I see it' – Small-scale commercial organic farmers use photography to record farm system changes. *Ingede, the Journal of African Scholarship*.
- STEVENSON, N. (2007) Visualising the city: an analysis of photographic images of London using semiotics and visual anthropology. *Glancing, Glimpsing and Gazing. Tourists and Tourism in a Visual World*. Eastbourne.
- STEWART, W. P. & FLOYD, M. F. (2004) Visualizing leisure. *Journal of Leisure Research*, 36, 445.
- STEWART, W. P., LIEBERT, D. & LARKIN, K. W. (2003) Community identities as visions for landscape change. *Landscape and Urban Planning*, 69, 315-334.
- STOCKDALE, A. & BARKER, A. (2009) Sustainability and the multifunctional landscape: An assessment of approaches to planning and management in the Cairngorms National Park. *Land Use Policy*, 26, 479-492.
- STRACK, R. W., MAGILL, C. & MCDONAGH, K. (2004) Engaging Youth through Photovoice. *Health Promotion Practice*, 5, 49-58.
- STRENG, J. M., RHODES, S., AYALA, G., ENG, E., ARCEO, R. & PHIPPS, S. (2004) *Realidad Latina*: Latino adolescents, their school, and a university use photovoice to examine and address the influence of immigration. *Journal of Interprofessional Care*, 18, 403-415.
- TAYLOR, J., KING, R. D., ALTMANN, T. & FIEHN, O. (2002) Application of metabolomics to plant genotype discrimination using statistics and machine learning. *Bioinformatics*, 18, S241-248.
- TAYLOR, J. G., CZARNOWSKI, K. J., SEXTON, N. R. & FLICK, S. (1995) The Importance of Water to Rocky Mountain National Park Visitors: An Adaptation of Visitor-Employed Photography to Natural Resources Management. *Journal of Applied Recreation Research*, 20(1): 61-85.

- THE LONDON MULTIMEDIA LAB SOCIAL PSYCHOLOGY DEPARTMENT (2003) Final report of young people's views project qualitative research pilot: participatory multimedia project. IN POSITIVE FUTURES PROGRAMME PREVENTION TEAM, T. Y. P. D. U., DRUGS STRATEGY DIRECTORATE OF THE HOME OFFICE (Ed.), London School Economics and Political Science.
- THOMPSON, N. C., HUNTER, E. E., MURRAY, L., NINCI, L., ROLFS, E. M. & PALLIKKATHAYIL, L. (2008) The Experience of Living With Chronic Mental Illness: A Photovoice Study. *Perspectives in Psychiatric Care*, 44, 14-24.
- THOUTENHOOFD, E. (1998) Method in a Photographic Enquiry of being Deaf. *Sociological Research Online*.
- TOLICH, M. (2010) A Critique of Current Practice: Ten Foundational Guidelines for Autoethnographers. *Qualitative Health Research*.
- TRAN, X. & RALSTON, L. (2006) Tourist preferences influence of unconscious needs. *Annals of Tourism Research*, 33, 424-441.
- TRAWECK, D. E. (1977) Visitor Employed Photography on the Huron River: A tool for interpretive planning. Ohio State University.
- TREMBATH, C. & TENNSTEDT, K. (2008) Pembrokeshire Visitor Survey 2007/2008 Final Report. IN RESEARCH, Q. (Ed.) York.
- TRIBE, J. (2001) Research Paradigms and the Tourism Curriculum. *Journal of Travel Research*, 39, 442-448.
- TUDOR, D. T. & WILLIAMS, A. T. (2003) Public perception and opinion of visible beach aesthetic pollution: the utilisation of photography. *Journal of coastal research*, 19, 1004-1115.
- TUNSTALL, S., TAPSELL, S. & HOUSE, M. (2004) Children's perceptions of river landscapes and play: what children's photographs reveal. *Landscape Research*, 29, 181.
- TURGENEF, I. S. (1867) *Fathers and sons*, New York, Leypoldt & Holt.
- TURVEY, R. (2007) *Pembrokeshire: The Concise History*, University of Wales Press.
- URRY, J. (2002) *The Tourist Gaze*, London, SAGE Publications Ltd.
- WANG, C. (1998) Project: photovoice involving homeless men and women of Washtenaw County, Michigan. *Health Education and Behavior*, 25, 8-10.
- WANG, C. & BURRIS, M. A. (1994) Empowerment through photo novella: portraits of participation. *Health Education & Behavior*, 21, 171-186
- WANG, C. & BURRIS, M. A. (1997) Photovoice: concept, methodology, and use for participatory needs assessment. *Health Education and Behavior*, 24, 369-387.
- WANG, C., BURRIS, M. A. & XIANG, Y. P. (1996a) Chinese village women as visual anthropologists: a participatory approach to reaching policymakers. *Social Science and Medicine*, 42, 1391-1400.
- WANG, C., YI, W., TAO, Z. & CAROVANO, K. (1998) Photovoice as a participatory health promotion strategy. *Health Promotion International*, 13, 75-86.
- WANG, C., YUAN, Y. L. & FENG, M. L. (1996b) Photovoice as a tool for participatory evaluation: the community's view of process and impact. *Journal of Contemporary Health*.
- WANG, C. C., ANDERSON, R. M. & STERN, D. T. (2004a) Exploring professional values and health policy through photovoice. *Medical Education*, 38, 1190-1191.

