

**School of Design and the Built Environment**

**Designing Activist Spatial Experiences Using Mixed-Media  
Virtual Environments**

**Rusaila Bazlamit**

**This thesis is presented for the Degree of**

**Doctor of Philosophy**

**of**

**Curtin University**

**December 2018**



## Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

The research presented and reported in this thesis was conducted in accordance with the National Health and Medical Research Council National Statement on Ethical Conduct in Human Research (2007) – updated March 2014. The proposed research study received human research ethics approval from the Curtin University Human Research Ethics Committee (EC00262), Approval Number HRE2016-0471.



---

**Rusaila Bazlamit**

18<sup>th</sup>/ December/ 2018



## Abstract

Memorial and conflict museums have communicated historical events like the Holocaust in Europe or Apartheid in South Africa. However, people in long-running or ongoing contemporary conflicts do not have the capacity to build physical spaces to communicate what is happening to them or raise awareness about their situation. Therefore, this research investigated how to design “activist spatial experiences” using low-cost immersive and interactive media to communicate complex political narratives, that do not depend on creating actual architectural structures.

This research followed a design-led research model, which meant that a prototype was designed, tested, and evaluated. The prototype created was titled “re:Visit Palestine”. The prototype focused on communicating Palestinian narratives and spatial experiences of occupation and apartheid. Before designing the prototype, extensive background research was conducted which included reviewing the literature about design activism, creating experiences in affective spaces, and creating experiences using digital and interactive media. Three case studies were conducted on existing experiential memorial spaces. As the research used the Palestinian situation as an archetype, it was also important to map contemporary Palestinian artworks and films to understand the themes and approaches for representing Palestine, the Palestinians, and their experiences of living under occupation.

This background research resulted in a set of design considerations that informed the process of creating and designing the prototype. The designed prototype consisted of an interactive virtual environment and video projections. A key consideration of the design process was that it had to be implemented using low-cost, readily available hardware and software, and not require expert technicians. Additionally, it had to be easily transportable, and flexible enough to utilise a variety of venue spaces.

Key experts from different disciplines related to the research were invited to test the prototype. Their interactions and feedback were documented through observational recording of their interactions with the experience, and also their reflective discussions.

The test findings revealed how the initial design considerations were reflected in the process of design and how the final prototype responded to them. These findings also included the common themes and challenges that were identified by the expert test group and how these related to the initial design intentions and decisions.

The analysis of these findings subsequently informed the proposed further development of this specific prototype, and also produced a set of recommendations for how this type of activist spatial experiences might be applied to other contested or complex political narratives, especially for misrepresented or under-resourced people.

# Table of Contents

Declaration .....	iii
Abstract .....	v
Table of Contents .....	vii
List of Figures .....	xiii
Abbreviations .....	xix
List of Presentations and Publications .....	xxi
Acknowledgements .....	xxiii
Dedication .....	xxv
<b>Chapter 1. Introduction .....</b>	<b>1</b>
1.1 Motivation .....	1
1.2 Research Question and Significance .....	2
1.3 Methodological Framework .....	3
1.3.1 Research Position within the Design Discipline .....	3
1.3.2 The Researcher's Position within the Research .....	6
1.4 The Palestinian Situation .....	7
1.4.1 Historical Background .....	8
1.4.2 The Current Situation .....	11
1.4.3 Western Media's Coverage of the Situation .....	15
1.5 Limitations of this Research .....	17
1.6 Structure of the Thesis .....	18
<b>Chapter 2. Literature Review .....</b>	<b>21</b>
2.1 Introduction .....	21
2.2 Political, Art and Design, and Social Media Activism .....	21
2.2.1 Art and Design Activism .....	22
2.2.2 Activism and Social Media .....	34
2.2.3 Palestinian Activism in Online and Social Media .....	36
2.2.4 Identified Literature Gaps .....	41
2.3 Designing Experiences in Affective Spaces .....	42
2.3.1 Embodied Experiences .....	43
2.3.2 Affective Spaces .....	44
2.3.3 Identified Literature Gaps .....	46
2.4 Designing Experiences through Digital and Interactive Media .....	47
2.4.1 Introduction to Digital and Interactive Media .....	47
2.4.2 Using Digital Media in Museums .....	51

2.4.3	Serious Gaming and Gamification .....	54
2.4.4	Using Digital and Interactive Media in Cultural Heritage .....	63
2.4.5	Identified Literature Gaps .....	66
2.5	Summary .....	68
<b>Chapter 3. Methods .....</b>		<b>71</b>
3.1	Introduction .....	71
3.2	The Methodological Framework.....	71
3.3	The Methods .....	72
3.3.1	Stage 1: Background Research.....	72
3.3.2	Stage 2: Prototype Design .....	74
3.3.3	Stage 3: Prototype Testing and Evaluation .....	76
3.3.4	Stage 4: Reflections Discussion and Conclusions.....	78
3.4	Ethical Considerations .....	79
3.5	Summary .....	81
<b>Chapter 4. Case Studies: Existing Experiential Memorial Spaces.....</b>		<b>83</b>
4.1	Introduction .....	83
4.2	Memorial Museums .....	84
4.3	United States Holocaust Memorial Museum (USHMM), United States of America.....	88
4.4	Apartheid Museum, South Africa .....	100
4.5	The Australian War Memorial, Australia.....	111
4.6	Summary .....	120
<b>Chapter 5. Mapping Existing Palestinian Visual Culture Production Scene .....</b>		<b>123</b>
5.1	Introduction.....	123
5.2	Palestine as the Fragmented Terrain of Memory, Occupation and Imagination .....	125
5.3	The Evolution of the Palestinian Hero Image .....	140
5.4	Communicating the Experiences of Living under Occupation in Palestine .....	153
5.5	Summary .....	159
<b>Chapter 6. The Process of Developing and Designing the Prototype "re:Visit Palestine".....</b>		<b>161</b>
6.1	Introduction .....	161
6.2	Design Considerations for the Proposed Solution .....	161
6.3	Experimentation and Exploration .....	165
6.4	Ideation and Envisioning the Design Solution.....	170
6.4.1	Brainstorming Ideas and Concepts.....	170



6.4.2	The Conceptual Framework .....	173
6.4.3	The Experiential Framework.....	175
6.4.4	The Narrative .....	177
6.4.5	The Assets .....	180
6.5	Developing the Final Prototype .....	185
6.5.1	Concise Description of the Final Prototype .....	186
6.5.2	Developing the Virtual Environment .....	187
6.5.3	Developing the Video Projections .....	192
6.5.4	Working on the Leap Motion .....	193
6.5.5	Setting up the Prototype .....	193
6.5.6	Choosing a Name for the Prototype .....	194
6.6	Summary .....	196
<b>Chapter 7. Testing and Evaluation of the Prototype “re:Visit Palestine” .. 199</b>		
7.1	Introduction.....	199
7.2	The Process of Testing and Evaluation.....	199
7.2.1	Methods of Documenting Feedback .....	201
7.2.2	Information about the Expert Focus Group .....	202
7.3	Presentation of Findings and Design Issues.....	204
7.3.1	The Interactivity Framework.....	204
7.3.2	The Conceptual Framework.....	209
7.3.3	The Experiential Framework.....	213
7.3.4	The Visual Aesthetic Framework.....	215
7.4	Summary .....	216
<b>Chapter 8. Discussion of the Design Considerations, Decisions and Testing Feedback..... 219</b>		
8.1	Introduction.....	219
8.2	Did the Design Achieve the Initial Set of Design Considerations? .....	219
8.3	Discussion of the Key Themes and Challenges .....	225
8.3.1	Using Game Engines to Create Spatial Experiences Based on Political Narratives .....	226
8.3.2	The Use of the Leap Motion Controller .....	231
8.3.3	Relying Solely on Virtual Environments versus Using Physical Props.....	234
8.3.4	The Presentation of Digital Online Footage.....	236
8.3.5	The Use of Multiple Projections and Multimedia.....	238
8.3.6	Employing Cultural Icons as Guides.....	242
8.3.7	The Duration of the Prototype.....	246
8.3.8	The Interface and the Visual Elements of the Design.....	248

8.3.9	The Cognitive and Emotive Presentation of Counter-Narratives in Activist Spatial Experiences.....	250
8.4	Summary .....	254
<b>Chapter 9. Recommendations and Design Considerations for Future Development of the Prototype “re:Visit Palestine.” .....</b>		<b>257</b>
9.1	Introduction .....	257
9.2	Design Considerations for Future Developments of the Prototype .....	257
9.2.1	The Interactivity Framework.....	258
9.2.2	The Conceptual Framework .....	260
9.2.3	The Experiential Framework.....	262
9.2.4	The Visual Aesthetic Framework.....	263
9.2.5	Proposed Plan of Action.....	264
9.3	Possible Future Exhibiting Scenarios .....	265
9.3.1	Exhibition at an Art Gallery .....	265
9.3.2	The Project as a Mobile Application.....	270
9.4	Summary .....	271
<b>Chapter 10. Conclusion .....</b>		<b>273</b>
10.1	Summary of Chapters.....	273
10.2	Outcomes and Observations.....	276
10.3	Future Work .....	277
References .....		279
<hr/> <b>APPENDICES</b>		291
<hr/> <b>Appendix A The Ethics Approval Paperwork.....</b>		<b>293</b>
A.1	The Ethics Approval Letter .....	293
A.2	A Sample from the Invitation for Participation Email .....	295
A.3	Consent Form Sent to Participants .....	296
<b>Appendix B Copyright Releases .....</b>		<b>299</b>
B.1	Permissions to Use my Own Published Work .....	299
B.2	Thesis Images Copyrights .....	302
Explanation of Copyright Licences .....		305

<b>Appendix C</b>	<b>List of Palestinian Artworks Discussed in this Thesis.....</b>	<b>307</b>
<b>Appendix D</b>	<b>List of Films Discussed in this Thesis .....</b>	<b>311</b>
<b>Appendix E</b>	<b>Visual Documentation of the Prototype .....</b>	<b>313</b>
E.1	Brainstorming Sketches .....	313
E.2	Images from Inside the Virtual Environment .....	320
E.3	Flow Diagram of the Spatial Experience .....	322
E.4	Installation Documentation Images .....	323
E.5	The Textual Displays Appearing in the Virtual Environment .....	329
E.6	Mind Map of the Intersectionality between the Different Frameworks ...	340
<b>Appendix F</b>	<b>The Test Questionnaire.....</b>	<b>343</b>
F.1	A Sample from the Invitation Email to Fill in the Questionnaire.....	343
F.2	The Questionnaire .....	344
<b>Appendix G</b>	<b>Summary of the Debriefing Sessions following the Test Sessions .....</b>	<b>347</b>
G.1	Session 1: .....	347
	General reflections on the experience.....	347
	Handala, and their positionality within the experience.....	348
	Reflections on using the Leap Motion.....	349
	One thing that you would change about it .....	349
G.2	Session 2: .....	350
	General reflections on the experience.....	350
	Handala, and their positionality within the experience.....	351
	Reflections on using the Leap Motion.....	351
	One thing that you would change about it .....	352
G.3	Session 3: .....	353
	General reflections on the experience.....	353
	Handala, and their positionality within the experience.....	354
	Reflections on using the Leap Motion.....	354
	One thing that you would change about it .....	355
G.4	Session 4: .....	357
	General reflections on the experience.....	357
	Handala, and their positionality within the experience.....	357
	Reflections on using the Leap Motion.....	358
	One thing that you would change about it .....	359
G.5	Session 5 .....	360
	General reflections on the experience.....	360

Handala, and their positionality within the experience.....	360
Reflections on using the Leap Motion .....	361
One thing that you would change about it .....	361
<b>G.6 Session 6 .....</b>	<b>363</b>
General reflections on the experience .....	363
Handala, and their positionality within the experience.....	364
Reflections on using the Leap Motion .....	364
One thing that you would change about it .....	365
<b>Appendix H Proposed Plan of Action for Future Development of the Prototype “re:Visit Palestine” .....</b>	<b>367</b>

## List of Figures

Figure 1.1: Magne Hagesæter, Inside Hawara Checkpoint, in the Occupied West Bank, Palestine. Reproduced from Wikimedia Commons (Hagesæter 2006).	12
Figure 1.2: Yazan Jwailes, The Separation Wall between Beit Hanina and Ramallah. Reproduced from Wikimedia Commons (Jwailes 2017).	14
Figure 1.3: Andrew E. Larsen, Checkpoint 300 in Bethlehem. Reproduced from Flickr (Larsen 2011).	14
Figure 2.1: Jonathan Rashad, Tahrir Square -February 9, 2011. Reproduced from Wikimedia Commons (Rashad 2011).	31
Figure 2.2: Visualizing Palestine, 2018. <i>Bethlehem Besieged</i> . Reproduced from their website (Visualizing Palestine 2018).	38
Figure 2.3: Palestine Open Maps, screenshot from their website.	39
Figure 2.4: Palestinian Journeys, screenshot from their website.	40
Figure 4.1: AgnosticPreacherKid, <i>The Hall of Witnesses at the USHMM</i> . Reproduced from Wikimedia Commons (AgnosticPreacherKid 2010b).	92
Figure 4.2: Noor Nader, The Tower of Life at the USHMM. Reproduced from Wikimedia Commons (Nader 2016).	95
Figure 4.3: Estigman, The Piled Shoes at the USHMM. Reproduced from Wikimedia Commons (Estigman 2017).	96
Figure 4.4: AgnosticPreacherKid, The Hall of Remembrance at the USHMM. Reproduced from Wikimedia Commons (AgnosticPreacherKid 2010a).	97
Figure 4.5: NJR ZA, The exterior of the Apartheid Museum, South Africa. Reproduced from Wikimedia Commons (ZA 2008).	102
Figure 4.6: Raymond June, The Segregated Door at The AM. Reproduced from Flickr (June 2010).	105
Figure 4.7: Keso S, The Ramp at the AM. Reproduced from Flickr (Keso S 2009).	106
Figure 4.8: Steven dosRemedios, Interior shot at the AM. Reproduced from Flickr (dosRemedios 2015).	108
Figure 4.9: Australian War Memorial, <i>Dust Off</i> display featured an Iroquois helicopter. Reproduced from AWM website (Australian War Memorial 2018).	116

Figure 4.10: Australian War Memorial, Kapyong diorama from the <i>Korean War Trenches</i> . Reproduced from AWM website (Australian War Memorial 2018).....	117
Figure 4.11: Bidgee, The Reflecting Pool Leading to the Hall of Remembrance at the AWM. Reproduced from Wikimedia Commons (Bidgee 2009). .....	119
Figure 5.1: Elia Suleiman, <i>The Time That Remains</i> . 2009, still image from film. Reproduced from <a href="http://heidisaman.tumblr.com/">http://heidisaman.tumblr.com/</a> (Suleiman 2009). .....	127
Figure 5.2: Larissa Sansour, <i>A Space Exodus</i> . 2009, Video 5' 24''. Reproduced from the artist's website (Sansour 2009). .....	128
Figure 5.3: Emily Jacir, <i>Memorial to 418 Palestinian Villages Which Were Destroyed, Depopulated, and Occupied by Israel in 1948</i> . 2001, refugee tent, embroidery thread, record book, dimensions variable. Reproduced from Documenta14 website (Jacir 2001).....	130
Figure 5.4: Emily Jacir, <i>Ramallah/New York</i> . 2004–2005, Two-channel video, 38' 50''. Reproduced from MoMa's website (Jacir 2004-2005).....	132
Figure 5.5: Sandi Hilal and Alessandro Petti, <i>Stateless Nation</i> . 2003, installation, the 50th Venice Biennale, Venice. Reproduced from <a href="http://heimoaga.com">heimoaga.com</a> (Hilal and Petti 2003). .....	133
Figure 5.6: Larissa Sansour, <i>Nation Estate</i> . 2012, Photography and video, 9'. Reproduced from the artist's website (Sansour 2012).....	134
Figure 5.7: Larissa Sansour, <i>Nation Estate</i> . 2012, Photography and video, 9'. Reproduced from the artist's website (Sansour 2012).....	135
Figure 5.8: Unknown, A woman holding her old house key. Reproduced from Palestine News Network website. ....	138
Figure 5.9: Larissa Sansour, <i>Nation Estate</i> . 2012, Photography and video, 9'. Reproduced from the artist's website (Sansour 2012).....	139
Figure 5.10: Justin McIntosh, Palestinians wearing Che Guevara t-shirts. Reproduced from Wikimedia Commons (McIntosh 2004). .....	142
Figure 5.11: Eman, Graffiti supporting Marwan Barghouti on the Separation Wall, near the Qalandia checkpoint north of Jerusalem. Reproduced from Wikimedia Commons (Eman 2007). .....	144
Figure 5.12: Rawan Mansour, <i>Leila Khaled</i> . Reproduced from the artist's portfolio on Devian Art website (Mansour 2012).....	145
Figure 5.13: Sharif Waked, <i>To Be Continued...</i> 2009, Video 41' 33''. Reproduced from the Guggenheim Museum website (Waked 2009). .....	147
Figure 5.14: Mo3, <i>We Are Your People</i> "translated text". 2015, Photomontage. Reproduced from the artist's Facebook page (Mo3 2014-ongoing ). .....	148

Figure 5.15: Mo3 <i>Samidoun Here</i> “translated text”. 2014, Photomontage. Reproduced from the artist’s Facebook page (Mo3 2014-ongoing ).	149
Figure 5.16: Raeda Saadeh, <i>Mona Lisa</i> . 2007, Photography, 109 x 81 cm. Reproduced from Curiator (Saadeh 2007).	150
Figure 5.17: Jorit Agoch and two Anonymous artists, Ahed Tamimi mural on the Separation Wall. Reproduced from Wikimedia Commons (Marsupium 2018).	151
Figure 5.18: Unknown, <i>Israel Targets Children</i> . 2000, Poster. Reproduced from The Palestine Poster Project Archives (“Israel Targets Children” 2000).	152
Figure 5.19: Hany Abu-Assad, <i>Omar</i> . 2013, Film (still shot). Reproduced from the film’s page on IMDB (Abu-Assad 2013).	155
Figure 5.20: Elia Suleiman, <i>The Time That Remains</i> . 2009, still image from film. Reproduced from YouTube (Suleiman 2009).	155
Figure 5.21: Raeda Saadeh, <i>Vacuum</i> . 2013, Two channel video installation, 17’ 07”. Reproduced from Sharjah Art Foundation website (Saadeh 2013).	157
Figure 5.22: Taysir Batniji, <i>To My Brother</i> . 2013, Series of 60 hand carvings from photographs on paper, 30,5 x 40,5 cm. Reproduced from the artist’s website (Batniji 2012).	158
Figure 6.1: Naji Al-Ali. Handala, 1975. Reproduced from Handala website (Handala 2017).	175
Figure 6.2: An early conceptual image of the intended virtual environment.	176
Figure 6.3: The structure and highlights of the narrative.	178
Figure 6.4: A still shot towards the end of the Jaffa scene.	178
Figure 6.5: A still shot towards the beginning of the Jerusalem scene.	179
Figure 6.6: A still shot at the end of the Gaza scene.	180
Figure 6.7: Comparison between inspiration images from Palestine and 3D assets created in the VE.	181
Figure 6.8: James Swift. a 3D model of Handala, 2014. Reproduced from the artist’s website (Swift 2014).	184
Figure 6.9: A schematic layout illustrating the prototype’s current setup.	186
Figure 6.10: The installation during one of the test sessions.	187
Figure 6.11: At a point in the Jerusalem scene inside the VE.	188
Figure 6.12: Elia Suleiman. <i>The Time That Remains</i> , 2009, Still image from the film (Suleiman 2009).	191
Figure 6.13: At the end of the experience. Only Handala can be seen in the corner.	191

Figure 6.14: An example of the navigation map inside the virtual environment and a close up of the map.....	192
Figure 6.15: A member of the test group using the Leap Motion embedded in a custom-built plinth. ....	194
Figure 6.16: A comparison between the original <i>Visit Palestine</i> poster by Franz Krausz, 1939, and the new Visit Palestine poster by Amer Shomali, 2010. Reproduced from Art and Social Movements website (Hay 2011). ....	195
Figure 6.17: The prototype's poster.....	196
Figure 7.1: A wide view from the exhibition during one of the test sessions. ....	200
Figure 7.2: The participants' gender. ....	202
Figure 7.3: The participants' age groups.....	202
Figure 7.4: The participants' main fields of experience (they could choose more than one).....	202
Figure 7.5: The participants' prior knowledge of the Palestinian/Israeli Situation. ....	203
Figure 7.6: The participants' knowledge of the Palestinian/Israeli situation after experiencing the exhibition. ....	203
Figure 7.7: The participants' change of attitude toward the Palestinians after the experience of the exhibition. ....	204
Figure 7.8: Recommendation of the exhibition for future experiencers. ....	204
Figure 7.9: The effect of the virtual environment. ....	206
Figure 7.10: The participants' confidence in using technology. ....	207
Figure 7.11: The participants' confidence in playing video games. ....	207
Figure 7.12: The difficulty in using the Leap Motion Controller. ....	208
Figure 7.13: The lack of instructions to using the Leap Motion Controller.....	208
Figure 7.14: The objectivity of the exhibition.....	209
Figure 7.15: The relationship between the participants and Handala "the guide". ....	211
Figure 7.16: Handala walking in the Jaffa scene inside the VE.....	212
Figure 7.17: The content of the videos.....	213
Figure 7.18: The use of mixed media.....	214
Figure 7.19: The duration of the exhibition. ....	215
Figure 7.20: The use of sound in the exhibition.....	216
Figure 8.1: A screenshot illustrating a point in the Jerusalem scene. The experiencer is inside a checkpoint card while the video shows Palestinians attempting to pass through the Qalandia checkpoint in Jerusalem.....	220
Figure 8.2: The Leap Motion controller.....	223



Figure 8.3: A comparison between the Apartheid Museum in South Africa and the VE in the Gaza scene. ....	228
Figure 8.4: Top image shows the information presented before attempting to pass through a crossing in Jerusalem while holding a Gaza ID card. The bottom image shows what the experiencer will encounter as they proceed at the Jerusalem scene in the VE. ....	229
Figure 8.5: Palestinians crammed at Qalandia crossing. Image still from a video. Reproduced from B'Tselem website (B'Tselem 2018). ....	234
Figure 8.6: A screenshot illustrating a point in the experience. The experiencer is standing inside a refugee tent while a video of a refugee old lady is being shown. ....	237
Figure 8.7: During a test session demonstrating a point in the experience with a text display in the middle and video projected on the side walls. ....	239
Figure 8.8: Handala walking in the first scene in Jaffa. ....	242
Figure 8.9: A conceptual image of how a 3D Handala will look like in the virtual environment. ....	243
Figure 8.10: Screenshots from video made by two young Palestinian twins about living in East Jerusalem (The Guardian 2011). ....	245
Figure 8.11: An example of a textual display with a QR code that appeared in the VE. ....	249
Figure 8.12: A screenshot from a video of an Israeli activist explaining the inhumane situation at Qalandia Checkpoint in Jerusalem (Partners for Progressive Israel 2015). ....	253
Figure 9.1: Proposed plinth with a modified joystick on top. ....	268
Figure 9.2: A member of the test group using the Leap Motion embedded in a custom-built plinth. ....	268
Figure 9.3: Sabella, S., Revolving gates used at an Israeli checkpoint. Reproduced from Palestine Photo Bank website (Sabella). ....	269



## Abbreviations

<b>AM</b>	Apartheid Museum, South Africa
<b>ANC</b>	African National Congress, South Africa
<b>AR</b>	Augmented Reality
<b>AWM</b>	Australian War Memorial, Australia
<b>CH</b>	Cultural Heritage
<b>HMD</b>	Head-Mounted Display
<b>ID</b>	Identification Cards
<b>INGO</b>	International Non-Governmental Organisation
<b>MR</b>	Mixed Reality
<b>NATO</b>	The North Atlantic Treaty Organisation
<b>NPC</b>	Non-Player Character
<b>PA</b>	The Palestinian Authority
<b>PLO</b>	The Palestinian Liberation Organisation
<b>RToP</b>	The Russel Turbinal on Palestine
<b>SGs</b>	Serious Games
<b>SVWs</b>	Serious Virtual Worlds
<b>UN</b>	United Nations
<b>UNRWA</b>	The United Nations Relief and Works Agency for Palestine Refugees in the Near East
<b>UK</b>	The United Kingdom
<b>US</b>	The United States of America
<b>USHMM</b>	The United States Holocaust Memorial Museum, US
<b>VE</b>	Virtual Environment
<b>VH</b>	Virtual Heritage
<b>VR</b>	Virtual Reality



## List of Presentations and Publications

Different parts of the thesis have been presented in national and international conferences, as follows:

- Bazlamit, R. 2017. "Using Interactive Installations in Spatial Communication of Complex Political Narratives." Paper presented at *Art and Its Directions: AAANZ 2017 Conference*, The University of Western Australia, Australia, December 2017.
- Bazlamit, R. 2017. "Re:Visit Palestine; Communicating Experiential and Spatial Qualities of The Occupation of Palestine Using Mixed Video-Virtual Environment." Paper presented at *Palestine and the West: History, Contemporary Realities and Challenges Ahead*, The University of Adelaide, Australia, November 2017.
- Bazlamit, R. 2017. "Communicating Experiential and Spatial Qualities of Complex Political Narratives Using Mixed Video-Virtual Environments." Paper presented at *Through the Looking Glass: Back to the Future of VR*, Dublin, Ireland, October-November 2017.
- Bazlamit, R. 2016. "The Evolving Visual Representation of Palestinian Heroes Since 2000." Paper presented at *The Rise and Future of Heroism Science Conference*, Murdoch University, Australia, July 2016.

Different parts of the thesis have been submitted for publications as follows:

- Bazlamit, R. Forthcoming (2020). "From Never Again to Not Ever: Creating Activist Spatial Experiences." In *Affective Architectures: More-than-representational Approaches to Heritage*, Jacque Miciellie-Voutsinas and Angela Person, eds., US: Routledge.
- Bazlamit, R. 2018. "Communicating Experiential and Spatial Qualities of The Occupation of Palestine Using Mixed Video-Virtual Environments", *Virtual Creativity*, 8 (1): 7-21. doi: 10.1386/vcr.8.1.7\_1.
- Bazlamit, R. 2017. "Communicating Experiential and Spatial Qualities of Complex Political Narratives Using Mixed Video-Virtual Environments." In 2017 23<sup>rd</sup> International Conference on Virtual System and Multimedia (VSMM), 1-8. IEEE. <https://doi.org/10.1109/VSMM.2017.8346254>.



## Acknowledgements

Going through this research journey was not a smooth ride. But I have been blessed with kindness, support, love and encouragement that made it possible to see this journey come to a fruitful end. First, I would like to thank my supervisor Dr Andrew Hutchison for supporting me throughout this research; his guidance has kept me on track. And his constant encouragement made me see the finish line. I would also like to thank my co-supervisor Prof Erik Champion for his valuable insights and feedback which has strengthened my arguments.

I would like to acknowledge the contribution of an Australian Government Research Training Program Scholarship in supporting this research.

I would also like to thank Dr Dean Chan, a research development consultant, for proofreading the thesis. Dr Chan's research expertise centres on cultural studies, digital media and visual culture in the Asia-Pacific region. I would also like to thank the two thesis examiners whose valued input have helped refine the final shape of this thesis and strengthen the overall arguments.

I would like to thank Kevin Raxworthy and Amy Hickman, technical officers from the School of Design and Art (now School of Media, Creative Arts and Social Inquiry) for their technical assistance. Kevin and Amy accommodated the technical needs of exhibiting the research's prototype; they were supportive and encouraging and made it less stressful for me. I would also like to thank my sister Saffiya Bazlamit, who is a freelance animator, for creating the animation frames for the guide "Handala" which were later used in the prototype.

On May 2013 I had a Skype chat with my sister Zainab who is two years my junior. Among the many things we talked about, I told her that I am seriously considering doing a PhD, though I had some hesitations about my ability to go through it. She encouraged me to do it. She said that if anyone can do it, it would be me. Several days later, Zainab passed away unexpectedly. Her death will forever be the most traumatic event of my life and I have never been the same person again. Just under a year later I started my PhD and now, here I am writing the acknowledgment of my thesis. I would have never made it without my sister's belief in me. She was, is and will always be

one of my biggest supporters. The least I can do to honour her is to dedicate everything I will ever achieve to her.

It was not possible for me to finish this research without the pouring love and support I received from my family. I would like to thank my husband Mohammad for supporting, encouraging, and taking care of me. All my love and gratitude for my children, Yusuf and Lujain, who made this journey more challenging but truly worth the while. My parents Issa and Fani, my siblings, Hail, Lubna, Ali, Aicha and Saffiya, and my mother-in-law Shifa were always there for me when I needed love, encouragement or a boost of self-esteem. Special thanks to Lubna, for she had to put up with a lot of my meltdowns and she has been, as always, the best big sister anyone can have.

I also want to thank my aunt, Dr Suha Bazlamit. She was the first woman to earn a doctorate degree in my family. She has shown me that with determination and hard work you can accomplish anything you set your mind on and that you can achieve what nobody thought you can.

I would also like to thank my good friends, Alissar, Asma, Hanan, Mona and Sameeha, who stood by me, cheering for me, listening to me and supporting me all the way. Their love and support have kept me sane, and no words of gratitude can do them justice. I am blessed to have them all as my friends. I am also grateful for the long list of friends and people who were kind to me, babysat my children and offered help in the different ways they could. I wish I can list all of their names here, but I hope that they know who they are and that I am thankful for everything they did for me. I would also like to thank all my virtual PhD companions at the “PhD and Early Career Researcher Parents” Facebook group and its two sub-groups the “Virtual SUAW - Parents Edition” and the “Full Draft Club”, for their continuous support, encouragement, guidance and company. It is indeed true that behind every successful woman there is a tribe of other successful women having her back. And my tribe was the best.



## **Dedication**

To all of those standing against injustice in Palestine and elsewhere around the world, I stand with you in solidarity, now and always. One day justice shall prevail.

To my parents Issa and Fani, for everything they did for me.

To my children Yusuf and Lujain, may the world be a better place for them.

To my sister Zainab (may she rest in peace), for everything she is to me.



# Chapter 1. Introduction

## 1.1 Motivation

“There’s really no such thing as the ‘voiceless’. There are only the deliberately silenced, or the preferably unheard.” (Roy 2004)

“What makes it possible for us as human beings to face the facts, to manufacture new ones, or to ignore some and focus on others?” (Said 1984, 47)

I was born to a Palestinian father and a Macedonian mother. Both of my parents have citizenships that are different to their homelands as they have been displaced from their homelands. Having this heritage has affected my views from an early age. During my teenage years, the First Gulf War, the dissolution of Yugoslavia and the war that ensued afterwards, and the ongoing situation in Palestine had formative effects on my understanding of the world. During my university years, September 11 happened, the Second Gulf War took place, and I remember the morning we woke up to the horrible news that Baghdad has fallen. During those years, the Second Intifada happened as well as the Israeli operation Defensive Shield which included the assault on Jenin refugee camp. At that time, there was little that I could do besides attending various demonstrations protesting those aggressions.

I grew up having a critical sensibility about the politics of our world. I was always interested in learning more about the misrepresented and the silenced. I always felt the urge to do something, to raise my voice and the voices of those I felt were being silenced or ignored.

When I decided to pursue my doctoral degree, I wanted to use my skills in something I believed in, namely, activism. Fuad-Luke uses the term “design-led activism” to refer to design actions that are aimed at addressing activist issues or causes altruistically (Fuad-Luke 2013). This concept has resonated with me. As a designer, I am interested in exploring interactive and immersive environments, especially by using low-cost technology. My background in architecture influences my perception of space and spatial experiences. Therefore, I wanted to try combining activism, digital

and interactive media, low-cost technology, and spatial experiences together in one research project. And this is how this research came into being.

## **1.2 Research Question and Significance**

The core question of this research is investigating how to design “activist spatial experiences” using low-cost immersive and interactive media to communicate complex political narratives. The research looks explicitly at narratives from the occupation of Palestine. The Palestinian situation is thus used as an archetype to demonstrate how this process of design can be applied to complex contemporary political conflicts that involve under-resourced and misrepresented people.

To address this question, the research has these primary objectives:

1. To explore how experience, objects of memory, and narrative have been used to create didactic and affective engagement within architectural spaces that communicate historical and political events.
2. To explore and understand how the situation of Palestine and the experiences of Palestinians living under the occupation have been creatively expressed in visual culture.
3. To create and evaluate a prototype of an activist spatial experience using low-cost digital and interactive media to communicate narratives from the Palestinian situation<sup>1</sup>.
4. To generate design considerations that can inform similar activist spatial experiences that are applied in other contemporary political situations involving misrepresented or under-resourced people.

A new wave of critical thinking and researching about Palestinian narratives is emerging, led by historians, political analysts, artists, architects and literature specialists. Through my research, I am building on this by exploring in depth how Palestinian narratives of occupation and apartheid can be documented and shared with

---

<sup>1</sup> I consciously use “situation” rather than “conflict” to refer to the political situation in Palestine. In the following section, I will explain this decision.

people around the world through the effective utilisation of digital and interactive media.

This research will also introduce the term “activist spatial experiences” to describe a new kind of exhibition that is created from an activist point of view. These exhibitions are designed to be mobile, temporal, adaptable and low-cost. These “activist spatial experiences” will add to the investigation of possible media exposure for political narratives, which have been contested, over-shadowed, neglected or silenced by better-resourced narratives.

### **1.3 Methodological Framework**

The research question draws on different disciplines; therefore, the research is interdisciplinary. Determining the suitable methods required synthesising different approaches to draw the required knowledge from these disciplines. As the research falls directly under the design discipline, I needed to explore possible methodological frameworks that can achieve the objectives of this research.

#### **1.3.1 Research Position within the Design Discipline**

Many scholars view design as a human action that is not rigid in its scope, processes or media. Anyone who creates an action that changes an existing situation into better ones can be considered a designer (Simon 1969, cited in Fuad-Luke 2013, 4). Papanek sees design even more broadly; everyone is a designer by nature. For him, design is fundamental to all human activities (Papanek 1985). Design can be seen as a way of life (Oosterling 2011). This kind of broad understanding of design informed Fuad-Luke’s definition of design: “Design is the act of deliberately moving from an existing situation to a preferred one by professional designs or others applying design knowingly or unknowingly” (Fuad-Luke 2013, 5).

Several terminologies are used to combine practice and research. Sometimes other terms that relate to practice are used, for example, process, studio, art or design (Biggs 2006). These are the most widely used terminologies:

- Design-*oriented* research versus research-*oriented* design.

Fallman proposed a distinction between the terms research-*oriented* design and design-*oriented* research (Fallman 2007). Design-*oriented* research is a process of using design as the means to produce new knowledge, meaning that the design is the component that drives the research (Fallman 2007), whereas, in research-*oriented* design the process is reversed. The research is the means to produce new designs, meaning that the research component drives the design (Fallman 2007).

- Research *through, for* or *into* art and design.

Frayling distinguished between research *into* art and design, research *through* art and design, and research *for* art and design (Frayling 1993). Frayling identified research *through* art and design as research where the creative production process is the primary research method (Frayling 1993). When design and art are considered the subject and the methods of the inquiry then the research is *into* and *through* art and design (Scrivener 2009). Scrivener pointed out that Frayling's categories are not indicating different types of research; instead, he focused on the different roles of art and design in the research, whether art and design were the subjects, the methods or the goals of the research (Scrivener 2009).

- Practice-*based* research.

Rust, Mottram and Till defined practice-*based* research, as the research in which the practitioner and/or the creative process has an essential role in the inquiry (Rust, Mottram and Till 2007). The processes of research and inquiry are dynamically evolving, placing practice at the heart of the research (Gray 1998). In the practice-*based* research model, research is initiated in practice, by identifying questions and challenges by the needs of the practice or practitioners. The research is then conducted through practice using methods that are known and suitable for practitioners in art and design (Scrivener 2009). Design-*based* research combines Frayling's definitions of research *through* practice and research *into* practice whereby design is both the subject and a method of inquiry (Scrivener 2009).

- Practice-*led* research.

Practice-*led* and practice-*based* research terms have been used interchangeably (Mäkelä 2009). The two terms are used to describe research that

includes creative production or works of art and design (Scrivener 2009). The definition of practice-*led* research should focus on understanding the role of creative production in the overall research (Rust, Mottram and Till 2007). For Gray, practice-*led* research means that the research is initiated first by problems or questions that are defined through practice and practitioners (Gray 1998).

The main debate in practice-*led* research is not about how it is conceived as a type of research but about what functions should the creative production play in the research (Scrivener 2009). In practice-*led* research, the designed artefacts can either be input sources for the production of knowledge or they can be outputs for communicating knowledge (Nimkulrat 2012). The roles of artists and designers have become more active in contextualising, understanding and examining not only the artefacts they produce but also the creative process of their practices (Mäkelä 2009).

Scrivener highlighted four main possible conditions of creative production in research: “art and design as the subject of research”, “art and design as method of inquiry”, “art and design as communication and justification of research outcomes”, and “art and design as a/the goal of inquiry” (Scrivener 2009, 75-78).

Following the discussion of these terms and the possible roles of the creative process in the inquiry, I will be using the term “design-led” research to describe the methodological framework of this research. My usage of this term as the methodological framework is not an attempt at defining this research model; indeed, more case studies are needed for future consideration in order to define this term and standardise it as a methodology in design research. My emphasis here is instead on outlining the specific roles of design in this research inquiry by looking at the four possibilities discussed by Scrivener.

1. Design as the *subject* of the research: In this research, the primary investigation stems from a designer’s perspective. The research is looking at how interactive media can be used to create an activist spatial experience.
2. Design as the *method* of the research: In this research, the primary tool of acquiring knowledge is through designing a prototype. The process of the design, the documentation, the reflection on the process, and the testing of the prototype are all methods for acquiring knowledge and attempting to answer the research question.

3. Design as the *outcome* of the research: In this research, the final designed prototype is not an outcome to be evaluated as in the more common practice-based research degrees. The prototype is not an end. There is no creative component that will be an outcome of the research. The design is part of the process; more specifically, it is an experiment to test the initial hypothesis of the research.
4. Design as the *goal* of the research: In this research, one of the significant attempts of the inquiry is how this design process and thinking can be applied to other similar cases in design activism. Advancing the knowledge in using interactive media in design activism is thus a primary goal of the research. One of the final conclusions of this research is outlining consideration points for future design projects that serve similar purposes as this research.

According to Herrington et al. there are four stages of design-based research. The first stage is the analysis of the problem by a collaborative team of researchers and practitioners. The second stage is developing possible solutions using existing design principles and innovative technologies. The third stage is iterative cycles of testing and refining the designed solutions. The fourth stage is the reflections on the solutions in order to produce new design principles and the future development of the solutions (Herrington et al. 2007).

So, for this design-led research model I identified four main stages that I will follow:

- Stage 1: Background research and interdisciplinary exploration of existing knowledge and projects that relate to the research question.
- Stage 2: Development of a prototype that addresses the research question.
- Stage 3: Testing and evaluating the prototype.
- Stage 4: Reflections, discussion and conclusions.

Artistic methodologies usually employ a pluralist approach using different methods that are tailored to the needs of each project (Gray and Malins 2007). In Chapter 3, I will explain the different methods that were used to fulfil the needs of each of these stages.

### **1.3.2 The Researcher's Position within the Research**

Practice-led research stems from the focus on the practitioner-researcher (Rust, Mottram and Till 2007). An essential characteristic of the practitioner-researcher role is that subjectivity and reflexivity are acknowledged (Gray 1998). In



addition, the practitioner-researcher role is a dual position, because the practitioner is reflecting on his/her own practice (Mäkelä 2009).

When positioning the researcher within the research, there are two positions; emic and etic. The emic approach to research means that the researcher is part of the social group that he/she is investigating. Therefore, the researcher has an insider perspective (Morris et al. 1999). The etic approach, on the other hand, takes the outsider or observer perspective (Morris et al. 1999).

At the beginning of this chapter, I stated my background as a Palestinian. However, Palestinians are fragmented, and their experiences vary drastically among those living in Israel, or in the West Bank or the Gaza Strip, or those in refugee camps in neighbouring countries or in difference places around the world. While all these Palestinians share the same history, similar values, tradition and culture to some extent, their current experiences vary. Thus, as a researcher of Palestinian heritage, I cannot draw a distinctive line between adopting an emic or an etic position. On the one hand, I identify with the Palestinian struggle. At the same time, however, I have never lived in Palestine or Israel, and I have no lived experience of the occupation.

Therefore, the dichotomy of emic versus etic positions is hard to navigate in this particular research<sup>2</sup>. The murkiness of my positionality reflects the complexity of the Palestinian identity. Thus, having to sit in between and on the borderline of emic and etic positions becomes part of my activist approach to the whole research.

## **1.4 The Palestinian Situation**

This research question is investigating a designerly way to address a political situation, so the research focus is not situated within the disciplines of Political Science or History. Therefore, my examination of the political situation has been constrained by the needs of this design research project. In this section, I will give an overview of the historical background of the Palestinian situation and the current situation to clarify the positioning of the designed activist spatial experience in this research in support the Palestinian cause. For more about the Palestine/Israel history and current situation,

---

<sup>2</sup> There is existing research about how to extend these two positions into an emic -etic -emic research cycle especially when the research is done in under-researched areas and involve indigenous perspectives (Punnett et al. 2017).

please refer to Pappé (1999, 2006), Wallace-Murphy (2016), Palestine Remembered (1999), Kattan (2009), Visualizing Palestine (2012), Said (1992, 1999, 2001a), Hilal and Pappé (2010), Shlaim (2001), White (2014) and Adiv (2010).

The Palestinian intellectual Edward Said's phrase "permission to narrate" is foundational to this research (Said 1984). However, it is important to state that the position of this research is not personal, and is based on growing scholarly and activist works around the world in solidarity with the Palestinian cause.

### **1.4.1 Historical Background**

The Palestine/Israel conflict remains one of the most influential conflicts of our times and affects people beyond the Middle East (Annan 2012). While the term "conflict" is widely used in the context of Palestine/Israel, I will mostly use "situation" rather than "conflict" in this research. This linguistic stand is based on scholarly work that focuses on moving away from the "paradigm of parity". Hilal and Pappé have examined the scholarly shift from the "paradigm of parity", a term which suggests that there are two equal sides to this conflict (Hilal and Pappé 2010). My research is proposing a design-led activist solution to raise awareness about the misrepresented Palestinian side. Therefore, the word "conflict" which denotes two equal sides is not in line with the direction of the intended, designed spatial experience.

In Western academia, Hilal and Pappé have noted that Palestinian academic works were considered propaganda while Israeli academic works were considered a professional scholarly representation of the situation (Hilal and Pappé 2010). However, since the 1980s there has been a shift in the power structure supporting the knowledge production scene which has, in turn, strengthened the knowledge production in favour of the Palestinian narratives. There are now groups of Palestinian and Israeli historians and scholars working together to advance a critical scholarship about the situation (Hilal and Pappé 2010). The Holocaust and the Western guilt for not standing with the Jewish people during their years of suffering have and are often used to legitimise the existence of Israel and perpetuate a negative image about the Palestinian struggle for self-determination (Bloch 2005; Finkelstein 2003). By exposing narratives from a Palestinian perspective, people will be more informed about what is happening there.

As I previously stated, it is outside the scope of this research to outline the progression of events leading up to the establishment of Israel on Palestinian land and beyond that to our current times. However, I will create an abridged timeline that takes into consideration the most determinative events that are relevant to this research.

1. In the 1880s wealthy Jewish beneficiaries started helping Jews migrate and settle in Palestine. They started making small settlements in Palestine. At that time Palestine was under the Ottoman control much like many of the countries in the Middle East.
2. In 1901 the Jewish National Fund was established with the support of Theodor Herzl. The main role of this fund was to buy land in Palestine and turn it into Jewish settlements.
3. In 1914 The First World War erupted. Britain declared war against the Ottoman Empire.
4. In 1916 the United Kingdom and France had a secret agreement facilitated by the British diplomat Sir Mark Sykes and the French diplomat Francois Georges-Picot. This agreement, known as the Sykes-Picot Agreement, divided the Middle East and brought it under British and French control (Palestine was under the British control).
5. In 1917, Britain provided a statement of support for “the establishment in Palestine of a national home for the Jewish people.” This statement was signed by the British foreign secretary at that time, Arthur James Balfour, and was addressed to Lionel Walter Rothschild, a leader of the British Jewry (The Editors of Encyclopaedia Britannica 1998).
6. In 1946 Jewish migrants became 30% of the population, which is ten times more than in 1897, and they owned 6% of the land. Nevertheless, the United Nations constructed a Partition Plan in which they divided Palestine into a Jewish state, an Arab State, and Jerusalem as a UN corpus separatum area (Khalidi 1997). According to this plan, the Jewish state was assigned 55.5% of the land (Khalidi 1997). This plan was approved in the United Nation General Assembly on 29<sup>th</sup> November 1947 as Resolution 181(II) (United Nations General Assembly 1947). This partition plan was not implemented due to the events of 1948.
7. The British troops left Palestine on 15<sup>th</sup> May 1948, and the state of Israel was announced on 14<sup>th</sup> May 1948.
8. In 1967, war erupted between Israeli troops from one side and Egyptian, Jordanian and Syrian troops on the other side. The war lasted for six days and from then on became known as the Six-Day War. As a result of the war, Israel took hold of the Sinai Peninsula from Egypt, the Golan Heights from Syria and the West Bank and the Gaza Strip (Wallace-Murphy 2016).

9. The First *Intifada* or Palestinian uprising against the Israeli occupation of the West Bank and the Gaza Strip started in late 1987 and lasted till 1991. The uprising was the start of associating the popular Palestinian uprising with rock throwing.
10. In September 1993, the Oslo Accords were signed between Israel and Palestine brokered by the United States.
11. The Second *Intifada* started in September 2000 and ended in February 2005. This intifada has resulted in the Israeli withdrawal from the Gaza Strip.
12. The blockade on the Gaza strip started in 2007. The ongoing siege is imposed by Israel and Egypt and includes land, air and sea borders.
13. During the blockade on the Gaza Strip, the Israeli military has launched four main military operations. The latest one, Operation Protective Edge, took place during this research in 2014. The operation resulted in the killing of 2,251 Palestinians, mainly civilians (Human Rights Council 2015).

### **1948: The year of *Nakba***

1948 is the year that marks the creation of the state of Israel. In the Palestinian collective memory, 1948 is considered the year of *Nakba* (Catastrophe), and it remains a pivotal point in any political narrative of Palestine (Sa'di and Abu-Lughod 2007). Despite the proliferation and accessibility of alternative media, the prevailing narrative of 1948 remains one-sided and controlled by the Israeli narrative, according to prominent Israeli historian Ilan Pappé (Pappé 2006). History is usually written by the victors, and because Israel emerged as the victor post-1948, it had control over the propagated narratives of 1948 (Shlaim 1999). Professional historians did not write that account. That account was written, “by participants, by politicians, soldiers official historians, and a large host of sympathetic chroniclers, journalists, biographers, and hagiographers” (Shlaim 1999, 173).

In recent years, a new wave of Western and Israeli historians, including Pappé and Shlaim, have challenged the dominant narrative of the state of Israel’s beginnings, and used terms like “ethnic cleansing” to describe the systematic actions of Israel towards Palestinians (Pappé 2006; Masalha 1999; Shlaim 1999; Beinun 2004; Hilal and Pappé 2010). This historical revision of the events of 1948 is important, as it recognises the Palestinian view that 1948 was a year of catastrophe for the Palestinian people (Azoulay 2011).

Critically examining the emerging scholarly work of 1948 of Israeli historians was an important component of this research. By revisiting the history of this important

year in the Palestinian situation, people are compelled to acknowledge it as “a crime that needs to be confronted politically as well as morally” (Pappé 2006, xii). These narratives resonate with the narrative of Palestinian historians (Masalha 1999) even though Arab narratives have previously been dismissed as untrustworthy and irrational (Said 1984), and sometimes even considered propaganda (Masalha 1999; Adiv 2010).

One of the main outcomes of 1948 is the creation of the Palestinian refugee phenomenon. Palestinian refugees are one of the largest and longest-lasting refugee populations in the world (Feldman 2012). Palestinian refugees make up two-thirds of all Palestinians. Their right of return was not part of the negotiation and agreement reached in the early 1990s during the Oslo Accords (Quiquivix 2014).

#### **1.4.2 The Current Situation**

Since 1948, many clashes, wars, and prosecutions have happened in the Palestinian political situation. Apart from military operations and wars, the humiliating effect of occupation is felt deeply on a daily basis and at different levels (Said 2001a). Israel has full control over the borders of Palestine. They have implemented an identification card system which categorises Palestinians. Those identification cards grant or prohibit access to certain places in Palestine/Israel. Palestinians on their daily commute are subjected to a series of checkpoints that in most cases take hours to cross (Figure 1.1) (Gould 2014b).



**Figure 1.1: Magne Hagesæter, Inside Hawara Checkpoint, in the Occupied West Bank, Palestine. Reproduced from Wikimedia Commons (Hagesæter 2006).**

## **Apartheid**

In November 2011, the Russel Tribunal on Palestine (RToP) conducted a session in Cape Town, South Africa, following two previous sessions in London (November 2010) and Barcelona (March 2010). In this session, the main question posed was whether Israel is an apartheid state or not. The conclusion was that Israel's policies against both Palestinians in the Occupied Palestinian Territories and Palestinians in Israel amount to apartheid (Harlow 2013). This was reiterated alongside a detailed plan of actions in RToP's final session in March 2013 in Brussels (Russell Tribunal on Palestine 2013). But long before RToP was inaugurated, politicians and scholars in the faculties of politics, social sciences and history have concerned themselves with this question (Stevens and Elmessiri 1977).

Using the term apartheid to describe Israel remains contested but has gained more currency in recent years. Former US President Jimmy Carter's book was titled *Palestine: Peace or Apartheid* and caused a backlash for Carter, who was once greatly respected in Israel (Finkelstein 2006). In many cases, using the term apartheid to describe Israel is considered slanderous to a country that promotes itself as "the only democracy in the Middle East" (Goldstone 2011). Yet, as Israeli journalist Gideon

Levy argued, the majority of Israelis are pleased with the effective policy of apartheid in their country, and they are supportive of the occupation of Palestine (Levy 2012).

There are commonalities between the old apartheid regime in South Africa and what is happening in Palestine now. Palestinians are denied access to lands, freedom of movement, resources and rights (Said 2001a). Israeli construction of the “Separation Wall”, checkpoints and the ongoing building of settlements inside the West Bank in violation of international ruling are examples of apartheid in the Occupied Palestinian Territories (Hilal and Pappé 2010). For Palestinians living inside Israel, the Law of Absentees and discrimination based on “Jewishness” are further noted examples of mechanisms that implement apartheid (Davis 2003).

### **The Spatial Interventions of Occupation and Apartheid**

The occupation and apartheid are manifested spatially through partition and separation rules aiming to contain and compartmentalise Palestinians creating spatial exclusions<sup>3</sup> (Weizman 2007). In other cases, Israel has adopted the approach of “architecture of erasure” where Palestinian sacred or historic sites are being demolished to make way for new Israeli projects (Makdisi 2010).

The Separation Wall is probably one of the most evident spatial interventions of occupation (Figure 1.2). The Wall is not built on the borders between Israel and Palestine as recognised in the UN partition plan. Rather, the Wall cuts through Palestinian lands and in many cases separates people from their lands. The International Court of Justice has deemed the building of the Wall in the Occupied Palestinian Territory illegal and violated Human Rights Law (International Court of Justice 2004).

---

<sup>3</sup>. There are various techniques of partition and separation that Israel has used as discussed in *Hollow Land: Israel's Architecture of Occupation* by the Israeli architect Weizman (Weizman 2007).



**Figure 1.2:** Yazan Jwailles, The Separation Wall between Beit Hanina and Ramallah. Reproduced from Wikimedia Commons (Jwailles 2017).

Checkpoints are another notable spatial intervention (Figure 1.3). Checkpoints are either permanent buildings or makeshift barriers. Palestinians crossing checkpoints can be detained, slowed down, or not granted access. Thus, the restriction of the Palestinians' movement impedes their ability to go to work, education, getting medical treatment or visiting family (Zeedani 2007). This restriction is amplified by the identification cards system imposed on all Arab residents of Israel, Jerusalem, the West Bank and the Gaza Strip (Tawil-Souri 2011).



**Figure 1.3:** Andrew E. Larsen, Checkpoint 300 in Bethlehem. Reproduced from Flickr (Larsen 2011).



### **1.4.3 Western Media's Coverage of the Situation**

Western audiences are used to empathising with disfranchised people in humanitarian crises in Asia, Africa and Latin America without engaging with their political beliefs (Bernard 2012). However, in the West<sup>4</sup>, Palestinians are either viewed through narratives that are not their own or represented in images that are not easily identified with (Said 2001b; Bernard 2012; Casey 2018). The media representation of Palestinians does not show their history or humanity (Said 2001b; Drainville and Saeed 2013). Israeli propaganda undertook a substantial effort that used frequent references to the Holocaust, silenced or ignored Palestinian sides, and played on the Western guilt of anti-Semitism to create their own narrative (Said 2001b; Finkelstein 2003; Bloch 2005). The goal of the Israeli propaganda was to depict themselves as victims while they continue their transgressions on Palestinians (Said 2001b).

#### **News Media**

Palestinians have generally not been portrayed very positively in the media. In recent years, there has been a slight change from total vilification of Palestinians to portraying them on an equal footing with their counterparts, the Israelis, in their hopes for dialogue and peace (Bernard 2012).

In the US coverage of the situation in Palestine, there is an attempt to balance their coverage by making the suffering look equivalent on both sides (Casey 2018). This is not reflective of the reality of the situation where it is not “conflict” or “clashes” but rather a brutal occupation (Casey 2018).

The news coverage of the Palestine/Israel political situation in Australia has been in line with Australian foreign policy and generally pro-Israel (Han and Rane 2013). Jewish-Australian journalist Antony Loewenstein argues that the pro-Israel lobby in Australia is prominent in defending the official perspective of the state of Israel (Loewenstein 2009). They have a strong influence on Australian media, labelling those opposing the Israeli narratives as anti-Semitic in an attempt to silence any opposing voices (Loewenstein 2009; Bloch 2005). In the media coverage, there are usually no in-depth analyses of the situation, no alternative perspectives and no

---

<sup>4</sup>, The West or the Western world in this research refers to the United States, Canada, Europe and Australia.

wider context to the situation (Han and Rane 2013). This is the case in many other Western countries, where Israel still displays itself as a democratic, progressive and humanistic state (Said 1984; Brennan 2006). Therefore, there is no real role for the media to challenge or provoke public opinions on the matter (Han and Rane 2013).

## Pop Culture

The Palestinian-Israeli conflict is readily used in different forms of entertainment in the European and US pop culture industries (Bernard 2012). One of the reasons that North American and European audiences are interested in the Palestinian-Israeli conflict especially post 9/11 is because it allows them to engage in a more urgent and real political situation that is distant from them rather than engage with their own political situations (Bernard 2012).

The portrayal of Israelis in movies like *Exodus* (1960) made it possible for the Western audience to identify with them as white Judeo-Christian masculine figures, whereas Palestinians were projected more often as terrorists (Bernard 2012). The Western audience view Arabs and Palestinians as violent, fanatical and anti-Semitic people that they cannot sympathise with (Said 2001b). However, a change in this narrative has probably started with *Hanna K.* (1983), a movie in which a humanised Palestinian protagonist was portrayed. This humanisation has continued in many other films that followed. Many of these films have been challenged, and in some cases the Anti-Defamation League<sup>5</sup> would campaign against the screening of these films like what happened with *Hanna K.* (Bernard 2012).

The Western audience now has access to various documentaries and movies about the situation made by Israeli and Palestinian filmmakers. For example, eight Israeli films have been nominated for the Academy Awards, while two Palestinian films have been nominated and two more jointly produced by Palestinian and Israeli filmmakers were nominated. Some of these films will be discussed in Chapter 5.

In addition, there have been several documentaries, films, and television series that were created to represent the Palestinian perspective better. Some of these examples include the Australian journalist and filmmaker John Pilger's

---

<sup>5</sup> The Anti-Defamation League is a non-profit organisation that claims to fight hate speech directed at Jews and Israelis and fight against any form of anti-Semitism. The organisation is based in the US (Anti-Defamation League 2018).

documentaries. In his documentary *Palestine is Still the Issue* produced in 2002, he revisited the Palestinian situation and examined why peace is still elusive. In his documentary, Pilger focused on the human side of events, for example, the recurrent issue of women and sick people being held up or delayed at the checkpoints. He talked to a woman who lost her baby at the checkpoint because she was not granted permission to move on. He also focused on how children were traumatised by what they are witnessing and what can be the long-term implications for these children growing up under occupation.

Another Australian example is the investigative report *Stone Cold Justice* produced as part of the ABC's *Four Corners* program. This report addressed the Israeli treatment of Palestinian children, and where they are being detained and arrested unjustly (Lyons 2014). This report resulted in a backlash from the Zionist lobby in Australia claiming that this report is "evil and deeply untrue" (Sheridan 2014).

In the 2011 BBC television series *The Promise* by Peter Kosminsky the story of 1948 was revisited through the eyes of a British soldier serving in Palestine during that period. The series was broadcast on SBS Australia later that year. The series also received a backlash from the Zionist lobby in Australia, claiming that the series promotes anti-Semitism (Wertheim 2012).

In conclusion, Palestinian narratives about their situation are generally still inaccessible and usually overlooked by the Western audience. However, with the rise of social media and alternative media, Palestinians now have valuable resources to share their narratives on their own terms away from traditional media outlets. Thus, Arabs and Palestinians can "break the silence" by resisting and contesting the misrepresentation, and disseminating images and messages of their own (Said 2001b). From this understanding, I am proposing the concept of designing "activist spatial experiences", using interactive and immersive media to communicate the Palestinian narratives to the Western audience.

## **1.5 Limitations of this Research**

While this research is interdisciplinary by nature, like most research in design, the focus of the research remains within the design discipline. Therefore, the

exploration of literature and background information had to be constrained to what is directly impacting the design decisions pertaining to the creation of the prototype.

For this research, only one prototype was designed and tested. While iterative testing and refining happened during the process of creation, only one prototype was presented to the test group. There was a time limitation, given that this research was undertaken as doctoral research that had to comply with the standard timeframes for such research. In addition, the prototype was mostly created and developed by myself, which involved learning specific software and programming languages that I had no prior knowledge about. Therefore, there were some technical limitations to what can be achieved within the prescribed time frame.

Though there are limitations to the research both in terms of time and resources, creating one prototype was enough to generate findings and produce new insights in this specific area, as will be further explained in this thesis.

## **1.6 Structure of the Thesis**

This thesis has ten chapters. These chapters are categorised into four main parts that reflect the four main stages of the design-led research model discussed in this chapter.

The first part is the background research and is covered in Chapters 2, 3, 4 and 5. In Chapter 2, I review some of the literature in three main areas that directly relate to the research question. I start by looking at political, art, design and social media activism. I then look at the designing of experiences in affective spaces. And lastly, I look at designing experiences using digital and interactive media. In Chapter 3, following on from the methodological framework that has been discussed earlier in this chapter, I detail the different methods that were used throughout this research. In Chapter 4, I conduct three case studies on memorial and conflict museums that employ experience design in the creation of affective interaction between the visitors and the topic presented by the museum. In Chapter 5, I examine different creative visual expressions produced by Palestinians. I specifically consider how Palestine is being constructed as a spatial entity, how the Palestinian hero images have evolved and the key experiences and themes usually represented in the Palestinian creative scene.

The second stage of the research is the process of creating the prototype and is covered in Chapter 6. In this chapter, I detail the process of creating the prototype. I start by explaining the main design considerations that were informed by the background research. I discuss the experimentation process that preceded the creation of the prototype. I then consider how the content of the prototype has been developed and finally how the whole prototype was created and developed.

The third part of this thesis is the testing and evaluation process and is covered in Chapter 7. In this chapter, I explain how the prototype was set up for evaluation, the process of choosing the test group and how their feedback has been collected. I present the findings and identify common themes that emerged from the testing process.

The fourth part of this thesis is the discussion of the findings, covered in Chapters 8, 9 and 10. In Chapter 8, I discuss the themes that emerged from the evaluation process and contrast them with the design consideration and design decisions. In Chapter 9, I conclude with the recommendation and consideration for the future development of the prototype by looking at the conceptual, visual, interaction and experience frameworks. I also consider possible solutions for specific scenarios. In Chapter 10, I conclude the whole research project by reflecting on the process of this research and reiterating the findings. I then examine how this research can serve as a template or a case study for other activist spatial experiences projects that specifically look at communicating complex political narratives involving disfranchised, misrepresented or under-resourced people.



## **Chapter 2. Literature Review**

### **2.1 Introduction**

In the previous chapter, I introduced the research question and discussed the proposed methodology of this research. I also discussed background information about the situation in Palestine which will be used as an archetype of a complex contemporary political narrative that will be addressed through my research project.

In this chapter, I will review literature that relates directly to the research question. This research has been undertaken in the context of design approaches to problem-solving, which often utilise interdisciplinary methods and subjects of enquiry. Therefore, the examination of existing literature will draw from three main areas of knowledge.

The first section of this chapter will discuss the concept of activism, starting with political activism, then focus on design and art, and social media activism. The second section discusses the principles of creating experiences in affective spaces, investigating how embodiment and emotions play different roles in meaning-making in designed experiences. The third section examines how experiences are created using digital and interactive media. The examination will focus on three main areas; digital media in museums, serious games in general, and using digital media and serious games in cultural heritage projects.