- WANG, C. C., CASH, J. L. & POWERS, L. S. (2000) Who knows the streets as well as the homeless? Promoting personal and community action through photovoice. *Health Promotion Practice*, 1, 81-89.
- WANG, C. C., MORREL-SAMUELS, S., HUTCHISON, P. M., BELL, L. & PESTRONK, R. M. (2004b) Flint photovoice: community building among youths, adults, and policymakers. *American Journal of Public Health*, 94, 911-913.
- WANG, C. C. & PIES, C. A. (2004) Family, maternal, and child health through photovoice. *Maternal and Child Health Journal*, 8, 95-102.
- WANG, C. C. & REDWOOD-JONES, Y. A. (2001) Photovoice ethics: perspectives from Flint photovoice. *Health Education and Behavior*, 28, 560-572.
- WARREN, S. (2002) Show me how it feels to work here: using photography to research organizational aesthetics. *Ephemera: Critical Dialogues on Organization*, 2, 224-245.
- WEARING, S., GRABOWSKI, S., CHATTERTON, P. & PONTING, J. (2009a) Participatory planning for eco-trekking on a potential World Heritage site: the communities of the Kokoda Track. *Pacific Economic Bulletin*, 24, 101-117.
- WEARING, S. & WEARING, B. (2001) Conceptualizing the selves of tourism. *Leisure Studies*, 20, 143 - 159.
- WEARING, S. L., WEARING, M. & MCDONALD, M. (2009b) Understanding local power and interactional processes in sustainable tourism: exploring village-tour operator relations on the Kokoda Track, Papua New Guinea. *Journal of Sustainable Tourism*, 18, 61 - 76.
- WHITNEY, J. C. (2006) My education: students with disabilities describe high school in pictures and words. *Teaching Exceptional Children Plus*.
- WILES, R., PROSSER, J., BAGNOLI, A., CLARK, A., DAVIES, K., HOLLAND, S. & RENOLD, E. (2008) Visual Ethics: Ethical Issues in Visual Research. *NCRM Research Methods Review Paper 011*. ESRC.
- WILHELM, S. A. & SCHNEIDER, I. E. (2005) Diverse urban youth's nature: implications for environmental education. *Applied Environmental Education and Communication*, 4, 103 - 113.
- WILHJELM, H. (2002) Large but not unlimited freedom in a Nordic city. IN CHAWLA, L. (Ed.) *Growing up in an Urbanising World*. Paris, Earthscan.
- WILLIAMS, J. & LYKES, M. B. (2003) Bridging theory and practice: using reflexive cycles in feminist participatory action research. *Feminism and Psychology*, 13, 287-294.
- WILLIAMS, K. (2010) Bishop's Palace at St Davids up for top heritage award. *Western Mail*. Media Wales Ltd. WalesOnline™.
- WILLMOTT, D. & CHÁVEZ, V. (2002) From silence into Speech: photovoice as liberatory research.
<http://donnawillmott.sfsu.myefolio.com/vertical/Sites/%7BE3EBC90E-81E1-4C24-9E12-317BD3CA7AB5%7D/uploads/%7BD335B057-FEB6-4A1B-8C9F-1DAB4C4E7D65%7D.PDF>.
- WILSON, N., DASHO, S., MARTIN, A. C., WALLERSTEIN, N., WANG, C. C. & MINKLER, M. (2007) Engaging young adolescents in social action through photovoice. The Youth Empowerment Strategies (YES!) project. *The Journal of Early Adolescence*, 27, 241-261.

- WOOLRYCH, R. (2004) Empowering images: using photovoice with tenants with special needs. *Housing, Care and Support*.
- WORLD TOURISM ORGANISATION (1994) *National and regional tourism planning. Methodologies and case studies*, London and New York.
- WORTH, S. & ADAIR, J. (1972) *Trough Navaho eyes*, Bloomington, Indiana University Press.
- WTO (1994) *National and regional tourism planning. Methodologies and case studies*, London and New York.
- WWW.ROYALPINGDOM.COM (2009) The internet in numbers.
- YAMASHITA, S. (2002) Perception and evaluation of water in landscape: use of Photo-Projective Method to compare child and adult residents' perceptions of a Japanese river environment. *Landscape and Urban Planning*, 62, 3.
- YATES, G. E., STEIN, T. V. & WYMAN, M. S. (2010) Factors for collaboration in Florida's tourism resources: shifting gears from participatory planning to community-based management. *Landscape and Urban Planning*, In Press, Corrected Proof.
- ZAMBON, M. J. (2005) Confessions of a qualitative researcher: reflexive photography and the exhibition of culture in schools. *Educational Perspectives*.
- ZILLER, C. & SMITH, E. (1977) A phenomenological utilisation of photographs *Journal of Phenomenological Psychology*, 7, 172-182.
- ZILLER, R. C. (1990) *Photographing the self: methods for observing personal orientations* London, Sage.
- ZILLER, R. C. & LEWIS, D. (1981) Orientations: self, social, and environmental percepts through auto-photography. *Personality and Social Psychology Bulletin*, 7, 338-343.
- ZILLER, R. C. & RORER, B. A. (1985) Shyness-environment interaction: a view from the shy side through auto-photography. *Journal of Personality*, 53, 626-639.

14 APPENDICES

14.1 Questionnaire for local participants



Code number:

Site:

Time:

Tourism Planning in Protected Areas PhD Research Project

Volunteer Employed Photography Experiment/ Phase 1

Thank you for taking the time to answer these questions and for participating to this research.

Do you

- ☐ live here all year round?
- ☐ own a holiday home

How long for have you lived in St David's peninsula?

.....years

What are the first 3 words that come to mind when you think of Pembrokeshire Coast National Park?

a..... b.....
c.....

Is your job related with the tourism industry in any way?

- | | | |
|------------------------------|------------------------------------|---|
| ☐ Yes | ☐ Full time | ☐ Summer |
| ☐ No | ☐ Part time | ☐ All year round |

Please specify:

What do you think is special about Pembrokeshire Coast National Park?

What is it that you value most about this area?

Do you think that your views as a resident are taken into account about the area planning?

Are there any aspects of the area that you don't like?

☐ Yes

☐ No

.....

How might the area be improved?

Given the chance would you ever think of moving elsewhere in this country?

☐ Yes

☐ No

Why?

.....

Our National Parks are under a lot of pressure. Are there any aspects of the area that if changed you wouldn't enjoy living in Pembrokeshire Coast National Park anymore?

Your age

☐ 16-29

☐ 30-44

☐ 45-59

☐ 60-74

☐ 75 or over

Male or Female?

☐ Female

☐ Male

Would you like to be sent a copy of the photos you will take?

☐ Yes

☐ No

Would you be interested in participating in a follow up study?

☐ Yes

☐ No

If your answer is yes to either of the above, please fill in your name, telephone number/ e-mail address, postal address:

Name:

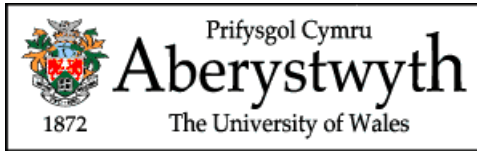
Tel number:

e-mail:

Postal address:

Thank you for taking the time to fill in this questionnaire. Please take a moment to read the information letter about the aim of the project and some information on the Data Protection Act.

14.2 Questionnaire for tourist participants



Code number:

Site:

Time:

Tourism Planning in Protected Areas PhD Research Project

Volunteer Employed Photography Experiment/ Phase 1

Thank you for taking the time to answer these questions and for participating to this research.

Are you...

- ☐ a tourist to the Pembrokeshire Coast National Park?
- ☐ a day visitor to the Pembrokeshire Coast National Park?

Can you please give the first 3 words that come to mind when you think of Pembrokeshire Coast National Park?

a..... b.....

c.....

- ☐ cycling
- ☐ sightseeing
- ☐ walking
- ☐ surfing
- ☐ other (please specify)

What is your main activity during your visit?

Why have you chosen to visit Pembrokeshire Coast National Park?

What is it that you value most about this area?

Have you visited Pembrokeshire Coast National Park before?

- ☐ Yes
- ☐ No

- ☐ Start of holiday
- ☐ Middle
- ☐ End

Are you going to spend all your holiday in the St David's area?

- ☐ Yes
- ☐ No

Are there any aspects of the area that you don't like?

☐ Yes

.....

☐ No

.....

How might the area be improved?

Would you consider coming back here again in the future?