### **2.2 Political, Art and Design, and Social Media Activism**

Throughout history, political activism has played a significant role in dismantling existing political structures, for example, the French Revolution at the end of the sixteenth century, or more recently, the toppling of the Mubarak regime in Egypt, the Ben Ali in Tunisia, and the Al Qadhafi regime in Libya. Activism also played an important part in human rights advocacy, for example, the Feminist Movement which started in the late 1960s and the Civil Rights Movement in the 1970s. Another important form of activism was opposing occupation and liberation movements in non-violent ways like the Boycott, Divestment and Sanctions (BDS) movement in South Africa. Political activists used different tactics and processes in

their movements and campaigns, such as protests, boycotts, civil disobedience, and strikes. The main aim for all of these activities is to raise the voices of the oppressed. Political activism usually works at a local level (which nonetheless might turn into a global movement), and sometimes it would gather international support.

Solidarity movements are a form of collective civic participation (Giugni and Passy 2001). People who are part of a solidarity movement are altruistically standing up to defend the rights and interests of other people (Passy 2001). Their form of activism is directed toward highlighting the issues of people like asylum seekers, refugees, people in war zones and people who are subjected to racism (Passy 2001). Solidarity is expressed by a sense of unity between two political groups who either share interests, understanding, hopes or sometimes a common enemy (Khalili 2007). In most cases, solidarity movements, through their protest and activism, aim to influence and challenge decision makers and other significant actors in order to advance the rights or better the situations of those being defended (Ataç, Rygiel and Stierl 2016). Solidarity movements are transnational and trans-categorical and therefore have transformative potential (Ataç, Rygiel and Stierl 2016).

In recent years, many political conflicts have emerged such as the Second Gulf War; the establishment of Islamic State in Iraq and Syria, or “ISIS”; the wars in Afghanistan, Syria, Iraq and Yemen; persecution of Rohingyas in Myanmar; various political unrests in South America and Southern Europe; not to mention unresolved long-standing conflicts like the Palestinian political situation that this thesis will focus on. Nowadays political activism still exists in different parts of the world and in different capacities, especially in social media. Recent examples include the Arab Spring, The Occupy movement, #blacklivesmatter and #metoo movements (Julier 2013b; Juris 2012).

Art and design have played important roles in political activism throughout history in different ways, mainly as tools of/for expression. And now, social media plays an important role in political activism as well.

### **2.2.1 Art and Design Activism**

Since the beginning of human civilisation, art has been put to the service of politics. Art usually responds to, and is controlled by the ideological, political and



social powers dominating societies (Millon and Nochlin 1978). Edelman argues that art is considered the “fountainhead” from which springs our understanding of politics and consequently our political beliefs and actions (Edelman 1995). For Rancière, art creates a sensory awareness of the world. It helps to understand the identity of things, forms images of the people and ultimately shapes the identity of communities (Papastergiadis 2014).

War is the most blatant manifestation of conflicting political ideologies and affiliations. Historically, art needed peace and quiet to flourish. Yet, during times of peace, art has been used to glorify war and war heroes. Artists of the classic age documented and narrated war events in many different forms, mediums and styles (Grois 2008). This has changed drastically in our time as the warriors no longer require the service of artists; now, the mass media documents, narrates and propagates these wars and their motives (Grois 2008).

At the same time, art can be used as propaganda to promote certain ideologies or to raise fear and hatred towards the enemies as we have seen during wartimes (Feldman 1972). For example, poster designs during World War II reflected nationalist political ideologies with the aims of recruiting people to serve in the military and painting nations of the other side of the conflict as villains and threats. This, however, is considered by some artists as an impure art, or propaganda (Feldman 1972). Nevertheless, there were also some artists who aimed to document the horrors of war. For example, Picasso’s *Guernica* (1937) came out of the artist’s own sense of emotional injury due to the Spanish civil war. This was happening before the larger scale of world wars and the development of weapons of mass destruction. After that, artists had to come up with new visual languages to cope with such massive destructions. Their forms were abstract and dehumanised (Feldman 1972). Nowadays, wars are still happening in different places around the world. The world is a scene of many political situations, and we have anti-globalisation movements, “war on terror”, and ecological defeatism to name a few (Bieber 2011). Consequently, new mass media is constantly producing and sharing images of war and other catastrophes from all over the world (Grois 2008). The imagery produced is considered “propaganda” in some cases and “documentation” in others. The distinction between the two can be contested based on the different sides of the conflict. Edelman emphasised the importance of images and preconceptions in how people understand news and establish their political

understandings. This means that art, films and media representations play vital roles in shaping public opinions on political matters (Edelman 1995). The current news and social media show us what is happening now, whereas art can link the past with the present, which allows art institutions to be places for critical discourse (Grois 2008).

Since the beginning of the twenty-first century, there has been an increased interest in how designers can contribute to and shape public discourse and civic life (DiSalvo 2012). The relationship between graphic design and activism is an old one, dating back to the 1860s, in which graphic design has been employed as a very effective tool for social and political issues and propaganda (Fuad-Luke 2013). Design activism appeared as a movement that challenged mainstream design practices and explored alternative models of practice (Julier 2013a). Design activism remains a new field, and its definition, principles and applications are still emerging (Fuad-Luke 2013; Julier 2013a; Markussen 2013). However, design activism is gaining in traction due to political unrest around the world (Lees-Maffei 2012). This is also enabled by the emergence of the internet and social media as more accessible, less controlled means of expression (Juris 2012).

Now, with social media, you can create strong campaigns that can go all around the world, which in some cases can even criticise these large online companies as they might be seen as the defining new territories and centers of power (Bieber 2011). Facebook, for example, has come under fire many times for breaches in safeguarding their users' data (Overton and Zuckerberg 2018), helping in spreading false news (Walker 2016), and taking sides in political conflicts by silencing and censoring content from certain groups (Abunimah 2018). Social media has nonetheless played a significant role in current activism movements, for example, the Occupy movement and the Arab Spring. I will discuss this further in the following section.

## **Definitions**

To gain a better understanding of the terms used in this thesis, I will highlight several definitions that were influential in framing this research and understanding the existing scholarship on the use of these terms.

## *Design Activism*

Fuad-Luke defines activism as any action aimed toward encouraging, promoting or creating change that in sequence create social, cultural or political transformations on a general and/or individual scale (Fuad-Luke 2013).

Since the design activism field is still considered new, having a singular and clear definition of what design activism constitutes is still a work in progress. Fuad-Luke offers a tentative definition of design activism: “Design activism is ‘design thinking, imagination and practice applied knowingly or unknowingly to create a counter-narrative aimed at generating and balancing positive social, institutional, environmental and/or economic change’ [sic]” (Fuad-Luke 2013, 27).

While Fuad-Luke celebrates the tension between design and activism, Markussen tries to distinguish between the two. For Markussen, the design action is not a political<sup>1</sup> action (like boycotting, protesting and so on), rather the design action is a “designerly way” of intervention and that it is why it is a powerful act of resistance (Markussen 2013, 2). In general, design activism embraces and reuses many of the common ideas found in mainstream design culture (Julier 2013a). While design culture is created through circumstances, design activism is more self-consciously responsive to circumstances (Julier 2013a). At the same time, design activism has created a shift in the design paradigm by exploring potentials of design as a participatory process, emphasising human-focused values in the service of improving the city (Kaygan and Julier 2013).

In this research, the activism is achieved through the design process of creating, testing and evaluating a prototype that serves as an “activist spatial experience”. This latter term is new and suggested by me to describe the type of project I have designed. The spatial experience is activist in the way it communicates a

---

<sup>1</sup> There is a difference between politics and the political (Oosterling 2011). Politics refer to governance structures and mechanisms. The political is a condition of a continuous contest between ideas or forces. Because it is a condition, it can be expressed insofar as people and organisations deal with one another in different ways whether through debates, protests or acts of incitement (DiSalvo 2010). The political as a condition can be expressed or experienced through design (DiSalvo 2012). The political is not confined to the views of political parties and their ideologies and beliefs. Rather the political encompasses the contribution of the citizens to the wider political dialogue within society. It responds to the general question of what sort of society we want to live in (Fuad-Luke 2013).

political narrative and raises awareness about it. This will be further explained throughout the thesis.

### ***Other Related Terms***

Design activism, social design, critical design, co-creation and sustainable designs are all concepts that overlap (Julier 2013b). This might create a level of ambiguity in attempting to arrive at a singular definition of design activism, but simultaneously allows more fluidity in the processes, aims and characteristics of different design activism projects. This research is not fixated on defining what design activism is or should be, rather it aims to create a new case study that will allow the scope of design activism to expand and overlap with different disciplines.

DiSalvo coined the term “adversarial design” to describe design activities that engage with political issues through designerly means and forms. But he expanded his definition of adversarial design to be: “A kind of cultural production that does the work of agonism<sup>2</sup> through the conceptualisation and making of products and services and our experiences with them” (DiSalvo 2012, 2).

The purpose of adversarial design is to participate in contestation that produces debate and awareness. And it is through such spaces of peaceful dialogue contestation and confrontation that democracy can flourish (DiSalvo 2012). Adversarial design includes an array of mediums and forms as agonism calls for “a pluralism of political positions” (DiSalvo 2012, 20).

The prototype that was created as part of this research, for example, is aiming to communicate the narrative of the occupation of Palestine through spatial and experiential modes. The goal of such communication is to raise awareness which can then encourage political change. The prototype will not end the occupation or lift the suffering of Palestinians.

---

<sup>2</sup> Agonism is a philosophical outlook that focuses on the importance of conflict as a feature and a value needed in all political systems (Fisken 2014). DiSalvo discussed the relation between agonism and design extensively in his book. For DiSalvo, agonism is “a condition of disagreement and confrontation – a condition of contestation and dissensus” (DiSalvo 2012, 4).

## The Roles of Design and Art in Activism

Fledman argues that all artworks have social functions because art is created for people, either for the self-fulfilment of the artist or for an audience. But there is another level of the social function of art when the artwork has a social intention, is directed toward a group of people, and aims to influence the group's thinking, feelings, and ultimately their actions (Feldman 1972). In contemporary art, most politically motivated art takes a dissident position. Artists produce work that is designed to challenge the political, social and cultural conditions of current societies. Through this challenge, positive change can happen (Bieber 2011). For Rancière, one of the roles of art is to create radical dissensus<sup>3</sup> (Papastergiadis 2014). There are artists who believe that it is their role as artists to tackle social and political issues that are important for them and for society (Feldman 1972). They aim through their art to create positive change that will aid in developing better societies (Bieber 2011; Feldman 1972).

Art not only reacts to or comments on political issues, but also shapes and generates political ideas and understandings (Edelman 1995). Art is not only a place for meaning, it is also a place that engages the viewer's self-awareness (Papastergiadis 2014). Political art has been and is still compared to propaganda, critical and activist art (Bieber 2011). But political art has a wider public and context, and in the end the audience determines how political it is (Jansen and Klanten 2011a). In Chapter 5, I have mapped some recent<sup>4</sup> Palestinian artworks and films to investigate the common themes and ways of representing Palestine, the Palestinians, and living under the occupation. These themes then informed the creation process of the prototype.

Design activism aims at creating counter-narratives that will generate a more balanced and positive change in social, environmental and economic issues (Fuad-Luke 2013). Design activism plays a major role in promoting social change, raising awareness about certain contemporary issues and questioning the constrictions in everyday life, while emphasizing how these issues and constrictions are triggered by mass production and consumerism (Markussen 2013).

---

<sup>3</sup> Dissensus is the opposite of consensus. According to the Merriam-Webster online dictionary, dissensus is "difference of opinion". The French philosopher Jacques Rancière has written a book *Dissensus: On Politics and Aesthetics*; however, this topic is outside the scope of this research, as the main focus of this thesis is on a designerly approach to activism and creating dissensus.

<sup>4</sup> In Chapter 5, I will explain why I chose to focus on artworks and films created after the year 2000.

The use of the term “design activism” suggests intention or an eagerness to act upon a situation (Julier 2013a). Design activism projects are broad in their aims and scope. Campaigning projects, for example, aim can communicate survival values or self-expression values. They can also look for or propose non-mainstream narratives in order to create alternative understandings of current issues (Julier 2013b).

From these different roles, I have outlined the goals of the proposed prototype of this research. The prototype focused on presenting counter-narratives from Palestine. These counter-narratives are not familiar or widespread among the intended audience of this project, which is the Western audience. By presenting these narratives, the work contests the general understanding of the Palestinian situation in the West. And through this contestation, new understandings and ideas can be formed which can then be translated into political action, for example, with people who attend the prototype subsequently writing to their members of Parliament, participating in the BDS movement, or having more empathy towards the Palestinians. The project in itself is not creating a political action; rather it is raising awareness by exposing Palestinian voices to the Western audience who can then choose to engage with their newly attained knowledge in different ways.

### **Aesthetics, Design, and Activism**

The intertwined relationship between aesthetics and the political<sup>5</sup> helps to define the activist nature of design activism (Markussen 2013). Design activism shares the same aesthetic perspective with art activism. At the same time, it has the political potential to interrupt or subvert current power systems (Markussen 2013). Design activism has two main potentials: First, a political potential where the design subverts systems of power and narrative thus raising awareness about certain issues. Second, an aesthetic potential where the design opens the relationship between how people

---

<sup>5</sup> In a paper discussing Jacques Rancière’s ideas on aesthetics and politics, Papastergiadis argued that Rancière is one of the major thinkers in the contemporary discussion of aesthetics and politics. His arguments are considered a “conceptual toolbox and critical touchstone” for artists, curators and art critics (Papastergiadis 2014, 6). While Rancière asserted that there were dependencies between art and politics and social issues, he argued that this did not mean that art is made more real if it responds to these issues. For Rancière, art and politics were separate entities, yet they did not need an agent to find common ground between them (Papastergiadis 2014). Rancière saw art as a system for interpreting the world we inhabit. It helps us understand the world better by offering alternative ways of seeing and speaking (Papastergiadis 2014). Rancière argued that aesthetics “can challenge the established order of politics” (Papastergiadis 2014, 16).

behave and how they feel (Markussen 2013). This is what distinguishes design activism from both political activism and art activism (Markussen 2013). In this research, the designed prototype took into consideration these two points. As mentioned before, the activist spatial experience in the proposed design project highlighted narratives that have been under-represented in the Western context. The communication of these narratives through the spatial experience will then raise awareness about the Palestinian situation. The experiencers of this spatial experience will then be affected in different ways. The new gained knowledge might inspire people to be engaged with the Palestinian situation in different ways, either by joining rallies, signing petitions or partaking in the current Boycott, Divestment and Sanctions movement (Palestinian BDS National Committee 2005). The kind of political activism if any that will be instigated by the prototype is dependent of the audience and their own choices, what the prototype is aiming at, is providing a different perspective on the situation that is usually ignored or misrepresented. This new way of presentation is the designerly tool of activism that this prototype is proposing as will be explained and discussed in this thesis.

The activist essence of design activism can be explored through the intimate interaction between aesthetics and the political (Markussen 2013). Markussen has coined the term “disruptive aesthetics”. In his understanding, it is the political potential of design activism to disrupt and subvert existing systems. He argues that we need a new alternative framework where design activism is understood as a disruptive aesthetic practice (Markussen 2013). In Markussen’s article, it is not clear whether this act of disruption is to be understood only in terms of spatial and visual qualities as his focus is on urban design projects. However, my understanding is that the act of disruption he talks about should engulf the visual and spatial aspects of a design activist project, and also extend to the conceptual and experiential aspects of that project.

As we have seen, many scholars focus on the power of design activism to subvert existing systems, which is a form of disruption. In design activism, cognitive and embodied engagement with the designed product or experience can become a way of changing viewpoints (Julier 2013a). But how the experience can also disrupt is still open to investigation. This is even more important in the case of digital design as the

spatial and visual are mediated and not physically embodied in the viewer's experiences. This will be investigated in this research.

## **The Relationship between Physical and Political Context and Art and Design Activism**

The country where art is being produced and exhibited plays a significant role in how it was made and how it will be received. Jansen and Klanten argue that making art under a dictatorship is more political than art produced in democratic countries (Jansen and Klanten 2011b). Political art in non-democratic countries has a clearer purpose as it serves to highlight the social injustices. Artists may oppose regimes on political, ideological, religious or cultural terms. That purpose is not as clear in the democratic countries (Bieber 2011). Political design, by contrast, aims at confronting and questioning the conditions of democracy (DiSalvo 2010). Oosterling's exploration of design activism focuses on socio-economic politics in democratic countries rather than presenting a comprehensive global understanding, especially in areas of conflict.

In DiSalvo's discussion of adversarial design, he focuses on agonism, which is a form of confrontation, contestation and dissensus (DiSalvo 2012). Agonistic democracy does not privilege consensus as in the formalised practices of democracy (DiSalvo 2012). Adversary denotes a relationship that includes disagreement, but not violence and desire for the annihilation of the other (DiSalvo 2012). However, what seems missing from this discussion of art and design activism is the role of the global scale of activism. Whether the art and design works were created in democratic or non-democratic countries will have different outcomes and impacts. Nonetheless, the subject of the works and where they are being exhibited might differ. The influence of the international community is an important factor in many wars, conflicts and human rights violations that are happening in different places around the world. This is particularly relevant to solidarity movements for example, and how people in democratic countries might advocate for the rights of others in non-democratic countries. As Oosterling asserts, "Local = global. The new here can be everywhere, i.e. no where [sic]." (Oosterling 2011, 10). Thus, the binary of democratic versus non-democratic can be seen as a hinderance to understanding the targeted audience on one hand and the expected impact on the other hand.



On an urban scale, reclaiming public spaces to exhibit art to the public is considered political (Jansen and Klanten 2011a). Design activism's medium is public physical space (Oosterling 2011). At this scale, the focus of architectural activism has been on how the architect envisions and/or implements designs that more efficiently use the planet's resources or designs that focus on affordable housing or urban designs that promote social justice (Fuad-Luke 2013). The public space has always been used for political activism. Lately the use of visual signs in urban spaces has been greatly manifested in various places around the world, from Tahrir Square in Egypt (Figure 2.1) to Plaça Del Sol in Spain to the various spaces associated with the Occupy movement (Douglas 2011). In reclaiming those public spaces, they are being recreated as sites of dialogue rather than as spaces of consumption (Douglas 2011). Using public spaces for art and design activism complements the conceptual understanding of the public spaces as being truly for the people.



**Figure 2.1: Jonathan Rashad, Tahrir Square -February 9, 2011. Reproduced from Wikimedia Commons (Rashad 2011).**

In this project, I have considered how to reclaim public spaces to exhibit this type of work. As the media intended to create the project is digital and interactive media, liberating the experience from any physical boundaries is part of the activist nature of this project. Extending from this liberation of physicality, the project should

also be adaptable to different venues including public outdoor spaces like plazas or train stations. This point will be further discussed throughout this thesis.

## **The Engagement between People and Design Activism**

There are three main types of people that engage with design activism projects: people who create the design activism projects, people who are the subject of the design activism projects, and the intended audience of those projects.

Design activism is a global movement, but it also reacts to local concerns and challenges (Kaygan and Julier 2013). In many cases, design activism started or invigorated grassroots activist trends (Kaygan and Julier 2013). However, we are currently seeing a change from the mainstreaming of design activism towards the institutionalisation of design activism. On the one hand, we can put design activism within the frameworks of humanitarian aid and innovation, and exclude the more political attitudes of design activism that aim at confronting existing power structures, as John Emerson, the principal of <https://backspace.com/>, has articulated (Emerson 2013, cited in Kaygan and Julier 2013, 239-240). On the other hand, it can create a disconnect between the design activism projects and the people they are intended for. As Markussen states, that the core of design activism is to touch people and be touched by them (Markussen 2013, cited in Kaygan and Julier 2013, 245-246).

The role of design activist also raises questions about who can contribute, design and decide the “what now” and the “what next” (Fuad-Luke 2013). The main purpose of political design is to create spaces of contest (DiSalvo 2010). Oosterling nonetheless questions the relationship between the activist and the community involved in the cause (Oosterling 2011). This relationship might be what differentiates between design reform as a top-down initiative and design activism as a grassroots activity (Lees-Maffei 2012). Unlike consumer rights reform movements, Papanek, as a design intellectual, focuses on facilitating grass-roots activism within the design field (Clarke 2013). DiSalvo examines the existing debate on the relationship between power design and artefacts. He says it is important to think of where the power is located according to the designer’s intentions, and in the design itself, and across the material and social relations (DiSalvo 2012).

From this, it was important to understand how Palestinians are being empowered through this project. As mentioned in the Introduction, the phrase “permission to narrate” has been a motivation. So, this project extended on possible facilitation for Palestinians to narrate stories from their situation. The focus of the spatial experience has been on highlighting Palestinian voices that are based on lived experiences, especially the voices of those usually overlooked by the Western media.

There is an emerging shift in participatory design practices that move from working with predefined groups of users to engaging with a broader public especially around controversial issues (Björgvinsson, Ehn and Hillgren 2012). Participatory design has focused on working on projects with recognisable stakeholders while addressing power relations and how to empower any weak or marginalised groups. However, there is a change in these practices now as they are more open and public (Björgvinsson, Ehn and Hillgren 2012). In this project, there is a slight participatory practice of the design. Ideally working with Palestinians in Palestine during the process of design would have shaped and informed the overall experience. However, given the limitations of this project, Palestinians were highlighted and participated through the inclusion of existing Palestinian voices and linking to existing Palestinian activist projects like the ones that I will discuss later in this section.

In design activism, a cognitive and embodied engagement with the designed product or experience can become a way of changing viewpoints (Julier 2013a). Engagement is now becoming the norm (Oosterling 2011). Rancière defined three alternatives to the condition of spectators. They are either active, passive or emancipated (Papastergiadis 2014). The emancipated state is the one where spectators not only actively engage with the artwork but also use it to discern the meanings behind the artwork and then reconfigure their own understanding of the subject of that artwork (Papastergiadis 2014). In this project, I tried to engage the audience in creating an emancipated state. Therefore, I introduced engagement and immersion to the spatial experience. By transitioning viewers from a passive state into active navigators of the designed experience, I hope that their position on the Palestinian situation will result in emancipation.

## 2.2.2 Activism and Social Media

Giving more power to the people is an act of activism in itself. The rise in the use of social media and new platforms has allowed more people to be politically and socially engaged. The internet has allowed autonomy for individuals to follow political issues and on their own terms (Halupka 2014). The “participatory web” is a term that was used for Web 2.0 and can now be applied to social media. The affordance of generating and sharing content to larger audiences has promoted people’s involvement in political discussions and actions (Zappavigna and Hyland 2012). Social media has allowed its users the space to comment and publicly express their political views on various issues and events especially to support those who are perceived as oppressed (Zappavigna and Hyland 2012). But with the use of social media for political engagement a new term has emerged, clicktivism. Clicktivism has been mostly used as a derogatory term denoting lazy forms of political engagement, where users at most only share, like and sign petitions (Halupka 2014). Many scholars are sceptical about the impact or effectiveness of such actions, and in some cases how they can cause disengagement from traditional forms of political engagement<sup>6</sup> (Halupka 2014).

The Palestinian situation has gained solidarity from various groups within the Arab and Muslim worlds, as well as anti-imperialists and internationalists (Khalili 2007). Many of these solidarity movements employ social media to connect with members of their group and other solidarity movements especially to organise actions and protests whenever certain escalations happen in Palestine. There are various solidarity organisations for the Palestinian situation, for example, the Palestinian Solidarity Movement in the United States, Palestine Solidarity Campaign in the United Kingdom, and the Friends of Palestine in Australia, to name a few.

Some are sceptical about the role of social media in mobilising crowds, for example, the events in Tahrir Square. These sceptics have argued that most of the

---

<sup>6</sup> Halupka argues that we need to shift our understanding of clicktivism by looking at it through a new perspective, as a “distinctive category of online political participation” and stop comparing it to other forms of political activism (Halupka 2014, 117). Slacktivism is another term used to refer to online activism which has no real political or social impact (Morozov 2009). It is considered a lazy form of activism aimed only at making people feel good about themselves without having to engage in real activism (Morozov 2009). For more on clicktivism and slacktivism, please refer to McCafferty (2011), Glenn (2015), Reed (2014), Cabrera, Matias and Montoya (2017), Rotman et al. (2011), Karpf (2010) and Halupka (2014).

mobilisation happened through face-to-face interaction as many of the protestors there did not have internet access (Juris 2012). It is nonetheless true that the Occupy movement, for example, spread through social media and also through the protestors' occupation of physical spaces (Juris 2012). Juris argues that the real importance of new media lies in how they have incorporated the existing practices of activists and how they have helped spread new dynamics of activism (Juris 2012).

The microblogging phenomena have turned everyday people into "citizen journalists" (Zappavigna and Hyland 2012). By using text, images or videos, users can report on newsworthy events in their surroundings with their mobile devices (Zappavigna and Hyland 2012). For example, protestors used Twitter to post images, videos and text in real-time, creating an up-to-date news feed of the events at the #Occupy camps. But Twitter cannot replace other means of networking like listserves, which are more effective for interactive discussions about the protests, their strategies and politics (Juris 2012). Additionally, social media can be used as tools for micro-broadcasting, but they cannot be efficiently used for sustaining organisational networks which have to be achieved via other means (Juris 2012). However, this has changed with the rapid use of Facebook as a networking and discussion platform either through their closed groups or open pages.

YouTube facilitates a co-creative participatory culture. YouTube has given a platform for amateur individuals who are motivated by their desire or need to express themselves, their community or their beliefs. As an indication of its influence, traditional news and media outlets have started broadcasting through YouTube (Burgess and Green 2009). That said, the level of production and finesse in the videos produced and uploaded to YouTube vary immensely.

The use of hashtags had a significant role in charging political events as we have seen in the Arab Spring countries for example (Zappavigna and Hyland 2012). What is powerful about the use of hashtags is that it can create an international resonance and continuum of movements that started on a national level, for example, the Occupy, #blacklivesmatter, and #metoo movements. In this research, I have experimented with ways that social media can be used to create the prototype, or help to extend the project beyond the designed experience through the creation of social

media presence that can be disseminated through people who come and experience the designed activist spatial experience.

### **2.2.3 Palestinian Activism in Online and Social Media**

There are several Palestinian activist projects that are based online and promoted through social media. Some of these projects are run by Palestinians while others are run by solidarity groups from around the world. I will list some of these projects that were explored as part of my initial research and then utilised while creating the content of the prototype.

#### **Palestine Remembered** (<https://www.palestineremembered.com>)

*Palestine Remembered* was founded by Salah Mansour and went online in 2000. It is an archival website which has extensive archival material such as photographs and maps from all the villages and towns of 1948. Some of the aims of *Palestine Remembered*, as mentioned in their mission statement, is to document the memories and stories of Palestinians of 1948 visually and textually, to create a forum for refugees to share and discuss their own stories with others, to debunk the Zionist propaganda about 1948 and Palestine, and to reach out to Israelis to help them understand the other side of the struggle (Palestine Remembered 2000). The *Nakba Oral History Project*, which is part of *Palestine Remembered*, started in 2003 in Jordan. More than 600 interviews were conducted with elders who lived through 1948. The emphasis of the interviews is on personal accounts of the events, and the interviewers aimed to conduct more than one interview from each village.

The website lists major cities in pre-1948 Palestine and all its villages. For each of those, there are maps, images pre-1948 up to now, statistics, general information, and satellite views using Google Earth maps. There are also links to related articles. There are image archives that members can add to. There is also a list of members of the website who identified as being from specific villages. And finally, there are links to videos either from the oral history project or from members uploading current videos that they made. The amount of content on this website is massive, and thus it has a wealth of material that is essential in preserving the oral history and common facts about Palestine. It is worth noting that the website is available in two

languages; Arabic and English, and there is a direct link on the website to Google Translate the site into Hebrew.

**Visualizing Palestine** (<https://visualizingpalestine.org>)

*Visualizing Palestine* (VP) is a “non-profit laboratory for innovation at the intersection of data science, technology, and design” (Visualizing Palestine 2012). The project was launched in 2012. The main contents of this website are infographics (Figure 2.2) and visuals that are created based on factual data that relates to the Palestinian/Israeli situation. All their created infographics and visuals are licensed under Creative Commons (Attribution-NonCommercial-NoDerivatives 4.0 International) allowing people to share and redistribute them while maintaining the full attribution to VP. Currently they have infographics in fourteen different languages including Arabic, English, Hebrew and French. VP also launched two interactive projects, *Palestine Open Maps* and *Palestinian Journeys*, which I will discuss separately.

# BETHLEHEM BESIEGED

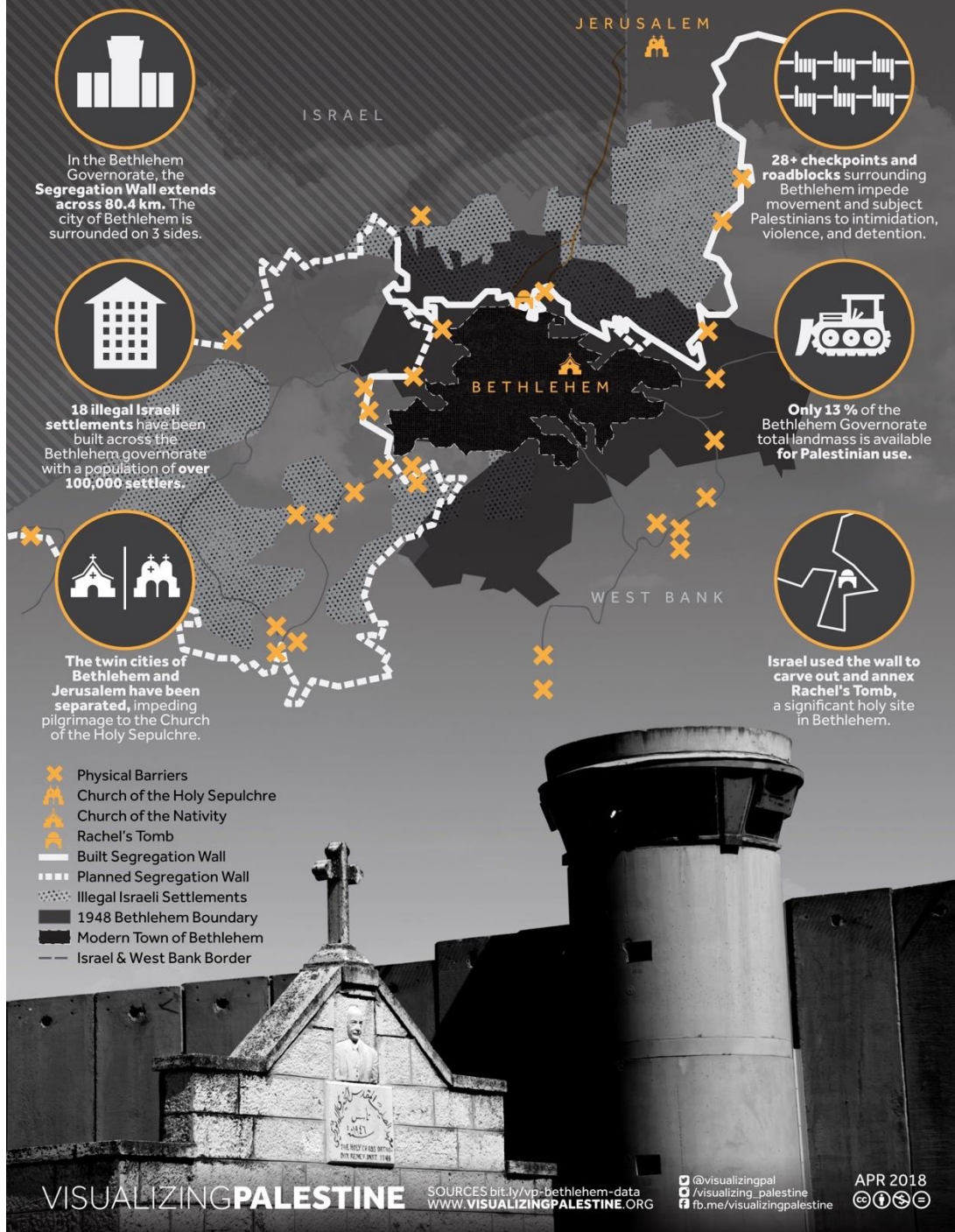


Figure 2.2: Visualizing Palestine, 2018. *Bethlehem Besieged*. Reproduced from their website (Visualizing Palestine 2018).



## Palestine Open Maps (<https://palopenmaps.org>)

*Palestine Open Maps*<sup>7</sup> is an online platform that allows users to navigate historical maps of Palestine dating back to the British Mandate of Palestine era (Figure 2.3). These maps were then layered with visual stories that were gathered “... in collaboration with data journalists, academic researchers, and civil society groups” (Palestine Open Maps 2018). The project is still at the alpha stage. One of the key ambitions of this project is to “... allow for collective digitisation of the information contained within the maps, and to build immersive storytelling experiences that would harness content from a plethora of other data sources and cultural archives, including historic photographs, oral histories and present-day digital maps and data” (Palestine Open Maps 2018).

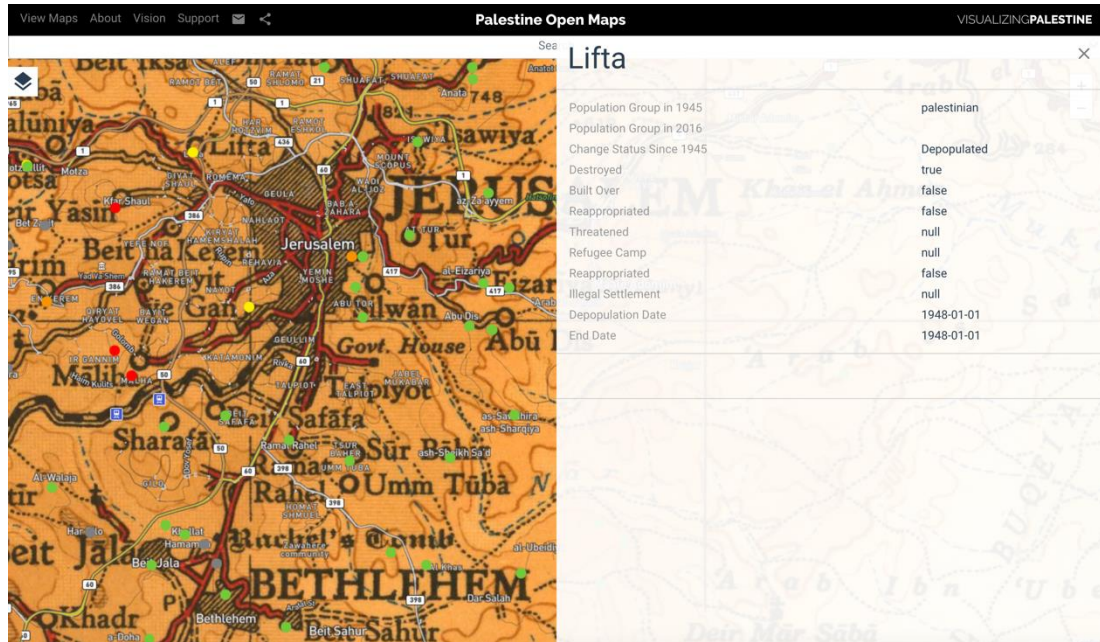


Figure 2.3: Palestine Open Maps, screenshot from their website.

## Palestinian Journeys (<https://www.paljourneys.org>)

*Palestinian Journeys*<sup>8</sup> is a joint project between the Palestinian Museum, and Institute for Palestine Studies and powered by Visualizing Palestine. This project is an online portal that consists of two main components; the Timeline part and the Stories

<sup>7</sup> This project was launched in 2018, and is still in its alpha stage. This means that this work was created after the creation of my prototype in this research in 2016.

<sup>8</sup> This project was launched in 2018.

part. In the Timeline part (Figure 2.4), there are a growing collection of “historical events, biographies, themed chronologies, highlights of historical, socio-economic and cultural themes, historical documents, and multimedia” (Palestinian Journeys 2018). This part is created by the Institute of Palestine Studies. In the Stories part, there are marginalised and forgotten narratives and personal stories from Palestinians. This part is created by the Palestinian Museum.

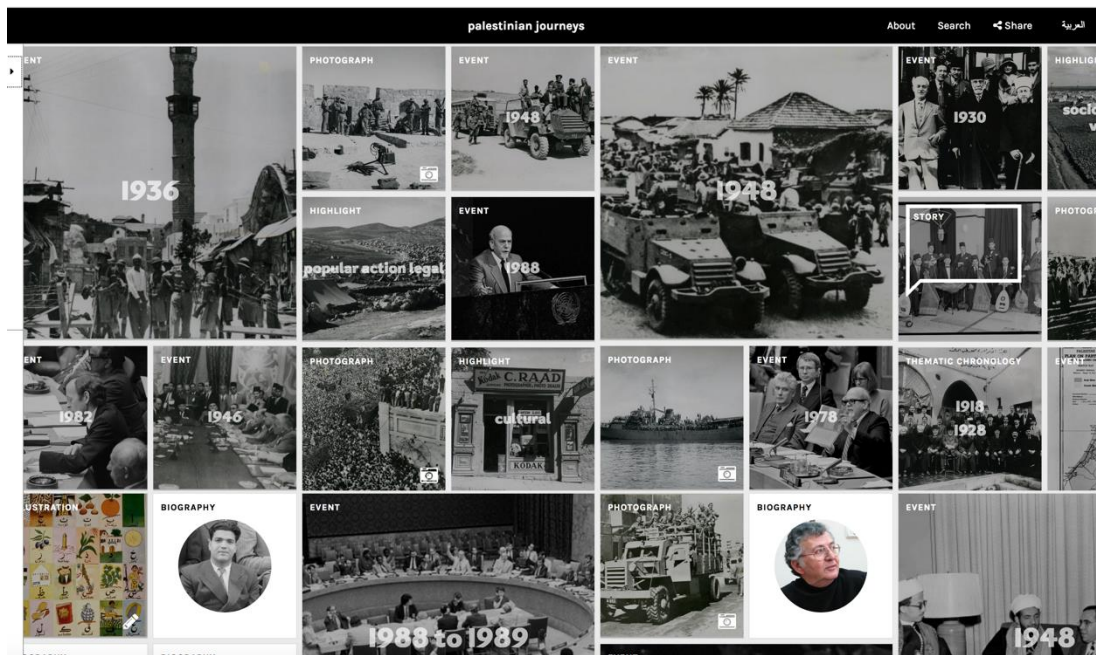


Figure 2.4: Palestinian Journeys, screenshot from their website.

### The Electronic Intifada (<https://electronicintifada.net>)

*The Electronic Intifada* is a news publication website that was co-founded by Ali Abunimah, Arjan El Fassed, Laurie Kind and Nigel Parry in 2001. The website features articles and reports created by various members of the editorial team or from trusted and leading activist and human rights organisations. Their reporting “is built on a foundation of documented evidence and fact-checking” (The Electronic Intifada 2000). *The Electronic Intifada* provides up-to-date commentaries on current events, and their reporting is usually accompanied by footage from the ground.

### Palestine Remix (<https://interactive.aljazeera.com/aje/palestineremix/>)

*Palestine Remix* is an interactive portal created by Aljazeera Media Network in 2015. This portal contains a large array of documentaries and video footage that have been coded for easy browsing and searching. Users can navigate through these

video materials and create their own short documentaries using an inbuilt video editor. The finished remixed documentaries can then be shared on various social media platforms. The website is available in four languages, namely, Arabic, English, Bosnian and Turkish.

#### **2.2.4 Identified Literature Gaps**

Design, art and social media have been used as tools for political activism. They all share one common goal, which is to disrupt the status quo and introduce different perspectives in different political situations. Through these forms of activism, the aim is to advance *dissensus* instead of consensus (DiSalvo 2012; Papastergiadis 2014).

But there are some growing scholarly conversations about how this can be achieved and what gaps need to be addressed. Markussen has identified a gap in the scholarly work on design activism. He points out that scholars have focused on either environmentalist or sociologist thinking when addressing the frameworks of design activism (Markussen 2013). By contrast, Markussen's attention is on aesthetics and how design artefacts can encourage social change and alter urban experiences.

DiSalvo identified a gap in scholarship about the relation between objects and mediums and how they relate to the political or politics. He says that we need to focus on looking at how the designed qualities of artefacts and systems enact a range of political expression. He argues that adversarial design could address this gap by not only being a means of doing the work of agonism (the positive application of political struggle) through the designed artefacts and systems, but also through understanding artefacts and systems in terms of their agonistic qualities (DiSalvo 2012). Fuad-Luke points out that primary scholarly works focused more on the application of activism in architecture and graphic design, whereas there are more design disciplines that can be addressed (Fuad-Luke 2013).

I also identified a gap that I hope that this research addresses. While the conversation in design activism looks at works in democratic versus non-democratic countries, those boundaries are not contrasted in the same way in the online space and in solidarity movements that collaborate and work on a transnational scale. Also, many of the conflicts and unrest in non-democratic countries are either fueled or supported

by democratic countries. Therefore, this research project is investigating how to introduce unfamiliar political narratives from one country to the people in another country to create and facilitate better solidarity.

## **2.3 Designing Experiences in Affective Spaces**

In the twenty-first century, the global marketplace has shifted its selling point emphasis from objects to experiences (Joy and Sherry 2003). The shift in focus to experience, with all the emotions and social relations that it raises through people's interaction with the designed world, has emphasised the concept of humanness within design (Press and Cooper 2003). Design thinking now focuses on both the experiential and emotional aspects of the interaction between people and the designed world, including objects and spaces (Kocsis, Barnes and Kenderdine 2012).

Experience design is “designing human experiences foremost and products, processes, and services that deliver that experience” (Fuad-Luke 2013, 22). Experience design can be defined as an approach to design where the focus of the designing process is to create pleasurable and meaningful moments (Hassenzahl 2010). The key contemporary issues that are usually tackled through experience design are economic, cultural and social issues (Fuad-Luke 2013). Through experience, learners learn. They change their unconscious understanding of consciousness and inner reflection, which is then transformed into action (Räsänen 1999).

Communicating and formulating experiential concepts can potentially become contributions to the community's shared body of knowledge (Löwgren 2007). A significant aspect of the experience is confronting one's beliefs and challenging people to rethink possibilities (Press and Cooper 2003). One of the characteristics of design that DiSalvo identifies is that design makes ideas and beliefs “experientially accessible and known” (DiSalvo 2012, 16).

The role of the designer is to enable the intended experiences (Press and Cooper 2003). When designing an experience, the designer should be mindful of the desired emotional and cognitive content of that experience, what actions it will engage, and finally what is the context and the temporal structure of that designed product. All these elements should be assessed afterwards to evaluate if they help achieve the

desired experience or not (Hassenzahl 2010). This framework of evaluation provided guidelines when evaluating the designed prototype as will be discussed in Chapter 8.

Creating experiences in spaces will necessitate some level of interaction between the viewer and the space. Löwgren argues that interaction design requires its own set of experiential concepts that are strongly concerned with how the interaction feels (Löwgren 2007). Hassenzahl describes how the consumption of shared experiences has three phases; anticipation, event and cooling-off (Hassenzahl 2010). These phases can be reflected when designing a spatial experience. The overall narrative of the experience should allow collective and individual “spaces” for engagement and reflection within the overall experience.

Designing spaces with experience in mind has been paramount in museums and memorials. Museums function as elicitors of experience and thoughts (Hein 2000). Prominent examples include the various Holocaust Memorials where the narrative takes a spatial form, and is used to create experiences (Meadows 2003). For example, the United States Holocaust Memorial Museum is structured with complex spaces ranging from narrow corridors, to bridges, to towers, backed with photographs and artefacts, all in the service of the narrative experience (Linenthal 1994). In Chapter 4, I have looked at three case studies of memorial museums and in particular look at the spatial experiences and design treatments used to achieve those experiences.

### **2.3.1 Embodied Experiences**

In recent years, there has been a shift towards embodied experiences (Joy and Sherry 2003). Waterton emphasises the importance of examining embodiment when working with heritage sites. This is due to the shift in understanding heritage sites as spaces of engagements, experiences and embodiment of the process of meaning and sense-making, and as agents or co-producers of heritage experiences (Waterton 2014).

Embodiment has two levels of awareness. One is the conscious (or phenomenological) level and another is the unconscious (or cognitive) (Lakoff and Johnson 1999). Although the first point of perception for museums visitors is through the act of seeing, they subsequently engage through their other senses, affecting how they form their experiences in the museum (Joy and Sherry 2003). Interpreting experiential art is based on the viewer’s past and present experiences, and results in

constructing new knowledge (Räsänen 1999). Perception is a physiological and intellectual judgment (Joy and Sherry 2003).

Reason is an embodied experience. Reason is mostly unconscious; it is mostly imaginative and emotionally engaged (Lakoff and Johnson 1999). Part of an embodied experience is the way our bodies *feel*. Thus we need to investigate how we *feel* and *think* through our bodies (Davidson and Milligan 2004). Anderson and Smith (2001) argue for a better understanding of a “sharper “geographical sensibility” [sic]” to better understand the significant role of emotion in the human experience (Anderson and Smith 2001, cited in Thien 2005, 451). Specifically, there is growing literature on the topic of affect and its role in shaping embodied encounters at memorial spaces (Micieli-Voutsinas 2017).

When designing the intended spatial experience in this research, I have focused on the two aspects discussed here; cognitive and affective embodiment. The engagement with the designed prototype has been examined thoroughly by looking at the efficiency of the technology and media used. Then, given the above theories, the role of emotions has been explored through the creation of the narrative and also how the technology and the interaction facilitated more affective engagement with the political narrative presented.

### **2.3.2 Affective Spaces**

While affect has been discussed in philosophy for many centuries, it is only in the twenty-first century that academics are turning their attention to discussing affect and emotions through critical thinking (Thien 2005). There is a rising interest in emotion within geography, similar to the interest in and exploration of embodiment before that (Davidson and Milligan 2004). Our understanding of ourselves and the world we live in is continually being shaped and reshaped by how we feel (Davidson and Milligan 2004).

There is no set definition of affect (Thrift 2004). Many scholars have scoped various definitions of affect, for example, the works of Kraft and Adey (2008), Thien (2005), Thrift (2004), Waterton (2014). It is not within the scope of this research to investigate the various definitions of affect. However, a basic understanding of what affect means is needed. Therefore, I will highlight some of the definitions that respond

to the overall research perspective on affect and affective spaces. Matthis argues that affect is a matrix which includes feelings and emotions (Matthis 2000, cited in Thien 2005, 451). Sedgwick suggests that affect can be attached to people, ideas, relations, things, activities and even other affects (Sedgwick 2003, cited in Thien 2005, 451). Thrift suggests that affect is something that pushes, pulls, or lifts us to feel, think or act (Thrift 2004). Affect is relational and differs from person to person (Kraftl and Adey 2008). It is considered a form of thinking though it is non-reflective and indirect (Thrift 2004). Thien gives an overarching definition of affect after her examination of the various existing definitions: “Affect is the *how* of emotion. That is, affect is used to describe (in both the communicative and literal sense) the motion of emotion [original italics]” (Thien 2005, 451).

The use of the word motion resonates with the premise of this research as spatial communication is central to the research question, and the designed spatial experience is a journey. Thus, bringing the spatial element to the emotive and affective forces makes sense. Linguistically, spatial terms are used to describe emotions, for example, speaking of the heights of joy or the depths of despair (Davidson and Milligan 2004). While architectural design is the starting point of making symbolic meaning of buildings, the inhabitation of the buildings and the different performances inside those buildings create the affective geographies of buildings (Kraftl and Adey 2008). We understand architecture through our experiences of it (Coates 2012). Kraftl and Adey argue that affect is designed in architectural spaces to work in many ways, and that architectural design works through different ways to evoke, channel and preclude specific affects (Kraftl and Adey 2008).

According to Thrift, affect is contagious (Waterton 2014). And through this idea of contagion, affect becomes political and the term “the politics of affect” has emerged (Waterton 2014). This contagion, however, is influenced by other factors both on the individual and collective levels. To illustrate that, Waterton referred to the fear circulating post September, 11 through media, films, books, art, museums and other pop culture means. Thrift specifically explains how affect could be used to change the political<sup>9</sup>. He states that the goal of such a change could be considered a kind of “emotional liberty.” But he emphasises that the real need for evoking emotions is not

---

<sup>9</sup> The definition of political versus politics has been previously addressed.

in a romanticised sense of creating emotions but instead in looking at how to navigate through these emotions (Thrift 2004, 68).

Museums and galleries are considered spaces to express and afford civic belonging. The exterior design of such spaces emphasises how these spaces are considered “secular temples to learning and the celebration of national virtues” (Crang and Tolia-Kelly 2010, 2320). An important step forward for museums to improve engagement with their visitors is to facilitate increased empathy, by focusing on the affective capacities of individuals and groups and not assuming a universal response from all visitors (Crang and Tolia-Kelly 2010). The use of affective display strategies in museums is aimed at creating experiential and embodied engagements (Messham-Muir 2004; Rankin and Schmidt 2009). For example, the use of dark spaces is one of the affective display strategies used in museums such as the Holocaust museums (Messham-Muir 2015).

Crang and Tolia-Kelly highlight the need to understand how affect, emotions and physical interaction between visitors and the displays work at national heritage sites (Crang and Tolia-Kelly 2010). Affective heritage sites do not rely on authoritative narratives for creating meaning at commemorative sites. Instead, they rely on the visitors to such sites to “feel meaning as it is produced through their embodied encounters with and within memorial spaces” (Micieli-Voutsinas 2017, 94). It is essential to understand the complex power structure working in any heritage site to evoke affect. This is important because it will help us understand how those heritage sites and experiences produce feelings of belonging, identity and inclusion on one hand and feelings of marginalisation, subjugations and exclusion on the other (Waterton 2014).

### **2.3.3 Identified Literature Gaps**

User experience design is becoming the focus of all design disciplines. Designers now focus on embodied experience that considers the cognitive and affective aspects of embodiment. Joy and Sherry have identified the lack of published studies that focus on embodiment processes at the cognitive level (Joy and Sherry 2003). Thrift points out that now we are in exciting times, where the concept of “cultural engineering” is bringing together the two realms of social sciences and art.



He argues that through these cultural engineering experiments, new ways of engaging in a political practice that values democracy above all will emerge (Thrift 2004). He also identifies the need for more research and development in this area to “expand the envelope of the political and so both restore the spaces of moral and political reflection that ‘man’ has collapsed and brought new forms of politics into being” (Thrift 2004, 75). This research project addresses this idea by proposing a practical new model of cultural space, one that is virtual, interactive, and immersive, as well as political, contestable, challenging and provocative.

## **2.4 Designing Experiences through Digital and Interactive Media**

Tell me, and I'll forget; show me, and I may remember; involve me, and I'll understand. (Chinese proverb cited in Lukas 2013, 103)

Experience is at the core of what interactive media can offer to people (Shedroff 2001). In other words, the engagement of the person with the design is the experience itself (Press and Cooper 2003). People think through experiences (De Castell and Jenson 2003). There is a huge body of existing literature on digital and interactive media which is sometimes called “new media.” In this section, I will focus on how experiences are being designed using digital and interactive media. I will focus on three main threads; designing digital and interactive experiences in museums, cultural heritage projects, and serious gaming. By exploring these three threads, I aim to investigate where this project can be situated.

### **2.4.1 Introduction to Digital and Interactive Media**

The introduction of smartphones, tablets and social networks has made it easier for people to connect with others from around the globe and to interact with technology and devices through the intuitive user experiences these digital media offer. Interactivity allows the user to have a part in the story (Jacobson 1999). Furthermore, in interactive media, the user can actively explore the information presented and engage with it in accordance with his/her preferences and needs (Graham 1999).

Interactive spaces offer a chance for people to interact with other people (Bullivant 2005). People now want to experience interactivity beyond their screens.

Designers are creating embodied experiences that challenge users' perceptions and add complex meanings to their surrounding (Suater 2011). People now seek to extend their experiences of digital media outside their screens and into their physical world, therefore creating experiences using digital media in installations or spaces, and facilitating meaning-making for viewers whether the meanings are informative or poetic (Klanten et al. 2011).

## **Interactivity**

There is a difference between participation and interactivity. Interactivity engages the viewer physically by pressing buttons or using any other input device, whereas participation engages the viewer socially (Bishop 2006, cited in Beech 2008, 2). Interactivity allows users some level of interaction with different media combined in a digital format (Graham 1999). As Jacobson summarised: "Everyone has a part in the story. That is the meaning of interactivity" (Jacobson 1999, 2).

Interactivity is the ability of users to modify the environment they are exploring by receiving feedback on their actions (Carrozzino and Bergamasco 2010). Technology has shifted from just simulation of movement into the simulation of interaction (Kocsis, Barnes and Kenderdine 2012). Power is given through interactivity to each individual user making the user feel more engaged (Graham 1999). Interaction and immersion together create the presence of the user in virtual experiences (Carrozzino and Bergamasco 2010).

## **Immersion**

Immersion is the user experience of being in a virtual or digitally created environment (Anderson et al. 2009; Carrozzino and Bergamasco 2010; De Castell and Jenson 2003). Immersion is realized through the creation of embodiment (Ryan, Rigby and Przybylski 2006). The term immersion is often used interchangeably with other terms like presence and engagement (Denisova and Cairns 2015). In their paper, Nilsson, Nordahl and Serafin reviewed different definitions of immersion and proposed a three dimensional taxonomy of the different conceptualizations of immersion (Nilsson, Nordahl and Serafin 2016). In this thesis, the term immersion is used to mean "an all-inclusive experience" which goes beyond the physical presence

and “submersion in a digital medium” into including meaningful and affective experiences (Farrow and Iacovides 2014).

The immersive environment is interactive and turns the audience into more active visitors (Courchesne 2002). Immersive Worlds are places which people choose to visit for enjoyment and want to be fully wrapped up in because they are enjoying experiencing the space and as such their immersion creates more pleasurable experiences (Lukas 2013). Being in an immersive environment has the potential to enable users to feel contained and surrounded yet free from worldly or in some cases bodily constraints (De Castell and Jenson 2003).

## **Virtual Reality**

Ivan Sutherland created the first Virtual Reality (VR) system in the 1960s<sup>10</sup> (Anderson et al. 2009). “The virtual” was the hype of the 1990s (Manovich 2006). But by the end of the decade and the rise of using the internet for everyday actions like making reservations, checking emails and listening to music, “[t]he virtual became domesticated” (Manovich 2006, 220). Oosterling points out that the virtual in digital media “does not mean possible but not yet realised”, rather it means “directly effectuated in actual scenario’s as real options” (Oosterling 2011, 10).

“Virtual reality is defined to be a computer-generated digital environment that can be experienced and interacted with as if that environment were real” (Jerald 2016, 9). Virtual environments allow users to create and experience activities that are not possible in real life (Calderon, Worley and Karl 2005). VR systems create virtual spaces for the users that do not relate to the user’s immediate physical space (Manovich 2006). In an ideal VR system, users can physically walk around objects and touch them as if they were real (Jerald 2016). VR creates environments where users can be immersed inside them and interact with various elements within these environments (Carrozzino and Bergamasco 2010). VR worlds do not obey the laws of nature as a rule. While this can be beneficial in general, it can be challenging in specific scenarios. For example, some users might have emotional and psychological problems when

---

<sup>10</sup> Some would argue that the Sensorama, which was developed in 1950s, is the first form of a Virtual Reality system.

exploring virtual environments, or they can experience motion sickness or nausea (Anderson et al. 2009).

VR is being used nowadays in specific disciplines and sectors that benefit from its special capacity for immersion and interaction (Carrozzino and Bergamasco 2010). What VR provides is the opportunity for learning concepts or practising skills through interactive narratives (Jerald 2016). For example, VR is being used in education and cultural heritage, as will be discussed later in this section.

There are several issues that hinder the spread of the use of VR. VR technology is still expensive in terms of software and hardware. VR projects need a multidisciplinary teams to work develop and deliver these projects. In most cases, immersive VR systems require their own dedicated spaces and team members to operate them, and this can be hard to achieve in museums. The interaction devices can be intrusive and hard for people to wear or use, and research is now heading toward the use of more transparent interaction devices like gesture and voice recognition (Carrozzino and Bergamasco 2010). These issues will be revisited in Chapter 6, when I discuss the experimentation with possible technologies that can be used in the design of the proposed prototype for this research project.

### **Augmented Reality**

Augmented Reality (AR) layers people's sensory perceptions of the existing world with digital information in various forms (Anderson et al. 2009; Manovich 2006). A viewer can perceive both virtual and real information simultaneously (Anderson et al. 2009).

### **Mixed Reality**

Mixed Reality (MR) is a term coined by Milgram in the mid-1990s. Mixed Reality is a combination of VR and AR technologies (Anderson et al. 2009).

### **Augmented Space**

Digital artefacts, information and communication technology are all temporal as much as they are spatial (Löwgren 2007). While the built environment always had layers of textual and visual elements placed on it, having that layer as dynamic multimedia information is new (Manovich 2006). These multimedia information

layers are also delivered to each person via their devices like their cell phones as they navigate the built environment (Manovich 2006). Architecture is now seen as a communication tool in this Information Age rather than just space as seen in the Industrial Age (Venturi, Scott Brown and Izenour 1972). From a technological point of view, the overlapping of information layers with the physical built spaces dissolved the priority long held for the geometrical dimensions of the space (Manovich 2006). Manovich termed this overlapping of informational multimedia layers on the built spaces as “augmented spaces” (Manovich 2006). Augmented space is: “... the physical space overlaid with dynamically changing information, multimedia in form and localized [sic] for each user” (Manovich 2006, 220).

#### **2.4.2 Using Digital Media in Museums**

In the 1990s, museums expanded their functionality to include galleries, gift stores, as well as hosting lectures and concerts (Manovich 2006). The role of contemporary museums has shifted from places to exhibit and showcase a collection of artefacts or artworks into places of communication of culture to the mass audience (Carrozzino and Bergamasco 2010). Now, the roles of museums have expanded from archiving and displaying collections into also “synthesizing [sic] experience” (Hein 2000, 84). Museums provide an array of spatial and affective experiences for their visitors (Kocsis, Barnes and Kenderdine 2012).

The exterior and interior architecture of the museum play a significant role in meaning-making for visitors (Kocsis, Barnes and Kenderdine 2012). Manovich emphasises the importance of working with the architectural elements of the museums. Kocsis, Barnes and Kenderdine emphasise the important role that the interior space of museums can play in creating and mediating effects and affects through embodied and affective experiences (Kocsis, Barnes and Kenderdine 2012).

Most museology studies focus on spatial design in terms of how they relate to exhibitions but not so much on how people experience those spaces (Kocsis, Barnes and Kenderdine 2012). While the debate still continues on subjectivity, experience and meaning in museums, the use of technology in museums deals with visitors as a whole subject taking into account their emotions and perspectives (Kocsis, Barnes and

Kenderdine 2012). Emotions play a significant role in meaning-making in museums, just like cognitive understanding (Hein 2000).

Employing technology in museums requires new ways of thinking and working with the technology on the one hand, and museumgoers on the other hand (Sanders 2002). Advanced technology is being used, for example by creating 3D collections where visitors can manipulate and view the collections from different angles through the use of multimedia and animation (Rizvic et al. 2012). Many sciences and history museums implemented interactive displays as part of their exhibitions in the attempt to engage visitors and offer new modes of learning through experiences (Kocsis, Barnes and Kenderdine 2012). Immersive VR is gaining more traction in museums (Carrozzino and Bergamasco 2010).

Manovich points out that technology drives cultural institutions in high-tech societies. Cultural institutions notice any trends in using certain technologies and they try to incorporate that into their programs (Manovich 2006). He argues that maybe now is the right time for such institutions to play a more active role and act like laboratories to test alternative uses of technologies (Manovich 2006).

## **Digital Museums**

Museum studies still mainly look at interior spaces as a neutral element of the experience (Kocsis, Barnes and Kenderdine 2012). However, this is different from digital museum exhibitions (Kocsis, Barnes and Kenderdine 2012). In digital exhibitions, the physical and virtual spaces play central roles in the embodiment of visitors (Kocsis, Barnes and Kenderdine 2012). Digital museums are a subset of museums, focusing on blending art, technology and new media (Kocsis, Barnes and Kenderdine 2012). Witcomb argues that the use of technology in museums should not be limited to their use as an interpretive aid, rather they should play a creative role in education by offering meaning-making through interactivity (Witcomb 2007).

## **Digital Containers**

Kocsis, Barnes and Kenderdine discuss digital containers and their role in museum spaces. Digital containers are “interactive, semi-immersive, and panoramic environments” that combine digital techniques with technological devices to create virtual spaces within a defined spatial structure placed within the museum’s space

(Kocsis, Barnes and Kenderdine 2012, 120). Digital containers raise questions about the role of spatial experiences in the museum because they have their physical presence in the museum space and their audience also has a concurrent physical presence within the digital exhibit (Kocsis, Barnes and Kenderdine 2012).

Digital containers create new experiential opportunities that are embodied and cognitive (Kocsis, Barnes and Kenderdine 2012). Digital containers can “bridge the gap between the pedagogic, the performative, the analytical, and the sensory” (Kocsis, Barnes and Kenderdine 2012, 123). The focus in digital containers is on the media presented, and the level of control users have over the speed, pace and volume of the media. This focus on the media deflects the attention from the interior space of the digital container. Digital containers facilitate new ways of being in museums. This presence takes into account the structure of the digital container and the spaces they create, their digital content and finally the embodied experience of the visitors (Kocsis, Barnes and Kenderdine 2012). Digital containers can facilitate collective performance through virtual embodiment, immersion and co-presence. Studying the effect of such performances can aid in understanding the new roles of the museums in challenging, informing and entertaining their visitors (Kocsis, Barnes and Kenderdine 2012).