☐ Yes

☐ No

Our National Parks are under a lot of pressure. Are there any aspects of the area that if changed you wouldn't choose to come back to Pembrokeshire Coast National Park for your holidays?

Your age:

☐ 16-29

☐ 30-44

☐ 45-59

☐ 60-74

☐ 75 or over

Male or Female?

☐ Female

☐ Male

Would you like to be sent a copy of the photos you will take?

☐ Yes

☐ No

Would you be interested in participating in a follow up study?

☐ Yes

☐ No

If your answer is yes to either of the above, please fill in your name, telephone number/ e-mail address, postal address:

Name:

Tel number:

e-mail:

Postal address:

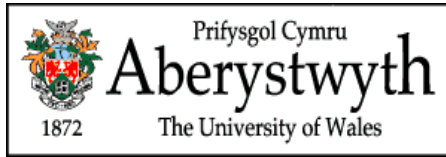
.....

.....

.....

Thank you for taking the time to fill in this questionnaire. Please take a moment to read the information letter about the aim of the project and some information on the Data Protection Act.

14.3 Letter to local participants in the research pack, English



27 April 2007

Dear Participant,

Thank you for taking the time to participate in this research.

The aim of this project is to establish how the tourism planning system in National Parks in Wales works, if it is to the benefit of the environment, the local community and the visitors, and finally to make some suggestions in order to improve it.

The second phase of this research is taking place in May 2007, using a method called volunteer employed photography. Visitors and locals are given disposable cameras and they are each asked to take 12 pictures of what they value and what they don't like about the place they either visit or live in. They are also given a folder with a "picture diary", where they are asked to explain what is in the picture and why they have taken it.

You are asked to take 12 pictures for the project. The rest of the film is for your own use, but please note in the "picture diary" the numbers of the pictures that are taken for the study. The easiest way to do that is by noting down the picture number displayed in the "remaining pictures" window. The pictures then will be developed and sent to your home address.

It is essential to highlight a couple of things about copyrights and the Data Protection Act. Due to Data Protection Act limitations, only adults are given cameras. The Institute of Rural Sciences, University of Wales Aberystwyth, is the legal owner of the project pictures. The information for the photos will be kept separately from the personal information gathered in the questionnaires and will be destroyed 3 years after the end of the project. If there are children in the pictures taken for the study, the pictures will be used for the data analysis but will not be shown in public.

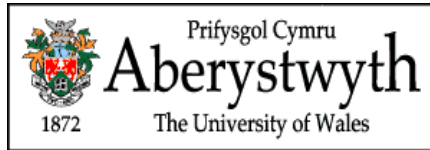
I would once again like to thank you for your time and effort.

Kind Regards,

A handwritten signature in blue ink, appearing to be 'Nika'.

Nika Balomenou

14.4 Letter to local participants in the research pack, Welsh



Gorffennaf 2007

Annwyl Gyfaill

Diolch am roi'r amser i gymryd rhan yn yr ymchwil hwn.

Diben y prosiect yw gweld sut y mae trefniadaeth cynllunio twristiaeth ym Mharciau Cenedlaethol Cymru yn gweithio, a yw o fudd i'r amgylchedd, y gymuned leol ac i ymwelwyr, ac yn olaf, i wneud rhai awgrymiadau am ffyrdd y gellid ei wella.

Bydd ail gyfnod yr ymchwil yn cymryd rhan rhwng Gorffennaf a Medi 2007, gan ddefnyddio dull o ffotograffiaeth gan wirfoddolwyr. Rhoddir camerâu tafladwy i ymwelwyr a thrigolion lleol a gofynnir iddynt gymryd 12 ffotograff o bethau sy'n werthfawr yn eu golwg ac o bethau nad ydynt yn hoffi am y lle y maent naill ai yn byw ynddo neu'n ymweld ag ef. Rhoddir hefyd ffolder iddynt sy'n cynnwys "dyddiadur ffotograffau" a gofynnir iddynt egluro beth sydd yn y llun a pham y maent wedi ei ddewis.

Gofynnir i chi gymryd 12 ffotograff ar gyfer y prosiect. Gallwch ddefnyddio gweddill y ffilm i'ch defnydd eich hun ond cofiwch nodi yn y "dyddiadur lluniau" rifau'r lluniau a gymeroch ar gyfer yr astudiaeth. Y ffordd orau i wneud hyn yw trwy nodi rhif y llun a ddangosir yn y ffenest "gweddill y lluniau". Caiff y lluniau wedyn eu datblygu a'u hanfon i'ch cyfeiriad cartref.

Y mae'n hanfodol tynnu sylw at rai materion ynglŷn â hawlfraint a'r Ddeddf Gwarchod Data. Oherwydd cyfyngiadau'r Ddeddf Gwarchod Data rhoddir camerâu i oedolion yn unig. Sefydliad y Gwyddorau Gwledig, Prifysgol Cymru Aberystwyth, yw perchennog cyfreithiol ffotograffau'r prosiect. Bydd yr wybodaeth ar gyfer y ffotograffau yn cael eu chadw ar wahân i'r wybodaeth bersonol a gesglir yn yr holiaduron ac fe gaiff ei dinistrio 3 blynedd ar ôl i'r prosiect ddod i ben. Os bydd plant i'w gweld yn y ffotograffau a gymerir ar gyfer yr astudiaeth, cedwir y lluniau ar gyfer dadansoddi data ond ni chânt eu dangos yn gyhoeddus.

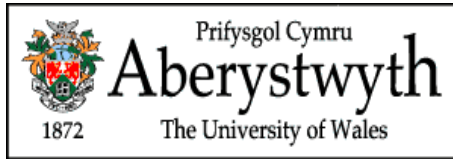
Hoffwn ddiolch i chi unwaith eto am eich amser a'ch ymdrech.

Yn gywir

A handwritten signature in black ink, appearing to be 'Nika', written in a cursive style.

Nika Balomenou

14.5 Letter to tourist participants in the research pack



Dear Participant,

Thank you for taking the time to participate in this research.

The aim of this project is to establish how the tourism planning system in National Parks in Wales works, if it is to the benefit of the environment, the local community and the visitors, and finally to make some suggestions in order to improve it.

The first phase of this research is taking place this summer, using a method called volunteer employed photography. Visitors and locals are given disposable cameras and they are each asked to take 12 pictures of what they value and what they don't like about the place they either visit or live in. They are also given a folder with a "picture diary", where they are asked to explain what is in the picture and why they have taken it.

You are asked to take 12 pictures for the project. The rest of the film is for your own use, but please note in the "picture diary" the numbers of the pictures that are taken for the study. The easiest way to do that is by noting down the picture number displayed in the "remaining pictures" window. The pictures then will be developed and sent to your home address. You are therefore asked to provide us with your contact details, in order for us to send the pictures back to you.

I hope you will be willing to help with this study. The person that handed out the camera to you is going to be at the same place to collect your camera when you return. If this is not the case, it would be really appreciated if you could please send the camera and the diary back to the following address:

Nika Balomenou
Institute of Rural Sciences
University of Wales Aberystwyth
Aberystwyth
Ceredigion
Wales
SY23 3AL

Or call me on: 07702811723 or 01970 622155

It is essential to highlight a couple of things about copyrights and the Data Protection Act. Due to Data Protection Act limitations, only adults are given cameras. The Institute of Rural Sciences, University of Wales Aberystwyth, is the legal owner of the project pictures. The information for the photos will be kept separately from the personal information gathered in the questionnaires and will be destroyed 3 years after the end of the project. If there are children in the pictures taken for the study, the pictures will be used for the data analysis but will not be shown in public.

I would once again like to thank you for your time and effort.

Kind Regards,

A handwritten signature in black ink, appearing to be 'Nika Balomenou', written in a cursive style.

Nika Balomenou

14.6 Example of completed and transcribed diary, L28

Total number of photos taken:

Project related:12

Personal:

Comments: We need visitors to keep coming to St David's – we have lost so many places of work (Brawdy, Trecun and now it seems the St David's Assemblies factory) that tourism is the main source of income for the city.

I think that cheap air fares have had an impact on the higher spenders that used to come here- or that would come here- there is a balance to be made between offering value for money in the accommodation sector and pricing things high that people can fly and stay in a villa on the continent cheaper than they can stay here.

We are back to a balance of things- holiday homes and traffic and affordable holidays. I think camping has been very busy this year, which may say something about the issues.

I would also charge 4*4's a lot more m... for everything- parking/ toll bridges/ they are increasing in numbers in the season.

Were you able to take all the photos you would have liked to take? No

Positive photos that you would have liked to take and were not able to? Whitesands beach- unspoilt- lovely to walk on (and the dog ban should be in force all year).

Are there any negative photos you would have liked to take and were not able to?
The many loud boats that zoom around disturbing wild life and walkers- quite a few people have complained (visitors and locals), but I know they draw in the 'thrill seekers'.

Anything you would like to add? It is very well thought out- I enjoyed it, I hope the responses I made were clear.

1

Photo Number	
Positive or negative?	+
Key features	Recycling point Quickwell St David's
Why is the key feature important to you?	So important to have a place nearby- for locals and visitors. It may also make people think to do it 'at home'.
Rating	1
What would spoil it?	The only changes would be if they were removed- that would be terrible.