### **Virtual Museums**

VR is used in science museums to communicate their existing collections, more so than in traditional museums (Carrozzino and Bergamasco 2010). But in traditional museums, more and more artists are using technology to produce new artworks (Carrozzino and Bergamasco 2010). VR technologies can be a powerful tool for displaying museum collections and offer an enjoyable experience to museum visitors (Rizvic et al. 2012). Having virtual 3D content available online makes the experience of visiting virtual museums more interesting and educational (Mortara et al. 2014). The Louvre in France, the National Gallery in the United Kingdom, and the Metropolitan Museum in the United States are some prominent examples of museums which have significant virtual components (Rizvic et al. 2012).

Virtual museum applications give people the chance to visit remote sites, explore fragile artefacts with no risk of damaging them, and communicate information through various multimedia (Mortara et al. 2014). Virtual museum projects aim at linking digital collections between museums as well (Rizvic et al. 2012). For example,

the Virtual Museum of Canada includes materials from 710 other member museums (Rizvic et al. 2012). Virtual museums are not just a virtual recreation of existing museums. They can offer access to different materials from a different location, or allow the creation of personalised experiences according to the visitors' interests (Mortara et al. 2014).

### **2.4.3 Serious Gaming and Gamification**

Computer games are one of the most widely disseminated entertainment experiences of our times. There is a very large amount of professional activity in the design and analysis of games in both the commercial sector and the scholarly community. Academics are more concerned with standardised definitions of games, whereas industry practitioners are less concerned with definitions, and constantly modify their approaches and solutions in response to feedback from the marketplace and they clear any ambiguity as it arises in their discussions with others (Schell 2015).

The purpose of game design is to create an enjoyable interaction. Many analysts and scholars have identified that the significance of a game is not the hardware, software or audio-visual aspects, and instead concentrate on the player's own internal experience. Computer games are seen as "an expressive medium" (Bogost 2007). Games are objects and processes at the same time (Aarseth 2001). Games are not the experience; they are the enablers of experiences (Schell 2015).

Walz and Deterding identified four main directions in what they called "the rise of a gameful world." These are serious games, serious toys, playful design and gamification (Walz and Deterding 2014a). I will focus on my discussion on serious games and gamification as they relate more directly to my research question, whereas serious toys and playful design focus more on creating playful experiences.

Following the success of computer games, serious games have evolved to make use of the advancement in gaming technology in other sectors besides entertainment (Anderson et al. 2009). The technological advances in serious games mirror advances in the entertainment games sector (Anderson et al. 2009). Learning and education were amongst the first to consider how they can benefit from this advancement in technology (Malegiannaki and Daradoumis 2017). Immersion in games increases the retention of knowledge and raises user engagement (Chittaro and



Buttussi 2015, cited in Andreoli et al. 2017, 2). Serious games have been used in education, training, cultural heritage, military and health sectors (Susi, Johannesson and Backlund 2007; Zyda 2005; Marsh 2011; Andreoli et al. 2017).

Several other terms are used in place of serious games, for example, e-learning, edutainment, game-based learning, digital game-based learning (Susi, Johannesson and Backlund 2007), playful learning (Malegiannaki and Daradoumis 2017; Susi, Johannesson and Backlund 2007), and gamification (Bogost 2014; Malegiannaki and Daradoumis 2017; Walz and Deterding 2014a). The design of serious games differs from the design of e-learning applications in so far that they balance learning with gaming (Mortara et al. 2014).

### **Defining Serious Games**

Serious games is a relatively new concept (Anderson et al. 2009). Serious games used to refer to a subset of video games when the Serious Games Initiative was established by the Woodrow Wilson International Center for Scholars (Marsh 2011). There are several works that have surveyed existing serious games definitions or aimed at proposing definitions of serious games<sup>11</sup>.

Simply put, serious games are digital or non-digital games that are used for more than just entertainment purposes (Susi, Johannesson and Backlund 2007; Marsh 2011). Since games are thought of as a means of entertainment, then serious games have an entertainment element too, albeit a serious one (Champion 2016b). Klimmt outlines five main characteristics of serious games that have been borrowed from digital games: multimodality, interactivity, narrative, social use, and specific frame of play situations (Klimmt 2009).

Danc<sup>12</sup> has identified an important distinction between the use of game-like 3D visualisation technology to create an experience, and the creation of game

---

<sup>11</sup> Scoping all possible definitions of serious games is outside the scope or needs of this research. For more on this issue, refer to these works: Anderson et al. (2009), Andreoli et al. (2017), Baek, Ko and March (2014), Champion (2016b), De Castell and Jenson (2003), Klimmt (2009), Marsh (2011), Michael and Chen (2006), Susi, Johannesson and Backlund (2007), Ritterfeld, Cody and Vorderer (2009), and Zyda (2005).

<sup>12</sup> The name Danc was used in the article by Susi, Johannesson and Backlund (2007). In the article, he is identified as the author of this website: <http://www.lostgarden.com/>. However, upon revisiting the mentioned website, the name of the author is now shown to be Daniel Cook. When referring to the author through the Susi Johannesson and Backlund article, I have kept the name that they used. However, for any information that I use from his website directly, I will refer to him as Daniel Cook.

experience. When client companies approach game designing companies, they are often interested in the visualisation, and not the game-like experience, to solve their business problems. In many cases, the 3D applications are built using game technology and might have a game-like feel, but they are not games. Therefore, serious games can be divided into two categories; games and 3D applications (Danc 2006, cited in Susi, Johannesson and Backlund 2007, 6). Cook proposes a new and more encompassing definition of serious games:

The application of gaming technology, process, and design to the solution of problems faced by businesses and other organisations. Serious games promote the transfer and cross-fertilisation of game development knowledge and techniques in traditionally non-game markets such as training, product design, sales, marketing, etc. (Cook 2005).

Similar to this broader definition, Marsh proposes a more comprehensive definition:

Serious games are digital games, simulations, virtual environments, mixed reality/media and interactions that provide opportunities to engage in activities through a responsive narrative/story, gameplay or encounters to inform, influence, for well-being, and/ or experience to convey meaning. The quality or success of serious games is characterised by the degree to which purpose has been fulfilled. Serious games are identified along a continuum from games for a purpose at one end, through to experiential environments with minimal or no gaming characteristics for experience at the other end. (Marsh 2011, 63)

Serious games can be viewed as mobile applications or web-based solutions or computer games (Anderson et al. 2009). However, Marsh argued that there should be a continuum of serious games that go beyond screen-based games (Marsh 2011). He identified three main groups of serious games that aim at extending our current understanding of what serious games are. The groups are: “serious games as games for purpose”, “serious games with reduced gaming characteristics”, and “serious experiential and cultural purposes” (Marsh 2011, 63-65). The continuum starts with games that are built with specific purposes other than entrainment and have the traditional characteristics of video games in general. The second group focuses on games and environments that have some of the gaming characteristics but they shift away from games into environments and digital media with purposes as well. The third group includes environment and digital media that do not have any or much gaming

characteristics. The purpose of these environments is to provide experiences and emotions that facilitate meaning-making for their users.

Following these definitions and understandings of serious gaming, I conclude that the proposed activist spatial experience in this research falls under the third group that Marsh has identified. The spatial experience I designed is based on the navigation of a virtual environment and uses digital media without having any gaming characteristics. Rather, the focus is on the experiential, spatial and affective interaction between the viewers and the designed virtual environment.

## **Other Terms**

As mentioned before, several terms are used in a similar context to serious games, which I will briefly outline here.

- Edutainment is education through entertainment, and it was a popular trend during the 1990s (Susi, Johannesson and Backlund 2007).
- E-learning is using the computer for enhanced learning tools (Susi, Johannesson and Backlund 2007).
- Game-based learning is either considered to be the same as serious games or a branch of it which has more defined learning outcomes (Susi, Johannesson and Backlund 2007).
- Digital game-based learning refers to the medium used, which is digital (Susi, Johannesson and Backlund 2007). Digital game-based learning is considered the newest trend (Arora and Itu 2012).

## **Persuasive Games**

Bogost argued against the use of the term serious gaming as he thought that neither of the two words is necessarily exclusive. Therefore he suggested a new term which is persuasive gaming (Bogost 2007). He first coined the term in his book *Persuasive Games* (2010). Bogost also established a company with the same name. The company's website describes their objectives:

We design, build and distribute video games for business, politics, learning (and more). We also consult and advise to help you avoid making games for bad reasons (like the spectre of gamification, brand manager jealousy, false dreams of youth, trendiness, caprice...). (Persuasive Games 2003)

Bogost argues that “persuasive games” is a better term to be used instead of “serious games.” He defines persuasive games as follows:

If persuasive games are video games that mount meaningful procedural rhetorics, and if procedural rhetorics facilitate dialectical interrogation of process-based claims about how real-world processes do, could, or should work, then persuasive games can also make claims that speak past or against the fixed worldviews of institutions like governments or corporations. (Bogost 2007, 57)

Of significance to this research, Bogost’s definition of persuasive games specifically refers to its potential in activism (Bogost 2007). However, through my investigation of existing literature on serious games, the term “persuasive games” has not appeared elsewhere, or been suggested as a replacement for the term “serious games”. Therefore, despite its possible connection with the type of project I am proposing in this research, I will not use the term “persuasive games” to describe it. As discussed earlier, Marsh’s continuum of serious games seems the best descriptor for the type of project I am proposing in this research.

## **Gamification**

In the late 2000s, game design started appearing more in the public arena. The term “gamification” emerged in mid-2010 and overtook “serious games” in mid-2011 (Walz and Deterding 2014a). The gamification industry is growing and expected to grow even more in the coming years. Gamification is now applied in many areas, for example, health and well-being, education and enterprise (Bogost 2014). The exact definition of gamification is still developing, and different understandings of the term are being negotiated.

“Serious games” and “gameful design” are thought to be opposites to “gamification”, and Bogost has suggested the term “exploitationware”<sup>13</sup> to describe some types of “gamification” products (Walz and Deterding 2014a). Walz and Deterding argue that such linguistic debates do not take into consideration more in-

---

<sup>13</sup> Bogost suggests using the term exploitationware rather than gamification because he sees the former more closely encompassing the purpose and current ethos of gamification. He further argues that examining gamification as practice shows that at its core it does not have much in common with game design and development. Its practices are drawn from more general and common practices of business and productivity software (Bogost 2014).

depth understanding of how the key terms are related and thus judge them based on how they meet the aesthetic, practical or moral standards of game design. Instead, they tend to take one of two stances: either good meaning well designed and ethical serious games or gameful design, as opposed to bad meaning poorly designed and unethical gamification (Walz and Deterding 2014a).

The key difference between serious games and gamification is that serious games take on the role of an instructor and therefore learning happens through its instructional content, whereas gamification influences the learning process by engaging and motivating users (Landers 2014). For gamification advocates, games are used as “solutions” in the business context. This means that games are abstracted, designed and used as business services (Bogost 2014).

### **The Relations between Entertainment and Pedagogy**

There is a current debate between scholars on what relations there are between entertainment and pedagogy, and between seriousness and gaming. For example, Bogost thinks that using the term “serious games” undermines the potential of video games in general, to convey messages and facilitate meaningful expression (Bogost 2007). Champion contests the common understanding of entertainment only in terms of fun and play. He argues that historically entertainment was historically always part of the culture, and can sometimes show violence and horror (Champion 2016b).

Charsky points out that edutainment is the worst form of education when activities are masked by not very entertaining gameplay (Charsky 2010, cited in Arora and Itu 2012, 4-5). Resnick argues against the common idea of education as some bitter medicine that needs to be masked with the sweetness of entertainment. This view also places the agency of learning with schools and teachers instead of students, whereas Resnick argues that the term “playful learning” is more suitable as it implies that the player is the one taking action and in charge of the learning process (Resnick 2004, cited in Arora and Itu 2012, 5). There is also a concern that using entertainment for education in social issues might trivialise the subject (Arora and Itu 2012). This concern has been addressed while designing the proposed activist spatial experience.

Sawyer clarified that the “serious” in “serious gaming” is not meant to describe the content of the game, rather the purpose behind it (Michael and Chen

2006). However, Zyda argues that in serious gaming, pedagogy comes secondary to entertainment, so a serious game still should be enjoyable and fun to play (Zyda 2005). Serious games are games. The seriousness is in the pedagogical investment with the various activities offered as part of the game, and through these activities knowledge is acquired (Zyda 2005). On the other hand, Micheal and Chen argue that serious games are still entertaining and enjoyable, but they have another function or purpose beyond that (Michael and Chen 2006). Arora and Itu highlight the need to balance the educational elements of the game with the dynamic play experience that should engage the player, and this will better serve the proposed outcomes of serious games (Arora and Itu 2012). In serious games, entertainment is as important and relevant as knowledge acquisition (Andreoli et al. 2017). De Castell and Jenson argue that what educational games have failed to learn from commercial games is that games are meant to be fun and engaging, and that gaming is a culture or a way of life and that players are always encouraged to develop their skills within the game and rewarded for that (De Castell and Jenson 2003).

### **The Roles of Serious Games**

While the goals of some edutainment are teaching facts, serious games extend beyond that to facilitate meaning-making and changing behaviours and attitudes, and focus on deeper learning while still producing an enjoyable experience (Ritterfeld, Cody and Vorderer 2009). Serious games have several roles; they inform and help create meaning for the players. Champion adds that they could also train and help in developing habits (Champion 2016b). Swain emphasises the importance of presenting information with clarity and objectivity within the game so that the message remains a trustworthy one (Swain 2007, cited in Arora and Itu 2012, 3-13). Iverson argues that serious games offer a paradigm shift in training as it allows users to become more active and the instructors to become facilitators (Iverson 2005, cited in Michael and Chen 2006, 118). In serious games, the centre of the experience is the player; he/she is the one to explore the context of the game and manipulate different objects within the game (Andreoli et al. 2017).

One of the objectives of serious games is to raise awareness and promote change in the attitude or behaviour of people toward a certain socio-political cause (Arora and Itu 2012). Serious games allow users to experience different cultural

perspectives (Champion 2016b). Usually this happens by engaging the players of these games through constructed narrative and cultivating empathy in characters relating to the subject matter while sharing more information about the cause (Arora and Itu 2012).

## **Interaction and Serious Games**

There are two important factors to create effective serious games: “An appealing and meaningful environment and a suited and intuitive interaction paradigm” (Mortara et al. 2014, 323). Most serious games still rely on a keyboard and mouse as their input devices, though the use of mobile devices is now very common (Mortara et al. 2014). Using touch screens in museums is common as well, and this can encourage “multiplayer” style collaboration between visitors to a museum (Dehais, Charvillat and Conter 2007). It is also important to think of what happens after the game and even offline by fostering audience engagement beyond the game (Arora and Itu 2012).

Carrozzino and Bergamasco created a spectrum that shows the classification of VR devices in term of how interactive they are, ranging from non-interactive to device-based interaction to natural interaction. They also created a spectrum for immersion that shows the classification of VR devices depending on how immersive they are, starting from non-immersive, low, to high immersion. At one end, desktop devices are considered almost non-interactive and non-immersive, and at the other end there are no sensors or external input devices to create natural interaction and deep immersion (Carrozzino and Bergamasco 2010).

Based on this spectrum, they argue that higher immersion with natural interaction will create a more pleasant virtual experience. This kind of experience works best for cultural heritage projects, or projects that are open to the general public. So, even if the users are not well experienced with the technology, they will still be able to control and explore the VR experience (Carrozzino and Bergamasco 2010). Creating natural and intuitive interaction is becoming more paramount in serious games. Thus, the trend is moving away from the keyboard and mouse to more innovative input devices, for example, gesture recognition and multimodal interactions (Mortara et al. 2014). This concept is relevant to this research, as the experience that I

an aiming to create will have to be easily understandable and navigable by a wide audience, regardless of their level of exposure to technology.

### **Serious Games and Activism**

There is a rising interest in virtual activism because it can transcend geographical limitations (Arora and Itu 2012). Serious games can be seen as a more innovative way of using online and digital media in activism, beyond the online petitions and collective actions (Arora and Itu 2012). Serious games can spread information about social issues and raise awareness, and enhance social change (Arora and Itu 2012).

Arora and Itu explore the nature and process of using serious games in International Non-governmental Organizations (INGOs) for learning and activist potential (Arora and Itu 2012). Their investigation showed that the use of serious games in INGOs lacked critical learning and activism, and instead relied more on emotional manipulation and followed a top-down pedagogy (Arora and Itu 2012). According to Arora and Itu, the serious games deployed have failed on three main fronts. Firstly, the information was presented within the game in a top-down manner, rather than creating a game-like exploration of the material. Secondly, the games were aimed at an audience who were already sympathetic to the social or political cause, since to be able to proceed with the game you had to know information that only people who are aware about the cause can know. Also, the games were presented on the websites of the INGOs, and therefore very few potential users will come across them. Thirdly, the learning process followed social marketing techniques in which morality and emotions drive the user, instead of critical thinking, which according to Arora and Itu is needed to foster activism (Arora and Itu 2012).

These points were quite important to be considered when I designed the prototype. The prototype needs to take into consideration who are the target audience and how to grab their attention, how to present the information to them and create the correct positionality for them inside the designed experience, and make sure to facilitate critical reflection alongside affective engagement with the subject being presented by combining facts with personal stories.



#### **2.4.4 Using Digital and Interactive Media in Cultural Heritage**

The London Charter defines cultural heritage, in the broader sense, to encompass “all domains of human activity which are concerned with the understanding of communication of the material and intellectual culture” (The London Charter 2009, 12) This, according to the charter, includes museums and art galleries on one hand, and heritage sites and research centers about heritage on the other (The London Charter 2009).

Virtual archaeological research arguably started with the use of Computer Aided Design (CAD) software that allowed the creation of detailed 2D drawings. And as the technology evolved, the use of 3D software became more widespread and familiar (Rua and Alvito 2011). Now, virtual reconstitutions that allow users to navigate and examine artefacts and sites are becoming more widespread.

#### **Virtual Heritage**

Virtual Archaeology is used as a tool for reconstructing, visualising and manipulating archaeological objects and structures (Rua and Alvito 2011). Virtual Heritage (VH) attempts to convey the meaning and significance of cultural objects and artefacts through the use of interactive and immersive digital media (Champion 2016a). Automatic data acquisition processes have been used in virtual archaeological research, but cost constraints have restricted their use in big cultural projects (Rua and Alvito 2011).

Champion offers the following definition for virtual heritage, which encompasses the process and roles of virtual heritage:

[V]irtual heritage is the attempt to convey not just the appearance but also the meaning and significance of cultural artefacts and the associated social agency that designed and used them, through the use of interactive and immersive digital media. (Champion 2016b, 69)

VR has been used in cultural heritage projects especially as a means for conservation and restoration. It is also used as an education or storytelling tool where information is being mediated by sensorial feedback (Carrozzino and Bergamasco 2010; Ott and Pozzi 2011). However, an important consideration in virtual heritage research is not the current status of technologies used but how these new technologies

are used and understood by society. Virtual heritage is not the simple combination of cultural heritage and virtual reality technologies (Champion 2016a), especially as VR is not a stable medium and the technology is changing and evolving all the time (Champion 2016b).

Creating virtual models for archaeological sites allows for more experimentation and implementation of various hypotheses interactively, with the ability to reverse the process and adjust the models more easily than physical reconstructions (Rua and Alvito 2011). Virtual models created can be cross-referenced and used in different projects when suitable (Rua and Alvito 2011). Virtual models also make it easier to visit these sites (Rua and Alvito 2011).

The use of immersive virtual environments in cultural heritage makes it easier for non-expert users to explore, understand and know more about ancient archaeological remains (Andreoli et al. 2017). Serious Virtual Worlds (SVWs) have great potential use in learning as they present contextualised information to the user as they explore the environment (Bellotti et al. 2010). Virtual worlds have been used in cultural heritage to create immersive experiences for the public to engage with different cultural content (Mortara et al. 2014). Virtual environments in cultural heritage are usually created and controlled using game engines (Anderson et al. 2009).

Similar to the previously discussed applications of digital and interactive media, there is a focus on the importance of peer-to-peer communication and collaborative technological tools in the field of virtual heritage (Andreoli et al. 2017). There are some challenges with virtual heritage research, for example, there is a lack of evaluation processes of virtual heritage projects; there is the occasional inclusion of neutral reflection on the success or failure of these projects; there is an insufficient amount of satisfactory metadata; and the field lacks efficient and flexible frameworks that integrate and combine assets from various secure archives (Champion 2016a).

### **Serious Games in Virtual Heritage**

Defining games in the context of virtual heritage is important because it shifts our understanding of games. Games in this context are the media used to facilitate knowledge seeking through interactivity (Champion 2016a). Games are still not fully

examined for their pedagogical capacity by professionals working in heritage studies (Anderson et al. 2009; Champion 2016a).

There is good potential for using computer games in virtual heritage as they are low-cost and can be designed as open-ended learning experiences (Champion 2016a). Serious games provide an interactive and experiential relationship with cultural heritage (Malegiannaki and Daradoumis 2017). Using game engines in virtual archaeology research allows researchers to dynamically evaluate the model created and overcome the limitation of the rigidity of images and experiencing the spatial dimensions of the model (Rua and Alvito 2011).

The use of serious games in virtual heritage is still a new field, and while the discussion on the use of gaming for leisure is well established, the use of games in virtual heritage is less discussed (Anderson et al. 2009). Serious games in virtual heritage have to make sure that immersion and collaboration are introduced to the players (Andreoli et al. 2017). Serious games in virtual heritage must provide a better understanding of the cultural artefacts, assets, and materials presented (Champion 2016b). Serious games in virtual heritage not only deal with the built environment but also with the natural environment and cultural influences (Mortara et al. 2014). As virtual heritage projects usually involve personal memories and sacred community artefacts, it is important that care and respect are shown (Champion 2016b).

What establishes the difference between serious games in general and those in virtual heritage is that serious games in virtual heritage are not only tools for education, but also tools for preservation, reproduction, and appreciation of cultural material (Malegiannaki and Daradoumis 2017). The use of serious games in virtual heritage is well suited for the affective domain especially in terms of using empathy for characters and plots that might help in understanding historical events and other people's culture, behaviour and challenges (Mortara et al. 2014). Serious games in virtual heritage usually use exploration to facilitate interaction with the cultural materials presented (Malegiannaki and Daradoumis 2017).

Serious games in virtual heritage can be played formally or informally, at home, in public places, or at schools (Mortara et al. 2014). The ability to play the games at home offers more flexibility in how much time the player can spend with the game whereas games in public spaces need to be easier to play and immediate

interaction with the game must be facilitated without the need for induction or tutoring sessions beforehand (Mortara et al. 2014). The important task of using interaction in virtual heritage is to provide meaningful and useful tools for transferring knowledge (Champion 2016a). Most serious games in virtual heritage are implemented on mobile devices to be played during the visit to the cultural site (Malegiannaki and Daradoumis 2017). Champion poses the question of how using novel interaction, and entertaining experiences affect the cultural understanding obtained by the user, and he also emphasises the importance of meaningful interaction within the virtual environment (Champion 2016b).

It is also important to understand the possible interactions of the viewers/players/visitors of these spaces regardless of whether they are digital heritage or virtual museums. These experiences usually involve groups of people at a time. Serious games in virtual heritage are either expected to be single-player or collaborative multi-players which create social relationships (Malegiannaki and Daradoumis 2017). Thus, any interaction that is intended and any technology used should facilitate multi-players interaction, be easy to understand and simple to use, and be as user-friendly for as wide an array of people as possible (Mortara et al. 2014).

#### **2.4.5 Identified Literature Gaps**

Manovich discussed how new media corresponds to the new post-industrial society (Manovich 2001). Kocsis, Barnes and Kenderdine have highlighted that beyond this dichotomy of old society/old media and new society/new media, there is a need to consider issues of inequality and accessibility of new media in different societies (Kocsis, Barnes and Kenderdine 2012). Carrozzino and Bergamasco point out that the move now is toward using devices that are low cost and easier to operate and use. Therefore, research is also focusing on input devices that utilise gesture recognition but do not require wearing heavy or complicated haptic technology (Carrozzino and Bergamasco 2010).

This issue is important for this research because navigating through power structures is paramount in activism, as I have discussed in this chapter. So, I have investigated the power of low-technology and whether it can be considered the new

“new media” (Manovich 2001). Thus, investigating and working with low-cost technology in its own right can be seen as a designerly act of activism.

Arora and Itu have identified several issues that should be further studied; the role of emotions in serious gaming and how emotions relate to critical learning and to activism; the type of information that serious games are sharing and how they connect with the organisations’ interests and the goals of the serious games campaigns, and finally what type of audience these games attract and maintain (Arora and Itu 2012). The cognitive or embodied responses of exhibition visitors are also still not sufficiently explored in terms of the spatial quality of the exhibition, especially now with the introduction of digital spaces (Kocsis, Barnes and Kenderdine 2012). Boyle et al. also allude to the importance of further studies on the cognitive abilities and emotional results for learners using serious games (Boyle et al 2012, cited in Malegiannaki and Daradoumis 2017, 7). There are three key aims of the learning process in serious games; cognitive, psychomotor and affective (Mortara et al. 2014). Better understanding and evaluation of how these aims are being met is still needed (Mortara et al. 2014). As this research borrows from serious gaming, the same need for further understanding of the role of emotions and affective experiences has been addressed in this research.

Carrozzino and Bergamasco point out that users’ needs in virtual museums are either considered and created at the beginning or the end of the development phases (Carrozzino and Bergamasco 2010). Similarly, Hamari, Koivisto and Sarsa (2014) point out that studies which use empirical and peer-reviewed evaluation methods in game design research are still scarce (Hamari, Koivisto and Sarsa 2014, cited in Walz and Deterding 2014a, 7). There is the same issue of the lack of evaluation studies on the use of serious games in virtual heritage (Champion 2016b). Mortara et al. (2014) have emphasised the need for research in game design to focus on “a smarter management and provision of multimodal and multidimensional content” (Mortara et al. 2014, 324). This research can provide a case study for a new methodological framework as mentioned in the Introduction and which will be discussed in the following chapter. Evaluation and iteration have played a significant role in attaining this research project’s findings.

## 2.5 Summary

In this chapter, I have reviewed literature related to design, art, and social media activism, designing experiences in affective spaces, and designing experiences using digital and interactive media. Following each section, I identified the gaps that might help me situate my project and my own contributions to these topics.

Through this research project, I am proposing a new media that can be used for advancing a counter-narrative that is highly contested on a global scale. This media is interactive and engages virtual environments to can create mobile spaces that can be used as urban interventions, as mobile applications or as an exhibition in art galleries. The term that I am suggesting for this type of project is “activist spatial experience”. The application of digital and interactive media in design activism is still not common. Accordingly, my research and work will add to the existing conversations and offer a case study of new kind of spaces that can work as an activist tool. I also find there is a gap in how the aesthetics, content, and context come together on an experiential level especially those mediated digitally.

Therefore, by experimenting with interactive and virtual media to communicate counter-narratives from the Palestinian perspective, I am creating experiential and spatial connections between the “cause,” the “activist” and the “masses”. Moreover, since I am working on communicating a political narrative of an existing conflict, the experience I am designing is current and changing. Thus, the design approach is different than experiences designed in memorial museums which communicate historical events. Another key and innovative element in my research is investigating mobile, temporal and dynamic exhibiting modes that can adapt to any physical space and transfer between physical and virtual presence in contrast to how digital containers work, as they propose their own physical space and structure within existing museum spaces (Kocsis, Barnes and Kenderdine 2012). Finally, another important innovative element of this research is working with low-cost technology to create an activist spatial experience which, as previously explained, is a designerly act of activism.

In the following chapter, I will reiterate the methodological framework of this project and discuss in details the different methods that were used to carry out the

research. I will also discuss the ethical considerations and how they were addressed in this research.





## **Chapter 3. Methods**

### **3.1 Introduction**

In the previous chapter, I reviewed literature that relates to the research question. The literature review focused on how art, design and social media have been used in political activism in recent history. It looked at how experiences are created and used in affective spaces. The literature review also examined how experiences are created using digital and interactive media to be used in museums, serious games and cultural heritage projects. I concluded each section of the literature review by identifying existing gaps in the literature and related these gaps to the research contribution to knowledge.

In this chapter, I will outline the methodological framework that has been used in this research and which has already been discussed in the Introduction. The research model that I adapted in this research has four main stages. I will explain the different methods that have been used for each of these stages, and the rationale and purpose of using each of these methods. I will then discuss the ethical considerations of this research and what I have done to ensure that they are met.

### **3.2 The Methodological Framework**

In the Introduction, I discussed the methodological framework of this research through examining different research models that incorporate practice, in this case, design, and research. I concluded with the choice of the design-led research model as the methodological framework. I also examined my position as the researcher within this research. I concluded that given the complexity of the identification of the Palestinian identity, my approach to the research is neither emic nor etic. Instead, it sits in the in-between just like being part of the Palestinian diaspora<sup>1</sup>.

In summary, the methodological framework is a design-led research model which consists of four main stages:

---

<sup>1</sup> In this context, diaspora refers to Palestinians who were removed from their country and are scattered around the world.

- Stage 1: Background research and interdisciplinary exploration of existing knowledge and projects that relate to the research question.
- Stage 2: Development of a prototype that addresses the research question.
- Stage 3: Testing and evaluating the prototype.
- Stage 4: Reflections, discussion, and conclusions.

These four stages employ different methods that fulfil the requirements and outcomes needed for each of these stages. At the same time, ethnographic approaches and methods have been employed when required. These methods will be discussed in detail in the following section.

### **3.3 The Methods**

In this section, I will explain the different methods that were used for each of the four main stages of the research.

#### **3.3.1 Stage 1: Background Research**

Design is, by nature, interdisciplinary, as it usually proposes solutions for real-life problems. So, for this design-led research model, the research is interdisciplinary too. As stated in the Introduction, the core question of this research is to investigate how to design “activist spatial experiences” using low-cost immersive and interactive media to communicate complex political narratives. The core of this investigation is the creation of a prototype that looks explicitly at the Palestinian situation. So, regarding background research, I needed to cover the following threads:

- The history and current conditions of the Palestinian situation.
- The use of design and art in activism.
- Creating spatial and affective experiences.
- Creating experiences through interactive and immersive spaces.
- General understanding of the existing experiential political spaces.
- General understanding of the existing Palestinian visual culture production.

To cover these different threads, I used the following methods, and I will explain how they were applied and what kind of information I was seeking to extract by using them.

## **Literature Review**

In Chapter 2, I looked at the current discussion about how art, design and social media have been used in activism, especially in recent decades. Through this review, I concluded that there is a need for more design activism projects that affect the world on a global level, especially on issues that transcend the democratic /non-democratic binary which is often referred to in the design activism discourse. I examined the designing of experiences in affective spaces and how embodiment is stimulated through these experiences. I also discussed the designing of experiences through digital and interactive media. I specifically looked at how digital media is used in museums, serious gaming and virtual heritage projects. Through this literature review, I managed to synthesise the different gaps that I identified and proposed how this interdisciplinary research project can address some of those gaps.

In the Introduction, I examined critical readings of the history and current conditions of the Palestine/Israel situation. The literature examined was multidisciplinary; it included literature from political history and international political studies. It also looked at how the built environment of Palestine has been affected by the occupation. I also discussed the Western media coverage of the Palestinian situation. I specifically looked at the Australian media as this research has been conducted in Australia and the prototype tested on an Australian audience. This discussion has led to identifying a gap in the accessibility of alternative Palestinian narratives to Western audiences, and thus this research can provide an innovative method to communicate such political narratives through spatial and affective experiences that are built using interactive and immersive installations.

## **Case Studies**

Another essential step in the background research was for me to look at existing projects that relate to the research question. Case studies are empirical inquiry tools that look at why decisions were made and how they were implemented (Yin 1994). In order to understand the process of creating and designing experiences in spatial settings based on political narratives, I needed to look at case studies of political and memorial spaces. Case studies are used when examining contemporary events, and usually when the focus of the examination is on the “how” and “why” (Yin 1994). Case studies have been used in Chapter 4 where I looked at three main examples that

illustrated how narrative, objects of memory, and spatial experiences created didactic and affective engagement with the political and historical narratives being communicated. I studied the United States Holocaust Memorial Museums in the US, the Apartheid Museum in South Africa and the Australian War Memorial in Australia.

### **Visual and Conceptual Mapping**

In order to gain a better understanding of the existing Palestinian visual culture, visual and conceptual mapping was carried out as detailed in Chapter 5. I examined artworks, films and pop culture media that have been created by Palestinians since 2000. The analysis focused on the representation of Palestine as the fragmented terrain of memory, occupation, and imagination. It also examined the evolution of the Palestinian hero image. Finally, the examination looked at the communication of daily experiences of living under occupation.

In conclusion, the first stage achieved the following points:

- Create better understanding of the context of this research and identify the existing gaps in the literature.
- Create leading points for the conceptual and thematic approach to the design solution.
- Understand how narrative, objects of memory, experience, and space can be articulated to communicate political situations.
- Create design considerations for the proposed prototype which provided the starting point of the second stage.

### **3.3.2 Stage 2: Prototype Design**

Following the findings and conclusions of the first stage, a set of design considerations for the prototype solution was outlined. The next stage was to create a prototype. Prototypes are not final products. They are a means to an end, and their significance in the research is in terms of how the process of their construction leads to conversation and reflection (Ratto 2011). This stage consisted of three main steps: experimentation, creation and documentation. These steps were not chronological; instead, they co-occurred and fed into each other. This stage is discussed thoroughly in Chapter 6 and summarised here to create an understanding of how this stage fits into the overall methodological framework.

## **Experimentation and Exploration**

The main reason behind experimentation was scoping possible technologies that can be used to fulfil the needs of the design. I looked at affordances of the main software with which the exhibition can be built, the possible input devices and finally the output options that can help create the immersive space needed.

The knowledge gained through the background research guided the creation of the content. Furthermore, I looked extensively at existing visual materials representing Palestinians voices, including amateur videos, activist videos, news footage, and documentaries. The exploration focused on the spatial presence of the occupation and apartheid. The exploration covered the macro-level, for example, looking at maps and borders to understand the relationship between Palestinian presence and the Israeli settlers' presence and their relationship to the Separation Wall. The exploration also covered the micro-level, for example, the use of a complicated identification card system to control access and movement of the Palestinians between different territories in Palestine and Israel. While designing the content, it was essential to simultaneously build up the narrative based on the concurrent research done into the political situation that is being presented. Another critical point was thinking about what key experiences that the design will cover in the content and how they will be presented using the explored technologies. This in return was an important factor in how the created exhibition would facilitate the correct positioning of the viewer within the experience.

## **Creation**

One prototype was created and presented to the test group. However, the process of design was iterative. All the design decisions had evolved and changed following small-scale test sessions that were carried out with the thesis supervisory team. The prototype examined the use of the interactive virtual environment and video projections to create the experiential and spatial aspects of living under occupation. The prototype used low-cost technology and was built in a way that allowed it to be mobile and easily constructed in different indoor spaces.

## Documentation

The methodology in practice-led research needs to be transparent and clear, thus documentation is essential and at the same time it needs to be “transferable in principle” (Gray 1998, 13). Therefore, documentation of the design process, in particular, is important (Mäkelä and Nimkulrat 2011; Scrivener 2000). For this research project, I used a sketchbook to document and brainstorm ideas; preserved the evolving versions of the digital to keep track of significant changes and turning points in the designed prototype; and took photos and videos of the test sessions which were set up in the exhibition space.

### 3.3.3 Stage 3: Prototype Testing and Evaluation

Once the prototype was created, it was set up in the audio/visual lab at the School of Design and Art<sup>2</sup> at Curtin University. The final test group consisted of fifteen participants from different fields that all relate to the research question. In order to carry out the research, ethics approval was needed. So, an ethics application was submitted to the University and approval was granted. I will further discuss the ethical considerations of this research in the following section.

The process of setting up the exhibition and the structure of the test session is discussed thoroughly in Chapter 7. Usually, the ethnographic methods that are used in design research are used for data collection rather than the analysis (Wasson 2000). Using a test group to test and evaluate the design is considered an ethnographic approach to design. There are several ways ethnographic methods have been used to collect data (Wasson 2000). For example, in this research, I used participants’ verbally recounted observations and mounted video cameras as tools for documentation.

### Focus Group

The dynamic of the test group resembles focus groups. Focus groups are small groups of people that sit together and discuss topics defined by the researcher. The dialogue that happens between the different members of the focus group allows the discussion to expand and change course. Their interaction might also shift their views

---

<sup>2</sup> This school no longer exists as it was restructured in 2018. The lab now is part of the School of Media, Creative Arts and Social Inquiry.

and reformulate their ideas. These interactions and discussions are stimulated by the researcher (Cameron 2005; Lunt and Livingstone 1996). In their article, Lunt and Livingstone describe the standard approach of focus groups (Lunt and Livingstone 1996). Many of these have been adopted in this research. For example, the moderator, in this case, myself, had a set of key points that the group needed to discuss and I tried to keep the group on topic. The interaction was audiotaped and then transcribed. During the sessions, I was also taking notes on a notepad.

Lunt and Livingstone have highlighted existing debate on whether members of the focus group should be diverse or not (Lunt and Livingstone 1996); and how the more innovative approach to focus group design is to instead engage “naturally occurring groups of like-minded people” (Lunt and Livingstone 1996, 82). This is the approach that was used in this research. Though members of the test group did not necessarily know one another, they are experts in different fields that all relate to the research question. Focus groups are seen as a method that simulates the ethnographic process of argumentation (Lunt and Livingstone 1996). So, when selecting the test group, their political stance on the polarising Palestinian situation was not considered. This was a conscious decision made for two reasons. Firstly, this will mimic the nature of the future targeted audience who will have various political stances either pro, against, or oblivious to the Palestinian perspective. And secondly, the focus of the testing is on evaluating the design and how the narrative has been presented, rather than arguing on the legitimacy or the accuracy of the narrative. However, the participants were all aware when invited what the topic was, so they had the opportunity to decline to participate if they preferred.

### **Feedback Collection**

The ethnographic use of videotaping consumer practices was one of the primary methods that appealed to designers because they are naturally drawn to visuals, and this kind of videotaping provided a “transparent window” to consumer behaviours (Wasson 2000, 378). Thus, the initial method of feedback collection from the test sessions was the use of video recordings to capture the interaction between the participants and the exhibition. By looking at the footage from the video documentation, I examined how the participants navigated the space without the guidance of the research team, what points they dwelled on more, and what sort of

technical difficulties they have encountered. The second method of feedback collection was through verbal discussion sessions similar to focus group discussions as outlined previously. These discussions were documented using audio recording and taking notes during the sessions. One of my supervisors and I moderated the sessions. The last method of feedback collection was a follow-up questionnaire that aimed at post-test reflections and extracting quantitative data to help support the discussion of the findings later. The different feedback data that were extracted from the testing process were then thematised, analysed and discussed as will be explained in Chapter 7 and Chapter 8.

### **3.3.4 Stage 4: Reflections Discussion and Conclusions**

As this research follows the practice-led research model, the practitioner-researcher role had to be consolidated in the process. The practitioner-researcher role has a double position because the practitioner is reflecting on his/her own practice (Mäkelä 2009). Adopting Schön's reflections on and in action meant that the researcher became more proactive as they conduct their research through their actions of creation (Gray 1998). The reflective practitioners can formulate new knowledge through employing different methods that are connected to their personal artistic expressions (Mäkelä 2009).

Reflection-in-action denotes the process of altering the course of action in the process of creation when unusual situations arise (Schön 1991). Reflection-in-action is more specific to professional practitioners where they think and reflect on their actions as they are doing them (Gray and Malins 2007). In contrast, reflection-on-action is the analytical process of reflecting on the process of thinking, actions, and feelings that unfold as the work is being created (Schön 1991). Reflection-on-action is a retrospective reflection and is common in research, where the researcher reviews, evaluates and analyses (Gray and Malins 2007). Schön argues that "[a] practitioner's stance toward inquiry is his attitude toward the reality with which he deals" (Schön 1991, 163).

While designing the work, I reflected on the process of gathering the information that shaped my design decisions, and whether they related to the themes



and content of the exhibition, or the design development process. Those reflections guided the formation of the final prototype.

Following the testing and evaluation process of the prototype, I reflected back on my design decisions, how they were received, and how they can be improved. Those reflections were part of the discussion and outcomes of the research.

In my discussion chapters, I have three sources of findings that I related to one another; the initial design considerations of the intended prototype solution, the design process of the prototype, and the different feedback collected from the test group as discussed previously. Those were discussed in relation to one another and based on the common themes that emerged from the designing and evaluation processes. The discussion in Chapter 8 then informed the recommendation and consideration points for the future development of this prototype as discussed in Chapter 9.

### **3.4 Ethical Considerations**

Following my investigation of what are the principal ethical considerations in design (Bryman and Bell 2015; Miller 2014), and in compliance with the National Statement on Ethical Conduct in Human Research (National Health and Medical Research Council, Australian Research Council and Australian Vice-Chancellors' Committee 2015) and the Australian Code for the Responsible Conduct of Research (National Health and Medical Research Council, Australian Research Council and Universities Australia 2007), I identified four main areas that needed clarification in terms of ethical considerations. I will discuss how I addressed each of these areas.

#### **Ethical Considerations in Relation to the Researcher**

I started my Introduction by stating my personal motivation to do this research. Later in that same chapter I discussed my position within the research. While conducting this research, I made sure to remain respectable towards the different parties involved. Any critical readings that might be contentious or perceived as one-sided have been backed by existing scholarship on that subject. There has been no conflict of interest at any stage of the research, and there has been no industry sponsorship of any sort for the research.

## **Ethical Considerations in Relation to the Test Group Participants**

Before starting the testing process, I submitted an ethics application form to the Human Research Ethics Office at Curtin University. The application was identified as a low risk and approved on 25th November 2016.

Following the approval, I contacted the possible participants with an invitation email that contained a consent form and information sheet about the project. Before the start of each test session, the participants were once again given another information sheet that clarified the nature of the exhibition. When discussing the feedback from the participants in the thesis, their identities have been anonymised. In the consent form, the participants consented to their photos being taken and used in the thesis.

A copy of the ethics approval letter, invitation email, consent form and information sheets can be found in Appendix A.

## **Ethical Considerations in Relation to the Content of the Prototype**

Under the “fair dealing” provisions of the Australian Copyright Act, I have the right to include and discuss any visual material that relates to the design. This applies to the third-party images that I used throughout the thesis. I mostly used images that are licensed under Creative Commons or Public Domain. To the best of my knowledge, I have included the correct credits in the captions of all the images used. All the copyright information of the images used in this thesis are included in Appendix B.

Regarding the content of the prototype, I discuss the issue of copyright in more detail in Chapter 8. In general, for any video that I used, proper credits were given to the original creators or distributors.

## **Ethical Considerations in Relation to the Research Findings**

All the findings collected including the digital files of the prototype are securely filed and saved on the research drive of the research supervisor, Dr. Andrew Hutchison, for seven years in accordance with the University’s policies on data management and storage.

### **3.5 Summary**

In this chapter, I have reiterated the design-led methodological framework of this project. The research model has four main stages. I outlined the different methods and approaches that were used in each of these stages. Further discussions and implementations of these different methods will be examined in the following chapters, each one relating to a different stage of the research. I also discussed the ethical considerations of this research as they related to the content, the researcher, the test group, and the findings gathered.

In the following chapter, I will discuss the case studies conducted to examine how narrative, objects of memory, and spatial experience are employed in the didactic and affective communication of political narratives in memorial museums. These case studies are part of the background research needed to guide and inform the design process of the proposed prototype.



## **Chapter 4. Case Studies: Existing Experiential Memorial Spaces**

### **4.1 Introduction**

In the previous chapter, I outlined the methodological framework of this research and discussed the different methods that were used to carry out the research. The research adopts a design-led research model which has four main stages. The first stage of this research involves conducting case studies to explore the spatial experiences created in physical, architectural memorial space, to inform the design of the virtual spatial experience that is described in detail in Chapter 6.

In this chapter, I will explore case studies of existing experiential memorial spaces. The analysis will start by explaining the conceptual and architectural frameworks and the narrative that governed the design. I then examine key examples of spatial experiences and the different design treatments used. For example, I look at the use of photography, media, and physical objects of memory. I finally touch on some of the criticism that these spaces received on subjects that relate to the focus of this research.

There are three case studies that I have chosen to work with. The first one is the United States Holocaust Memorial Museum (USHMM), which is considered one of the most prominent Holocaust museums outside of Europe. The USHMM is the only museum I visited out of the three museums discussed here. Therefore, during my analysis of this museum, I will reflect upon my own experiences there. The second case study is the Apartheid Museum in South Africa. This museum can be considered a “conflict museum” (Hamber 2012). As the term apartheid is often used in the discourse about the Palestinian situation, as explained in the Introduction, studying a museum dedicated to apartheid is relevant. The last case study is the Australian War Memorial (AWM). While war memorials span the globe, I wanted to choose a local example to focus on, and the AWM is considered a leading example of war memorials worldwide.

## 4.2 Memorial Museums

There are sites of atrocity and violence all over the world (Hamber 2012). More memorial museums have been constructed in the last ten years than in the previous 100 years (Jenkins 2005, cited in Hamber 2012, 269). One of the reasons for this renewed need for preserving the memory of such historical events is that the survivors of these events are beginning to pass away (Landsberg 1997). This reason applies to the Palestine/Israel situation. As I discussed in the Introduction, the *Nakba* in 1948 is one of the main events of this situation and many of its survivors are passing away. Therefore, now, more than ever, there is a renewed interest in documenting the oral history of the *Nakba* as told by its survivors.

Some museums have started as memorials and then developed into museums whereas some were museums with commemorative spaces, and some were built to respond to specific historical events like the Jewish Holocaust museums and the South African Apartheid Museum (Hamber 2012).

According to the International Council of Museums (ICOM), a museum is defined as:

a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment. (International Council of Museums 2007)

Memory sites are: “Places and spaces where remembering activities such as commemorations, mourning, celebration, and educational activities take place” (Hamber 2012, 269). A memorial museum, on the other hand, is defined as: “A specific kind of museum dedicated to a historic event commemorating mass suffering of some kind” (Williams 2007, 8). Another term that is used in this context is conflict museums, which Hamber defined as: “Permanent sites of conservation and exhibition that focus on the legacy of political violence” (Hamber 2012, 269).

Memorial spaces are considered “transferential spaces”, a term coined by Landsberg (1997). Transferential spaces are spaces where people enter into experiential relationships with events that they did not live through in real life (Landsberg 1997). The importance of transferential spaces lies in their ability to

communicate memory and narratives to people who are not genealogically connected to the subject matter (Landsberg 1997).

## **The Roles of Memorial and Conflict Museums**

Following these different definitions, I focus on architectural spaces specifically built to commemorate, therefore acting as memorials; to preserve, educate and communicate, therefore acting as museums; or to communicate complex political narrative, therefore acting as conflict museums. I understand that having definitive terms to describe such spaces can be limiting. So, what is more important for this research is to understand the roles of these spaces rather than debate definitions.

One of the key roles of memorial museums is the commemoration of events so that people can know and understand what happened. This can be out of pride for the nation's past actions, celebrating their triumphs while paying respect to the fallen (Hamber 2012; Young 1993; Newbury 2005; Rankin 2013). Another role is the conservation of memories, artefacts, stories and shared values (Hasian 2004).

Education is another important role. Museums and memorial sites are considered didactic spaces because of the way they present and communicate memories (Teeger and Vinitzky-Seroussi 2007). Memorial museums usually aim at educating people and raising their awareness about the respective subjects at each museum. However, sometimes for the sake of meeting their educational goals, some conflict museums would project the outcomes of learning about a particular conflict into generalised concepts like fighting racism and building democracy (Hamber 2012). Another important outcome of raising awareness and education is either taking action against similar injustices still happening in the world or learning from the past to make sure that it will be a "never again" situation (Hamber 2012). However, one of the problems with the "never again" notion is that it creates an ideal image of the future with no contextual political reality. Therefore, some have argued that the "never again" notion is futile as various political atrocities are still happening around the world (Clark 2011).

Changing people's attitude is another role of memorials and conflict museums. But what is still lacking is a better understanding of how effective that attitude of change can be on existing conflicts. This is especially so if the conflict is

politically complex and there is almost nothing that individuals can do to stop that conflict (Hamber 2012).

Reconciliation is another role that some memorial museums play. For example, in Australia and South Africa, reconciliation has been promoted through education. However, in Australia, there has not been any memorials and museums specifically constructed by the state to promote reconciliation (Crowley and Matthews 2006).

Memorial museums have been criticised for the display of overly sentimental victimhood which can hinder the critical understanding of the context of the political conflict at hand (Hamber 2012). In addition, since museums are usually part of the touristic itinerary, visiting those museums can give visitors a false sense of self-satisfaction without further engagement with the content of the museums (Hamber 2012). Memorials can even cause a form of forgetfulness as visitors rely on their visits to such memorials to remember rather than engage with remembrance outside the memorial spaces (Young 1993).

## **Understanding Memory**

Memory plays a significant role in shaping our sensory experiences of the world (Micieli-Voutsinas 2017). The present experience of memory is part of the experience of images of traumatic memories. Understanding the objects of memory, physical or non-physical, in the present transcend thinking to see the pain of memory as it is being experienced and communicated (Bennett 2003). Memories are not formless; they manifest via narratives, images, objects and texts (Wagner-Pacifici 1996, cited in Teeger and Vinitzky-Seroussi 2007, 58-64)

Mass technologies have allowed the preservation of living memory and also created “prosthetic memories” where alternative living memories are being reproduced for those who did not experience the events that shaped those memories (Landsberg 2004). However, mass media can determine the way those memories are being presented and therefore pre-define people’s engagement with these prosthetic memories (Landsberg 2004).

There are different strategies of remembrance that are shaped by politics, museums’ curatorial teams, and educators that form and inform collective memories



(Hasian 2004). Collective memories are produced by the current social structures (Halbwachs 1992, cited in Micieli-Voutsinas 2014, 50). Our present is shaped by our recollection of the past but at the same time our understanding of the past and “our collective memories” are influenced and distorted by our present (Connerton 1989).

There are various ways that memories are communicated in memorial spaces and museums. Some memorials might use graphical displays that include human remains from past violence, for example, the Nyarubuye Memorial Site and the Ntarama Church in Rwanda (Hamber 2012). Others might rely on actual, physical objects to communicate memories. For example, the use of piles of objects such as shoes is central to the Holocaust iconography. Those piles signify what has remained after the Holocaust (Landsberg 1997). The objects, therefore, serve as documentary evidence of what happened (Hamber 2012). Such documentary objects also include films, documents, photographs and artefacts (Hamber 2012).

### **Emotion and Affect in Memorial Spaces**

In Chapter 2, I discussed the role of emotions and affect when creating spatial experiences. Affect and emotions play a significant role in memorial spaces. When designing memorials, the focus now is on embodied and affective experiences instead of monumentality and iconography (Micieli-Voutsinas 2017). The emotional reaction of visitors to memorials is meant to be transformative on a personal level (Hamber 2012). Provoking empathy in visitors in this way allows for better connection with the victims, as visitors feel for, but still feel different from, the victims of that specific topic (Landsberg 1997). Feeling empathy toward the traumatic subject is not the same as having a lived experiences of that trauma (Micieli-Voutsinas 2017).

Young has highlighted the potential issue of creating “a certain critical blindness on the part of the visitors. Imagining oneself as a past victim is not the same as imagining oneself – or another person – as a potential victim” (Young 1993, 344). However, Hamber argues that relying only on emotions to engage visitors with narratives of the victims can similarly cause this limited understanding (Hamber 2012).

### **4.3 United States Holocaust Memorial Museum (USHMM), United States of America**

The Holocaust is arguably one of the most horrific events of our contemporary history. It is estimated that six million Jewish people and five million people from other backgrounds were killed by the Nazis during the Holocaust (Hasian 2004). But the Holocaust's horror does not stop at the killing. Persecution, imprisonment and encampment are also significant parts of that history. Therefore, any communication of that historical narrative needs to depict as much as possible the extent of the Holocaust including those who perished and those who survived. The Holocaust is now considered a concept that has been removed from specific space and time (Levy and Sznajder 2006). The memory of the Holocaust has been used to reframe other injustices around the globe (Levy and Sznajder 2006), especially when certain terms are used like ethnic cleansing and genocide (Ó Tuathail 1996, cited in Micieli-Voutsinas 2014, 54).

President Carter proposed the establishment of a Holocaust museum in the United States of America (US) in 1979 (Landsberg 1997). The United States Holocaust Memorial Museum (USHMM) opened to the public in March 1993 (Landsberg 1997). The USHMM is located on the National Mall in Washington D.C. The museum has a permanent exhibition that is displayed on three different floors, beginning with the "Nazi Assault" then moving to the "Final Solution" and ending with the "Last Chapter". Visitors to the museum have to go through these stages once they begin the journey and there are no shortcuts. If someone opted to leave, they are still forced to move through the three floors (Landsberg 1997). A typical tour of the permanent exhibition takes around two to three hours (Hasian 2004). On that tour, there are only a few places where visitors can sit down. This was done intentionally because this museum aims to create physical and emotional exhaustion as an intended experience and require visitors to push through till the end (Landsberg 1997).

The design of the USHMM has served as a valuable case study for other memorial and conflict museums, for example, the Apartheid Museum (Rankin 2013) which I will discuss later, and the National September 11 Memorial and Museum (NS11MM) (Micieli-Voutsinas 2014). The USHMM is considered one of the best

Holocaust museums worldwide and since its opening has attracted over 43 million visitors (The United States Holocaust Memorial Museum 2018a).

## **A Holocaust Memorial in the United States**

Choosing to build a Holocaust memorial in the US was not an easy decision. There needed to be a justification as to why the US was willing to spend US\$168 million to build a memorial for an event that happened in another part of the world (Hasian 2004). Therefore, many of the design decisions aimed to Americanise the Holocaust (Hasian 2004). It was nonetheless important to maintain the integrity of the stories being told without stepping into “popular voyeurism” (Hasian 2004). The museum talks about how initially the US did not interfere to stop the prosecution of the Jews when it was happening, yet the US had redeemed itself when it worked toward the liberation of Jews from the concentration camps and opened its doors for their immigration to the US (Hasian 2004). One important example to illustrate this point lies at the beginning of the journey through the museum. After the visitors step out of the elevator, they see a film showing the visit of Eisenhower<sup>1</sup> to the Ohrdruf concentration camp in Germany (Hasian 2004).

The museum’s mission statement touched on the “never again” notion which was discussed previously in this chapter. The USHMM wanted to become the voice for victims anywhere around the world and to make sure the lessons from the Holocaust will be learned so that something similar can never happen again. The museum aimed at promoting how the US should never stand indifferent when people around the world are suffering prosecution. This was evident during the opening ceremony of the USHMM. Wiesel, the first chairperson of the US Holocaust Memorial Council, put President Clinton under the spotlight when he called the US to stop showing indifference and help the Bosnians who at the time were suffering in the Croatian-Serbian conflict (Hasian 2004). Indeed, soon after that speech, NATO intervened to help end this conflict. A more recent example is the USHMM’s display *Syria: Please Don’t Forget Us* which was installed in late 2017 to highlight the plight

---

<sup>1</sup> Eisenhower was the Supreme Commander of the Allied Forces in Europe when the Ohrdruf concentration camp in Germany was liberated in April 1945. Eisenhower later became the President of the US from 1953-1961.

of Syrian civilians caught up in the current Syrian Civil War (The United States Holocaust Memorial Museum 2018a).

### **The Conceptual Framework**

During the opening ceremony of the USHMM, Wiesel summarised the concept behind USHMM when he said: “For the dead and the living, we must bear witness” (Wiesel 1993, cited in Hasian 2004, 83). Designing the exhibitions of the museum relied on historical rigorousness (Landsberg 1997). The inclusion of survivors’ testimonies was important because, as Hilberg stated, one of the rules of speaking about the Holocaust is to recognise that a survivor’s story is superior to the best works of any Holocaust historian who did not have a lived experience of the Holocaust (Hilberg 1979, cited in Linenthal 1994, 425).

Several themes and experiences were key to the design process, for example, displacement, discontinuity and instability (Hasian 2004). These themes will be further discussed when talking about specific architectural and design treatments.

### **The Architectural Framework**

The architecture of the museum aimed at communicating the emotional dimension of the narrative and resonating the memories being communicated (Messham-Muir 2015). The transmission of knowledge in the museum did not rely on cognitive understanding alone but worked with the affective experiences of that knowledge (Landsberg 1997). At the same time, there needed to be a balance between how the cognitive and affective dimensions of the experience worked together to raise the consciousness of the visitors (Hasian 2004).

The architects working on the design wanted the experience to be visceral and for that to be reflected in the interior mood of the museum (Linenthal 1994). The journey through the museum had to combine confrontation with catharsis (Hasian 2004). There was the intention to create an empathetic connection between the visitors and the victims of the Holocaust (Messham-Muir 2015) and to force the visitors to experience part of the horror that the victims were subjected to (Hein 2000).

There are prevailing concepts that manifest in the exterior as well in the interior which are part of the experience the architects wanted the visitors to feel,

concepts like concealment, deception, disengagement and duality (The United States Holocaust Memorial Museum 2018b). Certain architectural treatment of the interiors of the museum aimed at referencing architectural elements from the ghettos, the towers of the concentration camps, and train trestles (Hasian 2004). The chosen bricks, metal works and building materials had to work with the dark and tragic nature of the Holocaust (Hasian 2004). The change in the spatial treatment from one space to another served to set up the intended mood for each stage of the journey through the museum (Linenthal 1994). For example, when visitors enter into the space that introduces the death camps, the space becomes darker and tighter (Linenthal 1994).

### **The Narrative of the USHMM**

The narrative of the permanent exhibition was designed as a seamless progression of events that are not linear but synchronic (Hasian 2004). The narrative builds its intensity progressively from the beginning of the journey at the Hall of Witnesses (Linenthal 1994). The architectural treatment and the content of the exhibition work together in presenting the overall narrative of the museum (Hasian 2004).

Movement or flux was one of the themes that the design team wanted to portray. Therefore, when creating the narrative, it had to take the visitors on a journey similar to what actually happened to the victims of the Holocaust (Linenthal 1994). The narrative was created based on three acts: Nazi Assault 1933-1939, Final Solution 1940-1945, and the Last Chapter which covers what happened after the end of the Holocaust including the Jewish immigration to the US and Palestine and the establishment of Israel. The architecture was created as a series of “interpretive spaces” with narrow corridors or bridges, and tower exhibitions (Linenthal 1994). And as any narrative, it had to have a resolution. Abramson, the chairperson of the museum development committee, wanted the ending to convey hope, but others wanted the ending to give the visitors a sense of closure (Abramson 1991, cited in Linenthal 1994, 427).

### **Key Spatial Experiences and Design Treatments**

The application of a narrative and a conceptual framework to the design of the USHMM has created different spatial experiences. I will examine some of the key

experiences by looking at what and how design treatments were employed to build on the spatial and affective experiences.

### *The Hall of Witnesses*

The design team wanted to personalise the Holocaust by engaging the visitors with the narrative so that they do not feel like they are bystanders (Linenthal 1994). Therefore, they are invited to engage deeper, not just cognitively, and instead become performers of “individual and collective remembrance” (Hasian 2004, 72). As the visitors enter the first space of the USMHH, the Hall of Witnesses, they are handed a passport that has the name and picture of a real Holocaust victim. Hasian described how personifying and identifying with one of the victims creates an emotional investment for learning and wanting to know what happened to the real person on the passport (Hasian 2004). This rite of passage creates a double positioning of the visitor as a witness and a victim (Crysler and Kusno 1997). By placing the visitor in the role of the victim, the museum becomes a liminal space where visitors will be motivated to understand how the Holocaust unfolded (Hasian 2004).



**Figure 4.1:** AgnosticPreacherKid, *The Hall of Witnesses at the USHMM*. Reproduced from Wikimedia Commons (AgnosticPreacherKid 2010b).

The Hall of Witnesses (Figure 4.1) is a three-story foyer with a glass skylight roof. The aim of this Hall is to create a transitional space between the inside and outside world (The United States Holocaust Memorial Museum 2018b). Various spatial

treatments set the mood for what is coming next. For example, the skylight is skewed and twisted, giving the feeling that something is not right. On the floor of the hall, there is a glass-block incision which cuts the granite flooring in a rift. While still waiting there, visitors can see the glass bridges that connect the north and south towers. Visitors might feel that they are being under surveillance by those crossing the bridges. From this hall, the visitors are then ushered to an elevator that will take them up to the fourth floor where their journey through the museum will begin. The elevators are constructed like steel cages, and their cold ambience gives a feeling that visitors are travelling back in time (Hasian 2004). This feeling serves an important role in creating a mindset that will direct the visitors' journey.

### ***Dark Spaces***

The use of darkness in the USHMM has created a template for other Holocaust museums (Messham-Muir 2015). The power of dark spaces in Holocaust museums lies in their ability to create uneasiness and feelings of dislocation for the visitors which resonate with the Holocaust's emotive nature (Jinks 2015 cited in Messham-Muir 2015, 436). Dark spaces not only reference the historical narrative of the Holocaust but also induce a sense of uncertainty (Messham-Muir 2015). Messham-Muir argues that besides the information displays that are cognitively understood, there is an important affective mode of engagement with the museum and its content: "Darkness contains meanings that arise from lived experience – of crisis, obfuscation, and uncertainty; of envelopment, smothering and invasion of personal space; of panic, groping and loss of clear bodily coordination" (Messham-Muir 2015, 455).