2

Photo Number	
Positive or negative?	+
Key features:	Cross, on 'Cross Square' St David's
Why is the key feature important to you?	This ancient stone cross is a focal point for the community- the St David's day events are held here and meeting for the 'coming together' after tragic events such as the tsunami.
Rating	1
What would spoil it?	Because of its position I don't think it can be spoilt.

3

Photo Number	
Positive or negative?	+
Key features:	Coast Path- at St Nons
Why is the key feature important to you?	The coast path is <u>the</u> most important thing here, to be able to watch from my door and in 15 mins I am here, able to walk in this stunning place.
Rating	1

What would spoil it?	If, for some reason, I couldn't walk on it- as when the 'foot and mouth' outbreak occurred- that was an awful time.

4

Photo Number	
Positive or negative?	+
Key features	Coast path- towards Porth Clais
Why is the key feature important to you?	I get so much of my 'inspiration' for my work from here (self employed textile artist) that the path can lead to caves/ rocks/ beaches- all in walking distance- so all my work is really 'local'.
Rating	1
What would spoil it?	If, for some reason, I couldn't walk on it- as when the 'foot and mouth' outbreak occurred- that was an awful time.

5

Photo Number	
Positive or negative?	+
Key features	Public footpath sign near warpool C... Hotel (with view) of Can Llidi.
Why is the key feature important to you?	Again, it's down to how I earn my living- 'inspiration'- and being able to watch from my door and see al this natural beauty- Can Llidi is our highest point- and is a constant source of inspiration.
Rating	1
What would spoil it?	If the path was blocked off or any 'development' occurred to stop access.

6

Photo Number	
--------------	--

Positive or negative?	-
Key features	St Non's apartments
Why is the key feature important to you?	This used to be a very nice hotel- then this happened, I don't like the 'bittiness' ... of it- it doesn't seem right at all. (and it's the second home/ holiday home market).
Rating	7
What can be done to make it better?	It should have been altered in a better way- it's a mis-mash.

7

Photo Number	
Positive or negative?	+
Key features	Bishop's Palace and Cathedral.
Why is the key feature important to you?	The Bishop's palace and Cathedral are important to the area- we have outdoor events in the B. Palace through the year and music concerts in the Cathedral, as well as reminding people about St David.
Rating	1
What can be done to make it better?	The B. Palace is a great example of an ancient ruin, Cadw keeping it safe.

8

Photo Number	
Positive or negative?	+
Key features	Two Canadian visitors revisiting after 17 years!
Why is the key feature important to you?	Visitors are very important to the survival of St David's and all its amenities- by chance these two were Canadian and came 17 years ago- they said it had changed a lot, not as many shops- mere cafés and mere large 4*4 cars blocking things up. (they said they liked it better 17 years ago).

Rating	1
What would spoil it?	If St David's changed too much, to become "any town/city" then the visitors may leave for somewhere else- we do need to keep the area special and to emphasise our strengths- not being afraid to be different from other places.

9

Photo Number	
Positive or negative?	+
Key features	Celtic Coaster bus
Why is the key feature important to you?	This is a great idea- to get people using local buses and leave the car. It would be great to advertise a 'car-free holiday'. I always have a stock of bus timetables in the gallery.
Rating	1
What can be done to make it better?	I hope they will continue to run the services- people will get used to them and use them more.

10

Photo Number	
Positive or negative?	-
Key features	4 new houses- all second/ holiday homes Nun Street.
Why is the key feature important to you?	Built on the site of the old 'city garage' –one was priced <u>over</u> £300,000- no local could afford this- they look awful too- plus it's another 4 homes that will be empty in the winter- thereby depriving ... local economy when everyone needs it most.
Rating	7
What can be done to make it better?	I know we need <u>some</u> holiday homes- but second homes are now pushing the prices up so much that unless there are changes no young people will be able to stay here- it will become a 'theme' village, not a real, living community.

11

Photo Number	
Positive or negative?	+
Key features	Trees- a quiet place near my home.
Why is the key feature important to you?	Again, it's back to my 'inspiration' <u>and</u> finding quiet places, even when there are visitors around I can still find peace to look and notice changes in the landscape and I still find 'nourishment'.
Rating	1
What would spoil it?	If they developed the valley then it would be spoilt.

12

Photo Number	
Positive or negative?	+
Key features	Cycle pathway signs. Y Bont.
Why is the key feature important to you?	I love people leaving their cars behind and walking or cycling- so much better for our roads/ health and environment- it needs to be made more of- <u>and</u> people see and experience a lot more.
Rating	1
What can be done to make it better?	All the roads were built way before 'tourism' – in summer this causes so much gridlock (and ill feeling for some locals). There is a park and ride bus and if people knew how compact 'the village' is they may walk more- a sign/ map may help?

14.7 Example of photo-set, L28

1



2



3



4



5



6



7



8



9



10



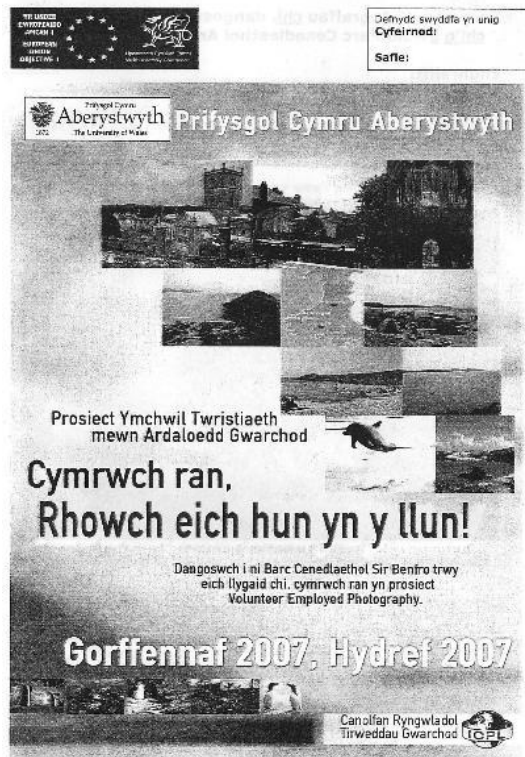
11



12



14.8 Diary sample (scan of original), Welsh



Trwy eich ffotograffau chi, dangoswch sut yr ydych chi'n gweld Parc Cenedlaethol Arfordir Sir Benfro!

Enghraifft:

Llun rhif 27



Llun rhif
27

Disgrifiwch y prif nodwedd(ion) yn y ffotograff.

Helin Trefin

A fydddech chi cystal ag egluro pam y mae'r prif nodwedd(ion) yn y ffotograff hwn yn bwysig i chi?

Dyna fawr prydferth. Roedd fy nhad a y dad a ni yma wastad pan oeddwn yn blant ac yn dweud hanes y lle wrthau. Wedyn prynai nyfen ia i ni a chlonian hyd amsur cino. Dyna un o'm hoff atgoff o'm plentynod.

A yw'r ddelwedd yn cael effaith gadarnhaol neu negyddol ar eich profiad o'r ardal lle rydych yn byw?

Cadarnhaol 1 2 3 4 5 6 7 Negyddol
neu
☐ Ddim yn gwybod

Os mai ffotograff o rywbeth a hoffwch yw hwn, pa newidiadau a fyddai'n ei ddifrethia i chi?

Os mai ffotograff o rywbeth nad ydych yn ei hoffi yw hwn, beth ellid ei wneud i'w wella?

Gwned pobol yn ymryboda o bwrsgarwydd hanesyddol y lle. Cu gwneud i sylweddol i nad hen felyn wedi mynd i'w hon. Mae yna lwytho seonau ac atgaffon y tu ol iddi. Mae i gyd i wneud o'n diwylliant yr ydych yn doli ddaod yma guda'm teulu o brud i'w gylad.

14.9 Project poster, English

 Prifysgol Cymru
Aberystwyth
1872 The University of Wales

University of Wales Aberystwyth



Tourism in Protected Areas
Research Project

Participate, Put yourself in the picture!

Show us Pembrokeshire Coast National Park
through your eyes, participate in our
Volunteer Employed Photography project.

July 2006, October 2006

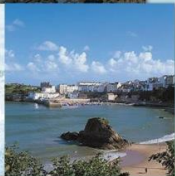


International Centre for
Protected Landscapes 

14.10 Project poster, Welsh

 Prifysgol Cymru
Aberystwyth
1872 The University of Wales

Prifysgol Cymru Aberystwyth



Prosiect Ymchwil Twristiaeth
mewn Ardaloedd Gwarchod

Cymrwch ran, **Rhowch eich hun yn y llun!**

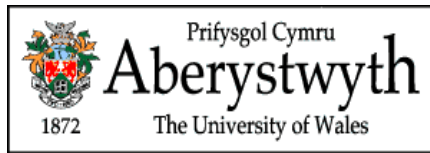
Dangoswch i ni Barc Cenedlaethol Sir Benfro trwy
eich llygaid chi, cymrwch ran yn prosiect
Volunteer Employed Photography.