### ***Voices from Auschwitz***

Landsberg's discussion of transferential space and prosthetic memories (Landsberg 1997) as discussed in the previous section is evident in the *Voices from Auschwitz* exhibition. In this exhibition, visitors listen to audio recordings of survivors describing their life at the camp. The absence of visuals forces the visitors to borrow images from their own memories and ideas about the Holocaust and create their own visual impressions. And while all the people in the room are listening to the same recordings, each one of them will create his/her own set of images and therefore their own subjective prosthetic memories (Landsberg 1997). The disembodied voices also

create a sense of discomfort and reverence at the same time. There is an impulsive intimacy between the visitors who are listening in silence and the survivors sharing their stories in the figurative darkness.

### ***Photography***

The inclusion of photographs in the exhibitions at the USHMM had an important role in providing legitimacy to the Holocaust narrative. Therefore, photographs were carefully selected to make sure they are historically accurate (Linenthal 1994). They also reduced the gap between the living and the dead by showing visitors images of the ordinary people who were victims of the Holocaust (Linenthal 1994). Some of these images document the years before the Holocaust, where visitors can see how the ghettos were constructed and how anti-Semitic sentiments were rising in Europe. These images shock the visitors as they illustrate how the world was aware of what was happening and still did nothing to stop it from happening (Hasian 2004).

One of the most important displays of photographs at the museums is in the *Tower of Life* (Figure 4.2). The photographic collection of Yaffa Eliach is displayed on the walls of a space designed like a tower. This space marks the stark contrast between life as it is being shown in the photographs and death which is evident in the rest of the exhibition (Linenthal 1994). Visitors stand on a metal bridge to view the tower. Standing in such a transitional space creates a confusing tension for the visitors. The elongated space of the tower makes the visitors feel dwarfed and enveloped by the photographs on display. But what the subjects of the photographs evoke is even harsher as people get to see images of people like them, ordinary people's lives that afterwards got obliterated by the violence of the Holocaust.





Figure 4.2: Noor Nader, *The Tower of Life* at the USHMM. Reproduced from Wikimedia Commons (Nader 2016).

### *Objects of Memory*

The piles of objects are considered one of the relics of the Holocaust (Landsberg 1997). Therefore, including them in the exhibition was a strategy adopted from the start. These piles depict the magnitude of the atrocious destruction of the Holocaust (Landsberg 1997). The objects also draw on the irony that the objects have made it safely to the US from Europe whereas their owners did not (Landsberg 1997). The objects chosen for the USHMM were carefully selected from different places in Europe. They needed to be authentic and evocative (Hasian 2004). The exhibitions display objects like toothbrushes, suitcases and shoes.

One of the most emotive parts of the USHMM is the display of the piles of shoes from Majdanek<sup>2</sup>. The piled shoes are different in size, style and function (Figure 4.3). They are all unique, yet they are chaotically piled together (Landsberg 1997). The combination of the compulsive erasure of the individuality of each shoe and forcing the visitors to perceive them as one pile resonates with the general perception of the Holocaust. The perception of the Holocaust as a horrible event of history might overlook the individual horror of each victim who was a person living a normal life, but her/his individuality perished when that person became *one of* the victims of the Holocaust.



Figure 4.3: Estigman, The Piled Shoes at the USHMM. Reproduced from Wikimedia Commons (Estigman 2017).

### *The Hall of Remembrance*

The journey in the museum ends at the Hall of Remembrance (Figure 4.4), which is a semidetached six-sided building. This hall architecturally fits with other monuments close by like the Washington Monument and Jefferson Memorial (The United States Holocaust Memorial Museum 2018b). Like the rest of the museum, the architectural treatment of the building plays a vital role in creating an intended mood

---

<sup>2</sup> Majdanek was a German concentration camp built in Poland when it was occupied by Germany in World War II.

for its visitors. For example, the corners of the hall are made of glass, which make the walls seem like freestanding tablets (The United States Holocaust Memorial Museum 2018b). Above the western entrance, an inverted window is created by reversing glass and limestone so that there are sixteen blocks of limestone framed by glass which defeats the standard purpose of a window. Instead, visitors get the sense of being blocked. They cannot look in or look out, which isolates both visitors inside the hall and passers-by outside the hall. This feeling fits with the theme of discontinuity and dislocation which were some of the main themes in the design of the museum as discussed before.



**Figure 4.4:** AgnosticPreacherKid, The Hall of Remembrance at the USHMM. Reproduced from Wikimedia Commons (AgnosticPreacherKid 2010a).

Darkness creates a sense of intimacy between the subject and the visitor (Minkowski 1970, cited in Messham-Muir 2015, 439). As opposed to dark spaces, light spaces evoke a sense of enlightenment and clarity (Minkowski 1970, cited in Messham-Muir 2015, 439). This is evident in the light treatment in the hall. Sunlight is diffused through a translucent central skylight. The narrow openings on the sidewalls provide partial views of the outside and let more light into the space. There is an eternal flame at one of the sides and visitors can also light candles as an act of remembrance, reflection, and renewal of life.

The conclusion of the journey is meant to give the visitors a chance to have a sense of closure. Therefore, the hall gives the visitors a space for silent reflection after their overloaded journey through the museum.

### **Self-reflections on My Visit to the USHMMM**

Visiting the USHMM created anxiety for me even before I stepped foot inside it. As a Palestinian, I am aware of the connection between the Holocaust and the creation of Israel. But as soon as I entered the museum, I was taken aside for extra screening. This incident added to my anxiety and made me feel unwelcomed. Stepping into the vast hall gave me a feeling of intimidation, and by the time I was in the elevator I already felt my heart racing.

This probably affected the way I perceived the passport given to me. While it was emotive for me, I did not feel right to hold the name and the picture of a real person because it has placed me in someone else's shoes without addressing my own privilege for not having to go through what that person actually went through.

As I walked through the different spaces, I felt the intensity of the narrative building up. There was an aching sensation in my heart that kept squeezing harder in certain spaces. The climax of this narrative, for me, was standing near the piles of shoes from Majdanek. Just like Landsberg's discussion of prosthetic memories, my perception of the piles of shoes painfully contrasted with my own happy memories of piles of shoes. For me, seeing piles of shoes usually signifies happy occasions. In my culture, we take our shoes off when we enter the house or the mosque. Piles of shoes therefore mean that people and relatives are visiting, or we are praying at the mosque and maybe celebrating Eid. To have these happy connotations starkly contrasted with the horror of the shoes at USHMM shocked me to the core and it was only then and there that I cried.

There was a sense of relief when we began to learn about the liberations of the camps but then I saw a poster that read "Welcome to Palestine". And then, I felt that I cannot continue the journey and opted to leave. For me, the lessons from the Holocaust was that it should not be repeated elsewhere and certainly not in Palestine. Therefore, knowing what has happened and is still happening to Palestinians, I did not feel comfortable about continuing the journey.

## Criticism

The construction of the USHMM had some controversies and criticisms. I will only highlight some of the issues that relate to this research. These issues are the use of experiential displays, the need to commemorate an event outside of where it happened, and the standardisation of the Holocaust iconography.

While the experiential modes of the display are considered one of the strengths and innovation of the USHMM, there has nonetheless been some criticism (Landsberg 1997; Hasian 2004). For example, Gourevitc called the USHMM an American theme park, and he saw no added value in having to experience the narrative in order to understand it (Landsberg 1997). Some scholars are wary of how experiential modes can underplay the significance of the cognitive mode in the dissemination of knowledge. However, Landsberg argued against this in the case of the Holocaust where there cannot be a linear narrative (Landsberg 1997). Therefore, in order to include a variety of materials and stories and move between places and time periods, the journey had to rely on affect and experience alongside the historical information (Landsberg 1997). On another hand, having all these artefacts and objects alongside the historical information created what seems like an uncontested version of the Holocaust (Crysler and Kusno 1997). Additionally, the presented information failed in tackling the contextual rise of Nazism in Europe (Crysler and Kusno 1997).

There are many critics of the choice of constructing a Holocaust museum in the US as it was not an American event (Linenthal 1994). Many defenders of the museums have argued that the presence of the Holocaust memorial serves as a reminder for Americans not to forget their values (Hasian 2004). Many communities have used the Holocaust as a case study when talking about other contested political situations, especially those that involve American foreign policy (Hasian 2004).

Zelizer has warned against the repeated use of similar types of objects and photographs documenting the Holocaust as they might create a sense of acclimatisation to such imagery (Zelizer 1998, cited in Hasian 2004, 86). Some scholars find the universalisation of the Holocaust a powerful moral force that can make sure that such events will not happen again, whereas some other scholars believe that this universalisation has caused a decontextualised understanding of the Holocaust that might trivialise the Jewish suffering (Levy and Sznajder 2006).

## 4.4 Apartheid Museum, South Africa

South Africa was forging a new post-apartheid history in the mid-1990s where the focus of the national narrative was on moving beyond the struggle and suffering to redemption and unity (Hamber 2012). This narrative is reflected in the Apartheid Museum (AM) where visitors go through a series of spatial experiences that relate to apartheid before emerging out of the exhibitions to images of the new democracy of South Africa (Hamber 2012). However, how this narrative is being reflected in cultural institutions is still contested, selective and complicated (Hamber 2012). There is the difficult task of navigating between people who want to forget this difficult past (mainly the perpetrators), people who want to remember it (mainly the victims), and people who wish it did not happen to begin with (Teeger and Vinitzky-Seroussi 2007). The AM, like the USHMM, was built using a narrative and conceptual framework in which photography played an integral role in sharing information and stories relating to the overall narrative (Newbury 2005).

The main aim of the museum is to educate people about apartheid, not only as a documentation of that era but to make sure that this does not repeat somewhere else (Rankin 2013). This concept once again resonates with the “never again” notion that has been previously discussed. Most of the visitors of the museum are tourists, and visiting the AM is becoming part of most travel itineraries to South Africa (Rankin 2013). To do the museum justice, one visit is not enough and usually one visit takes the bulk of the day (Newbury 2005).

Following the first democratic elections in South Africa in 1994, the country wanted to create a transformed cultural capital for itself in place of the apartheid ones. Therefore, building museums and monuments were essential in this transformation (Rankin 2013).

Building the AM was not a governmental initiative. The team who proposed the building and funding of this museum wanted to gain governmental approval to build a casino and a theme park on the same site as well. So, they wanted to support their application by proposing to fulfil their social responsibility by funding and building this museum (Rankin 2013; Rankin and Schmidt 2009). This issue has brought criticism to the museum as its physical context was at odds with the difficult

subject of the museum (Newbury 2005). The museum was opened to the public in 2001.

### **The Conceptual Framework**

The AM did not have an extensive collection of artefacts from the apartheid era (Rankin and Schmidt 2009). Therefore, the AM relied on the creation of affective experiences to communicate the difficult history of South Africa under apartheid (Rankin 2013). The approach toward experience and allowing visitors to project themselves while being exposed to the museum's narrative is similar to the USHMM (Newbury 2005). Most of the visitors to the AM would not have experienced living under apartheid in real life. Therefore, their affective experience of the museum will rely more on empathy. This affective experience had been reflected in the architecture and exhibition designs of the AM (Rankin and Schmidt 2009). From this, we can conclude that the AM is a transference space as well.

The conceptual framework of the AM revolves around understanding the past through experiencing it and then moving beyond that to a new legitimate present (Teeger and Vinitzky-Seroussi 2007). The museum, however, suggests a consensual understanding of the past that seeks to create a consensus rather than a conflict that might arise from issues of accusation and blame (Teeger and Vinitzky-Seroussi 2007). This has been reflected in the design of the museum, where the line between the victims and the perpetrators is not clear (Teeger and Vinitzky-Seroussi 2007). The AM has managed to communicate the narrative of South Africa under apartheid, and it commemorates the lives of those who suffered or died during apartheid and in the struggle for liberation (Rankin 2013).

One of the themes of the AM is disorientation, and that was implemented when designing the spatial experiences of the AM (Rankin and Schmidt 2009). Another theme is duality that represents contradictions and misrepresentation during the apartheid era (Rankin and Schmidt 2009). Another important theme is political oppression. Therefore, many of the architectural treatments of the museum reflected these themes by creating boundaries and obstructing easy flow between different spaces inside the museum (Rankin and Schmidt 2009).

## The Architectural Framework

The museum is built in the same vicinity as a casino and a theme park. Given the stark difference between their functions, the exterior architectural design of the AM aimed at creating a distinct departure from its urban context. Therefore, the architecture of the museum was isolated both figuratively and literally (Rankin 2013).

In front of the main building, there are concrete pillars that represent the principles of the new South African constitution. The lettering used is made of metal and now, with time, the metal has rusted and bled onto the concrete (Figure 4.5). I found this visual effect intriguing as it denotes the passing of time and yet those pillars, and principles, are still standing firmly there. Red bricks have been used to build the museum, and this gave it a severe façade, reminiscent of those used in prisons. The building is bare and very different to its surroundings, thus it isolates itself, and indeed looks like a prison. Hence, this design formed the first part of the affective experience for the visitors (Rankin 2013; Rankin and Schmidt 2009; Teeger and Vinitzky-Seroussi 2007). The relationship between the building which is contained and enclosed on itself contrasts with the severe pillars which are the only partly visible from the road, and mirrors the relationship between the hidden and contained past and the new hopeful present (Teeger and Vinitzky-Seroussi 2007)



Figure 4.5: NJR ZA, The exterior of the Apartheid Museum, South Africa. Reproduced from Wikimedia Commons (ZA 2008).



## **The Narrative of the Apartheid Museum**

Like the USHMM, the structure of the narrative in the AM had a distinct starting point, followed by an elaborated exploration of the history, and then a conclusion at the end (Teeger and Vinitzky-Seroussi 2007). Through creating an empathetic connection with the narrative, visitors not only learn about apartheid in a didactic matter but through their bodily awareness of the spaces they are inhabiting and their personal experiences within these spaces (Rankin and Schmidt 2009). But the narrative tried to keep the pain of the past separate from the hopes of the present (Teeger and Vinitzky-Seroussi 2007).

The focus of the narrative in the museum was on the dark and painful history of living under the apartheid era (Rankin 2013). The issue of race and the divide between the victims and the preparators were carefully addressed in the narrative, for example, by including Afrikaners as victims too, avoiding placing the blame on the white settlers and not directly addressing racist notions that the settlers brought with them to South Africa (Teeger and Vinitzky-Seroussi 2007).

The narrative focused on the African National Congress (ANC) and not the other political parties and resistance movements. Furthermore, it did not provide chronological information about the different heroes of the struggle. Therefore, the narrative became reflective of the vision of the ANC (Teeger and Vinitzky-Seroussi 2007).

The exhibition starts with laying the foundation of how apartheid came into being by tracing the early history of the colonisation of South Africa. Then the narrative delves into addressing life under the apartheid regime through different media (text, audio and video) that are placed along a maze-like path that has wire cages which obstructs the usual interaction between visitors and the information displays. This creates a sense of confusion which is an intentional part of the affective experience (Rankin 2013).

## **Key Spatial Experiences and Design Treatments**

The experience of the AM focused on the spatial dimension of the apartheid. Therefore, most of the spaces created division, confinement and separation. Here, I

will discuss some of the key points in that journey and look at the design treatments employed.

### ***The Hall of Segregation***

Just like the USHMM, visitors of the AM are given passes upon their entry to the museum. In this case, they are given identity cards that assign them to a racial group either white or non-white. The distribution of those identity cards is done arbitrarily, and therefore it can force even families or groups who came together to separate (Rankin 2013). Based on their identity cards, either white or non-white, visitors must go through the corresponding entrance (Figure 4.6). This forced enactment of apartheid establishes the mindset in which the visitors will continue their journey (Rankin and Schmidt 2009).

From that entrance, which is called the Hall of Segregation, visitors in accordance to their assigned classification have to go through turnstiles and wired cages as they move forward in a confronting and uncomfortable way (Rankin and Schmidt 2009). At the end of this journey there is a large display of the Classification Board which explains the system that determined how whites and blacks lived under the apartheid regime (Newbury 2005; Rankin 2013). This experience allows visitors to understand the effect of apartheid, which is reproduced in other places in the museum too (Teeger and Vinitzky-Seroussi 2007).

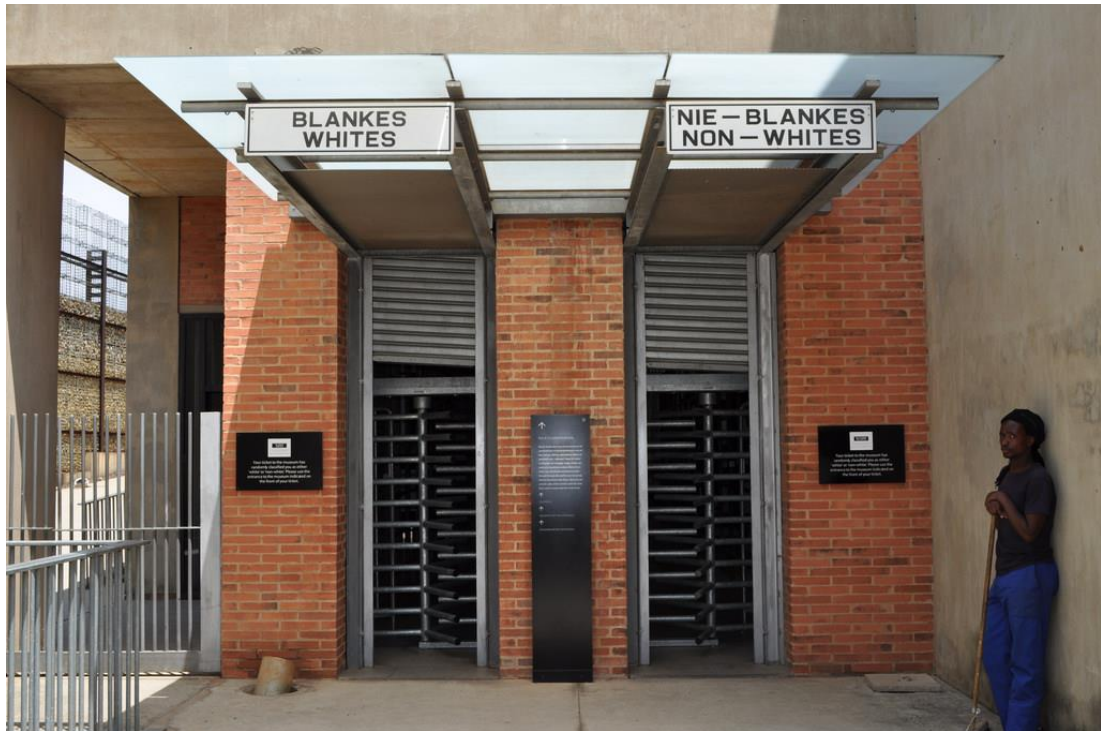


Figure 4.6: Raymond June, *The Segregated Door at The AM*. Reproduced from Flickr (June 2010).

Unlike my critique of the passports used at the USHMM, the identity card here has an immediate and confronting effect on the visitors. They are not placing themselves in other people's shoes. They are being subjugated to apartheid even if for a short period.

### *The Ramp*

After the confronting entrance, visitors find themselves reunited once again outside. That transfer from the dark and cramped space inside to the light and open space outside reflects the coming together of South Africans after the end of the apartheid regime (Rankin and Schmidt 2009). Outside, visitors walk up a long ramp. On the path of the ramp stand double sided mirrors that have life-size images of different people, from different races, ages and genders, that are associated with the struggle against the apartheid regime (Rankin 2013). The use of mirrors creates reflections of the visitors on the existing images (Figure 4.7). These reflections serve to confront the visitors as they question their own position within this narrative. They play on the concept of embodiment as well, as the visitors feel that they are joining those freedom fighters by standing next to them as they ascend the ramp (Newbury 2005; Rankin 2013). At the same time, the physical presence of those mirrors is obstructing or changing the path on which visitors are walking up (Rankin and Schmidt

2009). The ramp narrows as it goes up, exaggerating the perspectival effect of the ramp (Rankin and Schmidt 2009).



**Figure 4.7: Keso S, The Ramp at the AM. Reproduced from Flickr (Keso S 2009).**

As the visitors reach the top they find themselves on a viewing platform. The viewing platform is vast and wide, contrasting with the semi-enclosed ramp (Rankin and Schmidt 2009). That platform offers a panoramic outlook of Johannesburg. Curved stone walls are carefully designed to obstruct the view of the theme park and casino nearby through the architecture of the museum itself (Rankin and Schmidt 2009).

The ascension on the ramp until the visitors reach the platform can be seen as a reflection ritual. It gives the visitors a chance for an early reflection on what they have just experienced with their segregated entry. But at the same time, they find themselves joining the fighters against the apartheid as they make their way up to reach the reality of today as they encounter the panoramic view of the city in front of them. At the same time, ascension is usually associated with triumph and conquest. So, when the visitors reach the platform and see Johannesburg in front of them, they become optimistic and relieved before they make their way back inside the museum.

### ***The Second Entry***

From the viewing platform, visitors have to descend once again to go back inside the museum. As they make their way back inside, they can see large photographs of early Johannesburg (Rankin 2013). This transition brings the visitors' mindset back to knowing more about apartheid as if they are travelling back in time. They got a real-life view of Johannesburg on the viewing platform. Then, as they are going back to the inside of the museum, they see older images of Johannesburg. As they enter the space of the museum again, they can see the familiar museum foyer space with an enquiry desk and facilities (Rankin and Schmidt 2009). And from there they can start their journey through the museum.

### ***Spatial Segregation***

Throughout the journey inside the museums, separation, confinement and confusion are expressed through spatial treatments (Figure 4.8). Dividing cages and corridors show visitors how they are being separated, yet they are aware of the presence of others (Rankin and Schmidt 2009). There are no open and expansive halls in the museums similar to those found in other museums. There is a predefined and restricted pathway that visitors need to follow. Most of the galleries are small, on the side or interrupted. The zigzagging movement between the different spaces creates a sense of disorientation (Rankin and Schmidt 2009). Mediated information, whether video or audio, overlaps the built spaces. This overlapping heightens the visitors' awareness of their bodily experience while trying to absorb the mediated information (Rankin and Schmidt 2009). Another significant example is solitary confinement cells. Though the doors to those spaces are open for the visitors to enter, the bareness of the cells creates a claustrophobic feeling as those cells represent incarceration and confinement (Rankin and Schmidt 2009).



Figure 4.8: Steven dosRemedios, Interior shot at the AM. Reproduced from Flickr (dosRemedios 2015).

### *Objects of Memory*

The apartheid museum does not have many objects at display as there are not many artefacts from the apartheid era. However, objects have been used in some spaces. One notable example is the room with 131 rope nooses that are hung down from the ceiling. Those nooses are commemorating the execution of anti-apartheid activists (Rankin and Schmidt 2009). The placement of those nooses in a restricted space where visitors cannot distance themselves from the nooses provokes a visceral

reaction (Rankin and Schmidt 2009). The names of the executed activists are displayed as well. While the nooses highlight the gravity of the unjust executions, the names remind the visitors that these are real people who had their lives taken away. The activists are absent and present at the same time. And as visitors walk around or underneath the nooses, they can feel that.

### ***The Use of media***

Most of the information is presented through mediated audio/visual materials, and they are placed around the different spaces and not always in plain sight. Therefore, their role is not only didactic, as a source of emotive information, but they also heighten the spatial experience of confusion through the museum (Rankin and Schmidt 2009).

### ***Photography***

Photography played an active role in the opposition to the apartheid regime as it documented what was happening and later on it helped articulate the histories of apartheid (Newbury 2005). Therefore, photographs used in the museums provided a unified narrative of the apartheid and the struggle to end it (Newbury 2005). The photographs acted as witnesses to what happened, and by displaying them they impacted the conscience of those who saw them (Newbury 2005).

The first image that the visitors encounter when they enter the room about the new South Africa is the image of Mandela who is hailed as the hero of the story (Teeger and Vinitzky-Seroussi 2007). Towards the end of the exhibition there is a series of monitors that show diverse South Africans talking about their lives and reflecting on the recent history of the country (Newbury 2005).

### ***The Casspir***

In one of the spaces there is a real-size yellow Casspir displayed. Casspirs are land mine-resistant vehicles that were used in South Africa to transport troops. The placement of the Casspir in a confined space confronts the visitors once again, and emphasises the enormity of the vehicle (Rankin and Schmidt 2009). Visitors find themselves dwarfed by its presence which evokes feelings of vulnerability and fright. The positionality of the visitors is challenged once again, as they can choose between staying on the ground and getting a sense of how it felt being confronted by this

vehicle, or going up and stepping inside the vehicle and getting the view of the perpetrator (Teeger and Vinitzky-Seroussi 2007). The embodied experience of being in the presence of the Casspir, whether outside or inside it, simulates or reenacts the past through affectively experiencing how it might have felt (Teeger and Vinitzky-Seroussi 2007). The inside of the vehicle is a tight space, with video footage showing violent riots in which Casspirs were present (Rankin 2013). The experience inside the Casspir is claustrophobic and hints at the irony that people who enforced the apartheid system were also constrained like the victims of that system (Rankin and Schmidt 2009).

### ***The End of the Journey***

After the gruelling journey through the different spaces of the museums, visitors reach the end of that journey, and their tension is relieved by a display featuring the first free elections after the end of the apartheid era (Rankin 2013). This space gives the visitors a positive conclusion to their journey. As the visitors move past the election space, the corridor leading out narrows, giving a spatial sense of detachment between the visitors and the history of apartheid (Teeger and Vinitzky-Seroussi 2007).

From there, visitors reach a silent space for contemplation. There is a big contrast between the overload of information that the visitors have experienced as they moved through the museum and the quietness of that contemplation space (Rankin and Schmidt 2009). Also, at the end of the journey and as an act of commemoration, visitors are invited to place a stone on a cairn underneath the new South African flag (Rankin 2013). As the visitors make their way out to the gardens of the museum, they can see a café and a museum shop which brings the visitors back to the banality of their lives and serves as a subtle transition preparing them to leave the museum (Rankin and Schmidt 2009).

At the exit of the AM, there is a text display that summarises the concept and intention of the museum: “South Africa still bears the wounds of apartheid and the struggle against it. If these are to heal fully, and if South Africa is to develop into a truly non-racial society, the past must be grappled with and understood. Without that, no full reconciliation can occur. This is the reason for the Apartheid Museum.” (Rankin 2013, 88) This summery emphasises that the reason for such museums is to offer people a chance to understand the complexity of apartheid so that they can move



forward and stand against the repetition of apartheid policies anywhere else in the world.

### **Criticism**

The museum attracted criticisms due to its relation to the building of a casino and a theme park. Many felt that this connection promoted a lack of seriousness, and were concerned about the fact that the funding is based on consumer capitalism. Also, the museum seems to be exclusively directed towards international tourists and middle class South Africans (Newbury 2005).

Using affect and emotive strategies can also be seen to commodify trauma (Rankin and Schmidt 2009). Another criticism of this mode of representation is that it can encourage “atrocious voyeurism” (Rankin 2013, 89) where visitors feel that they can very easily jump between roles, and into the past and back to present (Teeger and Vinitzky-Seroussi 2007); and that “apartheid can be easily experienced and survived harmlessly” (Teeger and Vinitzky-Seroussi 2007, 71).

The criticism of using experiential modes highlights the importance of maintaining a good positioning of the visitors within these created experiences. Visitors should understand and acknowledge their positions of privilege when going through such experiences. So, their affective embodiment is only a way for them to engage and understand, and not for them to re-enact the horrors of the apartheid. This is a significant point that was considered when I designed the prototype.

## **4.5 The Australian War Memorial, Australia**

The Australian War Memorial (AWM) is one of the leading war memorials worldwide. It is situated in the Australian capital, Canberra. Unlike the two other case studies, the AWM is not dedicated to one historical event, that is, the Holocaust or apartheid. And it is the oldest building of these three case studies.

The idea of the AWM came to Charles Bean, the official Australian First World War (WWI) historian. The initial goals of this building were to serve as a museum, a depository of war records, and a shrine (Inglis 2008). In the beginning, Bean’s vision of this building was an Australian War Museum. However, when the authorising act was passed in 1925 by the Australian Parliament, the museum became

a memorial (Inglis 2008)<sup>3</sup>. In 1979 the government tried adding museum back to the title but was met with opposition from war veterans (Inglis 2008). While the AWM was officially opened on Armistice Day 1941, some argue that it was not completely opened until 1993 when the remains of the Unknown Australian Soldier was received (Inglis 2008). As the idea came during WWI, it was meant to be dedicated to that war. But in 1952, the memorial expanded its brief to include all the wars that Australians have taken part in which meant including those that took place in the nineteenth century and those that happened afterwards or might take place in the future (Inglis 2008). The vision of the Memorial was articulated by Bean seven years after the official opening of the AWM in 1941. It is now written in the Orientation Gallery:

Here is their spirit, in the heart of the land they loved, and here we guard  
the record which they themselves made. (Nelson 2014)

The AWM attracts a large number of visitors including school children (McKernan 2017). For example, in their 2017 annual report, the AMW cited that out of their 1.2 million visitors for the financial year 2016-2017, 145,927 were school student and their accompanying adults (Australian War Memorial 2017).

The different roles of the AWM include; maintaining and developing a national collection of historical records, exhibiting some of these historical records and material, and assisting in the research of the Australian Military history (Australian War Memorial ACT 1980). But the AWM is also a shrine, a museum, and an extensive archive (Waterton and Dittmer 2014; Inglis 2008).

Education plays an important role in the AWM. School visits are part of civics and citizenship education. School students are given opportunities to learn, understand and engage with the histories of war through meaningful experiences at the AWM (McKernan 2017). Those experiences, while inspiring emotional and affective engagement, also provided didactic experiences that involve critical analysis and reflections (McKernan 2017). However, there is a challenging task of how to represent the confronting histories of war to school-aged audiences (McKernan 2017).

---

<sup>3</sup> K.S. Inglis has written extensively on the history of the AWM and other war memorials in Australia. He especially looked at the early formative years of planning and constructing the AWM. For more, please refer to his book *Sacred Places: War Memorials in the Australian Landscape* (Inglis 2008).

## **The Conceptual Framework**

The dual nature of the AWM poses a challenge to the balance of being a place of commemoration of those lost in war and a museum that displays complex and confronting histories of war (McKernan 2017). It is difficult for museums to display histories that involve trauma. At the same time, however, forgetting or neglecting the horrors or violence of these histories can add to the pain of the survivors and their descendants (Herman 2013, cited in McKernan 2017, 102). Therefore it is important to acknowledge the challenge in presenting, receiving and understanding that difficult past (McKernan 2017).

In the AWM's displays about the Great War, there was a reluctance to display the horrors of war and underplay the heroism of the "Anzac myth" (McKernan 2017, 102). The AWM in some way worked as a recruiter for any possible future wars, therefore it was important that they maintained a certain image of heroism and valour about the Anzac rather than acknowledging the real horror of wars and incorporating stories of the various experiences of the Anzac which can include cowardly actions (McKernan 2017).

## **The Architectural Framework**

The design of the museum was selected through an architectural competition. There were two entries that the competition judges liked, one by Emil Sodersteen and one by John Crust. The judges suggested that both architects work together on a combined final design. The final design has a clear Byzantine style, especially the dome of the Hall of Memory (Inglis 2008).

The AWM does not represent a singular event. The building was proposed during WWI; therefore, the focus of this building was on commemoration. Thus, monumentality is evident in the design.

Most of the exhibitions are designed in the typical museum experience, which included textual, visual and object displays (Waterton and Dittmer 2014). But various exhibitions tried to achieve affective and spatial experiences, as I will discuss further.

## The Narrative of the AWM

There is no single historical narrative that the AWM is trying to communicate. Instead “[t]he story that is told at the Australian War Memorial is predominantly one of Australian heroism and sacrifice” (McKernan 2017, 113). The stories of war at the AWM shows Australians who they are and what they stand for (Nelson 2014).

The memorial has displayed stories of death in various exhibition spaces. However, the focus was shifted away from any violent or gruesome nature of death in war (McKernan 2017). This led to the criticism that this technique represented a softened version of a violent history (McKernan 2017). It is important to avoid sensationalising or downplaying the horrors and violence of war especially when presenting materials to the school kids (McKernan 2017).

When the exhibition dedicated to WWI was proposed to be updated in 2014, the focus on individual stories was one of the key changes. Those stories would include stories of those who returned to Australia, became active members of the societies, and their stories of grief and loss. The exhibition had to evoke a sense of pride in its visitor, but that pride is balanced by a better understanding of the cost of war (Nelson 2014). *The Great War* exhibition was opened in 2014, as the result of the redevelopment of the previous WWI galleries. The exhibition follows a chronological narrative that takes the visitors on a journey through the major events of the war (McKernan 2017). For the most part, confronting histories were not removed from exhibitions, but were carefully displayed in a way to moderate their potential shock effect (McKernan 2017). Through the memorial, the narrative focused on stories of resilience, for example, when displaying stories about facial injuries. The stories that are shared are by those who have survived the injuries. This has nevertheless neglected the stories of those who did not recover from their injuries or the trauma of sustaining those injuries (McKernan 2017).

An exhibition about Afghanistan was opened in 2013 while that conflict was still ongoing, which was the first time the AWM had done that (McKernan 2017). The exhibition had artefacts from that conflict on display, including the Blackhawk helicopter that was used to bring three dead soldiers back to Australia in 2010. There was also a 30-minute video that showed images from the conflict including footage of

those of going to Afghanistan and coming back to Australia, footage from the battlefields, and reflections on post-traumatic stress order (Nelson 2014).

## **Key Spatial Experiences and Design Treatments**

Over the many years of its operation, the AWM has had several exhibitions, some of which are permanent and some are not. Given its different focus from the USHMM and the AM, there are several differences between them. There is no special treatment for the beginning of the journey in the AWM, and there is no overarching narrative that shapes the journey inside. This is reflected in the spatial experiences created. However, in my examination I will still focus on some of the key spatial experiences and investigate the various design treatments employed.

### ***Bomber Command***

*Bomber Command*, which is part of the *Second World War* exhibition, is designed as an affective multi-sensory experience (Waterton and Dittmer 2014). The display relies more on non-textual elements like light, sound, and floor vibrations. The display tells the story of a night raid on a town in Germany. The audience enters a dark space which is modelled as the bomber command's fuselage. That dark space is lit by the light coming from the video, and lights that flash on and off during the experience. The change in the level of darkness is designed to build on the embodied experiences of the audience. The experience depends on suspense and foreboding while the story of that bomber command is being shared via text and video (Waterton and Dittmer 2014).

### ***Vietnam War Gallery***

Light and sound are utilised in the *Vietnam War Gallery*. For example, in the *Dust Off* display, a real-size war aircraft "Bell UH-1B Iroquois A2-1019" is placed there (Figure 4.9). The display makes use of video footage, light and sound to build up the intensity of the experience (Waterton and Dittmer 2014). The vibrating lights along with the sound are used to resonate with the intensity of the narrative being laid out. The play on suspense and anticipation is used to increase the visitors' curiosity to learn and understand the event being displayed.



Figure 4.9: Australian War Memorial, *Dust Off* display featured an Iroquois helicopter. Reproduced from AWM website (Australian War Memorial 2018).

### *The Korean War Trenches*

Another important example is the *Korean War Trenches*. The space for this exhibition differs from other spaces as it has a low ceiling and is confined. This spatial treatment was meant to build on the intended experience (Waterton and Dittmer 2014). The exhibition has a recreated scene of a trench which included military equipment and soldiers made of wax (Figure 4.10). The exhibition makes use of sound and real recordings, as disembodied voices coming from different points and at different times during the experience. While the exhibition, on the one hand, might have been designed to teleport visitors back in time to get a sense of how it could have felt being in that scene, the wax figures and the disembodied voices may also create an overt emotional response (Waterton and Dittmer 2014).



Figure 4.10: Australian War Memorial, Kapyong diorama from the *Korean War Trenches*. Reproduced from AWM website (Australian War Memorial 2018).

### *The Battle of Hamel*

*The Battle of Hamel* is an immersive virtual reality (VR) experience that demonstrates the events of the battle of Hamel which was fought in 1918 in France. It was the first battle where Australian and American soldiers fought together. The VR experience recreates the events of the battle in a 3D environment. Viewers can look in all directions around them. It is only in the second half of the experience when the environment really feels immersive and there are many things happening. Sound and visual effects are used to increase the intensity of the experience, while a narrator explains the details of the battle. The VR experience is not interactive, as viewers can only look in all directions but they cannot control the pace or have any impact on the sequence being played.

The experience ties the viewers back to the AWM by informing them that many of the objects and vehicles seen in the virtual environment are actually presented in the museum. This creates an extension between the AWM and the VR experience. Visitors can see, inspect and read about the objects and vehicles but then through the VR experience they can understand the context of these object better and how they were placed during the actual battle.

## ***Photography***

In the AWM's archival collections, there are a lot of confronting images which include those of a graphical nature, for example, dead and severed bodies. However, these images are usually not put on display in the exhibitions (McKernan 2017).

Another example of confronting images is those of soldiers who sustained facial injuries. These images are extremely confronting, yet they are an important part of the history being presented. The way some of these images were included in the exhibition was through the visitors seeking to see these images via touchscreens. This meant that the images were not readily shown for all visitors, rather can be accessed by those visitors who have the interest or capability to view such images (McKernan 2017). Another important point for consideration is understanding how these images fit into the overall narrative that is being delivered, so that they are not only shown to represent the gruesome nature of war but rather to humanise the soldiers who sustained such injuries and share their stories of suffering and survival (McKernan 2017).

## ***Objects of Memory***

There is a huge compilation of objects from the different wars in the AWM collection and on display – objects like used helmets, torn uniforms, weapons and vehicles used in war. These objects exemplify the violence and horror of war (McKernan 2017). However, the objects that are put on display mostly belonged to soldiers who survived. So, even if the helmet is bullet-damaged, visitors are told that the soldier wearing the helmet survived that attack (McKernan 2017). Another example is a bloodstained uniform of one of the Australian servicemen who served in Afghanistan and survived that injury (McKernan 2017). In this way, the display of such objects emphasises the overall narrative of courage and survival. Nevertheless, these kind of objects can still cause discomfort and shock to some visitors.

This is different to the role of objects in the USHMM, where the display of objects were meant to personalise the objects and their previous owners but at the same testify to the owners' tragic fate.



## *The Roll of Honour and the Hall of Memory*

From the early conception of the Memorial, the Hall of Memory and the Roll of Honour were meant to be the sacred part of the Memorial (Waterton and Dittmer 2014). The Roll of Honour has embossed names in bronze of all of Australia's war dead. The Roll is placed on the cloisters on both sides of the reflecting pool (Figure 4.11). The reflecting pool leads up to stairs that lead into the Hall of Memory. The Hall of Memory's architectural form resembles a cathedral (Waterton and Dittmer 2014). At the other end of the reflecting pool, there is the eternal flame.



**Figure 4.11: Bidgee, The Reflecting Pool Leading to the Hall of Remembrance at the AWM. Reproduced from Wikimedia Commons (Bidgee 2009).**

While the concept of what will be placed in the Hall of Memory has changed over the years<sup>4</sup>, it now has the tomb of the Unknown Soldier. Another important element of the Hall of Memory is the stained-glass windows. The stained glass windows represent characteristics of the fifteen members of the Australian Imperial Force (Kellett 2015). Those windows are not considered architectural embellishments, but rather art, and that is why the artist Napier Waller was commissioned to make them (Kellett 2015).

---

<sup>4</sup> This issue has been discussed extensively in Inglis's book (2008).

These two spaces offer personal experiences for the visitors to reflect on their journey through the memorial, but also a chance for them to commemorate the fallen especially if they were loved ones.

## **Criticism**

Criticism of the AWM depends on specific exhibitions rather than the overall memorial. Though for some scholars, and as discussed earlier, the AWM's overall narrative seems to focus more on stories of survival and heroism that fits with the myth of the Anzac (McKernan 2017).

There was some criticism of the *Afghanistan* exhibition because some people felt that it is too soon to talk about that especially in the manner that it was displayed which aimed at creating visceral reactions (Britt 2014, cited in McKernan 2017, 106-107).

In the *Discovery Zone*, school children are invited to try on uniforms, get into war vehicles like submarines and the helicopter cockpit. There are olfactory stimulants such as the stench coming out of the vehicles or remnants of mustard gas. However, there has been some criticism of such playful ways of display. Critics felt that it is important that the children understand that war is not fun in any way (Inglis 2008).

## **4.6 Summary**

In this chapter, I looked at three case studies of memorial and conflict museums that used spatial experiences as the main mode of communicating their subject matters. I started with an overview of memorial museums and examined how memories are usually collected and communicated in these spaces. I then conducted the case studies, starting with the United States Holocaust Memorial Museum, then the Apartheid Museum in South Africa and lastly the Australian War Memorial. In my examination, I focused on the conceptual framework and how it reflected on the architectural framework, and how narratives in each of these museums were created and displayed. I then looked at the key spatial experiences in each of these museums. I also looked at the display treatments of objects of memory (including vehicles), images, and media, and how they fed into the overall narrative. Part of my examination

also looked at the history of building these museums and some of the criticisms that were directed at them.

These case studies have provided important insights into successful design techniques that use experience, space and narrative to create affective and embodied interaction between visitors and the political topics. When creating the overall narrative, it was important to highlight the key words and themes that best describe the subject. For example, in the USHMM, words like displacement, discontinuity and uncertainty played a significant role, whereas in the AM, words like separation, segregation and redemption were vital. These themes were then reflected in the design of the journey inside each of these museums, and inspired the main affective and spatial experiences.

Another key insight is the importance of facilitating proper positioning of the visitors within the space and in relation to the narrative. This has been efficiently done in the AM where the visitors were forced to be segregated and enter the space through different doors, thus enacting apartheid. Another key insight is how the information or objects of memories being presented to the visitors should be governed by the intended affective experience, for example, how the piled shoes, and the photographic collection of one village were presented in the USHMM. Another insight is how immersivity can be created and facilitated in physical or virtual displays as seen in different exhibitions in the AWM.

These insights will inspire the design process of this research project's prototype as will be discussed in Chapter 6, and also inform the discussion of the findings following the design and evaluation of that prototype in Chapter 8 and Chapter 9. What this research project is aiming at is to create a new way of commemorating and communicating political narratives. The main difference is that the political narrative is still ongoing and current. Moreover, it involves people with limited resources. The proposed "activist spatial experience" is looking at innovative ways to create spatial experiences and exhibitions without having to build dedicated architectural spaces.

In the following chapter, I will examine different artistic expressions and formations that were created mainly by Palestinian artists and filmmakers who have been sharing narratives relating to Palestine. The examination will focus on how

Palestine as a spatial entity has been presented, how different hero images have been presented, and finally the key themes and objects that are usually used in the Palestinian visual culture production scene. The outcomes of that examination will feed into the design and development process of the prototype.

## **Chapter 5. Mapping Existing Palestinian Visual Culture Production Scene**

### **5.1 Introduction**

In the previous chapter, I examined three primary case studies of memorial and conflict museums. The focus of the examination was on how the conceptual framework, the architectural framework, narrative, and objects of memory were used to create spatial and affective experiences that communicated the historical events being represented in each of these museums.

In this chapter, I will examine different artistic expressions and formations that were created mainly by Palestinian artists and filmmakers who have been sharing narratives relating to Palestine. The list of the artists and artworks analysed in this chapter is not an exhaustive list, and a thorough investigation of this subject is outside the scope of this research and probably requires a whole separate research project to survey appropriately. The main purpose of this examination is to explore and understand how the situation of Palestine and the experiences of Palestinians living under the occupation have been creatively expressed in visual culture. This will then inspire and inform the creation of the proposed prototype.

Palestinian artists have been articulating narratives of their homeland before 1948. Yet, there are limited texts and scholarly research about Palestinian arts in mainstream contexts (Ankori 2006; Fisher 2010). The Palestinian art scene is expansive as the definition of who is Palestinian is itself quite broad (Zvi 2006). Palestinians are not homogenised. The Palestinian identity is continually being formed and negotiated through the different experiences of Palestinians (Sherwell 2006). Therefore, any expression, including in the visual culture, of that identity will also be varied and non-homogenised. The definition of who is Palestinian is one of the significant points of contestation between Palestine and Israel. In my research I have adopted this definition of Palestinian:

A Palestinian is any Arab who has been born in Historical Palestine<sup>1</sup> or any Arab whose parents were born in Historical Palestine, regardless of what their current place of residence is or what current citizenship they have.

This definition is broad and includes Arab Israelis, Palestinians in the West Bank and the Gaza Strip, Palestinian refugees living in neighbouring countries, Jordanians of Palestinian descent, and other nationalities who identify as Palestinians living anywhere around the world. The Palestinian art scene, like Palestinians themselves, extends over four geographical areas: inside Israel, the West Bank and the Gaza Strip, in Arab countries, and the diaspora<sup>2</sup> in Europe and the United States (Zvi 2006).

Palestinian art has been examined through themes of political history documentation, cultural preservation, the use of humour, humanising the Palestinian cause, and recreating some of their experiences (Ankori 2006; Demos 2003; Jansen and Klanten 2011b; Lionis 2013; Zvi 2006). I will extend on the existing research by analysing some prominent works to inform and inspire the narrative that I will be creating for the prototype as will be further explained in the following chapters. While artworks are made within a given period and might reflect specific political ideas, there can be various readings and perceptions of these artworks (Edelman 1995). Artworks do not necessarily represent history literally, but they can evoke the emotional experiences of the event they are portraying (Rankin 2013). Therefore, this examination is primarily based on my reading of the artworks and films and do not necessarily reflect the real intentions of the artists and filmmakers.

The examination will focus on projects, artworks and films<sup>3</sup> that have been created after 2000 up until 2015. The examination focuses on the paradigm shift in the visual language of Palestinian art-making especially since new art forms like video, performance and exhibition have been used (Sherwell 2006). The reasons for starting in 2000 are:

1. This year marks the beginning of the second intifada, which is one of the more recent political events in the history of the Palestine/Israel situation. This event

---

<sup>1</sup> Historical Palestine is used here to denote the areas that include Israel, West Bank and the Gaza Strip.

<sup>2</sup> In this context, the diaspora are Palestinians who were removed from their country and scattered around the world.

<sup>3</sup> For the full details of each of the projects, artworks and films that have been discussed in this chapter, please refer to Appendix C and Appendix D.

ultimately led to the construction of the Separation Wall, which arguably is the most visible form of apartheid and occupation in Palestine/Israel.

2. The turn of this new century has seen the advancement of new media and technologies, which is reflected in the art being created. Technology and digital media have noticeably increased the creation of art in Palestine despite it being under occupation. Also, Palestinians' creative documentation of their daily struggles has gained worldwide attention using social media.
3. The effect of the September 11 or "9/11" terrorist attack in the United States has been tremendous especially in the Middle East and affected their political and economic situations. Also, September, 11 has arguably aided in the rise of Islamophobia and fear of various terrorist groups. Ultimately this fear and stereotyping led to the confusion and conflation of what could be considered legitimate resistance with terrorism.

The analytical examination of the artworks and films will focus on three main themes:

- The spatial construction of Palestine both physically and conceptually.
- The characteristics of the hero/protagonist imagery.
- The representation of Palestinians' main emotions and experiences living under occupation.

Through understanding and exploring these themes, I can draw on commonalities and inspirations for the next stage of creating the prototype, especially when working on the overarching narrative of the intended activist spatial experience.

## **5.2 Palestine as the Fragmented Terrain of Memory, Occupation and Imagination**

What constitutes Palestine as a spatial construct in the visual culture production scene? This is an evocative question not only for its political ramifications, but also regarding contested narratives and claims of rootedness between Palestinians and Israelis. Defining Palestine on the map or as a defined area with clear borders is probably the most contentious subjects of all relating to the situation. However, there is a difference between the political situation and the day-to-day experiences of what is Palestine. In this section, I will not discuss the political definition of what is Palestine, neither on an international level nor a national level. My focus will be only on how Palestinians express their understanding of what is Palestine.

As Sherwell noted, attempting to create a unified narrative of the different representations of Palestinian identity and place will inevitably involve experiences of fragmentation, separation and estrangement (Sherwell 2006). I am arguing here that the construction of Palestine as a spatial entity is fragmented into three major paradigms.

The first paradigm is the “Imagined Palestine”. In this paradigm, Palestine is represented as a pure and abstract idea either based on memory or aspirations and imagination.

The second paradigm is the “Occupied Lands”. In this paradigm, Palestine is represented through the various interventions of occupation on the built and natural environments. This includes the after-effects of occupation on people living in refugee camps inside Palestine or even in neighbouring countries, for example, Lebanon.

The third paradigm is the “Objects of Memory and Resistance”. In this paradigm, Palestine is represented through iconic and symbolic objects that either relate to the collective memory of Palestinians or are considered national symbols of resistance and belonging.

These three paradigms exist and operate in different and sometimes isolated modes, nonetheless together they forge a mental and emotional identity of Palestine as a fragmented terrain of memory, occupation and imagination.

### **The Imagined Palestine**

The idea of Palestine includes Historical Palestine before 1948. This is probably that broadest definition of Palestine as it includes current areas of Israel. The imagined images are either based on the memories of those who were forcibly removed following the events of 1948, or based on the hopes and dreams imagining what sort of future there could be for Palestine and Palestinians.

There is romanticised imagery of what Palestine pre-1948 was like; villages flourishing with trees and representing a perfect picture of a harmonious and prosperous life. Native trees like citrus trees, fig trees and olive trees have been portrayed as fragments of that ideal version of homeland before the displacement (Bardenstein 2006). Artists like Sliman Mansour and Nabil Anani painted an idealistic



scene of Palestinian villages not necessarily depicting existing villages or situations but instead constructing an ideal impression of the homeland (Sherwell 2006).

In the film *The Time That Remains* (Suleiman 2009) by Elia Suleiman, we are exposed to images of highly stylised Palestinian towns in 1948. Houses were well designed and beautifully furnished. Suleiman used pastel coloured walls and furniture evoking a sense of fashionability and modernity. Suleiman paid great attention to the smallest details, such as how tables were being set using proper Western style cutlery and crockery. The houses had gramophones, and people used cars to drive around. The landscapes in his film were vast, green and fresh. Even the populace was all well-groomed and dressed (Figure 5.1). This paints a picture of a vibrant modern Palestine unlike the one usually portrayed by the Israeli narratives of Palestine being barren lands with savage people, if any at all, living there. So, Suleiman's portrayal not only counters such narratives, but also evokes a sense of pride and connection to a history lost to the newer generations of Palestinians especially those living outside of Palestine and Israel.



Figure 5.1: Elia Suleiman, *The Time That Remains*. 2009, still image from film. Reproduced from <http://heidisaman.tumblr.com/> (Suleiman 2009).

Besides looking at the ideal recollections of historical Palestine, some artists focused on depicting Palestine in the future. In *A Space Exodus* (Sansour 2009), a video artwork, Larissa Sansour imagines the future Palestine where it is not only a state but has a space program and an astronaut is placing Palestine's flag on the moon

(Figure 5.2). Sansour's work mocks the geographical limitation of Earth where Palestine till now could not claim its borders and be recognised internationally. In a key segment of this video artwork, the astronaut says, "Jerusalem, we have a problem". The placement of Jerusalem as the ground control of this expedition reinforces the connection between Palestinians, their dream state, and Jerusalem as its capital. However, the video ends with the astronaut floating in space toward the void, and we hear her call, "Jerusalem?" This questioning call of Jerusalem brings this dream back to the reality of the contestation of Jerusalem as the capital between Palestine and Israel.



Figure 5.2: Larissa Sansour, *A Space Exodus*. 2009, Video 5' 24". Reproduced from the artist's website (Sansour 2009).

Naming the spaceship "Sun Burnt" reinforces the Arab identity as sunburnt skin people. It can also relate to the more romanticised images of farmers, fishermen and villagers who are sunburnt from their daily work under the sun. This link ties the work back to the romanticised image of Palestine.

### **The Occupied Lands**

Contrasting with idealist images of the villages and towns, artists have tackled the destruction of many of these villages and towns after the events of 1948. Probably one of the most important projects is the *Google Earth Nakba Layer* by Thameen Darby (Darby 2006). The *Google Earth Nakba Layer* reveals the colonial violence that

began in 1948. Discussing the *Nakba*<sup>4</sup>, in general, is deemed to be controversial because it exposes Israeli's founding violence on the one hand and suggests historical claims to that land (Quiquivix 2014). A project like the *Google Earth Nakba Layer* brings forth the question of the refugees Right of Return<sup>5</sup> even if it has been omitted by politicians from both sides in the peace discourse (Quiquivix 2014).

In *Salt of this Sea* (Jacir 2008), a film by Annemarie Jacir, the two main characters, one a Palestinian and the other a Palestinian American experience their respective journeys to their ancestral villages in two different ways. The Palestinian man visits his demolished village and walks through its ruins, while the Palestinian American woman visits her grandfather house in Jaffa which is now owned by an Israeli family. Their two different encounters highlight the range of Palestinian experiences of dispossession after the *Nakba*.

However, the destruction of villages and homes did not only happen in 1948. Recent military operations, especially in the Gaza Strip, are still causing a great deal of destruction. In Taysir Batniji's installation work *GH 0809* (Batniji 2010a), he plays sarcastically with the themes of ownership and destruction. This artwork was made after operation "Cast Lead", the Israeli military operation on the Gaza Strip in late 2008 and the beginning of 2009. The installation has twenty C-prints each mounted on plexiglass. Each print features a destroyed house and its description but employs real estate visual and textual languages. The mounting of these prints in a grid of five by four resembles the façade displays of real estate offices. Describing and presenting the destroyed houses in a commercial real estate manner evokes a hidden narrative about who the former inhabitants of these houses were, and how the war has damaged their lives and their houses. The destruction is manifested through the haunting images of the houses that are displayed commercially. It humanises the occupants' stories as the viewers of this artwork are confronted by their positionality as curious onlookers just like they would be if they were hunting for houses. The destroyed houses thus play an essential role in Palestinian visual culture not only as part of the collective memory of

---

<sup>4</sup> The *Nakba* is considered one of the most important events in the Palestinian collective memory. This has been discussed in the Introduction.

<sup>5</sup> The Right of Return is a key term used in the Palestinian discourse referring to the rights of Palestinian refugees to go back to their hometowns including those that are now part of Israel.

1948, but also as current where people we know or can relate to today are still under the threat of having their lives and homes destroyed.

The tent also plays a significant symbolic role in the idealised memory of the *Nakba*. In Emily Jacir's installation *Memorial to 418 Palestinian Villages Which Were Destroyed, Depopulated, and Occupied by Israel in 1948* (Jacir 2001), Jacir built a real-life family-sized refugee tent. She then stitched on that tent the name of the 418 Palestinian villages which, as the title of the artwork says, were destroyed and occupied by Israel in 1948 (Figure 5.3). The naming of these villages is quite significant because they keep alive a history that is usually either dismissed or hidden. Similar to Darby's *Google Earth Nakba Layer*, this gesture of naming the villages reinstates the Right of Return. The tent as a temporal structure symbolises the *Nakba*, and the temporality of that structure echoes the Palestinian refugees' assumptions that their state as refugees living in camps is temporal as well.



**Figure 5.3:** Emily Jacir, *Memorial to 418 Palestinian Villages Which Were Destroyed, Depopulated, and Occupied by Israel in 1948*. 2001, refugee tent, embroidery thread, record book, dimensions variable. Reproduced from Documenta14 website (Jacir 2001).

However, the reality of the camps today tells another story. Yazan Khalili's photographic series *Colour Correction - Camp Series* draws attention to the Al-Amari refugee camp near Ramallah (Khalili 2007-2010). On panoramic photographs of the

camp, Khalili digitally coloured random houses in these images. This colouring can be seen as an act of wanting to fill the profound loss that the refugees living in that camp experience (Lionis 2012). Jawad al Malhi's *House #197* (Al Malhi 2008) uses panoramic photography of refugee camps as well. Al Malhi focused on the Shufa't refugee camp near Jerusalem. His work brings forth a different scenic imagery of Jerusalem by looking into the crammed houses in a refugee camp (Fisher 2009). While this imagery deromanticises the image of Jerusalem, it also brings forth another humanitarian crisis, the crisis of the everyday Palestinians who might not make it to news headlines but still suffer from the occupation in their own ways. Ein el-Helweh refugee camp in Lebanon is well documented in *A World Not Ours* (Fleifel 2012), a biographical documentary film by Mahdi Fleifel. Through walking down the alleys of the camp, to visiting its markets, to going inside different houses, Fleifel offers a humanised and intimate encounter with the camp and its occupants.

Beside the impoverished and overcrowded nature of the camps, a sense of intimacy and solidarity is often portrayed. For example, in the drama film *Omar* by Hany Abu-Assad (Abu-Assad 2013), young Palestinian men were portrayed being chased by the Israeli military forces, and they had to run through houses and to jump between courtyards. And usually the occupants of the houses would make way for them instead of stopping their entry. This shows solidarity between Palestinians in the face of the occupation forces.

Outside of the refugee camps, the depiction of various cities and urban cultures has also been apparent. In *Ramallah Syndrome*, Sandi Hilal and Alessandro Petti tackle the everyday life of Ramallah<sup>6</sup> which appears to be a typical city. It raises a question about what is Ramallah, and its positioning as "a spatial and social order that emerged after the collapse of the Oslo 'peace process'" (Hilal and Petti 2009). Through conversations with people, the artists look at how different people from or living in Ramallah place themselves within this city and what it represents to them. On one level, it touches on the idealised or romanticised image of a city that might be inaccessible to many Palestinians, but on the other, it shows the banality of the everyday life of people living there (Fisher 2009). Ramallah also features in Emily Jacir's video artwork *Ramallah/New York* in a similar manner (Jacir 2004-2005). In

---

<sup>6</sup> Ramallah is one of the key cities in the West Bank and is considered the de facto administration capital of the Palestinian Authority.

this two-channel video artwork, Jacir juxtaposes images of Ramallah with images of New York. The artist lives in both of these cities. Jacir focuses on indoor spaces accessed by the public, for example, barbershops and restaurants. The artwork shows a lot of resemblances between the two video channels. These resemblances expose a different image of what Palestine is like especially for a Western audience who might be oblivious to how vibrant life in Palestine is (Figure 5.4).



Figure 5.4: Emily Jacir, *Ramallah/New York*. 2004–2005, Two-channel video, 38' 50". Reproduced from MoMa's website (Jacir 2004-2005).

By comparison, the Gaza Strip has a very different reality to Ramallah's. As of 2018, the Strip has been under siege since 2007 and subject to recurrent military operations. The feeling of entrapment is best depicted in Taysir Batniji's sculptural work *Untitled #2* (Batniji 2010b). The sculpture is a box with mirrors endlessly reflecting the red pencil shavings that are in the middle of the box. The infinite reflections of the shavings within the constricted borders of the box give a claustrophobic sense of confinement and imprisonment.

*Stateless Nation* (Hilal and Petti 2003) by Sandi Hilal and Alessandro Petti pokes fun at the fact that Palestinians were not allowed a pavilion of their own at the 50<sup>th</sup> Venice Biennale. The artists responded to that by recreating large scale passports and travel documents owned by Palestinians and placing them in between different pavilions (Figure 5.5). Having those passports scattered and not brought together reinforces the fragmented spatial realities of Palestinians holding different passports and travel documents (Fisher 2009). The presence of these passports and travel documents between the different pavilions reminds other nations of their complicity

either by going against or remaining neutral in regards to supporting the Palestinian statehood.



Figure 5.5: Sandi Hilal and Alessandro Petti, *Stateless Nation*. 2003, installation, the 50th Venice Biennale, Venice. Reproduced from heimoaga.com (Hilal and Petti 2003).

Proposing a ludicrous solution for life under occupation was evident in Larissa Sansour's photo and video artwork *Nation Estate* (Sansour 2012). In this artwork, Sansour depicts a virtual Palestinian homeland all packed inside a high skyscraper. The main levels she portrays are Jerusalem, cities in the West Bank, and Gaza (Figure 5.6). Enclosing them in a skyscraper brings forth a sense of inclusion that is not there in the geographical map of these three fragmented spaces. This might be seen as a mockery of the proposed two-state solution, which in reality is impossible due to the fragmentation of the areas in which Palestine is allowed to create its state. This futility is turned into a humorous or absurd formation of a nation *estate* rather than a state. The inclusion of an advertising poster that reads "Gaza Shore best sushi in place" mocks the reality of the fishermen living in Gaza where the current siege forbids them from going far enough into the sea to be able to fish. So, in Sansour's artwork not only are Gazan fishermen free to catch fish as they need and wish, but they have joined modern life by making sushi out of their caught fish. Furthermore, other Palestinians have the freedom of movement to go to Gaza to enjoy eating sushi there.



Figure 5.6: Larissa Sansour, *Nation Estate*. 2012, Photography and video, 9'. Reproduced from the artist's website (Sansour 2012).

Palestinians' relation with the sea has always been a significant issue in Palestinian imagery. The Mediterranean Sea has been blocked from most Palestinians living in the West Bank as they cannot access it in Israel or the Gaza Strip. Thus, the wish to visit the sea became a symbol for the Right of Return, but also as a symbol for the freedom of movement between different areas of Palestine. This can be seen in the drama film *The Salt of This Sea* (Jacir 2008). In the film, the two main characters sneak into Israel to visit the Mediterranean Sea. The scene where they run towards it and jump right in and start swimming is cathartic. In *Nation Estate* (Sansour 2012), the sea of Gaza is not wide and open. Instead, it is a small area of water that has built borders (Figure 5.7). This might refer to the reality of the Gaza Strip which is currently the only Palestinian city on the sea, yet the city is under siege, and Gazans cannot travel far enough out to sea to make a living, while other Palestinians cannot enter the Strip at all.





Figure 5.7: Larissa Sansour, *Nation Estate*. 2012, Photography and video, 9'. Reproduced from the artist's website (Sansour 2012).

The architecture of the occupation features in different ways in Palestinian visual culture. From the photographic documentation of watchtowers like Taysir Batniji's *Watchtowers* (Batniji 2008), to defying the existence of Israeli watchtowers like the scene in *Divine Intervention* (Suleiman 2002), a film by Elia Suleiman, where the watchtower collapses merely by the confident walking by of a Palestinian woman, smartly dressed and wearing heels. Her walk was in defiance of the long queue of waiting Palestinians cars and a group of Israeli soldiers pointing their rifles at her.

The Separation Wall currently is the most prominent symbol of occupation and has been widely used visually by Palestinian artists, filmmakers and also international activists (Gould 2014a). The Wall might appear in the background of an artwork like in *Nation Estate* (Sansour 2012). In one of the scenes, we get the first glimpse of the Wall when Sansour enters the lobby. There is a stark contrast between the modernised hyper clean indoors of the estate and the harsh dark reality of occupation on the outside. Khalil Rabah's *The 3rd Annual Wall Zone Auction* (Rabah 2004) pokes fun at the Wall. The video artwork recreates an auction scene of objects collected around the Wall, choosing the Separation Wall as the background scene questions the prominence of that Wall as an edifice of the occupation. Rabah's auction can be seen as an "... act of political protest at the devastations wrought by the eight-metre-high [sic] barrier that today imprisons West Bank Palestinians in a number of enclaves" (Cesari 2012, 89). Poking fun again at the Wall is seen in one of the most

iconic scenes in Elia Suleiman's film *The Time That Remains* (Suleiman 2009). In this scene, Suleiman is seen doing a pole vault over the Wall. The scene starts with a close up on the face of Suleiman who is holding the pole then the camera zooms out to the side to show him running towards the Wall and the scene ends with a front view when we see him jumping to the other side of the Wall leaving the pole to fall in front of the Wall. This scene exposes the ugly face of such a Wall as a barrier, but at the same time, it is poking fun at how, by the simple action of pole vaulting, a person can breach it. There is a tension between the rigidity of the Wall and the fragility of its supposed purpose as a security wall.

In *The Iron Wall* (Alatar 2007) documentary, Mohammed Alatar focuses on the presence of the Separation Wall and the Israeli settlements built within the Occupied Territories. Through the use of panoramic and aerial views, viewers gain a better understanding of the occupation's effects on the built environment. What *The Iron Wall* managed to bring forth visually is the impossibility of establishing a Palestinian state, given the current spatial interventions of the occupation, by building the Wall and the continued construction of the illegal settlements. These physical interventions have caused the Palestinian communities to be more fragmented. Moving on from the aerial views of this film, we can see an eye-level view of the Wall in Emily Jacir's photo-essay *Retracing Bus Route no. 23* (Jacir 2006). In her photo-essay, Jacir attempts to trace the bus route no. 23 which her father used to ride on his way to work between Bethlehem and Hebron in the 1960s. Jacir documented her journey through photography which showed the extent to which the Wall has penetrated the Palestinian cities, cutting through roads and blocking access in many cases. The route her father used to take no longer exists.

*Lemon Tree* (Riklis 2008), a film by the Israeli filmmaker Eran Riklis and starring the Palestinian actress Hiam Abbass and Palestinian actor Ali Suliman, features a different take on the Wall. The film is centred around the life of a Palestinian widow who lives next to her lemon grove. However, her life drastically changes when an Israeli minister becomes her neighbour. The physical intervention inside her grove grows slowly from constructing a fence, then a watchtower, and restricting her access to her grove until they take over most of her grove under the pretense of maintaining the security of the minister. In the final scene, we see the Israeli minister opening his window that used to look over her lemon grove only see the Wall standing there

instead. The camera zooms out taking us to the other side of the Wall to once again be confronted with a dead lemon grove and the widow walking in between her dead trees.

### **Objects of Memory and Resistance**

Objects, symbols and images have been used to move people's emotional senses to elicit national pride (Davidson and Milligan 2004). When thinking of objects relating to history or collective memory, we think of museums (Davidson and Milligan 2004). As a stateless nation, Palestine does not have this kind of museum. Addressing this issue, Khalil Rabah created a fictional museum, *The Palestinian Museum of Nature and History and Humankind* (Rabah 2003 - ongoing). In this work, Rabah envisioned and constructed a fictional museum that has various objects collected from the natural and urban environments of Palestine. The museum alludes to the Palestinian dream of statehood – a Palestinian state that is self-sufficient and has enough funds to create its own cultural institutions like this museum to document and exhibit its national identity. But following on from Rabah's museum arises the question as to what sort of objects can represent Palestine.

Going back to the *Nakba*, the extent of the destruction and disposition of Palestinians goes beyond their physical world into their cultural heritage as well (Fisher 2010). An allusion to this can be seen in one of the scenes in the film *The Time that Remains* (Suleiman 2009). In this scene we see Israeli soldiers looting the houses while listening to Arabic music playing from a looted gramophone.

Palestinians everywhere are emotionally attached to various symbolic objects from the homeland. Regardless of whether they are photographs, dresses, embroidery, or even folkloric tales, these objects connect them to their identity even if they are far removed from the physical borders of their homeland (Said 1999). The old house key is probably one of the more widely used objects representing the *Nakba*. Most refugees who left their houses following the events of the *Nakba* took their house keys with them, thinking that their departure was temporary and that they would be going back. Many Palestinian elders in the refugee camps still hold on to their keys. Posters and images featuring the old keys have been used in advertising events commemorating the *Nakba* (Figure 5.8). Taysir Batniji's artwork *Untitled* (Batniji 2014) is a bunch of keys made of glass. The artist created a replica of his own keychain which he was using before leaving Gaza. Making the keys from glass plays around with the concepts

of existence and non-existence. It also reflects the political transparency of Palestinian refugees who are usually dismissed from any peace negotiations and political conversation on international levels.



**Figure 5.8:** Unknown, A woman holding her old house key. Reproduced from Palestine News Network website.

The flag is considered a central national symbol for any nation. Deploying the Palestinian flag, even though Palestine is not technically a state, is a statement that Palestine exists, at least for the Palestinians. Sansour likes to use the Palestinian flag in her work. In her video artwork *Nation Estate* (Sansour 2012), the flag is seen on a large scale, draping one of the walls of the lobby. In her video artwork *A Space Exodus* (Sansour 2009), the flag is proudly planted on the surface of the moon (Figure 5.2). The flag also appears on the astronaut's space suit.

The olive tree is another key element in many narratives about Palestine. One of the significant issues of occupation is the continuous uprooting of olive trees and the separation between olive groves and their owners due to the building of the Separation Wall. The connection between the olive trees and Palestinians is not only on the earth's surface. Instead, that connection is deeply rooted with Palestinians' sense of ownership of the land. Thus, defending the olive trees is considered an act of resistance. Indeed, one of the most iconic images, if you Google the term Palestine, is of an old Palestinian woman hugging tightly onto an olive tree whose branches have been cut down while an army jeep and some Israeli soldiers are looking down at her. In the documentaries, *The Iron Wall* (Alatar 2007), and *5 Broken Cameras* (Burnat

and Davidi 2011) directed by the Palestinian Emad Burnat and the Israeli Guy Davidi, scenes of uprooting olive trees are shown. In *Nation Estate* (Sansour 2012), the olive tree is portrayed as defying the coldness of the built space, and it breaks through the artificial flooring (Figure 5.9). But the protagonist welcomes this breakage as she bends down to water the tree with a small watering can in a very intimate and caring manner.



Figure 5.9: Larissa Sansour, *Nation Estate*. 2012, Photography and video, 9'. Reproduced from the artist's website (Sansour 2012).

As I have discussed previously, the film *Lemon Tree* (Riklis 2008) is centred around a woman wanting to defend her lemon grove. In this film, the lemon tree is a symbol of rootedness and resistance as well.

Pomegranates are another iconic Arab fruit. In Jumana Aboud's video work *The Pomegranate* (Aboud 2005), Aboud tries to place the pomegranate seeds back in the pomegranate shell. The process is painful to watch as she squeezes the seeds to stay in place but the bold coloured juices keep escaping. This work is probably investigating how difficult or impossible it might be to retrieve and return Palestinians. It also shows how fragmented Palestinians are as a nation. Just like the seeds, once they left they became plural, so now it is not a pomegranate as a whole but seeds that try to get back and are struggling to do that.

In conclusion, through this examination, we can see that the representation of the spatiality of Palestine is varied. From idealistic memories of Palestine to documentation of the physical intervention of occupation on the built environment and

natural landscapes of Palestine, to the various objects that forge a connection to history, current times, and hopes. From all of these, Palestine emerges as a fragmented terrain. This is reflective of how Palestinian experiences are fragmented. And this fragmentation and the three identified paradigms will inform the overarching narrative of the spatial experience as I will explain in the following chapter.

### **5.3 The Evolution of the Palestinian Hero Image**

In every national struggle for independence and self-determination, various images of national heroes emerge alongside images of struggle and victimhood. Palestine has been struggling against Israeli occupation and fighting for independence since 1948. Since then, heroes have been represented in literature, visual culture and pop culture. The representation of these heroes has been evolving and is in a constant state of flux. The hero image has continually changed in Palestinian visual arts, films, and digital/social media scenes since 2000. The factors outlined in the introduction of this chapter signify how 2000 has inspired and changed the depiction of heroes and heroism.

By examining examples of Palestinian artworks, installations, films, graffiti, pop culture and social media (including internet memes), I argue that three distinct archetypes of heroes have emerged.

The first archetype is the political icon. Images of political figures and icons are usually celebratory in nature and often romanticised. But in many cases, this archetype is polarising even among Palestinians themselves.

The second archetype is the anonymous rebel. Most of the imagery depicting them especially in social media, by Palestinians and people in solidarity with the Palestinian Cause, tend to romanticise those heroes. On the other hand, Western media have different depictions and understanding of those rebels, who would be seen as terrorists or gangsters. Palestinian artists have been challenging these images either by contextualising the heroes' behaviours or questioning their portrayal in the media.

The third archetype is the *Samidoun*<sup>7</sup> or the Resilient; the everyday people whose heroism lies in their attempts to lead a normal life. Images of these heroes have increased with the accelerated use of social media and micro-blogging by Palestinians especially at times of military operations.

Each of these archetypes has their own audience and reach, raising the question as to which of these three archetypes create the strongest empathetic connections with a Western audience. An answer to this question would be useful to activist artists and designers working within a Western context, like in the case of this research.

### **The Political Icon**

When it comes to national struggles, political figures are usually the most visible in the media and therefore the most visible in people's perceptions. However, these figures are often polarising; they might be heroes for some, while remaining villains/terrorists for others. People like Che Guevara, who is considered an icon for many socialist and nationalist struggles against imperial powers, is still considered a criminal in the US. Nelson Mandela, who once was considered an outlaw and imprisoned, later became an icon of triumph against racism and apartheid. This polarisation of the political icon image is reflected in the Palestinian discourse as well. Needless to say, both Che Guevara and Mandela are celebrated in the visual pop culture in Palestine. You can see Che Guevara's iconic image printed on T-shirts worn by Palestinian kids in refugee camps (Figure 5.10) or pictures of him painted on the Separation Wall.

---

<sup>7</sup> *Samidoun* comes from the Arabic word *Sumud*. *Sumud* is a term widely used in the Palestinian discourse to denote steadfastness, resilience and perseverance.



Figure 5.10: Justin McIntosh, Palestinians wearing Che Guevara t-shirts. Reproduced from Wikimedia Commons (McIntosh 2004).

But Palestinians also have their own political icon heroes. Yasser Arafat might be one of the most famous, although the more unified celebration of his image arguably only emerged after his death. Arafat's history reveals a fluctuation in how much he was considered to represent Palestinians. He started as a nationalist freedom fighter against the occupation and was a founding member of Fatah<sup>8</sup> in its early days. But later, he turned into a politician instead of a revolutionary figure. And that is when the number of his admirers started to decline. However, on a global level, following the Oslo Accords<sup>9</sup>, the media image of Arafat took a drastic change from a gangster into a political leader (Mandelziz 2003, cited in Shinar and Bratic 2010, 133). There is an antagonism between Palestinian refugees and the Palestinian leadership. The root of this is the erasure of the refugees' Right of Return from peace negotiations between the Palestinian Authority and Israel (Quiquix 2014). However, towards the end of his life, Arafat was once again embraced by more Palestinians especially when he was besieged in Ramallah by the Israeli military in 2002 and 2004 until his transfer to

---

<sup>8</sup> Fatah is one of the most prominent Palestinian political parties. It was formerly known as the Palestinians National Liberation Movement and was founded in 1952. Arafat was one of the founding members. The current President of the Palestinian Authority, Mahmoud Abbas, is a member of Fatah.

<sup>9</sup> The Oslo Accords is a set of agreements signed between the government of Israeli and the Palestinian Liberation Organization (PLO) in 1993.



France as a patient and his passing away there. Arafat's portraits decorate many of the official Palestinian Authority offices, and his portraits are painted on the Separation Wall. An image of Arafat appears in *Divine Intervention* (Suleiman 2002) on a balloon. The protagonist is holding that balloon before he releases it and it starts flying high in the sky beyond checkpoints, watchtowers and the Israeli military until it reaches Jerusalem. A criticism of Arafat is seen in the autobiographical documentary film *A World Not Ours* (Fleifel 2012). In one scene, Fleifel zooms in his camera on the famous Oslo Accords handshake between Yasser Arafat and Yitzhak Rabin. In the film, Fleifel explained how it bothered him that Arafat was the first one to extend his hand. In another scene, Fleifel's friend and the main protagonist of this film shares his feelings towards Arafat, and how growing up he was told that Arafat liked uneducated kids and thugs and how he grew up to be a thug, only to realise that even Arafat is irrelevant in his life.

Another prominent icon is Marwan Barghouti. He is a political prisoner, and for that reason he is often dubbed the Palestinian Mandela. Because of his imprisonment, he is conceived to be an inspiring hero for persevering against occupation but unlike the other countless Palestinian prisoners in Israeli jails. Barghouti is a political figure and thus the aspiration for him to be freed and ruling the country one day fills the imagination of many Palestinians. There is a lot of different graffiti of Barghouti on the Wall (Figure 5.11), and he appears in many posters especially those calling for the release of all Palestinian prisoners in Israel.



Figure 5.11: Eman, Graffiti supporting Marwan Barghouti on the Separation Wall, near the Qalandia checkpoint north of Jerusalem. Reproduced from Wikimedia Commons (Eman 2007).

Another example albeit one sitting on the murky border between a political figure and a rebel is Laila Khaled. She is not a politician nor has she been in politics. Khaled was a member of the Popular Front for the Liberation of Palestine that was responsible for aeroplane hijacking incidents in the late 1960s and early 1970s. An iconic image of Khaled exists, the kuffiyeh draped around her head while holding a rifle with a bullet-shaped ring on one of her fingers. Her image in abstract evokes images of the Virgin Mary despite the significant difference between these two women (Figure 5.12) The image has been reproduced as graphic art, in poster designs, and even painted on the Separation Wall.



Figure 5.12: Rawan Mansour, *Leila Khaled*. Reproduced from the artist's portfolio on Devian Art website (Mansour 2012).

Sheikh Ahmad Yassin, the founder of Hamas, is usually celebrated by Hamas<sup>10</sup> and its supporters. Images of him, portraits and graphic art are again seen in offices, posters and the Separation Wall.

In conclusion, images of political icons tend to be a celebration of that person's actions, legacy or aspiration. Thus, these images tend to be literal rather than figurative or imaginative. Usually, that celebration is confined within specific sub-groups and their affiliations inside the broader Palestinian community. Due to the

---

<sup>10</sup> Hamas is a Palestinian Islamist Organization. It has been the de facto governing authority of the Gaza Strip since it won the democratic elections in 2006.

apparent political views of these figures, they are likely to be polarising on a regional and global level. Furthermore, because of their direct relation to politics, resistance and armed struggles, they most likely will not appeal to the broader international community who are not fully aware of the complexity of the Palestine/Israel political situation.

### **The Anonymous Rebel**

The anonymous rebels are a continuation of the political icons as they often carry the messages of the different political factions and organisations on the ground. The actions of the rebels are what is being celebrated and often romanticised. The rebels' actions are highly contested as the distinction between whether they are legitimate freedom fighters or terrorists is highly contested. For example, Americans associate the stone-throwing young people with aggression rather than heroism, as opposed to how most Arabs and Palestinians view them (Said 2001b).

Artists have tried to muddle this boundary through different methods. One is to contextualise the source of the behaviour of these rebels; for example, in the film *Paradise Now* (Abu-Assad 2005) we get to understand the motives of two suicide bombers. The story of two young friends is humanised through friendship, family ties, romance, cigarettes and fear. The hesitation and twists in the storyline also suggest that these rebels are not killing machines ready to kill without blinking. In fact, they are humans wanting to live a dignified life but driven down an unpleasant road by the harsh realities they have to face under occupation. This is also reflected in the film *Omar* (Abu-Assad 2013). The friendship between the protagonist Omar and his rebel friends are brought to a dramatic end due to the occupation forces and thus the last act that Omar commits, killing an Israeli agent, is contextualised through the rough and unnerving narrative of the whole film.

In *Arna's Children* (Mer Khamis and Danniell 2004) we get to see the difficult growth of children under the occupation. The documentary follows the Israeli activist Arna Mer Khamis who is the mother of the Palestinian director of the film Juliano Mer Khamis. Arna established a theatre in the Jenin refugee camp for young Palestinian children. The film follows the life of several of those children at different stages and years including after the battle of Jenin in 2004. The film showed a very tragic ending for most of these children when they grew up. Three died in clashes with the Israeli

army, one committed a suicide attack, and two others were imprisoned. Their future actions are contextualised within their growth among various military operations in the Jenin refugee camp which in some cases resulted in some of these children's houses being demolished. Also, we get to see a humanised side, by following their lives from being children playing together, to becoming teenagers talking about dreams, love and hopes, to later seeing them as adults making difficult choices.

The images of rebels are also questioned and investigated, for example, in Sharif Waked's video artwork *To Be Continued...* (Waked 2009). In this video artwork, the viewer sees a young man dressed in a similar fashion as a suicide bomber and seated in the same settings as featured in many suicide bombers' videos (Figure 5.13). The viewer at first glance thinks that the man is reading his farewell note or final testament, but in fact what he is reading is an excerpt from a classic text "One Thousand and One Nights". Waked wanted to subvert the viewers' expectations when seeing such familiar imagery proliferated through the media (Lionis 2012). The viewers quickly find themselves confronted by the fact that their fear and initial reactions toward this man are unfounded and based on stereotypes.



Figure 5.13: Sharif Waked, *To Be Continued....* 2009, Video 41' 33". Reproduced from the Guggenheim Museum website (Waked 2009).

Internet memes have played a significant role in establishing images of the anonymous rebel. For example, in the context of the most recent uprising that took place in 2014 in Jerusalem<sup>11</sup>, pictures of young men and women clad in the kuffieh and throwing stones have been on the rise. From a quick look at Mo3's account on Facebook, who is an anonymous graphic designer himself, we can see how such imagery is celebrated through the use of contemporary visual language to document a complicated subject, and the use of accompanying lines of poetry or religious text to reinforce the message (Mo3 2014-ongoing ) that these rebels are tough and that they are heroes for resisting occupation and standing against a large military armed only with stones, slings and most recently knives (Figure 5.14).



Figure 5.14: Mo3, *We Are Your People* “translated text”. 2015, Photomontage. Reproduced from the artist's Facebook page (Mo3 2014-ongoing ).

In conclusion, images of the “anonymous rebel” capture the imagination of the Palestinian youth. Being in defiance, standing in the face of the occupation, and showing bravery are the key features of these images. At the same time, however, many solidarity groups around the world tend to use images of those rebels and activists especially when they involve kids defying the Israeli military in a non-equal

---

<sup>11</sup> The 2014 Jerusalem Unrest happened as a response to the kidnapping and killing of the Palestinian teenager Mohammad Abu Khdeir at the hands of Israeli settlers in East Jerusalem.

way. These images tend to emphasise the concept that this is not a war or a conflict<sup>12</sup>, but rather a resistance movement against colonisation and occupation.

### The “*Samidoun*,” The Resilient

Beyond images of the injured or dead from the occupation, another type of image has surfaced, namely, pictures of the resilient or *Samidoun* as they are often referred to in the Palestinian and Arab context (Figure 5.15).



Figure 5.15: Mo3 *Samidoun Here* “translated text”. 2014, Photomontage. Reproduced from the artist’s Facebook page (Mo3 2014-ongoing ).

In *5 Broken Cameras* (Burnat and Davidi 2011), the film footage is based on the amateur video documentation by Emad Burnat. Thus, his footage brings a sense of realness and relatability to the viewer as the story is not scripted. Instead, it unfolds as it is taking place for both the filmmaker and the viewer. This makes the film more believable. This kind of footage not only humanises Palestinians but also gives their voices an excellent podium to speak out and to be listened to. It is worth noting that this film was nominated for the 85th Academy Award for Best Feature Documentary. The film centres around the protests of Bili’in village against the confiscation of its

---

<sup>12</sup> In the Introduction, I elaborated on the term conflict and why this research is not using it in the context of the Palestine/Israel situation

land to build the Separation Wall. The villagers are highlighted as resilient residents in the face of injustice.

Women are commonly featured as the resilient. One example is Saadeh's photographic work *Mona Lisa* (Saadeh 2007), where she has replicated the aesthetics of the Mona Lisa but with Saadeh's own face, which is a recognisable Arab woman's face. The backdrop of the image brings another dimension to the work. Idealist scenes of hills appear silent and almost serene at first glance, but on closer look viewers realise that the scene depicts an Israeli settlement (Figure 5.16). This creates a tension between the foreground as the Palestinian as a dominant reality and the background as the inescapable existence of the other side. Having that tension frozen within the very familiar imagery of the Mona Lisa brings the issue closer to a Western audience and demands attention and engagement. Another example of a resilient woman is the widow in the *Lemon Tree* film (Riklis 2008). This widow had to defend her lemon grove against its confiscation and destruction following an Israeli minister moving to the house next door.



Figure 5.16: Raeda Saadeh, *Mona Lisa*. 2007, Photography, 109 x 81 cm. Reproduced from Curiator (Saadeh 2007).



Another prominent example of an icon of resistance is the teenage girl Ahed Tamimi who, during the time of writing this thesis, was in prison for slapping an Israeli soldier (BBC News 2018). The video depicting the incident went viral. But even before this incident, Ahed has appeared in many videos confronting the Israeli military in the many protests that happened in her village of Nabi Saleh. Ahed's face has been featured in many posters and graphics, and she is considered a new icon of resistance (Fernando 2018). Her case has gained international attention. Ahed was released on 29<sup>th</sup> July 2018 after serving her sentence. A mural of Ahed Tamimi was painted days before her release on the Separation Wall (Figure 5.17). The Israeli Troops arrested two Italian graffiti artists and one Palestinian graffiti artist over their work on that mural (Magid 2018).



**Figure 5.17: Jorit Agoch and two Anonymous artists, Ahed Tamimi mural on the Separation Wall. Reproduced from Wikimedia Commons (Marsupium 2018).**

Children are also considered an integral part of the *Samidoun*. Images of young children standing up to Israeli soldiers or machines are widely circulated online, and images of children in the aftermath of military operations usually attract

international solidarity. An example is Faris Odeh, the Palestinian teenager who was killed by the Israeli military during the Second Intifada in 2000. A photo of him standing in front of a tank armed only with a stone has been widely circulated (Figure 5.18).

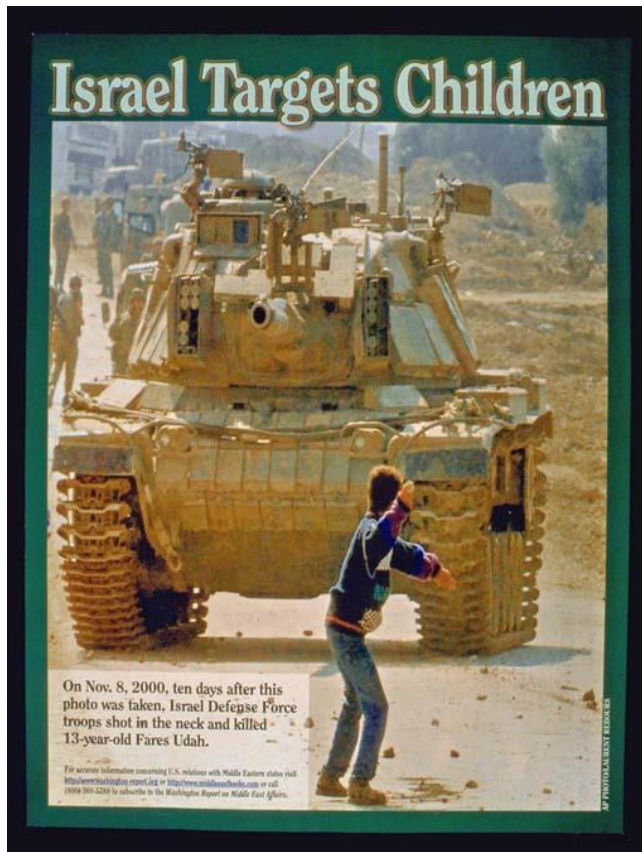


Figure 5.18: Unknown, *Israel Targets Children*. 2000, Poster. Reproduced from The Palestine Poster Project Archives ("Israel Targets Children" 2000).

And just like the case of the anonymous rebels, social media has played a significant role in featuring different images of the *Samidoun*. One example is Farah Baker, a teenage girl who tweeted about her life and feelings during the 2004 military operation in Gaza. Her followers rose from 800 to 166,000 in a matter of a few days. Her current followers number around 179,000 (Baker 2018).

Out of these three main archetypes of heroes, I argue that the *Samidoun* is the most relatable to the broader audience because the *Samidoun* are ordinary people who are resilient in the face of occupation, but at the same time they are not defeatists and try to take actions that bring more attention to the Palestinian situation.

## 5.4 Communicating the Experiences of Living under Occupation in Palestine

One of the primary experiences of Palestinians is the dream of return especially for the Palestinians living in refugee camps or worldwide. Thus, dreaming of the homeland is always present in their imagination (Bardenstein 2006), and has featured in many artworks and films. For example, in *Where We Come From* (Jacir 2001-2003), an art project by Emily Jacir, the dream of the homeland and the Right of Return is depicted through wish making. In this work, Jacir asked Palestinians in the West Bank and abroad if she can go to a place in Palestine they cannot, and do anything for them, what would that be. She then went and fulfilled their requests. Jacir who is a Palestinian with American citizenship can go to places other Palestinians cannot. This brings forth the irony of the insignificance of the Palestinian identity, and how only with a foreign passport can a person access their birthright. This reminds me of my own story and how the only time I managed to visit Jerusalem (my father's and grandparents' birthplace) was when I became an Australian citizen. Before I went there, members of my family asked me to do things on their behalf, just like the participants in Jacir's art project. This shows how this act of wishing, and people trying to fulfil that wish, is a deep desire among many Palestinians, especially in the diaspora. What Jacir did was bring to this experience to the public eye by placing this action at the heart of her work. She documented the process by placing the text of the wish next to an image of her fulfilling that wish. Jacir was asked very different things, ranging from eating a famous Palestinian dessert "Knafeh", to drinking water from the Al-Aqsa Mosque<sup>13</sup>, to visiting a graveyard. The humility of these wishes shed more light on who Palestinians are and the simplicity of their wishes. And in this simplicity, viewers can start to understand how the occupation has harshly affected even simple parts of Palestinians' lives including visiting their holy sites, going to the sea, or visiting the grave of a loved one. This portrayal highlights a different human side of the Palestinians beyond physical destruction and injuries. The power of the occupation has violated Palestinians' dreams, wishes and desires.

---

<sup>13</sup> Al-Aqsa Mosque or Al-Haram Al-Sharif is located on top of the Temple Mount in the old city of Jerusalem and is the third holiest site for Muslims.

The restriction of movement is one of the most prominent experiences of Palestinians living under occupation and therefore it is expressed in various ways and dealt with as such. This restriction of movement is not only concerning Palestinians living in the West Bank and the Gaza Strip but also the Palestinian diaspora who are unable to cross the borders or access many places in Palestine/Israel. This goes to show how deeply rooted the implication of the occupation is. And the restriction of movement is not just having someone or something blocking your way, but having to wait for an indefinite amount of time, having to deal with different paperwork, having to understand what kind of entitlement or restrictions your identification cards or travel documents provide, and so on. Batniji's video artwork *Transit* (Batniji 2004) is documentary in style. The video artwork is a realistic portrayal of the everyday struggles of Gazans attempting to cross the border to Egypt. In this artwork, viewers are confronted with how slowly time operates when you have to wait. The experience at the crossing is brought down to two dimensions of space versus time. Viewers get a better sense of the physical appearance of the crossing but also how time operates and moves within that space. The relationship of how time behaves within this space is reflected in how the space renders itself with the passage of time. This dual manoeuvre highlights the experience of Palestinians having to cross the border and makes them more relatable, magnified, and hopefully understood.

Sharif Waked's video artwork *Chic Point* (Waked 2003) comes down to a very intimate of experience, one's own body. In his work, he expressed how the male body of Palestinians is portrayed as a possible threat, how it must be under surveillance all the time and thus continue to be humiliated and dehumanised (Lionis 2012). The same concept of being under constant surveillance is seen in the film *Omar* (Abu-Assad 2013). In one scene, Omar, the protagonist of the film, is stopped by Israeli soldiers and asked to stand aside for no reason. Omar is left to stand in an awkward position under the heat of the sun while the soldiers chat and laugh on the other side of the road (Figure 5.19). The humiliation that Omar is being subjugated to is evident in a closeup shot on his face.



Figure 5.19: Hany Abu-Assad, *Omar*. 2013, Film (still shot). Reproduced from the film's page on IMDB (Abu-Assad 2013).

Suleiman pokes fun at that kind of surveillance in an iconic scene in *The Time That Remains* (Suleiman 2009). In this scene, a man gets out of his house to take the garbage out. In the middle of the road, there is a military tank that starts following him. When he notices it, he starts strolling back and forth while talking on the phone. The tank keeps following him in a stupid, absurd manner (Figure 5.20).



Figure 5.20: Elia Suleiman, *The Time That Remains*. 2009, still image from film. Reproduced from YouTube (Suleiman 2009).

Jawad Al Malhi's *Measures of Uncertainty* painting series looks at the everyday experiences of Palestinians. They are often merely waiting, or asked to stand and wait for an indefinite amount of time. This means that nothing can be planned because there will always be an outside force that can come in and disrupt any plans

they make. The slow passing of time is also evident in the film *A World Not Ours* (Fleifel 2012). The film uses a lot of home video footage by the director who visits Ein el-Helweh refugee camp where his father used to live before migrating with his young family first to the Gulf and then to the US. Fleifel comments on how little changes between his yearly visits. But in a more profound scene, Fleifel's friend and the main protagonist of the film, who has lived all his life trapped in the refugee camp, comments on how he hates time and that is why he refuses to own or wear a watch.

Isolation is an important aspect of Palestinian lives (Sherwell 2006). Many Palestinians had to leave Palestine either by force, or for economic and security reasons. Thus, the torment between wanting to stay and having to leave is a common theme. This is evident in Raeda Saadeh's photographic work *Crossroads* (Saadeh 2003). Saadeh used a familiar metaphor, the suitcase. Saadeh is depicted standing next to her suitcase, but then one of her feet is in a cement block which indicates a sense of heaviness and being stuck. The relative lightness of the suitcase juxtaposed with the heavy grounding of the cement expresses the difficulty of staying versus leaving. However, for many Palestinians who left Palestine their leaving is considered only transitional. This has been reflected in one scene in *A World Not Ours* (Fleifel 2012), when the two friends, Fleifel and his friend from the camp, say goodbye to each other on a staircase. The friend who has grown tired of his way of living decides to leave the camp and travel to Europe illegally. Having that scene in the staircase is powerful. The staircase is considered a transitional space in architecture. So, to have such a crucial encounter happen in such a space brings parallels to the Palestinian situation in general where any space they occupy seems like a transitional space on their way to somewhere else.

Futility is another theme that is often used, for example, in Taysir Batniji's performance work *Impossible Journey* (Batniji 2002-2009). In this performance, Batniji moves sand from one pile to another, back and forth, until he is exhausted. This back and forth action in a never-ending cycle emphasises the futility felt by many Palestinians. Palestinians feel stuck, but they do not know how to break away. The exhaustion that befalls the artist can be seen to represent a whole range of emotions, be it real physical exhaustion, frustration, or disappointment at being trapped within this cycle. This is similar to Raedah Saadeh's video work *Vacuum* (Saadeh 2013) in

which the artist recorded herself vacuuming some barren lands in Palestine (Figure 5.21).



Figure 5.21: Raeda Saadeh, *Vacuum*. 2013, Two channel video installation, 17' 07". Reproduced from Sharjah Art Foundation website (Saadeh 2013).

Death and grief are common themes for people under occupation and subject to military violence. In *To My Brother* (Batniji 2012), Batniji takes the viewers to a very personal experience of loss and grief. An Israeli sniper killed his brother in the 1980s, and in this work Batniji pays homage to his brother. The drawings are made by carving on paper traces of family photos during his brother's wedding. The intricate process of creating this artwork reflects fragility (Figure 5.22). So is grief; a very personal fragile process that a person has to go through. This type of visual language is universal. But mixing it with the political backstory adds a stronger take on how Palestinians suffer from loss under occupation. By forging this connection with the

viewer, Batniji created an emotional connection and sympathy that might lead to a better understanding of the situation.



**Figure 5.22: Taysir Batniji, *To My Brother*. 2013, Series of 60 hand carvings from photographs on paper, 30,5 x 40,5 cm. Reproduced from the artist's website (Batniji 2012).**

In *A World Not Ours* (Fleifel 2012), Fleifel talks about his uncle Said who had lost his brother. Israelis killed his brother and as such he is hailed as a hero in the camp. However, Uncle Said is traumatised by the death of his brother. He was once a respectable man, but after his loss, he became the fool of the camp. He spends his days doing nothing and many people laugh at him and his weird behaviour. In *5 Broken Cameras* (Burnat and Davidi 2011), Burnat ends his documentary by sharing the news that one of the main characters in his film got killed by Israeli forces. That revelation comes as a sad shock given that the viewers got to see various sides of that person's life. In *The Time That Remains* (Suleiman 2009), the protagonist of the film who the viewers got to know since 1948 until old age dies peacefully in a car next to his son while listening to a song that he used to listen to in 1948 as shown earlier in the film. But bringing this fiction back to reality, the director Elia Suleiman dedicated this



movie to the memory of his parents. A familiar gesture like this reminds the viewers that this fiction they just saw is based on lived experiences.

Elia Suleiman always appears in his movies, yet he is always silent. His position as a silent witness inspires the viewer to become a silent witness too. But also, it removes him from what is happening and this detachment can express many Palestinians' experiences of the situation, especially those who are either in refugee camps outside Palestine and Israel, or part of the diaspora. Suleiman also plays a great deal with framing his shots. Usually, he makes use of architectural elements to present a framed view. While this is aesthetically pleasing, it can be understood as a commentary on how the viewers' previous ideas and convictions frame their understanding of and connection with the narrative of the film.

Similarly, in *A World Not Ours* (Fleifel 2012), Fleifel takes the viewers around the camp while being seated behind his friend on a motorbike. Viewers see the camp but the view is partly obstructed by the friend's helmet. There is something powerful in the placement of that vantage point. Viewers are being guided through the camp by a person who knows it very well and lived all his life there. So, being in the back seat allows the viewers to be silent observers. This is a crucial concept that needs to be applied any time a person speaks from a lived experience as opposed to someone who views it from the outside. By this emphasis on the positionality of the viewer, we are setting up the viewer to be a better listener and be less judgemental. This concept will be implemented in the prototype designed for this research.

These highlighted daily experiences are only some of the most common in the Palestinian imagination. The fragmentation of Palestinian time, space, relationships, and freedom of movement are all key themes of the Palestinian cultural experience.

## **5.5 Summary**

In this chapter, I have examined some of the artworks and films that were made by Palestinians since 2000. In my examination I focused on three main themes; the spatial understanding of Palestine, the characteristics of the different hero images, and the key experiences of living under occupation. These identified themes will help

in the development of the narrative of the prototype and direct the choice of the key experiences that will be communicated in the exhibition.

I have identified three main paradigms that relate to the spatial construction of Palestine both physically and conceptually. There is the “Imagined Palestine” which includes the idealistic portrayal of Palestine pre-1948 and the hopeful or critical portrayal of the future state of Palestine. Then there is “Occupied Lands” which includes representation of the various spatial interventions of the occupation on the built environment which includes watchtowers, destroyed houses, and the Separation Wall. The third paradigm is “Objects of Memory and Resistance” which includes various objects and trees that are significant parts of the collective memory of Palestine. These three paradigms together create a spatial reality of Palestine that is a fragmented terrain of memory, occupation and imagination.

I have also looked at how the hero images have been depicted in Palestinian visual culture. I have identified three main archetypes. The first one is the “Political Icon” which involves imagery of political figures from the Palestinian situation. Then there is the “Anonymous Rebel” which refers to unknown Palestinian figures who are resisting the occupation in different ways and capacities. And finally, there is the “*Samidoun* or The Resilient” who are the everyday people persevering in their daily struggles to live under the occupation.

Finally, I have looked at the main experiences of living under occupation that have been communicated in Palestinian visual culture. I have looked at themes like the obstruction and restriction of movement, surveillance, futility and grief.

This thematic mapping and analysis of the Palestinian visual culture has provided important insights and inspirations that will inform the creation of the content of the intended activist spatial experience as I will explain in the following chapter.

With this chapter I have concluded the background research stage of this reach project. This research background stage has provided an important foundation that will guide and shape the second stage of designing the prototype.

In the following chapter, I will draw upon the knowledge gained from the background research, and I will discuss and document the process of designing and developing the prototype.

## **Chapter 6. The Process of Developing and Designing the Prototype "re:Visit Palestine"**

### **6.1 Introduction**

In the previous chapter, I visually and thematically mapped and analysed the existing Palestinian visual cultural production scene. I concluded with identifying significant themes and characteristics that relate to how Palestine is perceived as a spatial construction, what are the hero images emerging from Palestine and how they are being represented, and what are the key experiences that are often portrayed about living under the occupation. These themes and characteristics will help in creating the overarching narrative and the content of the prototype.

In this chapter, I will be documenting the process of designing and developing the prototype which I titled “re:Visit Palestine”. The proposed prototype will illustrate the design of an activist spatial experience using interactive and digital media. As explained previously, the Palestinian situation is used as an archetype of a complex political narrative for this prototype. I will start by outlining the design considerations that I had to bear in mind before proposing the design solution. These considerations are based on the background research that I conducted in the first stage of this research. I will then discuss some of the experimentation and exploration of possible technologies that can be used to create the prototype. I will then address the ideation and envisioning stage of the design solution. Finally, I will document the process of developing the prototype, which will include technical information about the prototype.

### **6.2 Design Considerations for the Proposed Solution**

In the previous stage of this research, I conducted the background research. The background research involved the literature review, case studies, and visual and thematic mapping. This background research has provided me with a set of design considerations for the proposed solution. I will explain each of these points and relate them to the background research. These considerations will then inform and guide the process of designing and developing the prototype.

- **The design solution has to convey the spatial and experiential aspects of occupation and apartheid.**

As discussed in the case studies that I conducted in Chapter 4, there is a tendency to use spatial experiences when communicating historical and political narratives in memorial museums. The focus is shifting to the experiential mode of delivering the information while extending the cognitive and affective modes.

The purpose of this research prototype is to communicate narratives of occupation and apartheid in Palestine. The spatiality of Palestine and the daily experiences of living under occupation has been discussed in the Introduction and Chapter 5. In Chapter 5, I examined how Palestine is presented as a fragmented terrain of memory, occupation and imagination. Palestine is depicted through three main paradigms; the “Imagined Palestine”, the “Occupied Lands”, and the “Objects of Memory and Resistance”. The occupation of Palestine is manifested physically in the built and natural environments through the creation of the Separation Wall, the segregation of roads, the checkpoints, roadblocks, watchtowers, and the building of illegal settlements. These spatial manifestations of occupation are then reflected in the day-to-day experiences of Palestinians; restricting their movement, besieging them, dehumanising them, and causing distress, trauma, and more. Therefore, the proposed design needs to create spatial experiences that employ cognitive and affective modes of communication.

- **The design solution has to be based on a narrative and facilitates interactivity.**

As seen in the case studies in Chapter 4, the memorial museums that are dedicated to one specific topic, such as the Holocaust and apartheid, each had a clear overarching narrative that took the visitors on a journey. Each narrative starts with an introduction to the subject before it builds up in intensity and finishes with a reflective and quiet ending. I found such use of the narrative successful in engaging the visitors and aiding in displaying and communicating detailed information. Therefore, I think that this design solution needs to be based on a cohesive narrative that will facilitate a smooth transition of the visitors from one point to another in their journey through the spatial experience. The narrative will be informed by the key themes and representational modes that were discussed in Chapter 5.

While digital interactivity has not been evident in the physical memorial museums studied, there were other forms of interactivity and immersion. For example, when the visitors were given identification cards at the entrance of the Apartheid Museum in South Africa, this has changed their route and how they entered the space. Another example is the *Bomber Command* exhibition at the Australian War Memorial (AWM), where sounds, light and vibrating floors were used to create an immersive experience. Another example is the use of the VR experience in *The Battle of Hamel*, also at the AWM.

This research is investigating the potentials of digital and interactive media in communicating political narratives. Therefore, I wanted to test the affordances and limits of the technology to see if digital interactivity can amplify the immersion in the created spatial experiences.

- **The design solution needs to be adaptable to different spaces.**

In my hypothesis, I am arguing that one of the advantages of using digital media to communicate political narratives is that it can be employed as a tool for design activism. While some political and historical events attract substantial funding to build dedicated physical architectural buildings, contemporary political events and conflicts might not have those financial capabilities. Following the literature review of design activism, occupying urban and public space have been used. Design activism's medium is public space (Oosterling 2011). The public space includes different spaces, for example, museums, shopping malls or markets (Crowley and Matthews 2006). Public spaces facilitate the commingling of people who are either visitors to those spaces or passers-by (Crowley and Matthews 2006). Therefore, I wanted to keep in mind that whatever technology I will be using, it had to be portable and adaptable to different output options, whether installed in a public plaza, inside a train station, on buildings, inside art galleries, or on different screens like TV, iPads or phones.

- **The design solution needs to be dynamic regarding how its content can be updated.**

Through the case studies on memorial spaces, I have demonstrated how most memorial spaces are built to communicate historical events. However, war memorials tend to include past and current wars that the country is taking part in. Working with a political narrative like Palestine is different because it is an ongoing situation. While

there are a lot of historical events and information relating to the situation, there are equally many events that are still happening, as the situation in Palestine is still ongoing. For example, during this research alone, unrest erupted in Jerusalem in 2014 following the kidnapping and torching to death of the Palestinian teenager Mohammad Abu Khdeir by three Israeli settlers; the Israeli operation “Protective Edge” on the Gaza Strip also occurred in 2014; the relocation of the US embassy in Israel to Jerusalem took place in 2018; and the Great March of Return also took place in the Gaza Strip in 2018.

Therefore, the proposed solution must be designed to allow for an easy process of updating content or including new materials as they emerge.

- **The design solution needs to be created on a limited budget.**

As previously discussed, the premise of the research question is looking at how people with limited resources can use technology as an activist tool. In an ideal world, Palestinians and other marginalised groups would have access to large funds to build museums and memorials that can be used to communicate their narratives. But they do not. So, looking at low-cost technology could be a solution for them. The availability and potential of this kind of technology fit perfectly with the idea of “activism” within the design discipline. Also, with the rise of availability and use of low-cost technology, “hacking” into their abilities is in itself an act of designerly activism<sup>1</sup>.

- **The design solution needs to address the needs of a specific audience.**

Any design should first and foremost take into consideration who is the target audience. In this research, the target audience is people who have limited or mainstream knowledge about the situation in Palestine. This means that people who are involved in solidarity movements are not the main target. The focus is also on people from the West. By that, I am referring to people from Europe, North America, and Australia and people who can understand English. I do not have a specific age group in mind, though children might find the exhibition’s themes and some footage disturbing. The reason behind these choices is that people from these countries can

---

<sup>1</sup> Markussen argued that the design action is not a political action like boycotting, protesting and so forth, rather the design action is a “designerly way” of intervention and that it is why it is a powerful act of resistance (Markussen 2013). This has been discussed previously in Chapter 2.

have a strong impact on their governments, which are involved in the Palestinian/Israeli situation through explicit financial aid like the US or implicit moral support of Israel and its actions towards the Palestinians like Australia. So, creating work that speaks to people from these countries is an act of political activism. This work intends to raise awareness about the Palestinian situation by highlighting different narratives than the ones usually projected and disseminated through Western media<sup>2</sup>.

### **6.3 Experimentation and Exploration**

In this section, I will outline some of the key experimentation and exploration of technology and concepts that preceded the design of the prototype. As I was approaching the design solution, I needed to think of three main things:

1. What is the tool that I will use to build the spatial experience?
2. What is the interaction device or technique that will be used by the visitors of the spatial experience?
3. Where will the spatial experience be exhibited, and how?

#### **Experimentation with Game Engines**

As discussed in the pivotal consideration points, the design solution needed to create spatial experiences that allow for interactivity and immersion. Therefore, any digital tool that I needed to experiment with had to facilitate that.

Game engines are built to create three-dimensional interactivity. Game engines are software systems which are used to develop games or similar applications (Zyda 2005). Game engines have the ability to create virtual spaces in which viewers can walk around, run, jump and interact with objects in these spaces. Viewers can also look in 360 degrees around them. Usually, game engines have several components that deal with modelling, animation, physics, rendering and audio, and they manage the input and output interactivity of the game (Anderson et al. 2009). Game engines differ regarding how much flexibility they allow for designers and programmers.

---

<sup>2</sup> In the Introduction, I had a section dedicated to the Western media on the Palestinian situation.

Game engines have been used to create educational games and serious games (Arora and Itu 2012; Baek, Ko and Marsh 2014; Bogost 2007; Walz and Deterding 2014b). They have also been used in virtual heritage projects (Barwick, Dearnley and Muir 2011; Champion 2015; Champion 2016a; Ioannides and Quak 2014; Rua and Alvito 2011) as has been discussed in Chapter 2.

Therefore, I decided to use a game engine, though I am not a gamer or a game designer and have never worked with game engines. But since I am creating only a prototype, which later on needs to be expanded and improved, I felt confident in pursuing this path.

I chose to use the Unity game engine. The main reasons for choosing the Unity game engine (hereafter referred to as Unity) are:

1. Unity created a lot of flexibility regarding what can be produced and what type of interaction can happen between the visitor and the virtual environment.
2. Unity has a free personal license. This license gives access to most of the full-featured game engine, and the game designer can use it as long as he/she is not earning an annual revenue above \$100,000 per fiscal year (Unity Technologies 2017). This restriction can easily be met by an activist project where there is no financial profit expected. By using the free personal license, Unity could be considered a low-cost technology.
3. Unity is one of the most popular game engines used and has a wealth of online documentation and support forums which makes it easier for novice designers to use it.
4. Unity is compatible with several other software. This has made creating or sourcing assets especially the 3D models relatively easier. My previous knowledge of 3D modelling software and other programming languages helped me navigate and understand the system quite well.

Despite using a game engine to create the spatial experience, the spatial experience is not a game. The design needs to steer away from various gamification elements; for example, actions, scores and replay functions. Maintaining the non-gaming nature of this experience directed the choice of a suitable interaction or input device. And as discussed in Chapter 2, this project falls at the far end of the serious games continuum proposed by Marsh as an experiential environment for purpose (Marsh 2011).



## **Experimentation with Tools of Interaction**

After deciding on game engines as the prime builder of the spatial experience, I needed to explore what tools of interaction can be used in the intended experience. Champion posed an important question for the designer of cultural learning spaces, which is to consider which factors can help people be immersed in their experience of such spaces both in spatial and thematic ways (Champion 2015). There is a trend now to move towards as-natural-as-possible interaction tools, for example, gesture recognition and multi-modal interactions that can allow the viewers to use their whole body to interact with the virtual environment or exhibition (Mortara et al. 2014).

I identified four main categories for the interaction devices that can be used in this prototype. Each of these choices has advantages and disadvantages that need to be weighed up before making the final decision. When I was exploring these choices, I had to keep in mind, besides the technical restrictions of each option, which of these choices will help immerse the viewer in an appropriate way that serves the intention of such immersion.

- **Using keyboard and mouse.**

This is the basic and standard choice. Using keyboard and mouse will work smoothly and will not need any further programming. It will be easy to use especially with people who are familiar with gaming shortcuts on the keyboard. However, the viewers will be conscious of the technological mediation between them and the spatial experience. There is a degree of separation that might detract from better immersion with the experience.

- **Using game controllers.**

There is an abundance of choices of game controllers, whether joysticks, gamepads, remote controllers for game consoles like Wii, or balance boards. These game controllers are built and customised to be used in games and with game engines. This means that getting them to work with the prototype would be relatively straightforward. The younger generation, especially those interested in gaming, will find them easy to use. And most of these controllers are within the affordable price range. However, these controllers have the obvious connotation with video games and gaming, which is something that this design wants to steer away from.

- **Using motion sensors.**

There is a variety of motion sensors that can be used. For example, Kinect is a camera-based sensor. It is a game controller created by Microsoft for its Xbox gaming consoles and Windows personal computers. Kinect uses webcams to detect a person's movement and translates that into the game to help the player control his/her movement within the game. Like other game controllers, it can work well with games and has good documentation and support available, but only for the Windows operating system. Another advantage of Kinect is that it is hands-off, which means that the viewer can be away from it and not be actually aware of it. Yet the viewer's movement is being detected and fed into the virtual environment. In this case, the viewer will have to learn how his/her real body gestures are controlling their movement in the virtual space. However, the problem with Kinect is that it can only detect one body at a time. And if more than one body is in the space, it might cause confusion. For this prototype, this meant that the distinction between who is running the exhibition and who is just standing to watch is not clear and can confuse people viewing the exhibition at the same time. The prototype will, in turn, be confused, too, as to which body is giving the input, and as a consequence, the experience will not run properly. For these reasons, and also due to it being only compatible with Windows operating systems, I decided against using Kinect.

I looked at other low-cost sensor-based controllers, and I found the Leap Motion controller. The Leap Motion, at the time of the research, was relatively new and experimental technology. It is an infrared (IR) sensor that can detect and trace finger movements and translate that into digital signals which can then be translated into action triggers. The Leap Motion is being used as a substitute for the computer mouse and now is gaining more traction as an input device for games and virtual reality.

The Leap Motion uses hand gestures of only one person at a time. This means that there would be no confusion in regard to who is driving the prototype even if there is more than one person in the space at any given time. However, only one person at a time can act as the controller of the exhibition.

Another important advantage is that the Leap Motion can be disguised within the exhibition's space in a way that will eliminate any connotation with gaming and

make the interaction with the exhibition seamless. Another important point is that the Leap Motion sells at around \$80, which is considered low cost (Leap Motion 2017b). Given all of these points, I decided to try and use the Leap Motion.

- **Using mobile devices.**

Besides thinking about the primary tool of interaction between the viewer and the spatial experience, I thought of other possible additional layers of interaction that might take place in this experience.

Nowadays mobile devices are always with us, and we tend to use them in endless capacities. They are used in augmented and mixed reality projects. For this research, there are two main possibilities of using them inside the exhibition. Firstly, using QR codes where the viewer can scan them to get access to further existing information from the web. This means that certain content in the prototype can be updated which is one of the consideration points mentioned before. Secondly, using mobile phones for social media sharing, such as taking photos or even selfies inside the exhibition and then using certain hashtags to promote the exhibition on various social networking websites (such as Facebook and Instagram) and incidentally advertise the exhibition.

### **Experimentation with Exhibiting/ Output Technology**

As discussed in the design considerations in the previous section, the design solution should be adaptable and portable to different environments. However, for this prototype, I needed to focus on one option and see how it can be done. There were three main options that I explored.

- **Wall Projections**

The use of projections is the first obvious choice. Projections meant that the work could be projected relatively anywhere, from the street, public spaces, to galleries and even museums. This meant that the exhibition would be relatively portable, which is one of the pivotal considerations. Projectors are easy to set up and nowadays come with different tweaking capabilities and exhibition positions, which means that multiple projections could be used to create more immersion within the spatial experience if needed.

- **Screens**

This can include viewing on TV screens, computer monitors, or mobile devices. Depending on the size of the screen, this can become a one-on-one experience. The prototype can be viewed at any time; the viewers can pause and continue at their own pace.

- **Head-Mounted Displays (HMD)**

There is a range of head-mounted displays that can be used. Some of them are quite expensive, but cheaper versions are becoming available. I looked at a cheaper version of Oculus, Oculus Gear, which comes with Samsung Galaxy phones. This can work very well to create an immersive experience. However, the level and mode of interaction need to be adjusted and made suitable for this kind of technology. I also tried working with Google Cardboard. Despite looking at these options early on, I could not experiment further with them due to time and technical limitations.

## **6.4 Ideation and Envisioning the Design Solution**

In this section, I will describe the process of envisioning the design solution. I will start by documenting some of the brainstorming ideas and concepts. I will then discuss the conceptual and the experiential frameworks. I will also describe the narrative that was developed for this prototype and finally I will talk about the different assets that were created or sourced for inclusion in the final exhibition.

### **6.4.1 Brainstorming Ideas and Concepts**

When I first started brainstorming ideas and thinking of possibilities, four main ideas appeared. I started thinking about these ideas and how each one can be improved and if they can overlap in the final prototype. It came apparent to me that whichever idea I chose to focus on, the other ideas remain valid options that can be achieved and developed given different circumstances and fewer limitations. I included some sketches and diagrams that were done during this brainstorming stage, which can be referred to in Appendix E.

## **Virtual Environment (VE)**

At this stage, this was the vaguest idea I had. But I knew that I wanted to create a 3D virtual environment that takes the viewers through different spaces. I thought of having a guide to help the viewers navigate the environment. The virtual environment can be viewed on screens or projected on walls.

## **Navigational Maps**

I thought of using Google Maps or create similar interfaces to it. The idea was that the viewer must plan a journey through Palestine only to be bombarded by checkpoints, roadblocks and the Wall. I thought that the viewer would have the option to see views from the street like Google Maps, but then they get to see real footage from Palestine, which can be in the form of videos or images.

Another idea that came to me was to plan a visit to the Holy Land “Jerusalem” using humour to portray the harsh reality of inaccessibility of Jerusalem for Palestinians living in the West Bank and the Gaza Strip or Palestinian refugees living outside of Palestine.

Another idea had an abstract map with only QR codes displayed on it. The viewers can scan these codes using special QR code reader applications downloaded on their smartphones. The QR codes will connect them to the available online resources.

Another idea had a map with highlighted cities as clickable icons to help guide the viewers through their journey. When viewers click on any of these cities, they are transported into a 3D virtual world. Which will have hot spots that can be triggered to project different formats of information including text, images and videos.

## **Making Choices**

One of the key themes that I found through the background research on Palestinian narratives was the complicated identification (ID) cards system imposed by Israel on all Palestinians. Therefore, I thought of ways that I can incorporate that in the design. I had the idea to create a matrix of the different ID cards options, the

different entry points and then the different destinations<sup>3</sup>. The choices that the viewer can get through this are varied. In the best scenario, they can easily get to their intended destination, have no issues, and enjoy their trip. In the worst scenario, they will be denied access, realise that they are stuck, and they cannot visit their destination. These different scenarios are portraying real-life scenarios, and thus the choices make the viewer live in someone else's shoes.

## **The Two Sides**

Another idea I had was creating two parallel realities and the viewer must choose his/her embodied experience. I thought about having two projections running side-by-side and divided in the middle with a real physical barrier in the exhibition space. As the viewer enters the exhibition space, he/she would have to choose which side of the barrier they would stand. This meant that they could only experience one side of the story at a time. I also thought of having the main interface in front, then on either side viewers have videos or texts representing the Palestinian side versus the Israeli side. And on the floor, there would be a map, which could be the top view of the main screen.

While this idea would show the two sides and might illustrate the meaning of apartheid, I felt that it is not the right way to move forward. I do not want to equate the two sides of the story. Instead, I opted to focus only on the Palestinian side, as the Israeli side of the story is quite accessible to the target audience.

## **Playing with Low-Cost Technology**

I thought about playing with low-cost technology, and I looked online for options and tutorials. For example, I found how we can create hologram effects using smartphones and old CD covers. I thought I could create holograms of some of the important artefacts that are related to Palestine, objects like the old house key, the olive tree, or even the Separation Wall.

I also looked at ways to create an embodied presence of the viewer inside the virtual environment using green screens and webcams. I experimented with a hack instead of a green screen, which is using a black screen and a webcam, and then

---

<sup>3</sup> This idea has been visualised as a matrix and included in Appendix E.

overlapping the webcam projections and the virtual environment projection to create the illusion that the viewer is inside the virtual environment.

#### **6.4.2 The Conceptual Framework**

Lukas has highlighted a set of key points to think about when designing experiences in immersive spaces (Lukas 2013). The first point is “Difference”; when designing an experience, the designer should be mindful of how people will interact and live that experience differently. The second point is “Common Themes”; so, despite the differences, there should be a clear common theme for that immersive space. The third point is “Depth”; it is important for visitors to those spaces to have deeper connections with the story that is being unfolded which will add to the complexity of their experiences. The fourth point is “Purpose”; those designed spaces need to have clear purposes. Experiences should be meaningful and tie in with the overall narrative or concept of these spaces. The fifth point is “Open-Ended”; the experiences should allow the users to complete them, giving them the chance to bring something to the experience in order to engage more (Lukas 2013).

In this prototype design, I had to make sure that I responded to these key points. For the “purpose” of this spatial experience, I had to define the core message and make it concise. The message I wanted this experience to deliver was to understand how the occupation of Palestine has affected people’s daily lives. For this message to be delivered, viewers need to experience this through spatial and affective encounters. The experience will be through the journey itself rather than reaching specific destinations. When defining the overarching narrative, I was mindful of creating “common themes” and “differences”. These will be clarified when I discuss the narrative later. For the “open-ended” point, I carefully thought of the ending of this experience and what is expected for the viewers after their experience. And finally, “depth” had to be considered when working on the narrative, the proposed journey in the virtual environment, and the type of engagement with the guide “Handala”, as will be explained later.

#### **Having a Guide**

I wanted to introduce a guide in the exhibition. The main role of the guide is to aid in the navigation of the virtual environment (VE). But also, I wanted the guide

to be Palestinian and therefore position the viewers correctly from the start of their journey. The goal is to cultivate empathy in the viewers, specifically an empathy that is stemming from the viewers' desire to understand the perspective of others and not from imagining themselves in the shoes of those other people (McCully 2012, cited in McKernan 2017, 104). By following this guide, this meant that the viewers in this experience are following a Palestinian who is sharing his/her lived experience. Following the study of evolution of the hero image in Palestine in Chapter 5, I knew that I wanted to choose a guide that represents the everyday people of Palestine who are persevering against the occupation. I wanted a guide who is one of the *Samidoun*. Therefore, when considering who could act as a guide, I immediately thought of Handala (Figure 6.1).

The history of Handala fitted perfectly with what I wanted. Handala is a caricature character created by the Palestinian cartoonist Naji Al-Ali in the 1970s. Al-Ali created Handala as a ten-year-old boy, which is the age of Al-Ali when he was forcibly removed from his village Ash-Shajara in Palestine in 1948 and became a refugee at Ein el-Hilweh refugee camp in Lebanon. Handala has been featured in many of the political cartoons that Al-Ali created. Handala is always shown from the back. Al-Ali explained that the reason is that Handala is stuck at his age of ten and he will only be able to grow when he goes back to his Palestinian village. And only then will he turn and face us. Unfortunately, this never happened as Naji Al-Ali was assassinated in 1987 in London and the situation in Palestine since then has had little progress in the right direction. Ever since his creation, Handala has become a symbol associated with the Palestinian cause.

Handala's backstory ties in very well with the intention of having a guide in the virtual journey. Knowing only Handala's back meant that he always has to be ahead of the viewer. This is a perfect fit for the idea of him being a guide. This also adds to the mystique of his story. We cannot see his face and whether he is sad or angry. His rugged look adds to the intrigue of his character. He seems like a mischievous ten-year-old boy, who can run, jump, sneak between barriers, and be where he is not supposed to be. Thus, I decided that Handala would be the guide for the journey I am creating.