Gorffennaf 2007, Hydref 2007



Canolfan Ryngwladol
Tirweddau Gwarchod 

14.11 Follow up letter requesting camera and diary



Nika Balomenou
Institute of Rural Sciences
University of Wales, Aberystwyth
Ceredigion
Wales
SY23 3AL

07702811723 or 01970 621693

28 June 2007

Dear

I am writing to you regarding the "Tourism Planning in Protected Areas" PhD Research Project you agreed to participate in, in May this year.

I notice that I haven't yet received your camera. Your photographs are a very important part of the dataset for my PhD project. Perhaps you forgot to hand it back or you didn't have time to finish the project? I would be more than happy to print/develop your photos and send them back to you if you would like me to, when you finish with the task.

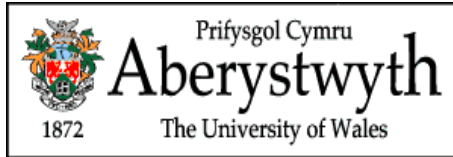
Please accept my apologies and ignore this letter if you have already sent the camera, as our correspondence has probably crossed in the post.

I am really looking forward to hearing from you.

Thank you in advance,

Nika Balomenou

14.12 Thank you letter accompanying participants' copy of the photographs



19 December 2007

Dear

Thank you for taking the time to participate in the Volunteer Employed Photography project. Your effort is much appreciated and your photographs and comments have been very useful.

I am hoping to have some results early next year, which I am hoping to publish. This is a bit later than expected but I had to continue sampling this summer as well to get the sample size needed.

I would once again like to thank you for your time and effort. Please find a copy of your photographs attached to this letter.

Best wishes for a happy Christmas and New Year.

Kind Regards,

Nika Balomenou

14.13 Questions for interviews with planners for 11 September 2008

Questions on planning for interviews on the 11th February

1. What are the first 3 words that come to mind when you think of the geographical area of the NP?
2. What do you think is special about it?
3. What is it that you value the most about this area?

Questions I need to ask

4. How important is tourism for the area? Day trippers or tourists?
5. How important is the National Park designation for the area?
6. What is the relation of tourism planning with land-use planning?
7. What are the tourism planning goals for the area? (How many tourists can the area take? What kind of tourist is the target group? What are the strategies in order to achieve those goals? Do the goals apply to the whole NP or are there different goals for different parts?)
8. How important is public participation in planning?
9. Is public participation ensured? How?
10. What are the levels of public participation in planning and why?
11. Are there sufficient funds for innovative approaches towards participation?
12. What do you think about volunteer employed photography? Do you think it can offer knowledge that was previously difficult to be obtained? What are the possible constraints that would not favour its use?
13. Is it a participatory technique that could potentially work for planning or tourism planning? Can it possibly assist you in resolving planning issues/ conflicts or work as a proactive planning technique?

Questions that would be interesting to have comments on

14. What the planning issues in the area? (Would it be like interrogating them if I ask that?)
15. Second homes. Is it a planning issue? How can it be tackled? Do you think there is a solution to the problem?

16. Are people happy with planning in the area? Do you think local people think that their views are taken into account about the area planning? (question asked to locals as well)

Questions I will ask if I have time

17. In terms of revenue which industry/ industries is the most important for this area?

Examples

1. Bluestone development- controversy regarding this planning decision
2. St David's visitor centre expansion. Were people consulted?
3. Quickwell hill car park charges raised approx £3 in one night and locals have to pay that amount as well. Was there appropriate consultation?
4. Are more parking spaces going to be made available?
5. Are there congestion-relief plans considered for St David's and Solva?
6. More car parking spaces= more tourists?

14.14 Publications resulting from this PhD research

1. Balomenou, N., Garrod, B. (2010). Using Volunteer-employed Photography: Seeing St David's Peninsula through the eyes of locals and tourists. In: Burns et al. *Tourism and Visual Culture Volume 2: Methods and Cases*. London: CABI.
2. Balomenou, N. 2008 Pictures and voices: investigating tensions and conflicts in tourism planning. In: *Voices in Tourism Development, Creating spaces for tacit knowledge and innovation*. The Centre for Cross-Cultural Understanding (CCCU) NHTV, Breda University of Applied Sciences, the Netherlands , 3-5 November 2008
3. Balomenou, N., Garrod, B. (2007). Using Volunteer-employed Photography: Seeing St David's Peninsula through the eyes of locals and tourists. In 6th *International Symposium on Aspects of Tourism: Gazing, Glancing, Glimpsing: Tourists and Tourism in a Visual World*. School of Service Management, Eastbourne, University of Brighton, UK, 13-15 June 2007