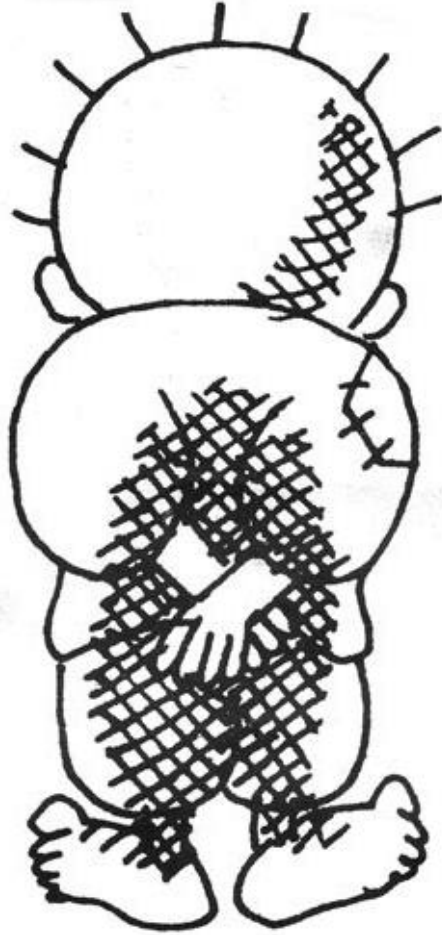
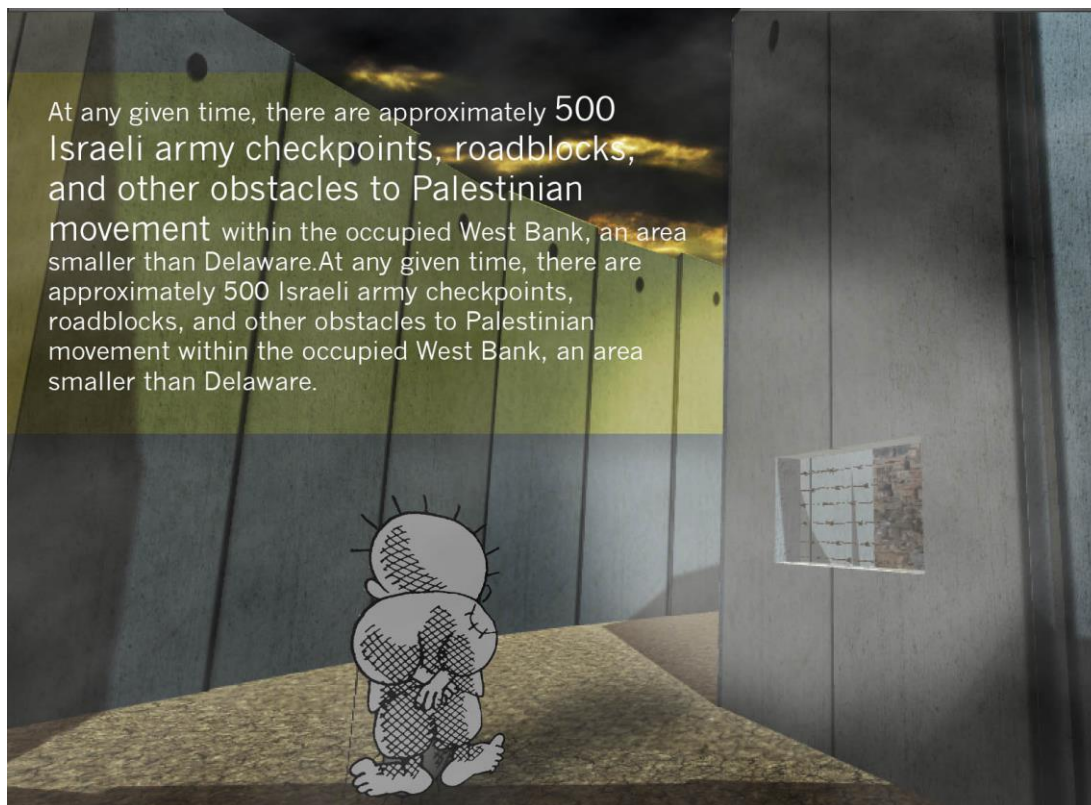


Figure 6.1: Naji Al-Ali. Handala, 1975. Reproduced from Handala website (Handala 2017).

### 6.4.3 The Experiential Framework

I wanted to use a mix of both real and virtual representations of Palestine. The virtual environment can be 3D models and 2D maps and will form the main navigational interface. The real representation can be an added layer either projected on top or synchronised to be projected on a separate wall from the main navigational interface. This representation can include archival videos, current footage, images, oral history, tweets, animation and infographics, all of which are either available online or may be crowdsourced (Figure 6.2).



**Figure 6.2: An early conceptual image of the intended virtual environment.**

Objects of memory are also important in creating this experience. In memorial museums, physical objects of memory play significant roles in creating emotive and didactic encounters with the overarching narrative. So, in this spatial experience it is important to include objects of memory. The objects can appear virtually within the virtual environment. Following the research in Chapter 5, I selected some important objects of memory that can inspire the narrative. The old house key, an ambulance stuck at a checkpoint, olive trees, citrus trees, the Separation Wall, security checkpoints, the ID cards, the refugee tent, the sling, and a piece of stone, are some examples of the objects I considered.

The VE is based on real spaces; however, they are not realistic recreations. This means that the spaces in the VE are not based on actual places. I opted to create a conceptual understanding of the real places and work from there. However, all the information included in the narrative is based on facts. These facts came from the background research I conducted.

Navigating through the journey inside the VE happens on two axes. The first is the time axis where the viewer starts before 1948 during what is referred to as

“Historical Palestine”, moving to the current times where the occupation has intensified, and the apartheid policies are more evident. The second is the spatial axis which involves the navigation of space, moving between the fragments of what is Palestine<sup>4</sup> including Israel, the West Bank and the Gaza Strip, as well as the refugee camps in neighbouring countries.

#### **6.4.4 The Narrative**

When working on the final narrative structure of the experience, the three-act structure predominant in game design was used. This standard structure consists of act 1: setup (exposition), act 2: conflict (complications), and act 3: resolution (Marx 2012). This structure translated into this exhibition where in the first act, or the exposition, the viewers gained an overview of the backstory of what they would be experiencing. In the second act, or the complications, the conflict that affected the story and the experience were laid out for the viewer. And in the third and final act, the resolution, the experience provided the viewer with an end. We have seen similar narrative structures used in both the USHMM and the AM as I have discussed in Chapter 4. I also had to take into consideration the three paradigms of the representation of Palestine as a spatial construction that I have identified in Chapter 5 and reiterated earlier in this chapter.

The final narrative for this particular experience focused on three main cities reflecting the choice of the abovementioned three acts: Jaffa, Jerusalem and Gaza (Figure 6.3). This choice was based on how each of these cities represents a different aspect of this story concerning history, current ruling authorities, and the experiences of occupation and apartheid.

---

<sup>4</sup> The fragmentation of Palestine conceptually and physically has been discussed in Chapter 5.

Start at the sea



(Exposition)  
The history / 1948  
Historic Palestine  
Nakba / Refugees



(Conflict)  
Restriction of Movement  
ID Cards  
The Wall/ Checkpoints

End at the sea



(Resolution)  
Seige / Blockade  
War Aftermaths  
*No resolution!*

Figure 6.3: The structure and highlights of the narrative.

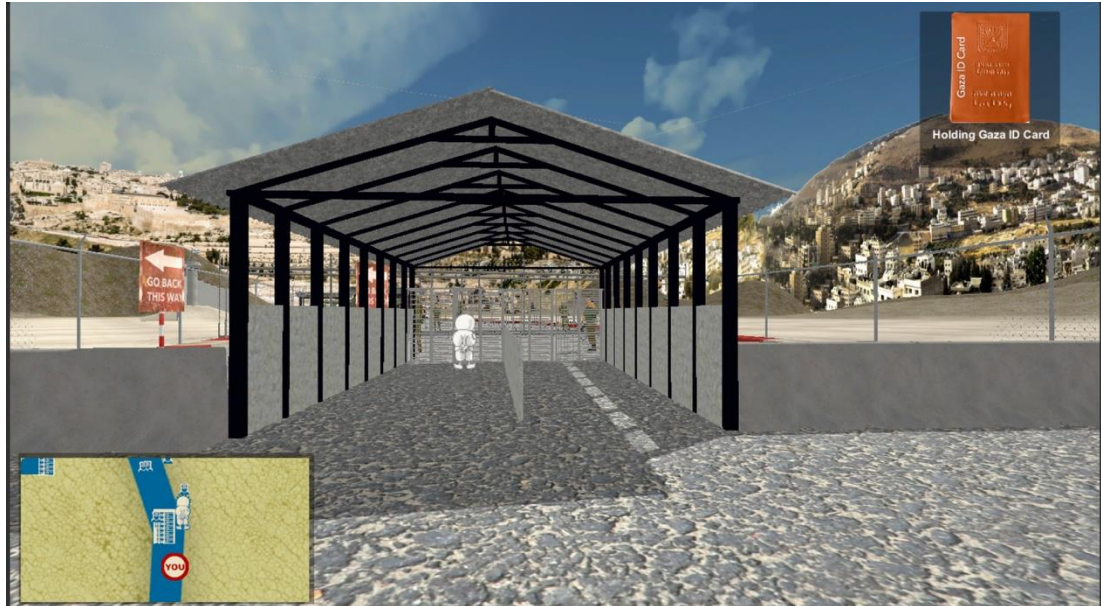
The narrative started in Jaffa, currently a city in Israel. Jaffa served as the scene where the introduction to the political situation is laid out by focusing on Palestine’s prosperity before 1948, then the story of the *Nakba* is recounted and how Palestinian villages were destroyed in and after 1948, causing their inhabitants to leave and become refugees in other places in Palestine or in neighbouring countries (Figure 6.4).



Figure 6.4: A still shot towards the end of the Jaffa scene.

From Jaffa, the narrative moves to Jerusalem. Jerusalem is considered the most contested city in this situation. This contestation has been more evident from the various reactions following the controversial relocation of the United States’ embassy to Jerusalem (Alsaafin 2018). The focus in this scene is the restriction in movement by

showing checkpoints, the Israeli imposed system of identification cards, and the Separation Wall. The physical aspects are shown in the 3D virtual environment whereas the experience is reflected in the video footage selected to show different day-to-day experiences of Palestinians crossing in and out of Jerusalem using different identification cards, which allow or restrict their access accordingly (Figure 6.5).



**Figure 6.5: A still shot towards the beginning of the Jerusalem scene.**

From Jerusalem, the narrative moves to the Gaza Strip. Gaza represents the harshest condition of this situation. The main theme of this scene is the blockade, the Gaza Strip being under siege and inaccessible, and being constantly under the threat of Israeli military operations. So, the viewers will go through a series of checkpoints during which they will learn more about the blockade, its effect on people, and then learn more about the different Israeli military operations that have happened in recent years. When they reach the end of those checkpoints, they will not be granted access to Gaza. This experience will form the end of this journey. The viewers will find themselves trapped behind fences unable to move forwards or backwards. This entrapment should leave the viewers feeling unsatisfied, which is an integral part of the experience, as the resolution for this whole experience is that there is no resolution (Figure 6.6).



Figure 6.6: A still shot at the end of the Gaza scene.

Moving from one city to another, there should be a distinct visual treatment in the VE that supports the viewer's sense of progress. Changing the camera filter, the skyboxes used, or the soundscape can all aid in creating different moods for each of the scenes. To give some breathing space for the viewers as they move from one scene to another, I wanted to use cut scenes that will create a space for the viewers to sit back until they must move to the next scene. The cut scenes are edited from footage that has to be meaningful and relate to the transition between one city to the next.

#### 6.4.5 The Assets

In the case of museums, there are objects, artefacts, textual displays, audio recordings, video footage and photography to disseminate the information to the museum's visitors; I needed to create the equivalent assets for this prototype. Assets are virtual and digital files that can be in the form of video, audio, 3D models, photography or text. I will explain the different assets that I needed for this prototype and how these assets were created or sourced.

#### Three-Dimensional Models

To create the 3D models, I used Autodesk Maya as a 3D modelling software. Maya and all other Autodesk software are available to students for free (Autodesk 2018). Since I am already familiar with 3D modelling software, I ventured to create

most of the assets myself. I decided that the models I create will not be exact replicas of real spaces since this would be beyond the scope of this research project. However, I researched and looked at real images from Palestine especially checkpoints and crossings to get a better understanding of the spatial qualities of these places (Figure 6.7). This research enabled me to create the required 3D models more effectively.



Figure 6.7: Comparison between inspiration images from Palestine and 3D assets created in the VE.

Some of the models that were needed were generic, for example, models of cars, soldiers, tanks and trees. Due to time and technical constraints, these models have been bought or sourced from free online inventories like SketchUp 3D Warehouse.

## **Video Assets**

Through my research, I came to know about various activist online projects that relate to Palestine. These projects had a wealth of materials that can be used, including archival footage, current footage, infographics, images and short explanatory videos. I had to watch a large amount of footage and select what I thought can benefit the narrative. In my selection process, I wanted to make sure that I choose footage from a variety of sources. This is crucial to maintaining a more objective understanding. Having said that, I was only choosing footage that speaks from the Palestinian point of view, as what the exhibition is communicating is a counter-narrative to the mainstream narrative which favours the Israeli point of view.

The footage came from various news sources including Al Jazeera, AJ+, The Guardian UK, and Wall Street Journal, activist and solidarity organisations like B'Tselem, Jewish Voices for Peace, Partners for Progressive Israel, Palestine Remix, and Mondoweiss, and Palestinian activist projects like Palestine Remembered, Electronic Intifada, and Visualizing Palestine. It was also important that the videos create human connections with the experiencers<sup>5</sup>, and therefore add more “depth” and at the same time “difference” in their engagement with the stories in these videos. So, I steered away from news-like videos or rigid documentary style videos, and focused more on stories coming directly from people living there. These people are part of the *Samidoun* who are discussed in Chapter 5.

Having footage from different sources meant that they have different qualities, aspect ratios, and specifications. I did not edit out any logos or watermarks originally placed on the footage. Therefore, the source of the footage remains obvious and credited for the experiencer to see at any point of the experience. I tried to unify the videos by using my own custom title before each video and creating a custom progress bar to indicate how long each video runs for. I also edited some of the videos,

---

<sup>5</sup> I have used the term “experiencer” instead of viewer or user as it best describes the active state of people coming to this type of ‘activist spatial experience’ exhibition. The term “experiencer” has been previously used in academic literature about people experiencing digital environments.



as they were too long. The video assets' durations ranged between 01' 19" and 02' 59".

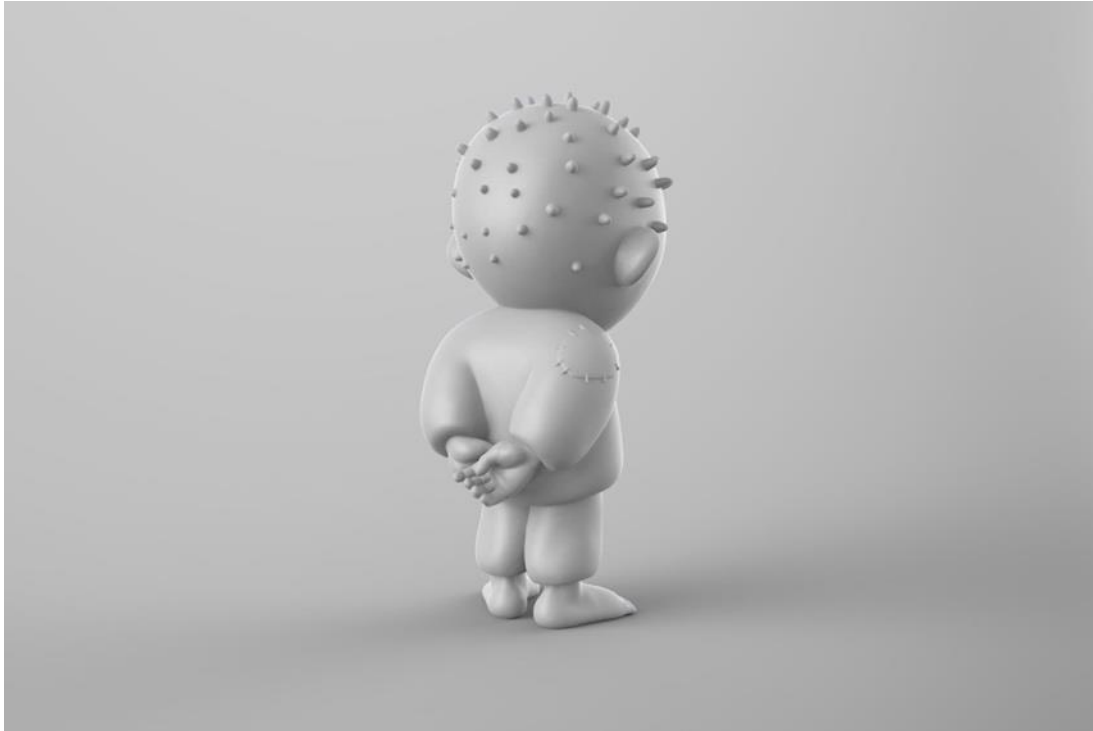
The playback of videos was to happen using a different projector than the one used to project the VE. Thus, I had to work out where the videos are placed in relation to the journey in the VE and how the communication will happen between the main VE, built-in Unity, and the playback of videos.

I am aware that there is an issue of copyright of using these videos. Given that the prototype is for research only I had no problem with using them. However, for any future plans, there are two options to move forward. Firstly, obtaining permission to use the videos which in many cases I suspect will be an issue given the potential problem of connecting the activist nature of this project to many of these sources. Secondly, most of these videos are available online, so the videos can be streamed from their online location without having to download them.

### **The Character of Handala**

Trying to fit Handala visually with the rest of the work was a real challenge. Handala is a 2D character, and we only know the back side of him. So, I started thinking of ways to include him as a 2D character in a 3D environment.

I started by testing how would Handala look like if he were turned into a 3D character. I found out that a 3D model of Handala existed (Figure 6.8) and was made by James Swift, the art director of M&C Saatchi (Swift 2014). So, I tried to give it a go and created a model in Maya and imported it to Unity. To turn the 3D model into an animated, one that can respond to interactive commands, became too difficult for me to achieve from a technical point of view. Adding to that, the 3D model did not look right to me. The real spirit of Handala was not there, and I kept thinking of the original 2D character.



**Figure 6.8: James Swift. a 3D model of Handala, 2014. Reproduced from the artist's website (Swift 2014).**

Therefore, I decided to keep Handala as close as possible to the original version and started looking at other options of creating 2D animations in different software and importing that to Unity. I found a solution by using multiple 2D sprites to create an animation cycle inside Unity. And with the help of the animator Saffia Bazlamit, the animation cycles were created in Adobe Photoshop and Illustrator. I then had to import them, turn them into animation loops, and then program them to respond to the commands as needed in the prototype.

### **Audio Assets**

Audio had to play two important roles in the virtual environment:

1. Help in setting up the correct mood (that is, from the sound of the ocean and the trees at the beginning, to sounds of bombs and people shouting when we move to explain 1948)
2. Give cues to the experiencer about what is happening or about to happen. For example, when they are holding a Gazan ID card, and they approach a barbed wire fence, a soldier starts shouting at them in a language they do not

understand. This would signal that they might be doing something wrong and they need to walk in another direction.

Thus, I had a clear idea of what audio files were needed for the prototype. I had to think of ways that I can source these files. I looked at free online audio directories, and I tried to find audio snippets that might work and were appropriate to be used in this project. I used freesound.org, which is an online collaborative database of audio snippets, loops, and recordings that you can use under different copyright schemes (Free Sound 2005-ongoing). For more specific recordings from Palestine, I used the audio parts of online videos that I found mainly on YouTube – for example, audio files about clashes with Israeli soldiers, bombs on Gaza, and Palestinians in real life situations.

I designed the soundscape of the prototype inside Unity to be projected in 3D using 7.1 or 5.1 surround sound systems. It was important to have that to create a better immersive experience for the experiencers.

### **Textual Assets**

I wanted to further include written material at certain points in the journey. The text aims to give more information about the context of the journey in real life and to also ease the experiencer in to the video that he/she will be watching shortly after. The content of these textual assets was based on the earlier research on the history and current conditions of the situation. I had to be precise and keep the text as short as possible to make sure it will engage the experiencer to read them. I have also linked those textual assets to further information on online websites using QR codes so that if the experiencers are interested, they can scan the QR code using their mobile devices to access the additional information.

## **6.5 Developing the Final Prototype**

In this section, I will document the process of developing the final prototype before the testing process that will be discussed in the following chapter. I will start by providing a concise description of the final prototype; then I will go back to explaining how each of the main elements was developed. I will also talk about the

process of setting up the exhibition in the chosen space before the testing process. And finally, I will explain the name chosen for this prototype.

### 6.5.1 Concise Description of the Final Prototype

The prototype is a multi-channel exhibition (Figure 6.9) which consists of an interactive virtual environment and video projections. The Unity game engine was used to create the interactive virtual environment that served as the main navigational interface. The Leap Motion was used as the input device for the interaction. Wall projections as the output channels were synchronised to create immersion and build on the spatial experience. The videos projected were edited from footage sourced from the internet. The footage was produced mainly by people in Palestine or from different activist organisations working with Palestinians.

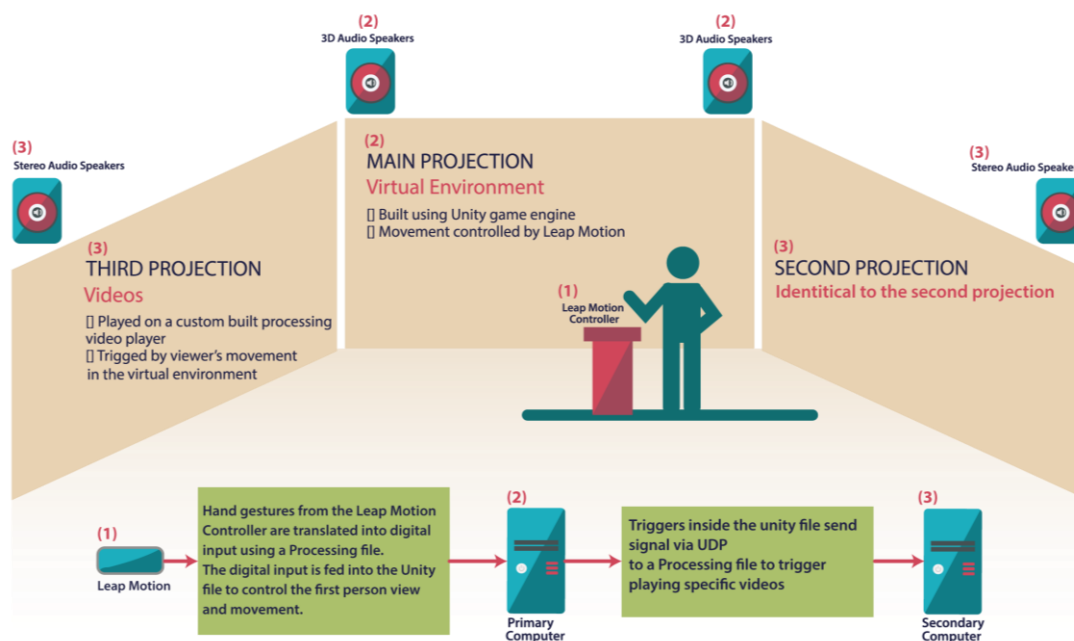


Figure 6.9: A schematic layout illustrating the prototype's current setup.

To create a sense of immersion with the exhibition, the work was shown on three walls (Figure 6.10). The central wall had the virtual environment built using Unity. The two adjacent walls showed the video projections whenever they were triggered by the movement of the experimenter in the virtual environment. The Leap Motion was concealed inside a custom-built plinth that stood in the middle facing the central projection.



Figure 6.10: The installation during one of the test sessions.

In Appendix E, I have provided more visual documentation of the prototype which includes a flow diagram of the experience, a plan view of the exhibition, and images from the prototype's test sessions.

## 6.5.2 Developing the Virtual Environment

As I have explained before, the virtual environment (VE) was built using the Unity game engine and mainly Autodesk Maya for creating the 3D models. I was building the assets as I described in the previous section while working on the VE. Therefore, the documentation of the process here is not chronological because the way that I was developing the prototype was interconnected. I will outline the main steps that I had worked on while preparing the VE.

### Creating the Scenes

The narrative had three main acts, as explained before. Each act involved a city and a time period. The first scene in Jaffa covered the story of the *Nakba*. The second in Jerusalem covered the theme of restrictions of movement. The third and final scene in Gaza covered the story of the blockade and recent Israeli military operations.

For each scene, I had to build the environment which included setting up different 3D models in relation to one another, adding a terrain on which they will be placed on, deciding on the appropriate skybox and lighting, and finally defining the path where Handala will walk and where the experiencer must follow.

Certain elements in the environment needed to be controlled by script. Unity game engine uses either JavaScript or C# language. I used C#, though I had no prior knowledge of this specific programming language.

I had to make sure that I wrote the correct code to create the desired scenarios and effect. For example, when the experiencer goes to Jerusalem, he/she goes through the same checkpoint using four different ID cards. Consequently, each card plays out a different scenario and shows or hides things in the existing environment (Figure 6.11)



Figure 6.11: At a point in the Jerusalem scene inside the VE.

## Handala (the Guide) in the Virtual Environment

Handala was created as a 2D animation loop. I then had to import him into Unity as a Sprite. Then I had to program his walk on a predefined path as a navigation Mesh Agent<sup>6</sup>.

Handala only starts walking when the experiencer gets closer to him, and then he will walk up to a certain point and wait for the experiencer to follow. I had to create

---

<sup>6</sup> Any usage of specific technical jargon here is only meant to document the process rather than confuse the reader with the technicality of designing and creating the prototype.

an idle state for Handala while he is waiting until he has been triggered, then his walking cycle will start to loop as he moves to a pre-determined destination in the environment.

## **The Experiencer in the Virtual Environment**

The experiencer was created inside Unity as a first-person shooter controller (FPSController)<sup>7</sup>. In video games context this means that experiencers control their movement inside the environment, and can walk, run and jump. Also, it means that the field view of the experiencers will be similar to a first-person's field of vision. The experiencers can look in all directions and move their heads in a similar way to what they can do in real life. To create the FPSController I had to import an existing prefab asset from Unity and then tweak the parameters to result in smoother walking and navigation suitable for the experiencer of the exhibition.

For this spatial experience, Handala gave the experiencers a sense of direction as to how and where they should progress. As the experiencers moved in the environment, they would stumble upon invisible triggers that would trigger the appearance of textual displays that had more information relating to specific themes within the narrative. At the same time, this would trigger the video projections on the adjacent walls as I will discuss later.

## **The Textual Displays**

I used textual displays that would appear at certain points in the journey. The displays had further information that related to the point in the journey they appeared. The displays also had QR codes that can be scanned as I discussed previously.

The textual displays would appear when an invisible trigger is triggered by the experiencer's movement in the VE. Those invisible triggers become activated and run a specific script once the experiencer steps or goes through them. The triggers are invisible, so they do not detract the experiencer from experiencing the environment but at the same time have an element of surprise when the text appears, or videos play.

---

<sup>7</sup> Same as previous.

## Working on the Soundscape

Audio clips were attached to certain objects in the VE. These clips would either change their volume based on how close or far the experiencer is to them, or be triggered by invisible triggers once the experiencer steps on them. The audio clips were created as 3D sounds and therefore added to the spatiality of the experience.

Audio clips were either temporally triggered (such as a shouting soldier when we get close to him) or acts as scenic sound that fades in and out as we move closer and further (such as the sound of the ocean).

## Transitional Cut scenes

There are two transitional cut scenes between scene 1 and 2, and scene 2 and 3. There is also an introduction scene and an ending scene.

The cut scenes were selected based on the theme that they needed to link with. The first cut scene was from a Syrian TV series about the 1948 *Nakba*, titled *Al-Taghriba Al-Filistinia*<sup>8</sup> (Ali 2004) directed by Hatem Ali. The cut scene shows one of the main characters, who was being forcibly removed from his village, receiving the news that his brother has been killed by Israeli forces; as a result, he runs toward a barbed wire with a sign saying “The Truce Line”. He then cries and runs away in fear and desperation. The second cut scene was from a Palestinian film *The Time That Remains*<sup>9</sup> (Suleiman 2009). In this scene, the protagonist, who is the director himself, is seen pole vaulting over the Separation Wall (Figure 6.12).

---

<sup>8</sup> The title translates to The Palestinian Exodus.

<sup>9</sup> This film has been discussed in Chapter 5, and this scene is specifically discussed there as well.





Figure 6.12: Elia Suleiman. *The Time That Remains*, 2009, Still image from the film (Suleiman 2009).

The introduction scene focused on giving background about Handala, his pivotal role as a guide, and what experiencers will be experiencing. The ending scene had a slide show of archival and current images from Palestine with a message from Handala before everything fades to black leaving only Handala standing in the corner (Figure 6.13) signalling the end of the experience.

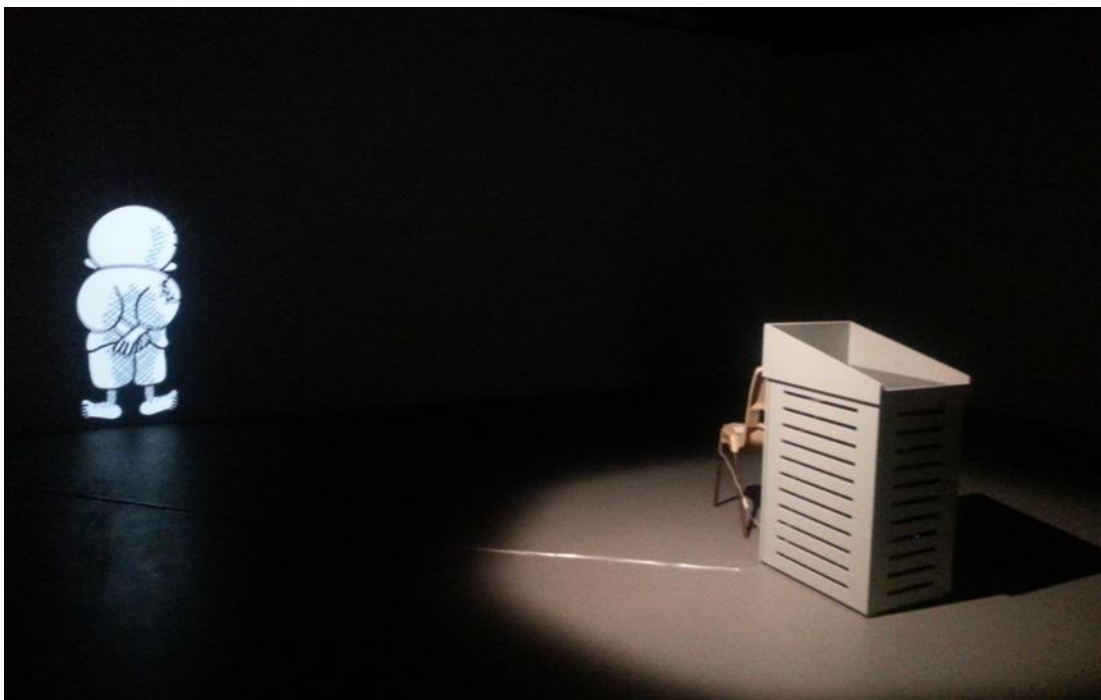


Figure 6.13: At the end of the experience. Only Handala can be seen in the corner.

## The Navigational Map

The main reason for adding a navigational map was to give the experiencers a sense of where they are and how long they still have to go. It also showed where Handala is located, as well as some of the key elements in the environment (Figure 6.14).

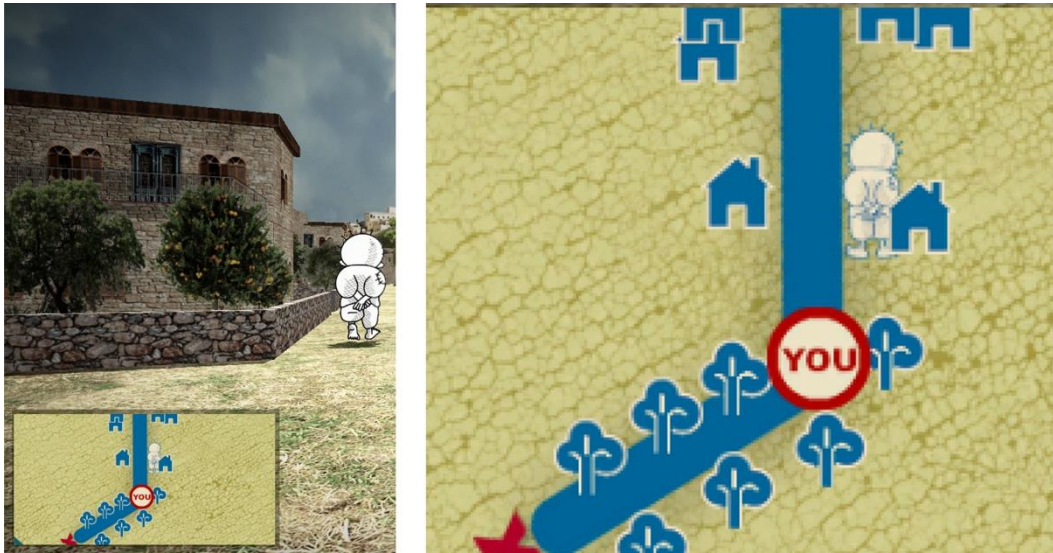


Figure 6.14: An example of the navigation map inside the virtual environment and a close up of the map.

### 6.5.3 Developing the Video Projections

I discussed previously how I created the video assets for this prototype. I then had to find the best way to link their projection with the VE. The videos were being played using a custom-built video player created using Processing. The video player was created by the School of Design and Art<sup>10</sup> Lab Support Specialists, Kevin Raxworthy and Amy Hickman. After that, they worked on a script that will allow the communication between two computers; one running the Unity file (the main virtual environment) and one running the Processing file (videos' playback) as illustrated in Figure 6.9.

---

<sup>10</sup> This lab now is part of a new restructured school called the School of Media, Creative Arts and Social Inquiry.

#### **6.5.4 Working on the Leap Motion**

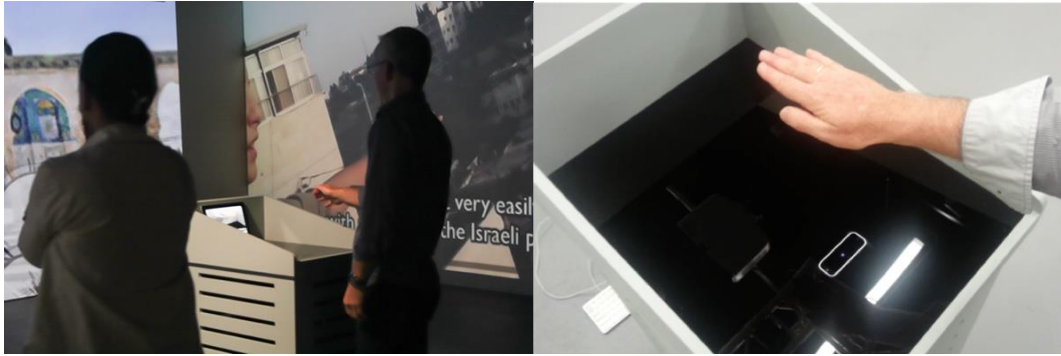
The Leap Motion is not designed to be used in Unity in the way that I was looking for. Usually, the Leap Motion is used to translate real hand movements to a virtual hand appearing inside Unity. But what I wanted from the Leap Motion is to control movement similar to how game controllers would do this. Therefore, the Leap Motion caused many technical issues. Once again Processing was used to create a code that can link the signal from the Leap Motion to Unity. This code was created by Kevin Raxworthy.

#### **6.5.5 Setting up the Prototype**

The prototype was set up in the Audio/Visual Lab at the School of Design and Art. The lab is a multiuse space, which has multiple projectors connected, and a 7.1 audio system.

The prototype needed at least two different projection outputs. One is for the virtual environment which is the main navigational interface. The other output is the video footage playback, which will be triggered by the experiencer navigation in the virtual environment. The prototype needed two sound systems as well, one for each of these two outputs.

Another important design consideration was how to place the Leap Motion in the exhibition. The Leap Motion needed to be connected to the computer running the virtual environment. As I wanted the technology to be disguised as much as possible, I customised a plinth where the Leap Motion was embedded on the top surface of the plinth. Then a black Perspex sheet was placed to further conceal the Leap Motion. The plinth's body was made to accommodate the placement of the computer used to run the virtual environment and a set of stereo speakers. And it had to have enough ventilation slits to make sure the computer would not overheat (Figure 6.15).



**Figure 6.15: A member of the test group using the Leap Motion embedded in a custom-built plinth.**

To communicate between the two main computers that were running either the VE or the video projections, a signal was transmitted using a Universal Data Protocol (UDP) port on a local router.

## **6.5.6 Choosing a Name for the Prototype**

### ***Visit Palestine Poster***

There is a very famous poster by Fran Krausz called *Visit Palestine* (Krausz 1936). The poster was used in the Zionist propaganda in the 1930s to entice European Jews to go to Palestine. Many Palestinians still feel the irony of this poster, which was used to call for establishing a Jewish state, yet it acknowledged that that land is actually Palestine (Lionis 2012). Unauthorised replicas of Kraus’s poster has appeared in many Palestinian homes (Lionis 2012).

However, the poster has been subverted many times by Palestinian artists. In *Nation Estate* (Sansour 2012), the poster appears as an ad for the estate with the words “visit Palestine” replaced by “Living the High Life”. Instead of the image of Jerusalem with the Dome of the Rock taking centre stage as in the original poster, there is a single high-rise building which is enclosed by a wall from all four sides. Another example is *Visit Palestine* (Shomali 2010) by Amer Shomali. In his subverted poster (Figure 6.16), he simply placed the Separation Wall in front of the same scene. This brings forth the difference between the promise of Palestine to the Jews in the initial poster, and the reality and aftermath of them actually coming and occupying the land. The Wall, as such, becomes evidence of the occupation’s spatial manifestation in the public space.



Figure 6.16: A comparison between the original *Visit Palestine* poster by Franz Krausz, 1939, and the new *Visit Palestine* poster by Amer Shomali, 2010. Reproduced from Art and Social Movements website (Hay 2011).

When I started thinking about possible titles for this project, I immediately thought of the original poster. The original idea of promoting Palestine to the West is similar to what I am aiming to achieve in this project. But what I am seeking to address is a re-reading of the current situation by introducing a Palestinian counter-narrative. This meant that the visiting of Palestine is actually a revisiting. And that is how the title came about. This revisit not only implies a re-reading of the existing narratives about Palestine, but also subverting the mainstream imagery of the current Palestine/Israel situation. The title and its relation to the original poster were reflected in this prototype's poster design, which also borrowed the layout, colour scheme and typefaces of the original poster (Figure 6.17).



Figure 6.17: The prototype's poster.

## 6.6 Summary

In this chapter, I documented the process of creating the prototype that demonstrated the use of the virtual environment and video projections to design an

activist spatial experience that conveys narratives about the occupation of Palestine. This chapter links the previous stage of this research, which is the background research stage, to this second stage of designing and developing the prototype. The background research informed the design considerations that needed to be addressed in the design solution. Following that, I documented the process of creating the prototype “re:Visit Palestine” with the different stages involved from experimentation and exploration to ideation and envisioning and finally to developing the prototype.

In the following chapter, I will document the testing process of the prototype and present the feedback that was collected from the test group who experienced the designed prototype.





## **Chapter 7. Testing and Evaluation of the Prototype “re:Visit Palestine”**

### **7.1 Introduction**

In the previous chapter, I documented the process of creating and developing the prototype “re:Visit Palestine”. The documentation covered the experimentation and exploration, the ideation and envisioning of the design solution, and finally the developing of the final prototype.

In this chapter, I will document the process of testing and evaluating the prototype “re:Visit Palestine”. I will start by describing the methods used to capture and document the feedback and then give general information about the experts recruited to be part of the test group. Then I will present the feedback collected through the different methods. Several themes and issues emerged as the findings of the testing process. These themes are grouped under four frameworks; the interactivity, the conceptual, the experiential, and the aesthetic frameworks. This chapter will focus on presenting the findings as they emerged from the testing and evaluation process. Further discussion and analysis of these findings will be done in the following chapter.

### **7.2 The Process of Testing and Evaluation**

Following the stages of the design-led research model adopted in this research, the third stage was testing and evaluating the prototype. After the prototype was designed, it was set up as an exhibition in a dedicated space ready to be tested and evaluated.

The prototype was tested on a group of experts from relevant disciplines. The testing was conducted in a dedicated space for exhibitions, namely, the Audio/Visual Lab at the School of Design and Arts at Curtin University<sup>1</sup>. The exhibition was set up with the technical support of the resident lab technicians. It was set up using three wall projectors. The central wall projection featured the virtual environment (VE) which

---

<sup>1</sup> As mentioned in previous chapters, this lab is now part of a new school called the School of Media, Creative Arts and Social Inquiry.

served as the navigational interface. The two wall projections on the sides were identical and featured the video footage which only appeared at certain points in the journey through the VE. In the middle of the physical exhibition space and facing the central wall, stood the custom-built plinth with the Leap Motion controller (Figure 7.1)



**Figure 7.1: A wide view from the exhibition during one of the test sessions.**

After searching for experts from the University staff, twenty-six key people were identified and invited. These experts were from the School of Design and Arts, School of Media, Culture and Creative Arts, and John Curtin Gallery<sup>2</sup>. Fifteen of the invitees confirmed their availability on the specified date of the test run. Those fifteen became the test group, and I will refer to them as the participants from here on. The participants were divided into six sessions according to their preference and availability on the day of testing. Each session had either three or two people besides myself and my two supervisors.

It is worth noting here that before the testing stage, I had applied for an ethics approval and was granted one as described in Chapter 3. All the involved paperwork can be found in Appendix A .

---

<sup>2</sup> The names of the two schools have changed since then to the School of Design and the Built Environment, and the School of Media, Creative Arts and Social Inquiry respectively.

### **7.2.1 Methods of Documenting Feedback**

In Chapter 3, I outlined the different methods that were used to document the testing process, which included video recording while the participants experienced the exhibition, audio recording of the discussion sessions after each test session, and finally a follow-up questionnaire which allowed for further reflections on the test sessions. The full questionnaire can be found in Appendix F.

The video recording captured the participants' interaction with the exhibition. It captured the way the participants navigated the real space as they experienced the exhibition, as well as capturing their challenges in using the Leap Motion. It also showed patterns of navigating key elements in the VE and the participants' bodily reactions to some of the footage projected.

After each group of participants finished experiencing the exhibition, they sat down with my supervisors and myself for half an hour of discussion, which was audio recorded and transcribed later. Full summaries of these sessions are included in Appendix G.

Hassenzahl (2010) has outlined a framework for evaluating designed experiences as discussed in Chapter 2. The designer should be mindful of what are the desired emotional and cognitive contents, what are the actions needed from the experiencers to engage with the content, and what is context and structure of the designed experience (Hassenzahl 2010). Therefore, the participants were asked to respond to three main questions. Firstly, they were asked to share their general reflections about experiencing the exhibition. Secondly, they were asked to reflect on the Handala character as their guide and how they positioned themselves within the experience. Thirdly, they were asked to comment on the use of the Leap Motion as their interaction device with the exhibition. After that, they were asked, "if this work had to be exhibited next week, what would be the most important thing that you would change about it?" The reason behind this question was to extract major problems and issues they found with this prototype that they think are the most urgent to be addressed for the future development of the work.

After the spatial experience ended, a follow-up questionnaire was sent out to all the participants. Ten out of the fifteen participants responded. Their responses are represented in the figures in this chapter.

### 7.2.2 Information about the Expert Focus Group

The following figures demonstrate general information about the expert focus group. But as I mentioned before, only ten of the original fifteen participants responded to the questionnaire. Most of the participants were male (Figure 7.2). The age range varied, as three out of the ten were between 50-60 years and three were between 30-40 years (Figure 7.3). Most of the participants came from the Design and Digital Media disciplines with noted experiences in Art and Media Studies (Figure 7.4).



Figure 7.2: The participants' gender.



Figure 7.3: The participants' age groups.

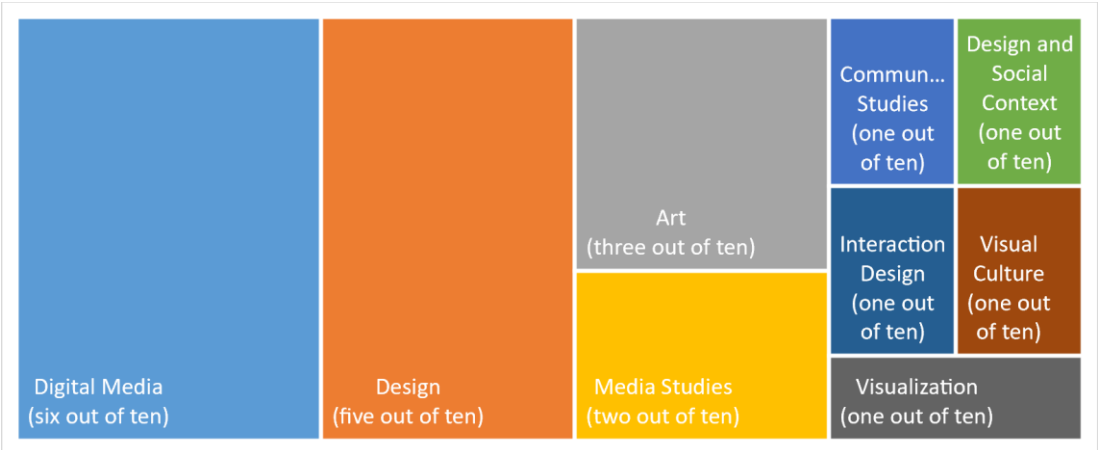


Figure 7.4: The participants' main fields of experience (they could choose more than one).

Four of the participants had been to the Middle East with only one of them travelling to Israel/Palestine. That participant said he had not seen similar scenes there to what he was exposed to during the exhibition. Concerning previous knowledge about the Palestinian/ Israeli situation, half of the participants felt that they had a good understanding of the situation (Figure 7.5). All the participants agreed that they had gained a better understanding of the situation after experiencing the exhibition (Figure 7.6).



**Figure 7.5: The participants' prior knowledge of the Palestinian/Israeli Situation.**



**Figure 7.6: The participants' knowledge of the Palestinian/Israeli situation after experiencing the exhibition.**

This new knowledge that the participants felt they gained after experiencing the exhibition has led them to feel more sympathetic towards the Palestinians (Figure 7.7). Another important finding is that nine out of ten participants felt that they would recommend this exhibition to other people to come and see (Figure 7.8). This demonstrates the importance of this work and its potential once fully developed.



Figure 7.7: The participants' change of attitude toward the Palestinians after the experience of the exhibition.



Figure 7.8: Recommendation of the exhibition for future experiencers.

## 7.3 Presentation of Findings and Design Issues

After the collection of the testing feedback as described in the previous section, I analysed the feedback to find common themes and issues. In my presentation of the feedback, I will anonymise the names of the participants.

In this section, I will present these themes and issues as they emerged from the findings of the testing process. I grouped the themes under four main frameworks; the interactivity framework, the conceptual framework, the experiential framework, and the visual aesthetic framework. However, it is difficult to draw hard lines between these frameworks. Therefore, the overlapping of the themes and ideas is expected.

In the following chapter, I will elaborate on these themes and discuss them with the initial design considerations and the design decisions taken to create the prototype.

### 7.3.1 The Interactivity Framework

Walking into the exhibition space, the participants had different reactions. Some of them did not know what to expect, and they stood there waiting for the exhibition to run by itself. Some of them did not notice the poster and information card, and thus did not know they had to interact with the work even with the presence

of the Leap Motion plinth in the middle and watching the introduction scene where Handala explained that they needed to follow him.

Participant 6, who is an art curator, expressed how he had a good feeling as he entered the space while Participant 7 who came in the middle of a session felt that she was lost and found it difficult to understand what was happening.

Having the exhibition interactive was polarising for the participants from the beginning. Some of the participants, in general, did not like the use of unfamiliar digital technology; they would have preferred if the exhibition ran by itself and they only observed, while others enjoyed having this interactivity. Participant 15 commented on how the introduction of interactivity in this exhibition had taken it from being a documentary into something more engaging. So, this exhibition as a work of art will open other venues and locations for people to engage with and experience the subject as opposed to documentaries. Participant 3 commented that she could see this type of exhibition fitting nicely in a museum space.

Contrasting this view, Participant 8 thought that the virtual environment is not needed and not central to the narrative this prototype is communicating. It was emphasised by several participants that the technology used needed to be tested and proofed so that people will be able to use it with ease and get the intended experience.

Participant 8 also observed how this prototype design is working against the established paradigm of Virtual Reality (VR). While VR is about creating freedom for the experiencer to navigate and explore, the intended experience of experiencers inside this VE is the restriction of movement. Participant 8 iterated that this reversal can be powerful if it is done properly.

Participant 6 suggested making this experience a one-person experience or at least one-person controlling the navigation while the others stand to watch. He also agreed with the idea of giving less control to the experiencer. He said the experiencer should feel compressed by not having choices for how he can move and navigate. For him, the immersion in this exhibition will come by constricting alternatives and not having distractions.

## Interactivity's Distractions and Attractions

One of the participants, Participant 4, who has previous knowledge about the political situation noted that this work presented the situation differently and allowed him to interact with it, which he thought was good. Participant 5 agreed that the experience is very powerful. But he observed that the way technology was set up stood in the way of him forming emotional connections with the work. This point was reiterated by other participants who also felt that the difficulty in using the technology and navigating the VE created a technical barrier for them to emotionally engage with the work. They became more focused on getting the navigation working smoothly. This caused the cognitive load on how to navigate the VE to be higher than it should be, as Participant 9 noted. He further said that the experiencer needed to be trained at the beginning on how to navigate so that later he/she can focus and engage with the content. These participants also observed that their emotional connections with the work came mostly from the videos. For them the VE did not offer the spatial connection it was intended to create because of the difficulty of navigation. While three out of ten participants felt that the VE did not affect their experience (Figure 7.9) and therefore there is no need for it altogether, others suggested taking away the interactive navigation and let the experiencer be automatically guided through the VE, as the narrative itself is powerful and people will be adequately engaged with the content.

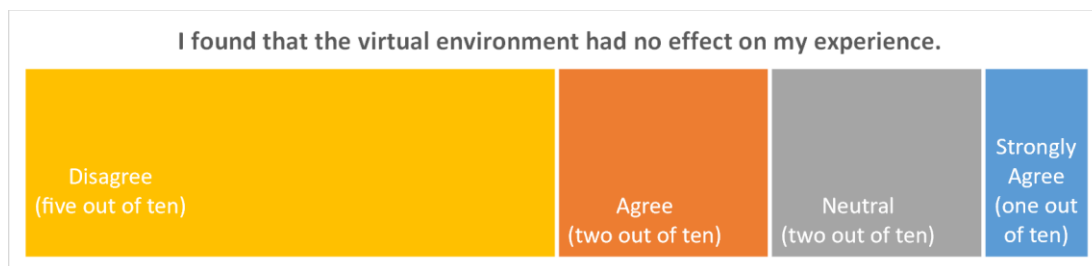


Figure 7.9: The effect of the virtual environment.

On the other hand, Participant 14 observed how interactivity makes the experiencers active in some way, by not just being present through their mind but also physically. Similar to this observation, Participant 15 thought that interactivity brought a sense of enjoyment to the experiencer. And he thought that if you give a really challenging message, whether it is about the dead people of the Holocaust or the Palestinians, people will turn away from it. Having this enjoyment from the interactive



element would not detract from the power of the message, rather it would offer another way to draw people in and then expose them to the difficult narrative. Ultimately, this would add to the power of the message. He concluded that if this work were a twenty-minute documentary about the Palestinian situation, people would not be tempted to come. But having this presented as an interactive exhibition will attract more people.

## The Use of the Leap Motion

In general, the participants appreciated the experimentation with a new mode of interaction using the Leap Motion. Some of them were excited by the novelty of this interaction mode, while some of the participants felt distanced from it as they do not feel comfortable using technology in general. Eight out of ten participants felt confident using technology in general (Figure 7.10) with over half of them familiar with playing video games (Figure 7.11). Seven out of ten participants (Figure 7.12) found that the interaction mode was not intuitive enough, and difficult to use and navigate. This meant that the experimenter had to spend more time getting familiar with the interface, which took time away from the content and the subject matter of the exhibition.

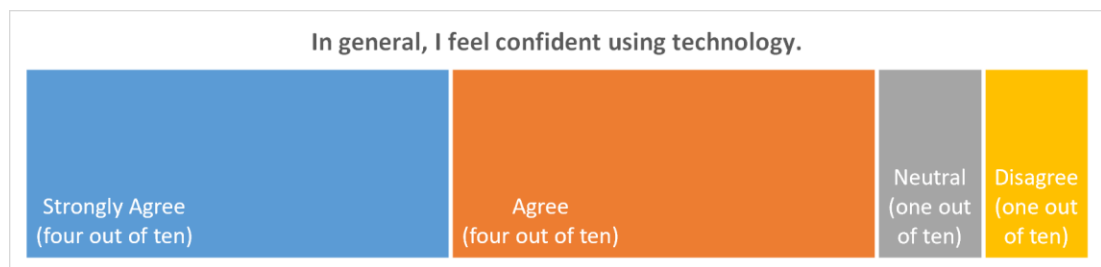


Figure 7.10: The participants' confidence in using technology.

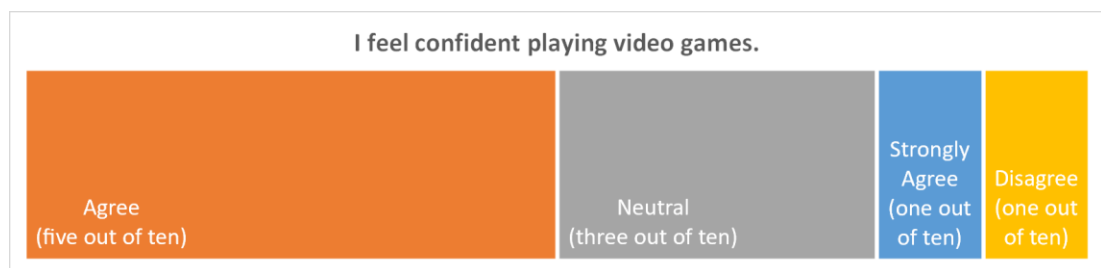
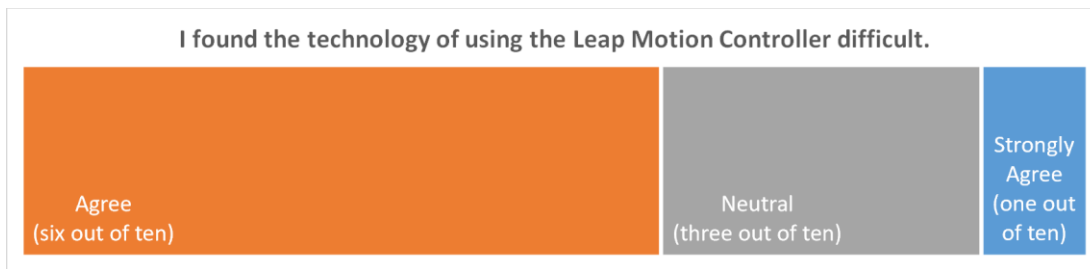
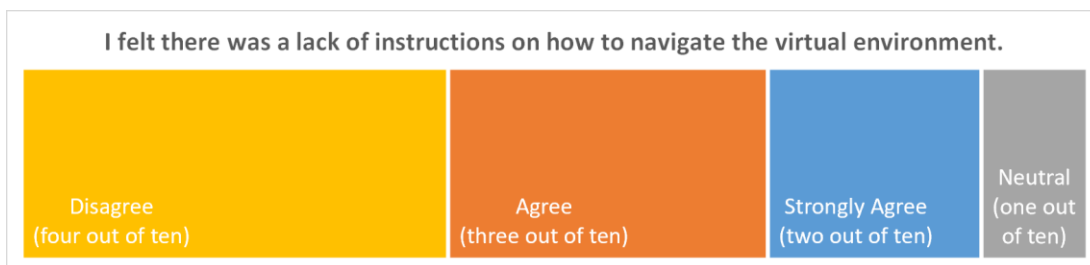


Figure 7.11: The participants' confidence in playing video games.



**Figure 7.12: The difficulty in using the Leap Motion Controller.**

Some of the participants suggested that this added frustration could have been integrated into the experience. Other participants maintained the importance of having ease of use for the experiencer so as not to detract from the content, which is the focus of this experience. Some of the participants felt that they got used to navigating using the Leap Motion after a bit of time. And it continued to get easier with time. However, half of the participants felt that there was a lack of instructions on how to use the Leap Motion to navigate the VE (Figure 7.13). Having more than one participant at a time also led some people to not want to take control, and they were happy to let others lead them through the VE. Some participants were aware of others in the space and did not want to move forward before a video was finished so as not to disrupt other people’s engagement with the video content.



**Figure 7.13: The lack of instructions to using the Leap Motion Controller.**

The suggestions for improvement varied. Some of the participants suggested using other game controllers, as they are easier to use and people would be more familiar with them. Participant 5 suggested using joysticks that have been customised to fit the theme, like building them into a cage. Another solution that was suggested by Participant 8 was taking away the interactivity element of the work but giving the illusion of it, meaning that the experiencer is progressing the character from one point to another on a pre-determined path and scenario. Thus, by restricting the interaction, the navigation will become easier, and the margin of errors will be lessened. This

participant was the strongest opponent of using the Leap Motion for this work. For him, the technology was working against the design.

Noting that any interface will have an element of difficulty to it, some participants suggested having a training session before the actual experience begins. This will allow people to get familiar with the interaction mode and by trying it beforehand they will be more comfortable in using it later. This training session could be set at an easy level at the beginning of the experience where the experiencer has to only walk about and look around the VE.

### 7.3.2 The Conceptual Framework

Generally, the participants found the content of this exhibition very revealing to them, especially when it came to the restriction of the movement of Palestinians. They found the work engaging and emotive. The message behind it was clear, and it was well integrated within the experience. An important point that was made is how the everyday struggles of Palestinians, for example, at the checkpoints, are not the sort of things that they would see in the news.

#### Objectivity and Counter-Narratives

Only two out of ten participants found the work to be one-sided and lacked objectivity while four of them felt the opposite and the rest (four out of ten) did not feel the work was objective or subjective (Figure 7.14).

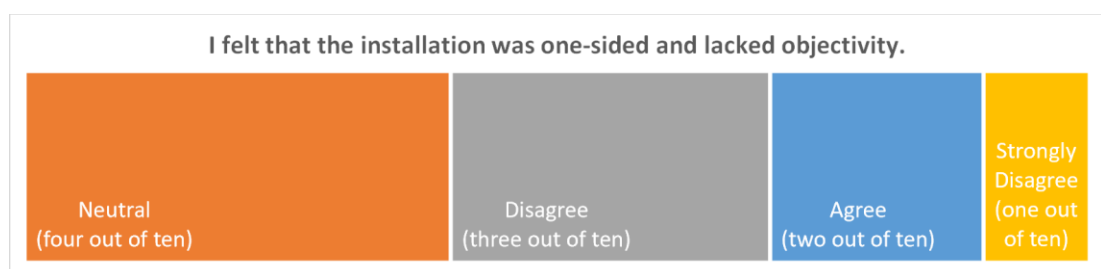


Figure 7.14: The objectivity of the exhibition.

One participant who has been involved in the early stages of developing the *PeaceMaker* game<sup>3</sup> said that he is familiar with the idea of using multimedia to display two different sides of the story. Thus, he would have liked to see more of the non-Palestinian viewpoint in this exhibition. He explained that he understands my rationale of only focusing on the Palestinian side and wanting to bring more attention to Palestinian perspectives. But it will still be helpful to bring the other side into the narrative occasionally.

### **Restriction of Movement and Confinement**

The restriction of movement and confinement were two of the strongest themes experienced by the participants. Some of the participants wanted these themes to appear in the exhibition more strongly. Participant 5 reflected on how the virtual checkpoints in the exhibition are wider than the real ones visible in the videos, and the experiencer can navigate through them relatively easily, which for him felt at odds with the intended experience of confinement. So, he suggested creating confinement both in the virtual world, by constraining the movement of the experiencer inside the VE even if it stands against usability, and in the physical space of exhibition, by building a carousel-like structure, where the experiencer must step in to start navigating the exhibition. Similar to this view, Participant 8 suggested building a box in which the experiencer has to step inside to experience this exhibition alone. He noted how when we change the actual space around the experiencer, he/she becomes more emotionally prepared to experience the rest of the exhibition. He noted that in his case he had no prior knowledge of the political situation, but if he were forced into a tight and uncomfortable space, he would be already forced to engage with the work and experience it differently.

The crossing of the checkpoints in Jerusalem was one of the parts that caught most participants' attention. They felt that the use of the different identification cards and how it was being demonstrated in the environment was good. Some of the participants suggested dramatising the obstruction of movement even further even by using more gamified elements. Or even giving the experiencers limited choices, thus

---

<sup>3</sup> *PeaceMaker* is a serious game developed by Impact Games. The game is inspired by real events from the Palestinian/Israeli situation. The game allows the players to play as the Palestinian President or the Israeli Prime Minister. And they have to make choices as leaders when certain events unfold and attempt to bring peace to the region (Impact Games 2013).

having definitive realisations of the futility, inability and absurdity of not being able to move forward.

One participant liked the end scene where the experiencer alongside Handala get trapped. However, another participant in the same group thought that some experiencers might not like that feeling of being trapped especially with the interaction mode not working smoothly, therefore will choose to leave the exhibition earlier than they should.

### Presenting a Guide “Handala” in the Virtual Environment

In general, the participants understood the need to have a guide in the virtual environment. And they liked the idea of having a child as the guide. But at the same time, more than half of the participants did not feel they were able to establish an emotional connection with Handala (Figure 7.15). Some participants expressed how they felt trapped when Handala was trapped.

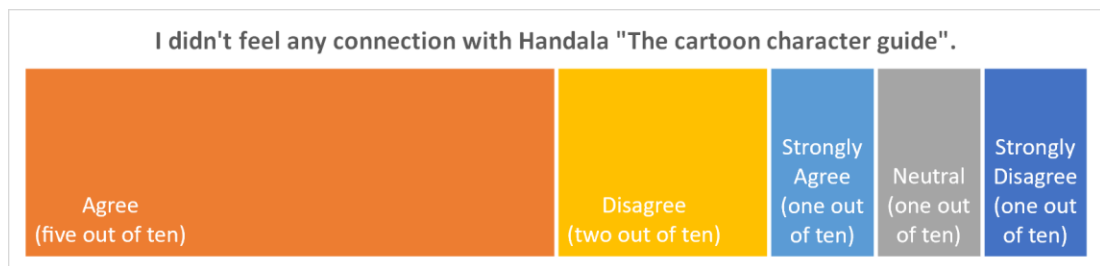


Figure 7.15: The relationship between the participants and Handala "the guide".

In general, the participants felt that Handala guiding them and their physical movement in the VE was in line with the progression in the narrative. However, one of the main problems of having Handala as the guide was the way he is visually represented (Figure 7.16). Given his cartoonish looks, they felt that aesthetically he did not fit with the rest of the VE. Some of the participants accepted his visual look after understanding his backstory, which was either introduced to them by some other participant, or by reading the information card, or via the introduction scene of the exhibition. Participant 11 said that he felt he got used to Handala’s appearance and accepted it. While Participant 1, who is an artist, stated that the way Handala was visually presented created a barrier between her and him, and she could not identify with him.



Figure 7.16: Handala walking in the Jaffa scene inside the VE.

Another important point made by many of the participants was that the story of Handala was not woven deep enough in the exhibition. They thought that the story of Handala should have been revealed slowly while addressing the rest of the themes of the narrative, for example, the everyday restrictions of movement. They did not think it was enough to have Handala's story mentioned once in the introduction scene. Therefore, by introducing Handala's story to the experiencers slowly a more meaningful connection could be established.

Also, given that Handala is a ten-year-old boy, this needed to be reflected in the way the experience was constructed. The narrative should come from the perspective of a child talking to adults. Moreover, Handala needed to connect with the narrative visually. For example, since Handala is acting like a guide, Participant 5 questioned how can Handala truly take the role of a guide. And by placing Handala at the centre of the narrative, everything should be built around him, for example, the camera position, the way the experiencer moves in the VE, their different paces and so on. Participant 9 suggested that Handala could explain who he is and why we cannot see his face while jumping between the different screens to guide the experiencer's attention and then for Handala to invite the experiencer to follow his pathway. On the other hand, a couple of participants attributed not connecting with Handala due to the fact he is always running ahead of the experiencer, and they felt they needed to catch up. The participants felt disconnected because Handala was always at a distance from

them. Having said that, Participant 13 felt that this disconnection added to the overall experience.

### No Virtual Palestinians

Another important reflection by one of the participants, Participant 6, was the absence of Palestinians in the VE. He remarked on how the experimenter and Handala are the only two people, which is at odds with the reality of these checkpoints. So, he questioned how can the feeling of over-crowding be delivered without having to populate the VE with figures.

### 7.3.3 The Experiential Framework

The majority of the participants felt more connected to the video projections. They found the content highly emotive and engaging (Figure 7.17). Some of the footage was found to be confronting, especially the ones about crossings and checkpoints. In general, the participants wished they had more time to watch all the videos.

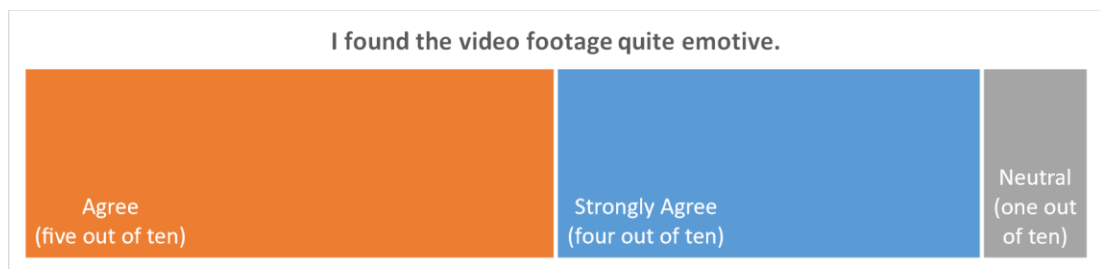


Figure 7.17: The content of the videos.

While participants engaged more with the video projection than the VE, they still appreciated the need for both. Participant 8 commented how he found the VE helpful in contextualising the content of the videos despite not offering him any emotional connection per se.

An important suggestion that was made is to bring the VE and video projections closer together, so the transition of the attention between these two become seamless. The participants also suggested simplifying the navigation of the VE and allowing the videos to talk more.

## The Use of Mixed Media

Three out of ten participants felt that the presence of more than one source of information at any given time was overwhelming and distracting for them (Figure 7.18). Having the text information overlaid on the main wall at the same time while a new video was being projected on the other two walls was confusing. Participants felt unsure where to place their attention. So, they either had to skip reading the text or not watch the video projection. Another element that added to this problem was the fact that most of the videos had Arabic voices so to understand what was being said the participants had to watch the video and read the subtitles.

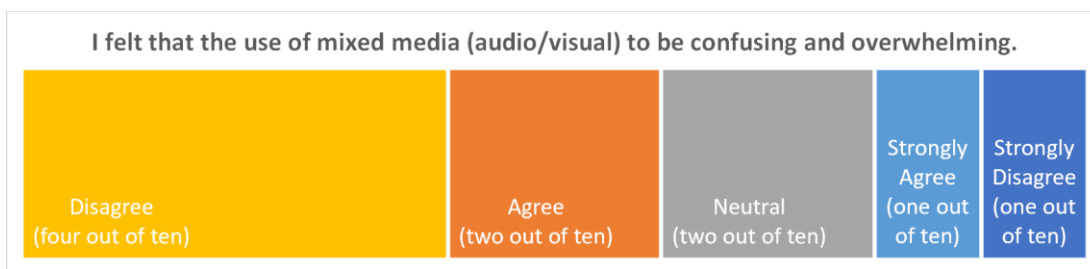


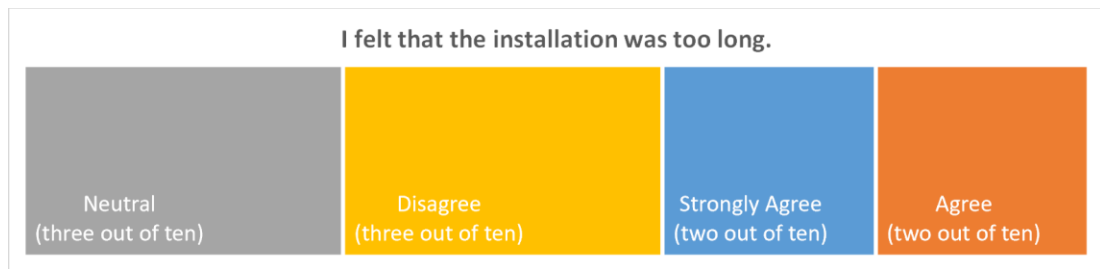
Figure 7.18: The use of mixed media.

Additionally, the use of two identical screens for the video projections was causing unwanted tension. Some participants felt aware of themselves choosing to look at only one side even though they knew that the two sides were identical. This tension did not contribute to their experience, though as Participant 6 suggested, it could be woven into the experience in the future development of this work.

## The Duration of the Exhibition

A full exhibition run would take up to one hour. This was a source of concern for four out of ten participants who found the experience to be too long (Figure 7.19). They noted that it is hard to engage people in an art gallery for this extended time. So, they suggested that a shorter version must be made.





**Figure 7.19: The duration of the exhibition.**

Participant 1, who is an artist, reflected on her attempt to classify the work, whether it was an art piece belonging in an art gallery or a display of information belonging in a museum. She said that this attempt at classification affected the way she interacted with the exhibition. Another participant commented on how this work could be viewed in the future, whether it will be part of a show or a show on its own. These remarks would help identify how the work is being presented to the public, which in effect will determine how “long” people might be willing to sit with it.

One of the participants felt that other participants in her group were progressing too quickly and she did not have enough time to absorb what was being presented.

Another important remark was made by Participant 6 who suggested that this type of work should be presented where no one is allowed to enter once the journey through the VE starts, but still permit experiencers to leave whenever they feel like it. For him, it was important that the experiencer gets the experience from the beginning.

### **7.3.4 The Visual Aesthetic Framework**

In general, participants felt that the aesthetics could be more enhanced and refined. The interface can be worked more on to enrich people’s experience – for example, having a reset button to help the experiencers if they get stuck.

One participant suggested adding smells to this experience, for example, having different aromas to accompany the first scene in Jaffa will enhance the experience.

A couple of participants questioned the invisibility of the triggers in the VE. They felt that the lack of visual or audio cues for these triggers created a disconnection

between the superimposed textual displays, not being able to move forward, and the new video being projected.

The participants felt that the ability to move forward in the VE and skip over videos was annoying and overwhelming. The majority of participants were in favour of having the videos appearing inside the environment or at least in the same field of view while others preferred having two separate projections, one each for the video footage and the VE.

## The Use of Sound

Most of the participants felt that the use of sounds in the VE was effective in engaging their attention while navigating the space (Figure 7.20). However, one of the participants suggested working more on getting the 3D effect of the projected sounds in the space which can increase the ease of navigation in the virtual environment.



Figure 7.20: The use of sound in the exhibition.

## 7.4 Summary

In this chapter, I have documented the process of choosing the test group and setting up the prototype as an exhibition to be tested. I have also explained the different methods used to capture the feedback from the testing process. This process involved video documentation, audio recording and a questionnaire. These different methods provided a rich collection of findings. The findings were then presented through four main frameworks; the interactivity, the conceptual, the experiential and the aesthetic, which focused on key aspects of the exhibition design. The different themes and issues that were discussed by the test group fed into these four frameworks and overlapped between them. I presented those findings as the participants communicated them.

In the following chapter, I will further analyse these themes and issues. I will also discuss these findings in relation to the initial design considerations and the design decisions and process including self-reflection that governed and shaped the design of the prototype.



## **Chapter 8. Discussion of the Design Considerations, Decisions and Testing Feedback**

### **8.1 Introduction**

In the previous chapter, I discussed the process of testing and evaluating the prototype “re:Visit Palestine”. I explained the process of choosing the test group and setting up the spatial experience for the test run. I then presented the feedback I got from the participants through the different methods I used to collect that feedback. Their feedback was summarised through four main frameworks and via major themes that were commonly discussed among the participants.

In this chapter, I will be discussing these common themes and issues that emerged from the design process and the testing of the prototype. In the first section of this chapter, I will examine how the design decisions and the testing feedback related to the initial design considerations. This is the first step in evaluating the potential of the design by comparing the outcomes to the initial intentions. In the following section, I will discuss in detail some of the major issues and themes that emerged from the test feedback. I will relate those themes to the design decisions that shaped the prototype and my self-reflections during the design process of the prototype.

### **8.2 Did the Design Achieve the Initial Set of Design Considerations?**

In Chapter 6, I explained how the first stage of the background research has led to outlining the design considerations that should govern the process of designing the prototype. The design considerations were informed by the background research, including the findings from the case studies on experiential memorial spaces and the visual and thematic mapping of the Palestinian visual culture production scene.

These design considerations informed and directed the design process of the prototype. In this section, I will reexamine these considerations, evaluate how the design of the prototype responded to them, and how the test participants reacted to the

prototype design based on these considerations. This is the first step in discussing the findings that emerged from the creation and the testing of the prototype.

- **The design solution had to convey the spatial and experiential aspects of occupation and apartheid.**

This point was key to the creation of the virtual environment (VE) and the design of the intended experiences inside that environment. The prototype design has managed to bring spatial and experiential qualities of the occupation to the experience of the exhibition.

A notable example is the checkpoint in the second scene in Jerusalem. The VE contained a virtually recreated checkpoint that showed the spatial experience inside checkpoints. The journey inside the VE at that checkpoint illustrated the complexity of the identification cards system and how it controlled who can cross that checkpoint. At that same point, a video showing footage from a real checkpoint in Jerusalem was being projected. The video showed Palestinians cramped inhumanely inside metal channels (Figure 8.1).



**Figure 8.1:** A screenshot illustrating a point in the Jerusalem scene. The experiencer is inside a checkpoint card while the video shows Palestinians attempting to pass through the Qalandia checkpoint in Jerusalem.

The test participants discussed how such juxtaposing of the virtual environment and real footage gave them a better understanding of how occupation affects the everyday experiences of Palestinians. The test participants agreed that one of the most prominent experiences in the prototype was the restriction of movement and confinement. This was one of the key themes that the prototype intended to address and it succeeded in communicating that to the participants as they felt that their movement was being restricted. However, the participants felt that these experiences of movement restriction and confinement could be further expressed through intervention with the physical space of the gallery using real props. This specific point

of relying solely on digital media versus utilising physical props in the real space will be further discussed in the following section.

- **The design solution had to be based on a narrative and facilitate interactivity.**

Narratives are used in memorial museums as discussed in Chapter 4. The overarching narrative that was created for this prototype adopted the three-act structure that is widely used in game design as discussed in Chapter 6 and also used in the design of some memorial museums as discussed in Chapter 4.

The narrative started by laying the foundations of the current situation by addressing 1948 which is when Israel was established, and the *Nakba* of the Palestinians started. The experiencers would move through the different scenes and progress from one time period to another and from one city to another. To help them navigate the VE, I introduced Handala who is a cartoon of a ten-year-old Palestinian refugee boy<sup>1</sup> created by the Palestinian cartoonist Naji Al-Ali.

The test participants appreciated the existing narrative structure. However, they felt that bringing the backstory of Handala more into the main narrative could enhance the overall experience and create a more dramatic and cohesive storyline. This point will be further discussed in the following section where I will examine the role of Handala and how he can help position the experiencers inside the experience.

The interaction was introduced to the experience through navigating the VE. Experiencers had a first-person perspective inside the VE. They could walk in all directions, and look around them, similar to reality. Handala was the connection between the interaction and the narrative. The experiencers had to follow Handala around from point to point and explore different subthemes as they moved. The interaction happened using the Leap Motion. Experiencers had to use certain hand gestures to move and look around inside the VE.

The test participants expressed their concerns about the current interaction setup especially the lack of intuition in using the Leap Motion, which very few participants have encountered before. Their main concern was the high cognitive load of using the Leap Motion which for some participants hindered their ability to engage with the subject matter fully. Thus, some participants felt that the interactive element

---

<sup>1</sup> Please refer to Chapter 6 for more information on Handala and why was he chosen to be the guide.

could be completely taken out of the experience. This point will be further discussed in the following section.

- **The design solution needed to be adaptable to different spaces.**

One of the main objectives of this research is to explore how digital and interactive media can be used as a design activism tool, including the potential of having the freedom from needing to construct any dedicated physical spaces, and be able to set up the exhibition in various indoor and outdoor spaces.

The current setup of the prototype design consists of three projections, two of which are identical. The prototype as it is presently designed can be recreated in any space that has projectors, for example, classrooms or gallery spaces. And it can also be viewed on large computer monitors or TV screens. The use of the Unity game engine allows the exploration of other possible output options, for example, online or mobile devices. Experimenting with other possible output options has not been done or tested in this research due to time and labour limitations and as such are outside the scope of this research. However, this will be one of the major issues to be addressed in the future development of this work, as will be discussed in the following chapter.

The current setup is also easily portable. In most cases, the exhibition will make use of existing setups, which have two projectors, two sound systems, a router and two computers. The only unusual equipment that needs to be brought in is the Leap Motion (Figure 8.2), which is a small device “80mm x 30mm x 11.25mm” and weighs around 45 grams (Leap Motion 2017b). The Leap Motion will then have to be placed on a plinth that can be sourced or custom-made. Having said that, the use of the Leap Motion in this exhibition is still experimental, and with further development of the interaction mode, it might be eliminated from the experience altogether as will be discussed in the following section.





Figure 8.2: The Leap Motion controller.

- **The design solution needed to be dynamic regarding how its content can be updated.**

Memorial and conflict museums are most often dedicated to historical events. Though in some cases, for example, the Australian War Memorial, they can be dedicated to a specific political topic like war including past and any possible wars in which the country might participate in the future. This activist spatial experience is dedicated to a current and ongoing issue. This difference between the two types of spaces means that while the narrative can be static and fixed in memorial spaces, it needs to be dynamic and changeable in the activist exhibitions.

The prototype design made use of video footage that has been sourced online from different organisations and activist groups. So, when new events happen, and new videos of relevance emerge, the video projection list can be edited and updated accordingly.

Using the Unity game engine allows for modifications and real-time importing of various assets into the virtual environment. The level of difficulty in doing that will need to be weighed against how crucial and prominent the event added is to the overall experience. Added complexity may necessitate more powerful computers, larger screens, more expansive interfaces, or even specialist programmers.

- **The design solution needed to be created on a limited budget.**

This research is investigating how activist spatial experiences can be created with and for under-resourced people in contemporary political conflicts. Therefore, one of the main objectives is to explore how this can be done with a limited budget and using low-cost technologies that are accessible and readily available.

The prototype design did not require the building of any dedicated architectural spaces. Instead, the spatial experiences happened inside the virtual environment created for the prototype.

The prototype design did not rely on high-end technologies, for example, high-definition projectors and tracking systems similar to those used in many dedicated spaces of visualisation and virtualisation of big data and research<sup>2</sup>. Using the Leap Motion instead of higher end tracking systems helped in cutting down the cost massively. As mentioned before, the Leap Motion was selling at AU\$80.00 at the time of the research (Leap Motion 2017a). Also, the prototype made use of existing projection setups that can be found in classrooms or art galleries.

The creation of the prototype and the exhibition setup has shown that it can be effectively achieved using a limited budget and by making use of existing resources and low-cost technology. However, the human effort of creating and developing the work has not been calculated. So, for any future development of the work, a clear budget must be outlined. Any future development of this prototype beyond this research will require a larger team to work on its creation and therefore will need a budget. This means that applying for possible funds, grants or support will be required.

Nevertheless, the budget needed for this kind of project relative to budgets needed for constructing dedicated memorial spaces or museums is significantly less. Therefore, this kind of design approach is more efficient to be used by and for under-resourced people in contemporary political conflicts. This designed prototype has demonstrated that this approach is economically and technically feasible without access to large budgets or institutions.

---

<sup>2</sup> For example, Curtin University has the HIVE (Hub for Immersive Visualisation and eResearch). This facility has four large-scale visualisation systems that make use of high-end sensor and projection technologies (Curtin University 2018).

- **The design solution needed to address the needs of a specific audience.**

The prototype was designed for the Western audience with a limited understanding of the Palestinian situation. This meant that key historical events of the situation needed to be explained and laid out at the beginning of the journey. The introduction of Handala as a symbol of Palestinian children facilitated the creation of an emotional attachment between the audience and the narrative.

Another important aspect of having a specific audience is defining the main language of the exhibition. The prototype was designed with the English language as the assumed audience language. Therefore, I had to subtitle most of the videos that were included in the prototype. All the textual displays were written in English. Also, all the external links from the QR codes on those textual displays were directed toward websites written in the English language.

## **Conclusion**

In general, the design decisions responded well to the initial design considerations. All the considerations were addressed in the prototype design. In general, the test participants felt that these considerations were met successfully. However, the test participants discussed the problems and issues with some of the design decisions relating mainly to the narrative, experiences, and interaction, and how they can be refined and developed. I will elaborate on these issues in the following section.

In conclusion, the prototype design has demonstrated the effectiveness of using low-cost technology to create spatial experiences that communicate political narratives, as assessed from the collective responses of the expert test group. At the same time, the design process and the testing and evaluation process have highlighted key issues that need to be improved and worked on to better achieve the intended outcomes of such activist spatial experiences.

## **8.3 Discussion of the Key Themes and Challenges**

In this section, I will discuss the feedback from the testing process in relation to the design decisions and the self-reflection on the design process. This analysis and discussion will focus on principal themes that related to different aspects of the design.

In discussing these issues, I will evaluate the strengths of the current prototype design and how it can be further developed. I will also discuss the challenges and problems of the current design and how this can be fixed or avoided.

### **8.3.1 Using Game Engines to Create Spatial Experiences Based on Political Narratives**

Prominent examples of memorial spaces are war memorials and Holocaust museums. These spaces are based on narratives and spatial experiences that help visitors gain a better understanding of the historical information presented. Constructing such spaces require sizable funding typically not available for under-resourced people in contemporary political conflicts. Creating virtual spaces can be done using low-cost technology. Moreover, the detachment of the experience from a physical space means that the virtual space can be viewed in different ways, projected indoors or outdoors, or viewed on mobile phones or head-mounted displays. Such freedom and portability are great assets for an activist spatial experience project.

Game engines are a powerful tool to create three-dimensional interactivity. Game design methods have been used to create serious games and digital heritage projects. They have also been used to create experiential environments that have no gaming characteristics as Marsh has suggested (Marsh 2011). Using game engines to create politically driven experiences in a non-gaming setting is a relatively nascent approach and is following the continuum that Marsh discussed.

The main reasons for choosing to use the Unity game engine have been discussed in Chapter 6. To briefly reiterate, the main reasons were:

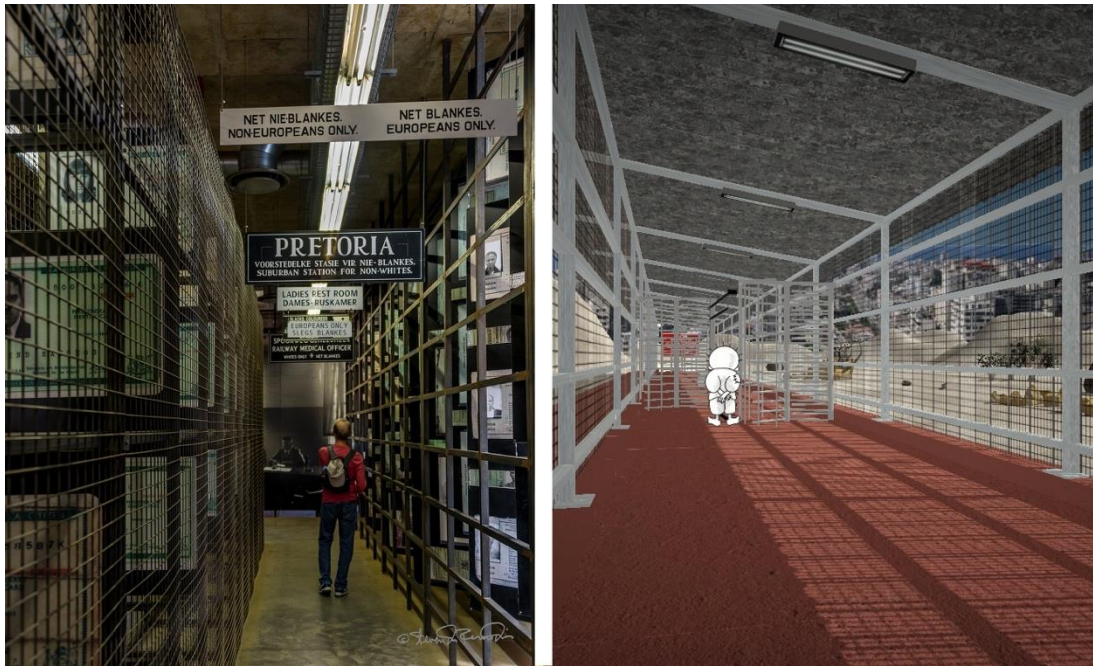
1. Unity game engine created a lot of flexibility in terms of what can be achieved.
2. Unity offers a free personal license under certain conditions that can easily be met in an activist project (Unity Technologies 2017).
3. Unity has good documentation and support.
4. Unity is compatible with several other software, especially those used for 3D modelling.

Using a game engine has prompted some advantages and challenges to the prototype design that were evident from the start of the design process and up to the testing of the prototype.

## **Creating Virtual Spatial Experiences**

The Unity game engine was used to facilitate the intended 3D interactivity of the prototype. Courchesne believes that the next mass medium that societies need to use for their contemporary cultural expressions should combine interactivity, movement and immersivity (Courchesne 2002). Therefore, when designing this prototype, I had to think about how these three elements should be used and combined. As reiterated throughout this research, the prototype is supposed to convey the narrative of occupation through spatial experiences. The prototype had to communicate the occupation's physical interventions on the Palestinian built environment, and how this affects the Palestinians' daily lives.

Having a defined purpose for the VE was important. In this case, the VE was the vehicle to express the spatial representation of occupation by creating tight spaces and blocked access. In creating the VE, I did not look for hyper-realistic representation of the built environment of Palestine. Instead I wanted to facilitate genuine experiences. This prototype provided a "transferential space" where people experience something that did not happen to them (Landsberg 1997). I aimed to give the experiencers a sense of spatial context about the information presented to them via textual or video projections. This is similar to the spatial treatment inside the Apartheid Museum (AM) in South Africa. Inside the AM, visitors had to walk through caged mazes while various media and textual displays were scattered along their journey through the mazes (Figure 8.3).



**Figure 8.3: A comparison between the Apartheid Museum in South Africa and the VE in the Gaza scene.**

In this prototype, the experiencers would experience the difficulty in moving from one space to another through their own movement inside the VE. At the same time, there was a sense of ambiguity about what is coming next and where they are heading to. This experience echoed the uncertainty experienced by Palestinians in their real lives. For example, even when crossing the same checkpoint as part of their daily routines, Palestinians do not know when this process can be interrupted, suspended or stopped.

Indeed, one of the prevailing experiences that the test participants focused on was the restriction of movement imposed on the Palestinians. This experience was communicated in the VE at the checkpoint in Jerusalem in the second scene. The experiencers had to repeat the same journey by using different identification cards and then explore what kind of privilege or disadvantage each identification card held for them (Figure 8.4). The interaction within the VE is then amplified through the immersion with the video footage which together gave a complete experience. As the feedback from the test participants showed, almost all the participants felt that they gained a better understanding of the Palestinian situation and therefore felt more sympathetic toward Palestinians.

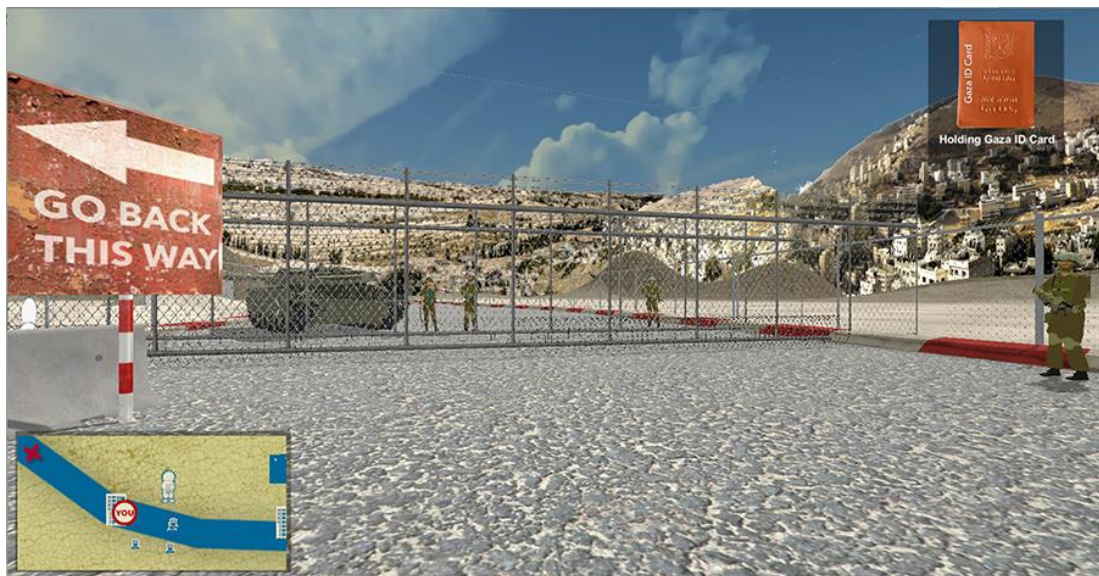


Figure 8.4: Top image shows the information presented before attempting to pass through a crossing in Jerusalem while holding a Gaza ID card. The bottom image shows what the experienter will encounter as they proceed at the Jerusalem scene in the VE.

## Interactivity and Audience Engagement

Interactivity is a major issue that the participants discussed. Some of the participants felt that the interaction is not an essential part of the experience and can be removed altogether. I think that this was due to two reasons. Firstly, there was the difficulty in using the Leap Motion, which will be discussed later. Secondly, there was the emotive connection between the participants and the subject matter which happened due to the video footage. However, one of the participants clearly stated that presenting the footage within this experience created a different connection as opposed to presenting footage in a documentary style. The relationship between the virtual

environment and the footage as two separate channels needs to be maintained. Yet, these two channels should continue to complement one another and help in creating an immersive affective experience.

### **No Gaming or Gamification**

As explained before, this prototype is not a serious game. But at the same time, it does not use gamification. The reason is that what gamification borrows from the game design discipline is different to what this design does. This design process is using tools and principles from the process of game design rather than borrowing characteristics of the final outcome of games in general. This means that as a designer I am using a designer tool in a similar capacity to its intended use but for a different outcome unrelated to games or gaming. This is what Marsh discussed in his proposed serious games continuum (Marsh 2011). He talked about using game engines to create experiential environments that have serious purposes. This is what this prototype is doing exactly, creating an experiential environment that serves a design activism purpose.

Steering the experience away from any gaming connotations stems from sensitivity regarding the difficulty of the subject being presented. It is vital when presenting difficult cultural or political material to a mainstream audience to stay mindful of the way it is being presented and not trivialise the subject matter. For this prototype, the experience was not aimed at whitewashing the occupation. Palestinians have suffered from occupation and still do, for over seventy years. Their struggles are real, and their livelihoods are difficult. People coming to this experience can be exposed only to a glimpse of that harsh reality. So, it is important that the experiencers get positioned appropriately within the experience. Their positioning is further clarified using the character, Handala, as their guide, as I will explain later in this section.

### **Enjoyment**

Another important challenge of using game engines is the element of playfulness and enjoyment that interaction usually instigates. Demanding interaction from the experiencers engages them on multiple cognitive levels. Play is considered a tool that engages curiosity (Schell 2015). Thus, as the experiencers interact with the



VE, they become more alert to what they are being presented. At the same time, engaging their sense of curiosity creates enjoyment and excitement. This enjoyment, as noted by one of the test participants, was a way to ease the experiencers in before presenting them with the difficult subject. However, relating this back to the issue of sensitivity towards the subject matter raises an important consideration. It is important to keep a balance between enjoying the experience and relating to its difficult subject.

In conclusion, using game engines to create a spatial experience was efficient and helped in engaging the experiencers inside the virtual environment. Using Unity has provided a manageable way to create the 3D world that can be navigated. However, the level of interactivity can be worked on more in the future – for example, through limiting choices and having the interaction happening on a predetermined path thereby only giving the illusion of the interaction. This will be further discussed in the following chapter.

### **8.3.2 The Use of the Leap Motion Controller**

Choosing to work with the Leap Motion was an experiment. The Leap Motion, in general, was still gaining traction at the time of designing the prototype. Therefore, using the Leap Motion presented several technical difficulties. For example:

1. The Leap Motion at the time of design was not supported by Unity on the Mac operating system.
2. To communicate between the Leap Motion and Unity, extra coding was needed. The code used was created using the Processing application specifically to fit the needs of this prototype.
3. The Leap Motion is not usually used to control a first-person controller (FPC) inside Unity game engine. Usually, it is used to mimic hand gestures in the virtual environment rather than control a person's movement.

These technical limitations resulted in experiencer experience difficulties. As evident from the testing of the prototype, the major challenge with using the Leap Motion was the cognitive load needed to figure out how to use it. The Leap Motion is relatively novel. So, even though eight out of ten participants stated that they are comfortable using technology and six stated that they are comfortable playing videogames, seven still found using the Leap Motion difficult. An intuitive interface

should be easily and quickly understood, predicted and used (Jerald 2016). In using the Leap Motion, the simple hand gestures of lifting the fingers up and down to look up or down, or moving the hand forward or backwards to move forward or backward in the environment, or tilting the hand right or left to look right or left, did not feel intuitive enough for the test participants. This is most probably because of the large margin of error and inaccuracy that was caused between the communication of the hand gestures to the Leap Motion and then to the FPC inside the VE.

This difficulty in using the Leap Motion reflected badly on the whole experience, and many participants felt that the interaction was not needed as it took away time and effort that should have been used to engage with the narrative. This indicated that while interaction in spatial experiences might be important, having that interaction happen seamlessly is crucial to making it meaningful.

Champion emphasises the importance of having the immersion within cultural learning spaces engage people in spatial and thematic ways (Champion 2015). Furthermore, Dourish emphasises that testing any controller should not focus on its technicality at the expense of the sort of experience it should achieve (Dourish 2006). For this prototype design, it was important to maintain the nongaming nature of the experience as explained in the previous section. Thus, choosing the Leap Motion, which is not a game controller, made sense. Another important factor that emerged is familiarity. The ambiguity in using the Leap Motion created confusion, as many participants had not used it before. So, an important issue that the prototype failed to address is familiarising the experienter with the interaction device.

Five out of ten participants stated that they felt there was a lack of instructions on how to navigate the virtual environment. One way to overcome this could have been through conducting a pre-training session before commencing the experience. When using a novel interface, this usually works. The experiencers get an induction session where the technology and how to use it is explained and demonstrated. However, I think this solution is not suitable for this kind of experience. The technology is not used to impress; it is a vehicle. Therefore, the focus is on the material presented, not the technicality or novelty of the exhibition. Also, the experience as it is now is a long one so adding more time before explaining how to use the technology

will make the duration longer and this can have a negative impact on how much time the experiencers can commit to this experience.

Instead of a dedicated pre-training session, introducing the interaction device can happen as part of the experience. This means that the design needs to facilitate the building of the experiencer's confidence in using the Leap Motion inside the virtual environment as part of the whole experience. For example, as one of the test participants suggested, during the first scene in Jaffa pre-1948, the experiencer can learn how to look around in different directions, how to move forward and follow Handala. In this way, the experiencer will steadily gain more confidence and understanding of how the Leap Motion is working, without having to engage with a lot of information or content. The experiencer's cognitive load will shift in focus from figuring out how to navigate the environment to experiencing that navigation in context with the information presented. This will weave the technicality of the navigation back into the experience. Once experiencers move forward and start having difficulties in moving around, their innate experiences become formed both by the navigation and the content. Having a progressive understanding about the ensuing restriction in the freedom of movement will therefore allow the experiencer to realise that this is part of the narrative rather than their failing at using the technology. This can ultimately drive any frustration or difficulty in moving around in the environment from being bad usability to understanding it as an intentional part of the experience. I think that this responds to Champion's and Dourish's concerns about using interactive technology as tools in cultural learning experiences (Champion 2015; Dourish 2006).

In conclusion, while using the Leap Motion has caused unwanted hindrance to the experience, it can be addressed rather than dismissed altogether. The technical limitation of how the Leap Motion was programmed to communicate hand gestures into movement in Unity was a defining factor. Since the time of designing the prototype, new technical changes might have occurred that might facilitate better use of the Leap Motion for the purposes of this prototype. There are also a few solutions to move forward with using the Leap Motion or other possibilities that will be discussed in the following chapter.

### 8.3.3 Relying Solely on Virtual Environments versus Using Physical Props

Restriction of movement was the most evident theme of the whole prototype experience. For example, in the second scene, the combination of the repetitive attempts of accessing Jerusalem, in the VE, using different identification cards on the one hand and the selected videos projected on the other hand amplified the restrictions and confinement that Palestinians endure (Figure 8.5). Many participants felt compelled by the footage of Palestinians crammed at Qalandia Crossing in Jerusalem. They expressed how such footage is rarely shown on mainstream media, yet it demonstrates the horror and the humiliation of living under occupation.



Figure 8.5: Palestinians crammed at Qalandia crossing. Image still from a video. Reproduced from B'Tselem website (B'Tselem 2018).

Despite having this strong impression on the test participants, they felt that this theme could be further dramatised and expressed in the real physical space of the exhibition. For example, some of the participants expressed how constructing real physical barriers in the exhibition space, whether a carousel or a small booth that the experiencer has to enter for the experience, can extend the confinement feeling beyond the virtual world. They explained that the addition of real physical barriers would put the experiencers in a different mindset where they might feel more uncomfortable or even claustrophobic. Indeed, the moods we have before we experience something affects what happens afterwards (Ahmed 2004, cited in Waterton 2014, 827). Thus,

having the experiencers feel confined and uncomfortable will prompt them to interact and engage with the subject even more.

VR and interactive media usually allow freedom of movement. As one participant pointed out, it is the established paradigm of VR to have that freedom. So, using VR to deliver restriction of movement is going against VR conventions. This can be a powerful statement in itself as an activist spatial experience that is going against “the establishment”. On another level, it has a deeper message for the Western audiences who expect freedom of movement, as a civil and human right, and expect it to be granted by default. So how would they feel if that freedom is compromised or taken away? Using VR in this way serves this purpose. The designer has confronted the experiencer by taking away a given right of VR. This must nonetheless be done in a way that makes it easier for the experiencer to understand and internalise this experience rather than assume it is a failed experiencer experience and due to poor usability. In this prototype design, the use of the Leap Motion has probably brought about confusion because the participants blamed the Leap Motion and its programming rather than assign their frustration or inability to move freely and easily to a purposefully constructed experience.

Relying solely on the virtual environment to convey the restriction of movement and confinement was not enough. Three main reasons contributed to this. Firstly, the design decision not to include any virtual Palestinians. This meant that the virtual spaces were not crowded and had no non-player characters (NPCs) which effectively lessened the effect of entrapment and confinement. Secondly, using the Leap Motion, which had no tactile interaction between the experiencer and the exhibition. Because the Leap Motion detects hand gestures in its field of vision, the participant’s hand moved freely in the space above the Leap Motion. Thirdly, the participants had relative freedom to move around in the virtual environment and had a wide field of vision.

These reasons highlight a way to move forward by finding ways to amplify the entrapment and confinement in the virtual environment and the exhibition space. This can happen by looking at other possibilities of interaction devices to compensate for the tactile interaction between the experiencer and the exhibition. Also, through enhancing the technicality and ease of use of the interaction device, the experience can

be pushed more to restrict the movement in the virtual world in a deliberate and meaningful way. The amount of freedom given to the experiencers to navigate the VE in relation to the context of each scene can also be changed accordingly. Subsequently, the use of physical props, large or small, can be addressed through the creation of the interaction device. So, even something like the Leap Motion can be masked in a different way than being placed on a plinth.

On the other hand, one of the main considerations for this design was to be as easily portable as the design permits. Moreover, the design should not be site-specific and as such behave like an easily constructed pop-up/intervention exhibition. These points need to be weighed against any physical props constructed. However, creating more meaningful experiences should be the main concern when alternating between the virtual and real spaces.

In conclusion, the question remains as to whether there should be any physical props to aid the experience and how they can be integrated with the rest of the design. Different issues will ultimately direct the future design development as will be addressed in the following chapter.

### **8.3.4 The Presentation of Digital Online Footage**

There is a huge depository of archival and current footage relating to the political situation in Palestine. Some of the footage included in the prototype came from organisations working with Palestinians like B'Tselem, or news cooperations like Al Jazeera and its offset projects like AJ+ and Palestine Remix. Most of the participants found the footage highly emotive and informative. The content of the footage helped in creating an affective connection with the subject.

Feldman argues that sometimes people need a frame to be placed on conventional events for them to discover different meanings, and that this discovery can create new perceptions of their social reality and that of others (Feldman 1972). Presenting the footage, which is readily available online, in this context created a different kind of viewing exposure. The footage stepped away from being documentary, vlogging, or news into an embodied experiential narrative. By juxtaposing the footage and the virtual environment, the experience moved from being

an abstract virtual journey into an affective and spatial communication of a real-life situation.

The footage was carefully selected after watching more than 100 hours of footage. The content of the footage was contextualised within specific points in the narrative and related to the virtual environment. This meant that the footage helped the experiencers build their own experiences and engagement with their navigation of the virtual environment, creating a good understanding of the subject matter at any given point. For example, towards the end of the first scene in Jaffa, the experiencer enters a refugee tent, and at the same time, a video of an old lady living in a refugee camp in Lebanon starts playing. The lady talks about her experience of being expelled from her village in 1948 and how that displacement has affected the rest of her life. The experiencer listens to her difficulty in having no country, no family, no identity, and no official documents while waiting in the dark refugee tent with only Handala standing there (Figure 8.6).



**Figure 8.6:** A screenshot illustrating a point in the experience. The experiencer is standing inside a refugee tent while a video of a refugee old lady is being shown.

Another advantage of using online footage is their currency. This is particularly important in an activist spatial experience that is communicating an existing political situation. So, having the flexibility to update the content of the exhibition is beneficial. Having the footage sourced online means that we have access to up-to-date footage as soon as they emerge online. This will allow for fluid shifting of the highlighted themes within the exhibition. Major events, for example, military operations, can be reflected in the experience of the exhibition. The ability to update the content of the footage will adjust the engagement between the experiencers and the exhibition to respond more accurately to the current reality of the situation. Using online media in this sense liberates the experience from being rigid, irrelevant or outdated. Also, using footage from different sources brings credibility to the stories

being shared, as the people featured in the videos are from all walks of life and with different or no affiliations.

However, using existing online footage has an important issue to be considered which is copyright. For this prototype and with the limitation of this research, I did not seek official permissions to reuse the footage. However, each of the video files presented had clear opening credits stating who made the original video and in what year. For the future development of this work, there are two possible ways to deal with this issue. Firstly, contacting the original creators or distributors of the videos to ask for their permission. Since the footage comes from organisations that are either activists in relation to the Palestinian situation or promoters for the rights of Palestinians, they would want these videos to be shared and spread. Explaining how the footage is being used or represented within this experience and maintaining the copyright of the original sources will hopefully help in gaining a positive response. The other way forward can be streaming these videos from their online sources. In this case, other technical issues might emerge that will need to be addressed.

In conclusion, this method of presenting online digital footage in an interactive exhibition projected in different physical spaces will provide connections between the different activists on the ground documenting and sharing their stories online, and the common people who might have no interest or knowledge about this particular political situation.

### **8.3.5 The Use of Multiple Projections and Multimedia**

The final design of the prototype used three adjacent wall projections. The main central wall had the projection of the virtual environment, while the two side walls had identical projections of the video footage. The side walls were black until a video played when the participants reached an invisible trigger in the VE. When a video was being played, the VE was dimmed down, and a textual display appeared overlapping the dimmed VE. That textual display had information relating to the specific point reached in the narrative and a QR code, which if scanned on the phone, will take the participant to a relevant website (Figure 8.7).





**Figure 8.7:** During a test session demonstrating a point in the experience with a text display in the middle and video projected on the side walls.

The test participants highlighted some challenges that were caused by the prototype's setup. One of the challenges was the use of identical projections on either side of the exhibition. While visually it looked good, it also created an unwanted tension for the participants as they felt they needed to focus on one side and by doing so, they became conscious of their choice. However, because both sides were identical, having to choose between them did not add anything to the overall experience.

One of the participants suggested that if the two projections had different images, for example, one from the Israeli point of view and the other from the Palestinian point of view, then having to choose where they placed their focus becomes part of how they are experiencing this work. This makes sense and enhances the overall experience. However, as I discussed previously, there is a conscious and fundamental reason for focusing only on the Palestinian point of view. So, another way forward can be by examining what other two footages can be projected. One possible choice can be projecting silent footage from the Israeli side. By silent, I mean general footage showing everyday life in Israel with no Israeli narration of their point of view. Having

this contrasted to the Palestinians' realities will highlight the Palestinian point of view. The experiencers will come face to face with the stark contrast between these two realities happening in very close proximity. In this case, showing the two sides, "Israeli vs. Palestinian", will illustrate the apartheid policies against Palestinians.

Another solution could be to include solidarity voices projected on one side and the Palestinian voices on the other. This is not meant to create division but to distinguish between talking about Palestinians and the representation of the Palestinians' lived experiences. These two sides should help the experiencers shift their positionality within the experience and help them broaden their "listening" abilities. This will be further discussed in later in this chapter when I discuss counter-narratives.

Another challenge that was caused by the current setup is the overwhelming use of multimedia at certain points. For example, when a video has been triggered and been projected on the side walls, the main navigation on the central wall simultaneously had a significant amount of text to be read. This has caused a problem with the participants, as they did not know where to place their focus. Three out of ten participants felt that the use of multimedia was confusing and overwhelming. Two out of ten participants remained neutral on this subject. During the test sessions, I noticed that some of them focused on reading the textual display, some shifted between reading and watching the videos, while others ignored the textual display altogether and placed their focus on the videos only. This is a weak point in the current design and should be addressed. At any given time, there should be only one source of information demanding direct attention from the experiencers. The experiencers should only choose from where to place their attention if that choice was part of the intended experience.

Another vital point that was raised about the use of multiple projections was the placement of the projections in relation to the participant standing in the middle. The main projection where the navigation was happening took centre stage and was the focal point for the participants. However, the footage, which had the stronger emotive connection for the participants, was projected on the peripheral field of vision. This arrangement created unpleasant visual connections between the participants and the content. Many of the test participants suggested bringing the video projections closer to the middle.

Another solution might be guiding the change of the experiencer's field of vision by completely dimming the central projection. This will allow the experiencers to not only shift their field of view but also shift their positioning from actively following Handala in the VE, to silently hearing Palestinians' real-life stories. In this case, it is important to think where Handala can be placed. Whether he should travel to the video projection screens, wait silently in the dark central screen, or disappear totally are all possible options that need to be tried and evaluated. In the following chapter, I will further discuss how the use of different screen arrangements will change based on how the exhibition is being adapted to different exhibiting venues including mobile phones and online viewing.

Another important issue that needs to be addressed is the use of audio cues to guide the experiencer's attention and create a better sense of immersion inside the VE. The majority of the participants felt that the sounds were effective in gauging their attention while exploring the VE.

The audio cues were placed in conjunction with certain themes within the journey. For example, when the participants started the journey near the sea, they heard the sound of waves diminishing. And when they ended their journey approaching the sea, the sound of waves started increasing. This audio treatment alluded to how in Jaffa (first scene), Palestinians who were forcibly removed were denied access to the sea, and in Gaza (last scene), Palestinians are denied access to the sea despite being so close to it. This complex relation to the sea is one of the major themes in the Palestinian visual culture scene as discussed in Chapter 5.

So, the use of audio cues shaped a soundscape that created different moods between the different scenes. However, some of the participants suggested amplifying the effect of audio cues by linking them to certain actions within the experience – for example, when an invisible trigger is being triggered, and a new video is being played. This might help the experiencer anticipate a future recurrence of this shifting between the different media presented. Ultimately it can help tie in the multiple projections better and enhance the overall structure of the exhibition.

In conclusion, the use of multiple projections should aim at creating a completely immersive experience, not an overwhelming one. The choice of how the different media can be presented should be informed by other design considerations

that take into account the amount of information presented, the type of media used, and how the visitors' bodies and perceptions should be shifted within the experience.

### 8.3.6 Employing Cultural Icons as Guides

In Chapter 6, I explained the rationale behind using a guide in the VE and why Handala, in particular, was chosen to be that guide. Being a guide, Handala became a central element of the experience. Moreover, Handala is the only Palestinian appearing in the VE. Therefore, addressing his presence and how the test participants reacted to his presence was a pivotal point in the discussion following the test sessions.

Six out of ten participants stated that they did not have any emotional connection with the character of Handala. This highlights an important weak point of the design because Handala, the only Palestinian character appearing in the VE, did not manage to engage the participants on an emotional level. There are several reasons for that. The first reason is the visual presentation of Handala. As explained before, Handala is a caricature created in the 1970s and, as such, the way he looks is sketchy and rough. Having that contrasted with the digital 3D imagery of the virtual environment (Figure 8.8) felt odd to many of the participants. The second reason is the ambiguity in how Handala was introduced to the participants.



Figure 8.8: Handala walking in the first scene in Jaffa.

In the introduction scene, before the start of the virtual journey, there was a textual display of the backstory of Handala and his creator Naji Al-Ali. This display

of vital information did not aid in connecting Handala with the rest of the experience and ultimately with his position as a guide. There was a large sum of text to be read, and the experiencers were not yet engaged or focused on taking that amount of information as it was presented. One of the participants mentioned another reason, and that is Handala was constantly ahead of them, and they had to follow him around. Thus, there was no time and space to form a connection prior to starting the journey with him. Some of the participants missed the introduction scene, and while experiencing the exhibition, they would ask others in the space about Handala. When some information was given to them, they felt a shift in their attitudes towards Handala.

The key way to address the relatively unsuccessful role of Handala is by explaining his backstory within the journey itself. Introducing Handala through the journey can also address his visual appearance within the VE. For example, there can be a gradual transformation of Handala from a real/virtual 3D boy into a ghost-like cartoon that exists in contrast to the environment. In Figure 8.9, I created a conceptual image using the same screenshot of the virtual environment as Figure 8.8. I added a 3D model of Handala which was created by James Swift. The 3D Handala seems to fit better in the VE. However, all the reasons explained previously that led to the choice of including Handala as he was originally created by Al-Ali are still important and need to be addressed. So, further exploration and experimentation are needed to see how can his 2D image be better integrated with the virtual environment, if possible.



Figure 8.9: A conceptual image of how a 3D Handala will look like in the virtual environment.

After presenting his original backstory to the experiencers, the next step should be maintaining a strong connection between Handala's story and the narrative. One of the participants discussed the importance of having a child's view reflected in the camera positioning as well as the pace and exploration of the space. What was missing from the design is an investigation of the duality between a child's view and the role of a guide. In fact, in one of the videos projected in the exhibition, two children were filming their environment and exploring it with us. The footage was created by Muhammed and Muna Al Qurd (12-year-old twins) and published by the *Guardian* (The Guardian 2011).

The children, Muhammed and Muna, took us through their neighbourhood in East Jerusalem. They showed us their house and the nearby playground which they cannot access fully and might be closed by the settlers whenever they want to do that. They also mischievously went to a settlement before getting scared and started to run away. Their pace varied, and their camera looked in different directions; for example, one time it was looking down on the path they were walking on (Figure 8.10). Videos like this provide a good case study to understand how children guide people through their worlds. By closely examining similar videos, I can make more informed design decisions about how to move the camera around the VE, how Handala can move, and how the experiencers can follow him.



Figure 8.10: Screenshots from video made by two young Palestinian twins about living in East Jerusalem (The Guardian 2011).

In conclusion, when using an existing character or a cultural icon, the backstories or concepts related to that character must inform the narrative and experience inside the exhibition. This must be done in a way that respects the original creator and the backstory of that character. At the same time, the designers should be mindful and aware of the implication of that backstory on the narrative they are creating, making sure to weave the story and the visual aspect of that character into the “new” design. This means that any adaptation or changes to the character must be done in a way that is respectful to the original creator and to other people who already know the character and have an emotional connection with it. Whether people have

any prior knowledge of that character or not, they must reach a good understanding of how this character fits in with the narrative and how his/her presence affects the overall experience.

### **8.3.7 The Duration of the Prototype**

Previously, I discussed how memorial and conflict museums employ narratives in their design and create different spatial experiences that guide the visitors through the assigned narratives. Visiting these museums usually requires a substantial amount of time that can range from two hours to half a day. In this prototype of an activist spatial experience, I had to pay attention to how much time I am assuming the experiencers will spend with the exhibition.

The prototype was initially designed to be around one hour long. However, prior to the test sessions, I modified the design to around 30-40 minutes. When asked if they felt the experience was too long, four out of ten participants agreed, and three out of ten remained neutral. This raises the need to reconsider the duration of the exhibition.

A defining element in the duration is the pace at which the experiencer can progress through the experience. The pace will change according to two main factors. The first factor is the ability to skip through videos versus having to watch each video fully. This is a design decision that I kept playing with. For the test sessions, I allowed the participants to skip through videos by freezing their ability to move forward in the VE for only thirty seconds. However, these thirty seconds were initially set up to the exact duration of each video played at a certain point in the journey. But because I wanted the participants to move faster through the overall experience, given the time limitations I had, I shortened the freezing duration.

The second factor is how many people are expected to experience the exhibition at the same time. During the test sessions, two or three test participants were available. This meant that there was more than one person to control the Leap Motion and ultimately the journey. The participants reported that they felt anxious when controlling the Leap Motion and moving forward that they might be moving too fast for the others. If this was a one-on-one experience, then the experiencer can determine the pace and move accordingly. However, if it is done in a group, the dynamics will



ultimately change based on the one person who decides to control the movement and the pace.

These two factors must be weighed in relation to other design decisions related to the exhibition in order to achieve the right balance between duration and pace. This issue will be further discussed in the following chapter.

The substantial viewing duration of this exhibition has several implications on the experiencers' preparation and expectation prior to the start of the experience:

1. The experiencers need to have a good understanding of what they are about to experience especially in terms of time commitment.
2. It is expected whenever counter-narratives or difficult polarising subjects are being introduced that some people might want to leave. So, the experiencers need to know that they can leave whenever they want, but realise that they will not have finished the full experience as it was designed.
3. The experiencers must be familiarised with the interaction devices before the start of the experience. This was a substantial drawback in the prototype design. The choice of using the Leap Motion brought novelty to the exhibition on one hand. But it was not refined enough to make it intuitive and foolproof to shift the focus on the content rather than the interaction mode as was discussed earlier in this chapter.
4. The guide Handala needs to be fully introduced at the beginning of the journey. This will allow the experiencers to better identify with Handala from the onset. This will also help the experiencers position themselves in this journey and in relation to Handala as their guide.

In conclusion, the duration of this experience can vary based on where the exhibition is being projected and how many people are viewing it at any given point. The ratio between the duration and number of experiencers is most likely to be in inverse proportion. This means that the larger the number of experiencers is expected, for example, passers-by in an urban plaza, then the shorter the experience needs to be. And if the experience turns into a one-on-one experience, then it can be longer. But what is key in promoting this experience is defining what it is and preparing the experiencers beforehand so that they can engage better with the exhibition.

### **8.3.8 The Interface and the Visual Elements of the Design**

Because this exhibition was only a prototype, fine-tuning the visual aesthetic aspects of the visual design was not a priority. Therefore, one of the key developments of this prototype will be working on its aesthetics.

Following the testing of the prototype, many participants expressed that the interface design needed more work to create a finer and more contemporary visual look. So, in the future development of the exhibition, paying attention to visual aesthetic elements like the colour scheme or typefaces used is crucial. The general interface will also need to be reworked based on the new narrative proposed. This will determine if certain elements are still needed and what elements must be added. For example, in the current design, a navigational map was provided, but only one participant commented on its placement. This raises the question about whether the map played any role in guiding the participants through their journey.

The QR codes were another element that was used in the prototype but only one participant engaged with them. I had the QR codes placed in the textual displays to provide extra information and link to relevant online sources (Figure 8.11). The lack of engagement with the QR codes can be related to the overload of information presented at that specific point, or it can be a generational issue. QR codes are more used by and known to a younger audience, the so-called “millennials”. So, using QR codes can be removed or adapted based on the assumed audience of future exhibition venues. Also, if this exhibition is to be viewed on mobile phones or online, hyperlinking will substitute the QR codes.



Figure 8.11: An example of a textual display with a QR code that appeared in the VE.

Other issues that will need to be addressed are the length of information contained in the textual displays, the visibility of triggers in the virtual environment, and adding reset and quit buttons to help the experiencers when they feel stuck or want to leave.

Another important element that needs to be done is branding, advertising and promoting this type of exhibitions. I chose the title “re:Visit Palestine” for this prototype. The subtitle then should serve more explanation of what this experience is, the technology it is using, and a subtle indication or allusion to its duration.

Museums rely on visitors’ personal narratives and post-visit involvement via social media (Kocsis, Barnes and Kenderdine 2012). Usually, the consumption of shared experiences has three phases: anticipation, event and cooling off (Hassenzahl 2010). Therefore, I wanted to think of the cooling off phase that is the immediate post-experience and the involvement afterwards with the subject. Engaging the experiencers once they finish the experience either through taking selfies or using hashtags to share their experience online is one way. Working on the meta-narrative of this experience will help in gauging the correct mindset of the experiencers prior to their actual experience of the exhibition. This includes a general understanding that the exhibition is highly politicised, contentious, and requires both interaction and commitment of time.

In conclusion, all these issues are part of the final stages of fine-tuning this exhibition and responding to the necessary changes to the overall structure of the exhibition. Nevertheless, working on the aesthetics is important in creating a powerful visual impact that is undoubtedly needed in this kind of exhibition and will help create a brand identity for this exhibition.

### **8.3.9 The Cognitive and Emotive Presentation of Counter-Narratives in Activist Spatial Experiences**

In this research, the concept of counter-narrative is important because the political situation of Palestine that I used as an archetype is often contested. Israel focuses on portraying a certain image to the rest of the world in which it is being portrayed as a progressive and democratic country among the chaos of neighbouring countries with corrupted regimes and a record of human rights violations (Brennan 2006; Goldstone 2011; Said 1984). In most cases any opposing view to this image is painted as propaganda or a smearing campaign and, as such, would be dismissed as hate speech or anti-Semitism (Loewenstein 2009; Bloch 2005; Said 2001b). Presenting a different narrative that disrupts the mainstream understanding of any contested subject would be seen as biased or non-objective. However, such reactions should not deter people who are sharing counter-narratives from doing that. Counter-narratives are used in design activism (Fuad-Luke 2013) and the idea of wanting to disrupt the status quo (Kaygan and Julier 2013) is one of the roles of design activism. Therefore, this work is based on counter-narratives, specifically a narrative that highlights the Palestinian understanding of the situation. The aim of this project is to bring counter-narratives and different voices to the conversation. The aim of such an activist project is that people will be better informed to shape their critical understanding of the political situation presented.

In this prototype, presenting the counter-narrative relied on two key points. The first point is the information and statistics that were derived from the background research conducted earlier. This information was then fed into the design of the virtual environment; it informed the choice of themes presented and was finally presented in the textual displays that popped up in the VE as the participants navigated the space. The second point was the use of common people's voices in the videos projected. People tend to engage more with people like them. This was evident in the way the

participants engaged more with the footage as opposed to the text or even the VE. While six out of ten participants said that the virtual environment had an impact on them, nine out of ten agreed that they found the video footage emotive.

The prototype is designed as an activist experience to communicate narratives of the occupation and apartheid policies against Palestinians. Therefore, it was important to understand if the test group felt any change in their views before and after their experience of the prototype. As stated in Chapter 7, prior to this experience five out of ten of the participants felt they had good understanding of the Palestinian/Israeli situation and after the experience all of them felt they had gained better understanding of the Palestinian/Israeli situation. This is a huge leap in raising awareness about the situation and presenting new narratives to the audience. Furthermore, the participants have unanimously agreed that they felt more sympathetic towards the Palestinians after the experience. These findings demonstrate that the prototype has succeeded in raising awareness about the Palestinian situation and creating a change of view for the experiencers. These roles are consistent with the roles of design activism which has been discussed in Chapter 2.

The raise of awareness and ultimate change of view are based on two key components of the spatial experience, the didactic and the emotive modes of representation. These two modes of representation have facilitated the cognitive and affective embodiment of the participants in the experience. Following from the discussion around affect and embodiment in Chapter 2, it was important when designing the prototype to focus on the two modes of presenting the narratives of occupation. The virtual environment represented the spatial experience by placing the participants in the physical environment of the occupation, for example, having to pass through a checkpoint. But at the same time, the textual displays (Appendix E) that popped at certain points in the journey contained information to help the participants understand what they are experiencing. Therefore, the VE has worked as a place for the participants to think and feel at the same time. To amplify these two modes of representation, the videos that were projected also contained information but presented through Palestinian voices. Another fellow person sharing his/her experience of living under occupation. As mentioned previously, most of the participants found the videos to be quite emotive.

Another important part of the design is Handala, which I have discussed in depth previously in this chapter. Handala had a role to play specifically on the emotive and affective modes, as he was supposed to represent a Palestinian kid guiding the participants through their experience. However, as discussed, this aspect of the design needed more work and attention to fully achieve the emotive connection.

The design focused primarily on Palestinian voices, which some might consider a one-sided representation of the situation. The participants were divided on this issue when asked if they felt that the exhibition was one-sided and lacked objectivity. Two out of ten of them agreed that the exhibition was one-sided, while four disagreed and four were neutral. This finding might highlight a potential challenge. But the idea of a counter-narrative is that it presents the “other” side. The audience that is being targeted in this project are those who have little understanding of the Palestinian situation. So, the aim is to present new information to inform their understanding. It is expected to be a difficult experience or even a confronting one for some of the audience. However, a key element of this activist spatial experience is presenting counter-narratives that are representative of people usually silenced or neglected in the mainstream media. People need to understand and accept that voices of “other” people are valid. The agency of any particular narrative should be in the hands of people living that narrative. The best way to amplify the voice of the voiceless, is by passing on the microphone to them and not speak over them or on behalf of them, to let them speak for themselves (Al-Khatahtbeh 2016). Said’s important work on the “permission to narrate” addresses the importance of allowing space for Palestinians to express and narrate their histories and stories (Said 1984). This applies to this kind of project, so while having supporters who are not Palestinians is of great importance to the cause, ultimately there is no one better at explaining the narrative than Palestinians themselves, who are talking from their lived experiences.

In one of the video clips, there was an Israeli woman who is pro-Palestinian, and she was showing how inhumanely Palestinians are being treated at a checkpoint (Figure 8.12). One of the participants expressed how he liked this particular video. He thought that it brought more balance to the argument and, as such, I should be bringing more of this kind of voices into the exhibition. This is a valid suggestion that can be taken into consideration for the future development of the exhibition. However, there is a difference between showing two sides of the story to satisfy the general need for

balance and showing people who are not subjected to the occupation sharing their solidarity with those who are. Media is supposed to be objective, unbiased, and show both sides of any news. However, as this is a political situation where you have an occupier and an occupied, there are no two sides in the literal understanding of the occupation. Therefore, when producing activist projects, projects that aim to disrupt and subvert, we cannot demand the kind of simple objectivity that uses the paradigm of parity.



Figure 8.12: A screenshot from a video of an Israeli activist explaining the inhumane situation at Qalandia Checkpoint in Jerusalem (Partners for Progressive Israel 2015).

This exhibition highlights a different narrative that is rooted in Palestinians telling their own version of events and sharing it with the world. So, it is important that the audience is listening carefully to what is being said. So, while it is important to focus on the politics of speaking and representation, we also need to address the politics of listening (Bickford 1996). According to Bickford, it is important that before people listen they should open themselves up and allow themselves to hear without judgment or prejudice. Following this, Dreher argues that people's reluctance to engage and listen might be an expression of privilege and power (Dreher 2010). So, in this exhibition the issue of the positionality of the experiencers is crucial. And that is

why a character like Handala is chosen to be the guide, and the experiencers have to surrender and follow this boy where he takes them on this journey into the unknown while exposing them to the very difficult material.

Activism denotes an aim to activate people to action. But the first point to achieve this is to challenge people's views and raise their awareness. This prototype has successfully managed to do that as discussed before. The prototype has demonstrated that through both cognitive and affective modes of presentation, people can think and feel differently and thus create a complete embodied experience of a difficult political narrative.

## **8.4 Summary**

In this chapter, I discussed the most important themes that emerged from the feedback I got following the testing of the prototype by the expert test group. I analysed the feedback in relation to the design decisions. I also examined how this discussion can inform the future development of the exhibition.

The discussion has shown that, in principle, using low-cost digital and interactive media to create politically driven activist exhibitions can be successfully done. The designed prototype has been successful in creating interactive spatial experiences, exposing counter-narratives, presenting emotive footage that was contextualised within the overall experience, and introduced a cultural icon, Handala, to engage the experiencers and attract their attention and eventually their empathy.

At the same time, the designed prototype had several weak points or failings. For example, using the Leap Motion as a novel/unfamiliar interaction device that was not intuitive enough caused a distracting and stressful cognitive load on the participants. Other challenges that were identified by the expert test participants were having too much information presented at the same time and fighting for the experiencer's attention, possibly having an overly one-sided representation of the situation, the long duration of the exhibition, and the failure to introduce the guide, Handala, earlier in the experience. These challenges can be addressed in the next step of developing the exhibition.



What has been evident through this discussion is that the nature of the future exhibition will vary depending on where, and to whom it is being exhibited. However, the nature of the media used has allowed for flexibility and aided in creating a meaningful display of information and interaction with the subject. It has also demonstrated how the use of game engines and game controllers particularly can serve as important vehicles that move away from the game industry into a new experiential activist exhibition realm. In this sense, the medium is not the message but simply a tool that carries a message. So, the designer can actively use, ignore or subvert established paradigms within the traditional uses of this media and technology. Also, this discussion has highlighted the propositions of counter-narratives in digital design activism and how the presentation of digital assets within virtual spatial experiences can open new venues for exposure needed in misrepresented or under-represented political situations and conflicts.

In the following chapter, I will be applying these discussion points to understand how this prototype can be further developed beyond this research. I will focus on outlining the process of thinking and development rather than proposing one ultimate solution. This will then aid in concluding with general recommendations for other cases of complex contemporary political narratives.



## Chapter 9. Recommendations and Design Considerations for Future Development of the Prototype “re:Visit Palestine.”

### 9.1 Introduction

In the previous chapter, I discussed the main themes and issues that emerged from designing, testing and evaluating the prototype. The discussion related the feedback following the testing process, by the expert test group, with the initial set of design considerations and the design decisions taken when creating the prototype.

In this chapter, I will be using this discussion to highlight the main design considerations for the different frameworks of this prototype. I will not be presenting one solution as such, but I will focus on the major issues that need to be addressed and improved in the event that this particular project should move to a further development phase. I will then propose two possible solutions for two different exhibition scenarios. These scenarios serve to demonstrate the level of resources, and differing approaches, that would apply to varying implementations of not only the project described in this thesis but to any under-represented group seeking to alter the perception of their circumstances.

### 9.2 Design Considerations for Future Developments of the Prototype

In this section, I will highlight the key design considerations for future development of the prototype. I will focus on the four main frameworks that were previously outlined and discussed in Chapter 7. The frameworks are the interactivity framework, the conceptual framework, the experiential framework, and the visual aesthetic framework. These frameworks do not work in isolation, and they feed into each other. The relationship between these main frameworks is intersectional rather than linear.

Starting with **the interactivity framework**, I will be looking at the extent of interaction needed and what are the possible devices for interaction and input that can

be utilised for this experience. I will then discuss **the conceptual framework** which relates to any changes needed for the narrative and the storyline especially regarding introducing the cultural icon Handala, and address the issue of counter-narratives and objectivity. I will then discuss the considerations for **the experiential framework** by looking at possible exhibition venues and output channels whether spatial or on screens and how that will affect the duration of the experience. And finally, I will discuss changes needed on **the visual aesthetic framework** which involve creating 3D and 2D assets inside the environment, and the brand identity of the whole project.

### **9.2.1 The Interactivity Framework**

Having an interactive engagement between the participants and the prototype helped to keep the participants active and engaged. However, one of the major problems with the current design was the technical difficulty in using the Leap Motion and how it communicated with the Unity game engine file, that is, how it controlled the movement of the participants inside the virtual environment (VE). For example, the test participants found it difficult to smoothly control their movement inside the VE; they went faster or slower than they wanted and they got stuck in some places. This difficulty resulted in frustration for the participants, some of whom questioned the need for the interaction altogether as was discussed in detail previously.

Two key points need to be addressed in order to move forward regarding the interactivity framework. The first point is discussing the extent of interaction within the experience. And the second point is possible options for input devices that can be used to maintain efficient interaction between the experiencers and the experience. The efficiency of the input devices should be both in technicality, that is, ease of use and familiarity, and thematically, that is, how this input device creates an appropriate thematic connection with the concept of the experience.

#### **The Extent of interaction**

The extent of the interaction will be determined by where the project will be exhibited. If the project is exhibited in urban spaces, then it will be impossible to control the direct interaction between the experiencers and the progression of the journey in the VE. For example, if the project is exhibited inside a train station, then the flux of people moving in and out make it impossible to have a direct interaction.

On the other hand, having the project as an application for mobile devices means that it is a one-on-one experience and the audience is already familiar with their own device. Also, if the project is exhibited in an educational institution with a younger audience expected, it would be different than exhibiting it in a seniors' community hall. The needs of the anticipated audiences and their familiarity with technology will be affected by the proposed space of exhibition. These circumstances will then inform specific design considerations that need to be addressed in the final design.

This difference in the limitation of the interaction will then affect other areas of the design, for example, the overall narrative, the duration of the experience, and the needs of the expected audience.

### **Input devices**

In terms of finding possible input devices, the previously adapted considerations as outlined in Chapter 6, when experimenting and deciding what possible technology can be used, are still valid. From the testing of the prototype, seven out of ten of the participants found the Leap Motion difficult to use. However, it is expected that the Leap Motion can be further developed and used to fit in this type of project. At the same time, there are a lot of possibilities for other low-cost devices to be experimented with. What is most important is to select a device that will be intuitive and easy to use, that the narrative allows a training space before the journey gets harder, and that the physical presence of the input device within the exhibition space feeds into the overall experience. This means that if any game controllers are being used, they are to be stripped of their original shells and masked in a way that is appropriate to the subject of the project. This means that physical props can be used to build on the experience and create a thematic interaction between the experiencer and the device on one hand and the experiencer and the experience on the other.

Another important point to address is how to introduce the level of any intentional difficulty of interaction in a way that helps the experiencers understand it as part of the experiential quality of occupation. At the same time, it is important to allow for a margin of error and resetting in case the experiencers get too frustrated or stuck at any point in the journey. If, however, experiencers feel too frustrated or unwilling to finish the whole experience, which might happen, then an alternative ending should be thought of. If a experiencer left the experience mid-way, for example,

a textual display would appear where statistics can be shared about the number of Palestinians who do not have the choice to leave even if they need to.

In conclusion, having any interactive elements within the experience needs to be designed in accordance with the nature of the exhibiting this experience. The place of exhibition, the anticipated audience, the duration, and the available technologies will determine the level of interaction and how it can best be achieved to create the intended spatial experience.

### **9.2.2 The Conceptual Framework**

Following the standard game structure, narrative has proved helpful in creating a cohesive progression in the journey for the experiencers. This structure has resulted in my designing three distinct visual scenes to respond to the three-act narrative structure. In my opinion, adopting that structure has served the overall journey inside the exhibition. The relationship between the VE and the video footage was also meaningful to the participants, as discussed previously. As such, any future development of the exhibition should take into consideration that any presented footage needs to be contextualised consistently and appropriately through the VE. This will create a connection between the different output channels and help the experiencers process the information presented to them through these different media.

However, there are two key points that emerged from the discussion that future development should focus on. The points are the use of a specific cultural icon like Handala, and the issue of counter-narratives and objectivity. These points relate directly to the narrative and any changes to the narrative will respond to these points and affect them.

#### **Presenting a Cultural Icon as a Guide**

The idea of having a guide to help the experiencers navigate the VE was well received by the expert test group. This helped them get a sense of direction and minimised the load of figuring out what they needed to do inside the environment. Having Handala, who is a child character, was significant.

However, there are a few issues that need to be addressed. Firstly, Handala needs to be introduced slowly and within the experience in a way that will aid the

experiencers in forming a bond with him gradually and meaningfully. Secondly, Handala's visual representation needs to be addressed so as not to cause dissonance between him and the rest of the environment. Thirdly, his child identity should affect the whole journey whether this is to be achieved through the pace, camera angle, mischievous behaviour, or innocent navigation of the environment. By taking these issues into consideration, the experiencers will have a better way to understand and relate to their guide and his position as a child. This will hopefully strengthen the emotional connection between the experiencers and the content that is being presented to them.

In conclusion, when using a specific cultural icon or symbol like Handala, it is important to recognise the fact that his history is unknown to most people unfamiliar with the culture or the political situation it stemmed from. As such, showing respect to that cultural icon requires the proper introduction of that icon in the new experience and embedding this history within the new narrative to facilitate the meeting and connection-making between that iconic figure and the experiencers.

### **Counter-Narratives and Objectivity**

The second point is the possible criticism of lack of objectivity in the project because the narrative relied only on Palestinian points of view. This point has been discussed extensively in the previous chapter. The conclusion is that it is expected that any activist project will "ruffle some feathers". This project aims at the disruption of the "one-sided" mainstream depiction and understanding of the Palestine/Israel situation because Palestinian viewpoints have been under-represented in Western media. For example, among the test participants, even those who had actually visited Israel clearly stated that they had not seen scenes similar to the things they saw in the video material presented in the prototype. This is the driving spirit of the whole project, to facilitate a "safe" space where Palestinian voices can be shared and heard.

The variety of the voices being featured in the video footage should continue in the same way as the prototype. The videos mainly featured Palestinians. The videos were created by different individuals and with the support of various organisations, news agencies, and activists. And as discussed in the previous chapter, footage from the official Israeli perspective can be included only if they further support the arguments of the harshness of the occupation and apartheid policies. The best way to

address any potential clashes with the counter-narrative prior to the start of the experience is through building the correct brand identity for this project. People coming to the experience should expect to be confronted, moved and challenged. By being better informed about what to expect, they can accept that and either go ahead or refuse to engage with this type of project.

In conclusion, counter-narratives and objectivity are not conflicting. In activist spatial experiences, it is expected that people's views will be confronted. However, any project on presenting narratives should be based on extensive research in order to support the narratives or arguments being presented.

### **9.2.3 The Experiential Framework**

The prototype was successfully installed in a dedicated audio/visual lab. The use of multiple projections and the 7.1 audio system helped in creating an immersive space using the existing setup. The exhibition was, as such, successful in being adaptable and created with a limited budget as was initially intended from the design.

#### **The Physical Space of the Experience**

Any future exhibition spaces will need to make use of existing setups. The prototype current technical setup can be used for exhibiting outdoors in urban places (for example, in a train station), indoor spaces (for example, in a gallery space or classroom), or on digital screens (like a mobile application). However, each of these cases would require additional considerations regarding the length of the narrative, type of interaction, and number of audiences engaging at any one time. This means that understanding where the project will be exhibited will be the first departure point for organizing a basic roadmap to how the project will be adapted and developed.

#### **The Duration of the Experience**

As stated in the previous chapter, the number of people expected to participate in the exhibition at any one time will be inversely proportional to how much time they can spend there. The larger the group, the less time they can dedicate, due to overcrowding and the throughput in the venue. However, this project will clearly be branded as an activist spatial experience. This means that even if it is being presented inside a gallery space, it is not an artwork or an art exhibition. This project is a new



type of exhibition that utilises activism and gaming technologies to create spatial experiences based on the navigation of interactive virtual environments. Therefore, the audience should be well informed before starting the experience and expect the duration of such an experience.

In the end, the duration of the experience will change in accordance with various factors within the other frameworks. So, the duration will be defined by other design decisions to suit the needs of the project better.

### **The Audio Assets**

Audio plays an integral part in creating spatial immersion in interactive experiences (Byers 2015). Sound or audio also enhances the affective interaction with the subject matter being presented (Dyson 2009). Some argues that sound works even more directly on creating the emotional connection between the experience and the experienter than visual representation does (Rokeby 1998).

Adding more meaningful audio assets either as background soundscape or audio cues is needed. The audio must be designed to be projected in a 3D space using 5.1 or 7.1 audio systems. Having the audio played in this way will enhance the immersiveness of the experienters in the experience. However, standard stereo audio systems can still be used effectively if that is all that is available.

#### **9.2.4 The Visual Aesthetic Framework**

The visual aesthetic framework has three main components, the 3D and 2D visual elements of the environment, the used sounds, and the brand identity of the whole project. Some of these elements were not refined in the making of the prototype due to time and labour limitations. Therefore, the testing and evaluation of the prototype did not focus on the visual aspects of the design from a visual aesthetic point of view. Rather, the focus was on understanding how the VE affected the experience of the exhibition, as was discussed in the previous chapters. Therefore, in developing the prototype, enhancing and refining the visual framework is one of the key tasks to be done.

## **The Visual Assets**

For the virtual environment, more 3D assets are needed to make the environment more animated while maintaining the imagery so that it is not hyper-realistic or re-creating specific places in Palestine. Some of these 3D assets can be sourced online from open-source 3D inventories, and some have to be specifically created by 3D modelling designers that will join the team.

The 2D elements inside the VE have to follow the same visual identity of the whole project. This includes paying attention to using a more contemporary aesthetics in terms of the typefaces and colour schemes in the textual displays and also in any navigational elements that will be added, for example, the navigational map and the reset/quit buttons. These 2D elements have to help the experiencers feel more grounded in their navigation of the space, giving them a sense of direction in terms of space and time, but also reassure them that if they feel stuck and frustrated they can reset their position and try again rather than be overtly discouraged and leave the whole experience.

## **Brand Identity**

A graphic designer will be responsible for creating and refining the visual identity of the project. The title “re:Visit Palestine” has not caused any problems with identifying what this project is about. But it has to be reflected more in the brand identity of the project. This will include the exhibition poster, leaflet, information cards, website, and business cards. Having a more defined visual identity will then improve the building of the experience’s brand and can aid in generating an online social buzz that will promote this project and attract more audience.

### **9.2.5 Proposed Plan of Action**

During this research, the majority of the work in creating the prototype was done by myself. I employed a freelance animator to create the different animation cycles for Handala. I also had some programming help from the technical staff at my school. Their work focused on creating the files in the Processing application which included the video player and the communication between the two computers (Unity file and video player), and the code file connecting the Leap Motion to the Unity files.

All the technical help the project received has been credited in the acknowledgement section of this thesis.

However, for any future development of the exhibition, a bigger team is needed to cover all different aspects of the project in a more professional and refined manner. The number of team members will depend on where the experience is being exhibited, the budget involved, and the timeline.

In Appendix H, I have created a plan of action that only focuses on the most obvious tasks, which will undoubtedly grow and adapt to each version of the experience made.

### **9.3 Possible Future Exhibiting Scenarios**

In this section, I will apply the previous recommendations and propose two different scenarios and solutions for the designed experience. The first scenario is where the project is being exhibited at a formal art gallery space, and the other is for developing the project as a mobile application. These represent perhaps the two most likely and yet differing implementations of the purpose of this project, which is to alter the perceptions of everyday people.

#### **9.3.1 Exhibition at an Art Gallery**

In my exploration of the possible exhibition of “re:Visit Palestine” at an art gallery, I will be looking at the major issues that have come out of the process of design, testing and evaluating the prototype. I will address how the narrative needs to be further developed, how to refine the interaction mode, and how to enhance the experiential and aesthetic modes.

#### **Developing the Narrative**

The narrative will be the first thing that needs to be developed. I will outline a possible abridged scenario which will focus on addressing the main shortcomings found in the current narrative as has been discussed in this chapter and previous chapters. In the proposed narrative, I will address how Handala, the guide, should be introduced through the narrative. I will also address how the restriction of movement

can be further emphasised. Finally, I will discuss the ending of this experience and what are the expected takeaways for the experiencers of this experience.

In the introduction scene, there will be a general information about the experience with some information about what the journey is and what technology is being used and how it can be used. The introduction will also ask the experiencers to free themselves from any prejudices, and open their minds and hearts to revisiting the Palestinian issue.

Then they will go to the first scene, in which they will start slowly exploring the environment which is to be set in Jaffa pre-1948. As they walk through it, they will find a 3D boy who introduces himself as Naji<sup>1</sup> who asks them to follow him as he wants to show them his grandfather's house. As they walk after him, the environment will change, for example, the houses will become ruined, sounds of people screaming and gunshots will be heard, and then Naji disappears. The information and videos projected will address the *Nakba* and its aftermath. As we move forwards toward a refugee tent, Handala will show up again but in his "original" cartoonish version. He will explain how he is the image of Naji, but he is Handala now because he was forced out of his country and that he will be stuck in this form and age until he is able to return. Then we move to the next scene which will start by Handala informing us that his real self Naji has been assassinated and that the situation in Palestine is even worse. So, today he will take us on a virtual visit back to his country, so maybe we can help him get back there. And that is how the rest of the journey unfolds.

The next scenes will address the current manifestations of occupation focusing on the themes of restriction of movement, the Separation Wall, and the illegal settlements in West Bank and Jerusalem, followed by the siege in Gaza and the recent military operations that have happened there. At the end of this journey, Handala and the experiencers will reach a dead end when they are not granted access to Gaza.

Handala will then provide a heartfelt conclusion to this journey explaining how this harsh reality is still happening in our times and that Palestinians are denied their basic rights, and refugees like him are denied their right of return and living in

---

<sup>1</sup> Naji is used to reference Naji Al-Ali, the original creator of the character, Handala. As was discussed in Chapter 6, Naji Al-Ali created Handala to represent his own story of being displaced from his village in 1948 when he was only ten years old.

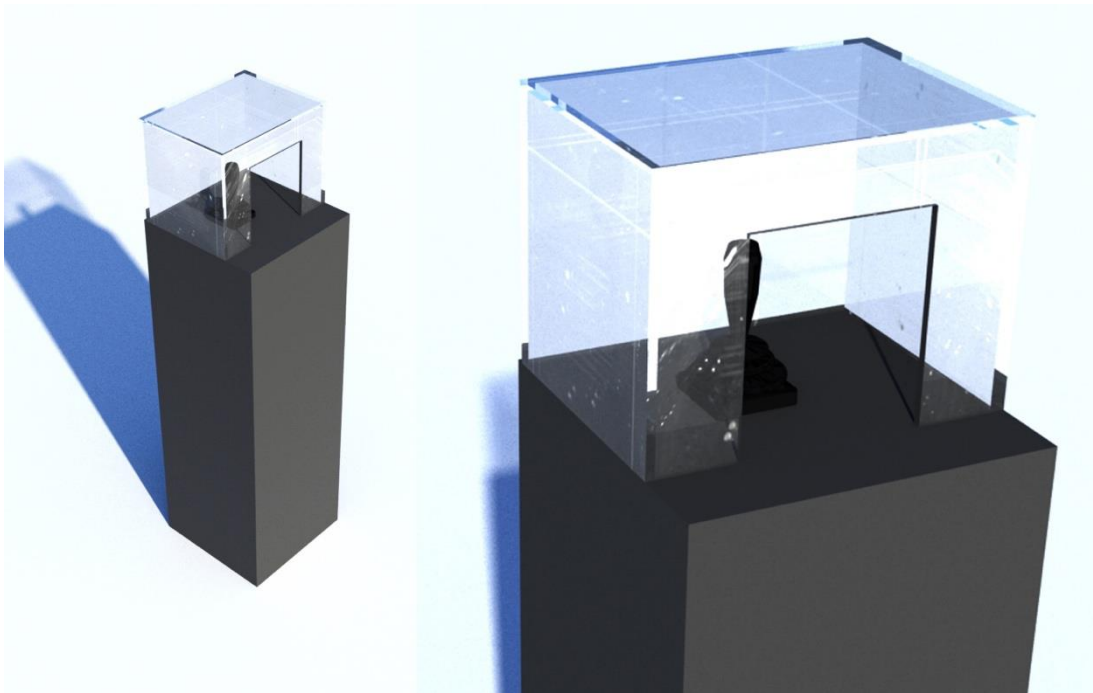
their own land. This will be the culmination of the experience for the experiencers, and after they leave, it is now up to them to internalise and process this experience and what it might mean to them now.

The building of the VE and choice of the videos will then reflect this new detailed narrative. And following the proposed plan of action, the project team will design the experience accordingly.

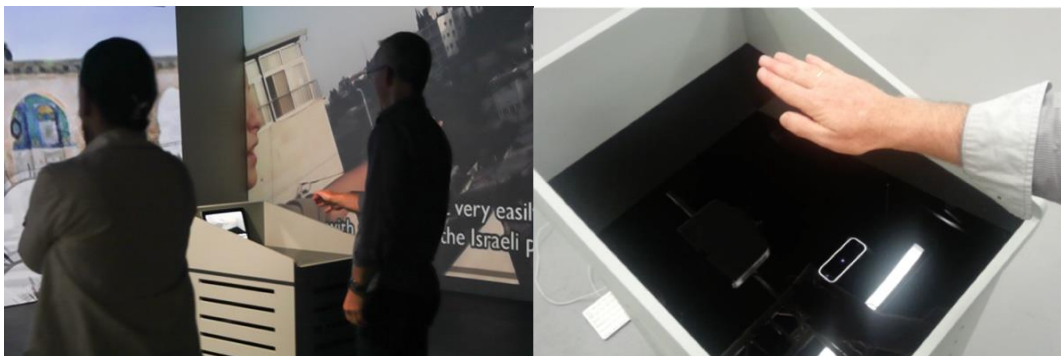
### **Working on the Interaction Mode**

As have been discussed extensively, the Leap Motion has proved to be difficult to use and hindered the full engagement with the intended experience. Therefore, addressing a new possibility for an interaction device is a priority. I will give a proposed solution to illustrate how the interaction mode can be addressed. This is by no means the one and only solution. It is only meant to illustrate a possible way forward.

A stripped-down joystick can be used to navigate the VE. The joystick is placed on top of a plinth but inside a glass enclosure with a front opening through which the experiencer's hand enters (Figure 9.1). This will cause an uneasy feeling like the hand is not free and the experiencer has to "enter" an unwelcoming space to be able to move forward in the VE. This in response to the participants' suggestion of extending the entrapment theme from the VE to the real space of the exhibition. This is in contrast to the current setup where the hand was moving freely on top of the Leap Motion that was imbedded in a custom-built plinth (Figure 9.2).



**Figure 9.1: Proposed plinth with a modified joystick on top.**



**Figure 9.2: A member of the test group using the Leap Motion embedded in a custom-built plinth.**

A joystick is built to be used as a game controller. Therefore, the design takes into consideration the usability and intuitiveness of using this controller in a VE. The familiarity of the device will facilitate shifting the cognitive load of the experiencers from the technology back to the subject of the exhibition.

### **Using Physical Props in the Exhibition Space**

Based on the feedback given by the test participants, introducing physical props in the exhibition space can emphasise certain intended themes. Also, in Chapter 4, I analysed how spatial interventions were used in memorial and conflict museums to build up the intensity of the experience and narrative being presented. Therefore,

using any physical props in this project should be examined in accordance with viability.

In this proposed scenario, I suggest using three main spaces of the art gallery in which the experiencers have to move from one to another. These spaces reflect the three-acts, namely, the exposition, conflict and resolution. These spaces each use two projections and one sound system. The projections are on adjacent walls with the plinth placed facing the main projection which has the VE. To move from one space to the other, the experiencers have to go through turnstiles which allow one person passing at a time. The revolving doors mimic the real ones deployed in Israeli checkpoints (Figure 9.3). Forcing the experiencers to go through these turnstiles will build on the themes of restriction of movement portrayed in the virtual journey.



Figure 9.3: Sabella, S., Revolving gates used at an Israeli checkpoint. Reproduced from Palestine Photo Bank website (Sabella).

## The Building of a Social Media Presence

As this is an activist spatial experience project, it is important to think of social media presence. One of the important aspects of this project is getting people to talk about it. We live in a time where online social networking and incidental

advertising are common. Therefore, the project should provide an opportunity for this social media presence to be built.

One way can be allowing the experiencers to take selfies with Handala at the end of the journey. Their photos can be then shared online via the different social networking platforms that the experiencers use and include specified hashtags that relate to the project's brand identity. This online social sharing will help spread the word about this exhibition and maybe invite other people to engage in discussions about the Palestinian situation.

### **9.3.2 The Project as a Mobile Application**

Because the project was built mainly using the Unity game engine, creating a mobile application is relatively easy, as this function is already provided in the software. This solution is based on the proposed development of the narrative and the building of metanarratives comparable to the previous scenarios of exhibiting the project in an art gallery. However, there are a few issues that need to be addressed as follows:

1. The video files will have to be incorporated inside the VE.
2. The interaction device is the mobile screen. And as such, the interaction needs to adapt to the conventions of touch screen interactivity.
3. Any QR codes used in the original version need to be replaced by hyperlinks.
4. Another possible solution would be to combine this mobile application with a VR headset. The Leap Motion Controller can also be used as the input device. An emerging trend is to use the Leap Motion with VR/AR headsets (Leap Motion 2017b).

In conclusion, the adaptation of the project is made relatively easy due to the tools that have been used to create the VE. The use of the Unity game engine allows for a variety of output options, and is compatible with a variety of input devices like game controllers or sensor technologies. However, the level of effort and the need for specific technical knowledge will be dependent on these choices.



## 9.4 Summary

In this chapter, I first discussed the results of the prototype design and testing in relation to the four main frameworks of this project. I concluded by applying the previous discussion on two possible scenarios, each suited to a different context to aid future development.

In discussing the key design considerations for each of the frameworks, I identified the main issues that need to be resolved or addressed. With regards to the **interactivity framework**, I looked at the extent of interaction needed in the experience and then discussed the possible interaction devices that can be used appropriately from a technical and usability point of view and in a thematic way appropriate to this kind of experience. For the **conceptual framework**, it was important to address the issue of introducing Handala as a known cultural icon for the audience who do not know much about him. I also addressed the issue of the counter-narrative and how it relates to objectivity. Addressing the **experiential framework**, when building the interaction, it is important to keep in mind the space in which the exhibition will be exhibited, and understand the needs of the space and the audience. I also addressed the duration of the exhibition and how this will be determined based on other considerations and design decisions that relate to specific cases of presentation. As for the **visual aesthetic framework**, creating a unified visual identity is paramount in branding this project which will in effect enhance the visual aesthetic value of the whole experience including the VE. Having a clear brand and visual identity will also help in identifying what this project is, and what is expected from its audience.

Finally, I outlined two possible scenarios, one as an exhibition in an art gallery and another as a mobile application. I addressed the main issues of narrative and interaction modes, including the “meta-narrative” that might keep an audience engaged with this exhibition post their experience with it.

In the following chapter, the Conclusion, I will summarise the different stages of this research. I will explore the significance of this exhibition in its adaptability to other contested political narratives. I will also present the outcomes and conclusion of the research summing up this whole thesis.



## Chapter 10. Conclusion

### 10.1 Summary of Chapters

In the Introduction, I stated the motivation for me to pursue this research. Being of Palestinian descent and at the same time an architect and a designer with an interest in utilising low-cost technologies, I wanted to explore how I can design a project that can raise the awareness about the Palestinian situation. The main objective of this research was to investigate how to design and “activist spatial experience” using low-cost immersive and interactive media to communicate complex political narratives. I used Palestine as an archetype to illustrate how such experiences can be designed. To determine the best methodological framework for this research, I looked at research models that combined practice (usually design or art) with research. I decided to use a design-led research model (Herrington et al. 2007). This research model had four main stages; the background research, designing a prototype, testing and evaluating the prototype, and finally discussing the findings and conclusion. These different stages are reflected in the structure of this thesis.

In Chapter 2, I reviewed important literature in three main disciplines that relate to the research question. I started by examining design activism, which is considered a relatively new field. I focused on the roles of design activism and how they can inform this research. I also looked at how social media has played significant roles in contemporary activist movements. I also examined some Palestinian activist projects that utilise digital and social media. In the second section of the chapter, I examined the concept of experience design and how to design embodied experiences and affective spaces. I also discussed the use of narrative in architectural spaces. In the third section of the chapter, I looked at creating experiences through digital and interactive media. I focused on the use of digital media in museums, serious gaming, and cultural heritage. Also, I discussed some of the identified gaps in the literature and how this research is situated in relation to these gaps.

In Chapter 3, I discussed the different methods that were used to achieve the intended outcomes of each of the research stages. I used a pluralistic approach, which included: case studies, visual and thematic mapping, experimentation, designing a

prototype, documentation, as well as focus group and ethnographic feedback collection. I also discussed the ethical considerations of this research and how they were addressed.

In Chapter 4, I conducted three case studies on existing experiential memorial spaces. I examined the United States Holocaust Memorial Museum in the US, the Apartheid Museum in South Africa, and the Australian War Memorial in Australia. My examination focused on understanding the conceptual and architectural frameworks that guided the creation of these spaces. I also looked at how narratives informed the interior design of these spaces. I then examined key spatial experiences in these spaces and the design treatments used to design these experiences.

In Chapter 5, I looked at the current Palestinian visual culture production scene. I specifically looked at artworks and films created after 2000. The visual and thematic mapping focused on three aspects; how Palestine as a spatial construction is being visually and thematically represented, what are the types of hero images that are used in the Palestinian context and what are their main characteristics, and what are the themes and concepts used to visually represent the experiences of living under occupation. Through this mapping, I identified paradigms, archetypes and themes that inspired the creation of the prototype.

In Chapter 6, I documented the process of designing and developing the prototype which was titled “re:Visit Palestine”. I started by defining the pivotal design considerations that were summarised through the background research conducted. I then documented the experimentation and exploration with game engines, tools of interaction, and exhibition options. I then documented the ideation and envisioning process of the design solution. Following that, I discussed and documented the process of developing the final prototype.

In Chapter 7, I documented the process of testing and evaluating the prototype. I started by explaining the process of choosing the test group and setting up the prototype for the test sessions. I then explained the different methods that were used to document the feedback from the test group. I then presented the findings of the testing process according to four main frameworks; the interactivity framework, the conceptual framework, the experiential framework and the visual aesthetic framework.

The findings have highlighted common themes, strong points, and shortcomings of the current design.

In Chapter 8, I discussed the initial design considerations and the findings from the design process and the testing process. I started by revisiting the initial design considerations and evaluating whether these considerations have been met by the design decisions taken to create the prototype. I then discussed the identified themes and challenges from the testing process with the design decisions and outcomes to understand how this exhibition can be further developed. I started by examining how game engines were used to create the spatial experience. I then discussed the challenges of using the Leap Motion as a tool for interaction. I also discussed whether physical props could be used in such spatial experiences or whether virtual environments can be enough. I then discussed the significance of presenting online digital footage that has been created as documentation of living under the occupation. I also talked about the use of multiple projects and multimedia and how they can help the experiencers be immersed cognitively and affectively within the overarching narrative of the experience. I also discussed the use of cultural icons as guides in such experiences, the duration of the experience, and the visual elements of the design prototype. Finally, I discussed the challenges of exposing counter-narratives in activist spatial experiences.

In Chapter 9, I used the discussion of the previous chapter and reflected on how this discussion can develop the prototype. I looked at design considerations that relate to the interactivity framework, specifically the extent of interaction needed in such spatial experiences and what kind of input devices can be used. I then looked at the conceptual framework, specifically the use of a cultural icon as a guide and how counter-narratives and objectivity can be consolidated in activist spatial experiences. I then looked at the experiential framework, specifically the duration of such experiences and how can such experiences be adapted to different spaces. Lastly, I looked at the visual aesthetic framework and how the designed prototype can be developed to have better visual elements and brand identity. From this discussion of design, I looked at two possible solutions to demonstrate how the above discussion can be implemented for specific scenarios.

In this chapter, I will discuss the final outcomes and observations of this research, how this knowledge can be applied in other political situations, and conclude with future work extending from this research.

## **10.2 Outcomes and Observations**

This research has managed to extend the possibilities of using gaming technology beyond creating games and serious games. The proposed “activist spatial experience” is providing a new case study of how gaming technology can be used to create an experiential environment for purpose (Marsh 2011). At the same time, it is providing a new case study for design activism, where the design intervention is done through the innovative use of low-cost digital and interactive media.

In this research, I introduced the term “activist spatial experiences” to describe new kinds of spaces or exhibitions that are based on activist approaches for raising awareness about contemporary political situations especially for disfranchised, under-resourced or misrepresented people. These exhibitions focus on the spatial and experiential communication of narratives relating to these political situations.

Some current examples of similar political situations are the Syrian crisis, the prosecution of the Rohingyas in Myanmar, the war on Yemen, the discrimination against African Americans in the US, the problem of the Nauru detention centre, and the discrimination against Indigenous Australians in Australia.

What these examples share in common is that they involve people who are usually silenced, ignored or misrepresented. Therefore, they all have emerging counter-narratives that can be highlighted through the use of this proposed activist spatial experience. Following from this research’s findings, there are key issues that need to be addressed when attempting to work on designing these spatial experiences.

When creating activist spatial experiences, it is important first to identify the level of interaction needed or which can be afforded through the intended experience. Therefore, what is important is working toward creating embodied and affective experiences that focus on the process of meaning-making. Any interaction should be directed toward the content rather than the novelty of the technology used.

Technology, especially in digital and interactive media, is rapidly changing and evolving. Therefore, when choosing a certain technology for these experiences, the focus should be on how the technology can respond to, and amplify, the thematic interaction between the experiencers and the communicated narrative.

Governments or other institutions usually build memorial museums. In contrast, individuals who believe in a cause can build these activist spatial experiences. Therefore, it is important that the narratives of these experiences reflect the real lived experiences of the people in question. The voices that need to be highlighted and represented are the voices of people living inside these political situations.

The accessibility of social media as a means for documenting aggressions and events has produced a wealth of visual material that can be brought to the fore when designing these activist spatial experiences. Any designed narrative, therefore, can adopt an ethnographic approach of accessing, assessing and presenting the individual stories of people living through these political situations.

Working with low-cost technology can be a great asset to such projects by effectively expanding the different venues where such experiences and projects can be open to the public. Reclaiming public spaces, creating mobile apps or having an online presence are all possible outcomes for such experiences. The choice will be influenced by the interested audience, how to engage this audience, and what is expected from the audience after their interaction with these experiences.

### **10.3 Future Work**

My first aim after this research is to develop the prototype “re:Visit Palestine” into a public exhibition. During the testing of the prototype, one of the participants who is an art curator showed interest in seeing this project developed for presentation at the gallery where he works, where difficult and challenging themes are the norm. Therefore, working towards developing this project is feasible and important.

The interdisciplinary nature of this research allows for further reading and exploration of the research methods and themes in relation to design activism, the Palestinian discourse, affective geographies, memory studies, virtual architectures, and the continuum of serious gaming.

In terms of the future extension of this research, I would like to extend on the discussion of certain themes that I had to constrain due to the time limitations of this research. Notably, I would like to investigate the relationship between affect, geography, and counter-memory spaces. I would like to specifically look at how affective embodiment can be mediated in digital and interactive environments. I want to extend the examination of virtual versus architectural spatiality in narrative spaces. And I want to explore how presence and flow differ in these two spaces.

I would also like to work on a comparative study of the Apartheid Museum in South Africa and the “re:Visit Palestine” exhibition to explore the parallels in communicating apartheid through creating architectural spaces based on historical narratives versus creating virtual spatial experiences based on current political narratives. I would also like to analyse the design project through Palestinian academic discourse, and examine how this project fits into the existing Palestinian scholarship.

This research has shown good prospects and potential for designing “activist spatial experiences”. I want to extend this to my professional practice and get involved with some of the activist causes that can benefit from this approach.

Going back to the first quotation in this thesis, Arundhati Roy, the Indian author and activist, said: “There’s really no such thing as the ‘voiceless’. There are only the deliberately silenced, or the preferably unheard” (Roy 2004). I hope that this research has helped in exploring a possible way to raise the voices of such people. Using digital and interactive media can provide new venues for activist spatial experiences, pushing the boundaries of not only who gets to talk, but also how they can be heard.



## References

- Aarseth, Espen. 2001. "Computer Game Studies, Year One." *The International Journal of Computer Game Research* 1 (1): 1-15. <http://www.gamestudies.org/0101/editorial.html>.
- About, Jumana. 2005. 'The Pomegranate.' video work/ installation Sharjah: Sharjah Art Foundation.
- Abu-Assad, Hany. 2005. *Paradise Now*. DVD. USA: Warner Independent Pictures. February 14, 2005.
- . 2013. *Omar*. DVD. US: Adopt Films, UK: Soda Pictures, France: Pretty Pictures
- Abunimah, Ali. 2018. Facebook Censors Palestinian News Outlet. The Electronic Intifada. Accessed April 5, 2018, <https://electronicintifada.net/blogs/ali-abunimah/facebook-censors-palestinian-news-outlet-1>.
- Adiv, Ehud. 2010. "Politics and Identity." In *Across the Wall: Narratives of Israeli-Palestinian History*, eds Jamil Hilal and Ilan Pappé, 19-44. London, New York NY: IB Tauris & Co Ltd.
- AgnosticPreacherKid. 2010a. "Holocaust Remembrance Week." *Wikimedia Commons*, [https://commons.wikimedia.org/wiki/File:Holocaust\\_Remembrance\\_Week.JPG](https://commons.wikimedia.org/wiki/File:Holocaust_Remembrance_Week.JPG).
- . 2010b. "United States Holocaust Memorial Museum interior." *Wikimedia Commons*, Digital image, [https://commons.wikimedia.org/wiki/File:United\\_States\\_Holocaust\\_Memorial\\_Museum\\_interior.JPG](https://commons.wikimedia.org/wiki/File:United_States_Holocaust_Memorial_Museum_interior.JPG).
- Al Malhi, Jawad. 2008. 'House #197.' Panormic Photogrph.
- Al-Khatahtbeh, Amani 2016. Trailblazers in Media Panel at United State of Women. Muslim Girl Accessed November 25, 2017, <http://muslimgirl.com/26196/full-video-trailblazers-media-panel-united-state-women/>.
- Alatar, Mohammed. 2007. *The Iron Wall*. DVD. Gernot Steinweg. [http://onlinefilm.org/en\\_EN/film/29117](http://onlinefilm.org/en_EN/film/29117).
- Ali, Hatem. 2004. "Al-Taghriba Al-Filistinia." *Syrian Art Production International*, TV Series, <https://www.imdb.com/title/tt3109682/>.
- Alsaafin, Linah. 2018. For Palestinians, US Embassy Move Cements Occupation Status Quo. Aljazeera News. May 14, 2018 Accessed August 14, 2018, <https://www.aljazeera.com/news/2018/05/palestinians-embassy-move-cements-occupation-status-quo-180513192601854.html>.
- Anderson, Eike Falk, Leigh McLoughlin, Fotis Liarokapis, Christopher Peters, Panagiotis Petridis, and Sara de Freitas. 2009. "Serious Games in Cultural Heritage." *The 10th International Symposium on Virtual Reality, Archaeology and Cultural Heritage VAST -State of the Art Reports*: 29-48. <http://eprints.bournemouth.ac.uk/20460/>.
- Andreoli, Roberto, Angela Corolla, Armando Faggiano, Delfina Malandrino, Donato Pirozzi, Mirta Ranaldi, Gianluca Santangelo, and Vittorio Scarano. 2017. "A Framework to Design, Develop, and Evaluate Immersive and Collaborative Serious Games in Cultural Heritage." *ACM Journal on Computing and Cultural Heritage* 11 (1): 1-22. doi: 10.1145/3064644.
- Ankori, Gannit. 2006. *Palestinian Art*. London: Reaktion Books.
- Annan, Kofi. 2012. *Interventions: A Life in War and Peace*. New York, USA: Penguin Books.
- Anti-Defamation League. 2018. Anti-Defamation League Accessed November 15, 2018, <https://www.adl.org>.
- Arora, Payal, and Sorina Itu. 2012. "Arm Chair Activism: Serious Games Usage by INGOs for Educational Change." *International Journal of Game-Based Learning* 2 (4): 1-17. doi: 10.4018/ijgbl.2012100101.
- Ataç, Ilker, Kim Rygiel, and Maurice Stierl. 2016. "Introduction: The Contentious Politics of Refugee and Migrant Protest and Solidarity Movements: Remaking Citizenship from the Margins." *Citizenship Studies* 20 (5): 527-544. doi: 10.1080/13621025.2016.1182681.
- Australian War Memorial. 2017. *Australian War Memorial Annual Report 2016-2017*. Canberra. <https://www.awm.gov.au/about/organisation/corporate/annual-report-2016-2017>.
- . 2018. Australian War Memorial. <https://www.awm.gov.au/>.
- Autodesk. 2018. Education Community. Accessed October 3, 2018, <https://www.autodesk.com/education/home>.
- Azoulay, Ariella. 2011. *From Palestine to Israel: a Photographic Record of Destruction and State Formation, 1947-1950*. London: Pluto.
- B'Tselem. 2018. B'Tselem – The Israeli Information Center for Human Rights in the Occupied Territories. Accessed November 23, 2018, <https://www.btselem.org/>.

- Baek, Youngkyun , Ryan Ko, and Tim Marsh, eds. 2014. *Trends and Applications of Serious Gaming and Social Media*. Singapore: Springer.
- Baker, Farah. 2018. Farah Baker. Twitter. Accessed November 20, 2018, [https://twitter.com/farah\\_gazan?lang=en](https://twitter.com/farah_gazan?lang=en).
- Bardenstein, Carol 2006. "Figures of Diasporic Cultural Production: Some Entries from the Palestinian Lexicon." In *Diaspora and Memory: Figures of Displacement in Contemporary Literature, Arts and Politics*, eds Yolande Jansen, Stephan Besser and Marie-Aude Baronian, 17-32. Amsterdam: Rodopi B.V.
- Barwick, Joanna, James Dearnley, and Adrienne Muir. 2011. "Playing Games With Cultural Heritage: A Comparative Case Study Analysis of the Current Status of Digital Game Preservation." *Games and Culture* 6 (4): 373-390. doi: 10.1177/1555412010391092.
- Batniji, Taysir. 2002-2009. 'Impossible Journey.' Performance.
- . 2004. 'Transit.' Video
- . 2008. 'Watchtowers.' series of 26 B&W photographs, digital prints.
- . 2010a. 'GH0809.' Series of 20 prints of C-Print on translucent glossy paper.
- . 2010b. 'Untitled #2.' drawer, mirrors, red pencils shavings
- . 2012. 'To My Brother.' Series of 60 hand carvings from photographs on paper.
- . 2014. 'Untitled.' Glass bunch of keys
- BBC News. 2018. Ahed Tamimi: Palestinian Slap Video Teen Gets Eight Months in Plea Deal. BBC. March 21, 2018 Accessed July 19, 2018, <https://www.bbc.com/news/world-middle-east-43487885>.
- Beech, Dave. 2008. "Include Me Out!" *Art Monthly* (315): 1-4.
- Beinin, Joel. 2004. "No More Tears: Benny Morris and the Road Back from Liberal Zionism." *Middle East Report* 230 (Spring, 2004): 38-45. doi: 10.2307/1559295.
- Bellotti, Francesco, Riccardo Berta, Alessandro De Gloria, and Ludovica Primavera. 2010. "Supporting Authors in the Development of Task-Based Learning in Serious Virtual Worlds." *British Journal of Educational Technology* 41 (1): 86-107. doi: 10.1111/j.1467-8535.2009.01039.x.
- Bennett, Jill. 2003. "The Aesthetics of Sense-Memory: Theorising Trauma Through the Visual Arts." In *Regimes of Memory*, eds Katharine Hodgkin and Susannah Radstone, 40-52. London: Routledge.
- Bernard, Anna. 2012. "Consuming Palestine: The Israeli-Palestinian Conflict in Metropolitan Popular Culture." *Journal for Cultural Research* 16 (2-3): 197-216. doi: 10.1080/14797585.2012.647669.
- Bickford, Susan. 1996. *The Dissonance of Democracy: Listening, Conflict, and Citizenship*. Ithaca, New York: Cornell University Press.
- Bidgee. 2009. "Australian War Memorial." *Wikimedia Commons*, Digital image, [https://commons.wikimedia.org/wiki/File:Australian\\_War\\_Memorial.jpg](https://commons.wikimedia.org/wiki/File:Australian_War_Memorial.jpg).
- Bieber, Alain 2011. "I Revolt, Therefore I Am." In *Art and Agenda: Political Art and Activism*, eds Robert Klanten, Matthias Hübner, Pedro Alonzo, Alain Beiber and Gregor Jansen, 50-55. Berlin: Die Gestalten Verlag.
- Biggs, Michael. 2006. "Modeling Experiential Knowledge for Research". In *The Art of Research : Research Practices in Art and Design*, eds Maarit Mäkelä and Sara Routarinne, 180-204. Helsinki: University of Art and Design.
- Björgvinsson, Erling, Pelle Ehn, and Per-Andres Hillgren. 2012. "Agonistic Participatory Design: Working With Marginalised Social Movements." *CoDesign* 8 (2-3): 127-144. doi: 10.1080/15710882.2012.672577.
- Bloch, Barbara. 2005. "Unsettling Zionism: Diasporic consciousness and Australian Jewish Identities." PhD diss. University of Western Sydney. ProQuest Dissertations Publishing: <https://researchdirect.westernsydney.edu.au/islandora/object/uws:2532/>.
- Bogost, Ian. 2007. *Persuasive Games: The Expressive Power of Videogames*. Cambridge, Massachusetts: The MIT Press.
- . 2014. "Why Gamification is Bullshit " In *The Gameful World : Approaches, Issues, Applications* eds Steffen P. Walz and Sebastian Deterding, 65-79. Cambridge, Massachusetts: The MIT Press.
- Brennan, Mike. 2006. "Review of Bad News From Israel, by Greg Philo and Mike Berry." *Democratija* 3 (Winter 2005): 49- 58.
- Bryman, Alan, and Emma Bell. 2015. *Business Research Methods*. 4th ed. Oxford: Oxford University Press.
- Bullivant, Lucy. 2005. "Introduction." In *4dspace: Interactive Architecture (Architectural Design)*, ed. Helen Castle, 5-7. Great Britain: John Wiley & Sons.

- Burgess, Jean, and Joshua Green. 2009. "The Entrepreneurial Vlogger: Participatory Culture Beyond the Professional- - Amateur Divide." In *The YouTube Reader*, eds Pelle Snickers and Patrick Vonderau, 89-107. Stockholm: National Library of Sweden.
- Burnat, Emad, and Guy Davidi. 2011. *5 Broken Cameras*. DVD. Kino Lorber. 23 November 2011.
- Byers, Ken. 2015. "Body-Movement-Interaction: Perception and Consciousness in Interactive Digital 3-Dimensional Audio-Visual Installations." *Body, Space & Technology Journal* 14.
- Calderon, Carlos, Nicholas Worley, and Nyman Karl. 2005. "Architectural Cinematographer: An Initial Approach to Experiential Design in Virtual Worlds" *The 11th International CAAD Futures Conference, Vienna University of Technology*: Springer.
- Cameron, Jenny. 2005. "Focusing on the Focus Group." In *Qualitative Research Methods in Human Geography*, ed. Iain Hay, 156-174. Melbourne: Oxford University Press.
- Carrozzino, Marcello, and Massimo Bergamasco. 2010. "Beyond Virtual Museums: Experiencing Immersive Virtual Reality in Real Museums." *Journal of Cultural Heritage* 11 (4): 452-458. doi: 10.1016/j.culher.2010.04.001.
- Casey, Tobias. 2018. "Western Media Gives Unbalanced Coverage of Israeli Occupation of Palestine." *University Wire*, April 30, 2018. <https://search-proquest-com.dbgw.lis.curtin.edu.au/docview/2032532906?accountid=10382>.
- Cesari, Chiara. 2012. "Anticipatory Representation: Building the Palestinian Nation(-State) through Artistic Performance." *Studies in Ethnicity and Nationalism* 12 (1): 82-100. doi: 10.1111/j.1754-9469.2012.01157.x.
- Champion, Erik. 2016a. "A 3D Pedagogical Heritage Tool Using Game Technology." *Mediterranean Archaeology and Archaeometry* 16 (5): 63-72. doi: 10.5281/zenodo.204967.
- . 2016b. "Entertaining the Similarities and Distinctions Between Serious Games and Virtual Heritage Projects." *Entertainment Computing* 14: 67-74. doi: 10.1016/j.entcom.2015.11.003.
- Champion, Erik. 2015. *Critical Gaming: Interactive History and Virtual Heritage*. Farnham, Surrey: Ashgate.
- Clark, Laurie Beth. 2011. "Never Again and its Discontents." *Performance Research* 16 (1): 68-79. doi: 10.1080/13528165.2011.561677.
- Clarke, Alison J. 2013. "'Actions Speak Louder' Victor Papanek and the Legacy of Design Activism." *Design and Culture* 5 (2): 151-168. doi: 10.2752/175470813X13638640370698.
- Coates, Nigel. 2012. *Narrative Architecture* Chichester, West Sussex: John Wiley & Sons Ltd. .
- Connerton, Paul. 1989. *How Societies Remember* Cambridge: Cambridge University Press.
- Cook, Daniel. 2005. Serious Games: A Broader Definition. Lost Garden. Accessed August 24, 2018, <http://www.lostgarden.com/2005/05/serious-games-broader-definition.html>.
- Courchesne, Luc. 2002. Experiential Art: Case Study. Accessed August 28, 2018, <http://ic.media.mit.edu/courses/mas878/pubs/courchesne-02-experiential-art.pdf>.
- Crang, Mike, and Divya P. Tolia-Kelly. 2010. "Nation, Race, and Affect: Senses and Sensibilities at National Heritage Sites." *Environment and Planning A* 42 (10): 2315-2331. doi: 10.1068/a4346.
- Crowley, Vicki, and Julie Matthews. 2006. "Museum, Memorial and Mall: Postcolonialism, Pedagogies, Racism and Reconciliation." *Pedagogy, Culture & Society* 14 (3): 263-277. doi: 10.1080/14681360600891878.
- Cryslar, G., and A. Kusno. 1997. "Angels in the Temple - The Aesthetic Construction of Citizenship at the United States Holocaust Memorial Museum." *Art Journal* 56 (1): 52-64. doi: 10.1080/00043249.1997.10791801.
- Curtin University. 2018. Curtin HIVE Accessed October 11, 2018, <https://humanities.curtin.edu.au/research/centres-institutes-groups/hive/>.
- Darby, Thameen. 2006. 'Nakba Layer', Google Earth Layer Map: Google Earth.
- Davidson, Joyce, and Christine Milligan. 2004. "Embodying Emotion Sensing Space: Introducing Emotional Geographies." *Social & Cultural Geography* 5 (4): 523-532. doi: 10.1080/1464936042000317677.
- Davis, Uri. 2003. *Apartheid Israel : Possibilities for the Struggle Within*. London, New York: Zed Books
- De Castell, Suzanne, and Jennifer Jenson. 2003. "OP-ED: Serious Play." *Journal of Curriculum Studies* 35 (6): 649-665. doi: 10.1080/0022027032000145552.
- Dehais, Christophe, Vincent Charvillat, and Jean Conter. 2007. "Interactive Augmentation of Photographs Depicting Prehistoric Engravings" *Thirteen Annual Scientific Conference on Web Technology, New Media, Communication and Telematic Theory, Methods, Tools and Applications, Delft University of Technology*: Eurosis.
- Demos, T. J. 2003. "Desire in Diaspora: Emily Jacir." *Art Journal* 62 (4): 68-78. doi: 10.2307/3558490.

- Denisova, Alena, and Paul Cairns. 2015. "First Person vs. Third Person Perspective in Digital Dames: Do Player Preferences Affect Immersion?" *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems*: ACM.
- DiSalvo, Carl. 2010. "Design, Democracy and Agonistic Pluralism." In *Proceedings of The Design Research Society International Conference 2010, Montreal*, 366-371. Design Research Society.
- . 2012. *Adversarial Design*. Cambridge, Massachusetts: MIT Press.
- dosRemedios, Steven. 2015. "Apartheid Museum." *Flickr*, <https://bit.ly/2T9ijUb>.
- Douglas, Noel. 2011. "Signs of Revolt, the Sign, the City and Revolution in the 21st Century." In *Proceedings of Social Change and Design activism, Design History Society's Annual Conference, University of Barcelona*, 7-10 September 2011. <http://www.historiadeldisseny.org/congres/>.
- Dourish, Paul 2006. "Implications for Design." In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, Montréal, Québec, Canada*, 541-550. 1124855: ACM. doi: 10.1145/1124772.1124855.
- Drainville, Elaine, and Amir Saeed. 2013. "A Right to Exist: A Palestinian Speaks." *Feminist Media Studies* 13 (5): 830-839. doi: 10.1080/14680777.2013.838364.
- Dreher, Tanja. 2010. "Speaking Up or Being Heard? Community Media Interventions and the Politics of Listening." *Media, Culture & Society* 32 (1): 85-103. doi: 10.1177/0163443709350099.
- Dyson, Frances. 2009. *Sounding New Media: Immersion and Embodiment in the Arts and Culture*. Edited by MyiLibrary. Berkeley: University of California Press.
- Edelman, Murray. 1995. *From Art to Politics: How Artistic Creations Shape Political Conceptions*. Chicago: The University of Chicago Press.
- Eman. 2007. "Qalandia Wall Barghouti." *Wikimedia Commons*, <https://commons.wikimedia.org/wiki/File:QalandiaWallBarghouti.JPG>.
- Estigman. 2017. "Shoes of the Fallen." *Wikimedia Commons*, Digital image, [https://commons.wikimedia.org/wiki/File:Shoes\\_of\\_the\\_Fallen.jpg](https://commons.wikimedia.org/wiki/File:Shoes_of_the_Fallen.jpg).
- Fallman, Daniel. 2007. "Why Research-Oriented Design isn't Design-Oriented Research: On the Tensions Between Design and Research in an Implicit Design Discipline." *Knowledge, Technology & Policy* 20 (3): 193-200. doi: 10.1007/s12130-007-9022-8.
- Farrow, Robert, and Ioanna Iacovides. 2014. "Gaming and the Limits of Digital Embodiment." *Philosophy & Technology* 27 (2): 221-233. doi: 10.1007/s13347-013-0111-1.
- Feldman, Edmund Burke. 1972. *Varieties of Visual Experience: Art as Image and Idea* 2nd ed. New York: H. N. Abrams.
- Feldman, Ilana. 2012. "The Humanitarian Condition: Palestinian Refugees and the Politics of Living." *Humanity: An International Journal of Human Rights, Humanitarianism, and Development* 3 (2): 155-172. doi: 10.1353/hum.2012.0017.
- Fernando, Gavin. 2018. Why the World is Talking about Ahed Tamimi. News Pty Limited. February 21, 2018 Accessed July 19, 2018, <https://www.news.com.au/world/middle-east/why-the-world-is-talking-about-ahed-tamimi/news-story/305b7f78edeafc9cd049b6a0bb0c82ff>.
- Finkelstein, Norman 2006. The Ludicrous Attacks on Jimmy Carter's Book. Counter Punch: Tell the Facts, Name the Names. December 28, 2006 Accessed June 29, 2014, <http://www.counterpunch.org/2006/12/28/the-ludicrous-attacks-on-jimmy-carter-s-book/>.
- Finkelstein, Norman G. 2003. *The Holocaust Industry: Reflection on the Exploitation of Jewish Suffering*. 2nd ed. London: Verso.
- Fisher, Jean. 2009. "Voices in the Singular Plural: 'Palestine c/o Venice' and the Intellectual Under Siege." *Third Text* 23 (6): 789-801. doi: 10.1080/09528820903371198.
- . 2010. "Palestinian Art: From 1850 to the Present." *Third Text* 24 (4): 481-489. doi: 10.1080/09528822.2010.491381.
- Fisken, Tim. 2014. Agonsim. Encyclopaedia Britannica, Inc. November 25, 2014 Accessed November 7, 2018, <https://www.britannica.com/topic/agonism-philosophy>.
- Fleifel, Mahdi. 2012. *A World Not Ours*. DVD. France: Eurozoom (2013), Germany: mec Film (2014), USA: Torch Films (2016)
- Frayling, Christopher. 1993. "Research in Art and Design." *Royal College of Art Research Papers* 1 (1): 1-5. <http://researchonline.rca.ac.uk/id/eprint/384>.
- Free Sound. 2005-ongoing. Free Sound. Accessed October 3, 2018, <https://www.freesound.org/>.
- Fuad-Luke, Alastair. 2013. *Design Activism: Beautiful Strangeness for a Sustainable World*. London, UK: Earthscan from Routledge.

- Giugni, Marco, and Florence Passy, eds. 2001. *Political Altruism? Solidarity Movements in International Perspective*. Maryland: Rowman & LittleField Publishers, Inc.
- Goldstone, Richard. 2011. Israel and the Apartheid Slander. October 31, 2011 Accessed June 29, 2014, [http://www.nytimes.com/2011/11/01/opinion/israel-and-the-apartheid-slander.html?\\_r=0](http://www.nytimes.com/2011/11/01/opinion/israel-and-the-apartheid-slander.html?_r=0).
- Gould, Rebecca. 2014a. "The Materiality of Resistance: Israel's Apartheid Wall in an Age of Globalization." *Social Text* 118 32 (1 ): 1-21. doi: 10.1215/01642472-2391315.
- . 2014b. "Sumud: The Palestinian Art of Existence." *World Policy Journal* 31 (3): 99-106. doi: 10.1177/0740277514552979.
- Graham, Lisa. 1999. *The Principles of Interactive Design* Albany, NY: Delmar Publishers.
- Gray, Carole. 1998. "Inquiry Through Practice: Developing Appropriate Research Strategies." In *No Guru, No Method? : Discussion on Art and Design Research* eds Pia Strandman and korkeakoulu Taideteollinen. Helsinki: Helsinki : University of Art and Design.
- Gray, Carole, and Julian Malins. 2007. *Visualizing Research: A Guide to the Research Process in Art and Design* Farnham: Ashgate Publishing Ltd.
- Grois, Boris. 2008. *Art Power*. Cambridge, Massachusetts: MIT Press.
- Hagesæter, Magne 2006. "Inside Hawara Checkpoint, in the Occupied West Bank, Palestine." *Wikimedia Commons*, Digital image, [https://commons.wikimedia.org/wiki/File:Hawara\\_checkpoint\\_2.jpg](https://commons.wikimedia.org/wiki/File:Hawara_checkpoint_2.jpg).
- Halupka, Max. 2014. "Clicktivism: A Systematic Heuristic." *Policy & Internet* 6 (2): 115-132. doi: 10.1002/1944-2866.POI355.
- Hamber, Brandon. 2012. "Conflict Museums, Nostalgia, and Dreaming of Never Again." *Peace and Conflict: Journal of Peace Psychology* 18 (3): 268-281. doi: 10.1037/a0029076.
- Han, Eulalia, and Halim Rane. 2013. *Making Australian Foreign Policy on Israel-Palestine : Media Coverage, Public Opinion and Interest Groups, Islamic Studies Series*. Carlton, Victoria: Melbourne University Press.
- Handala. 2017. Through the Eyes of a Palestinian Refugee. Accessed 21 Sep 2017, <http://www.handala.org/>.
- Harlow, Barbara. 2013. "Apartheid or Not Apartheid? The Russell Tribunal on Palestine, South Africa Session, November 2011." *Law, Culture and the Humanities* 9 (3): 412-420. doi: 10.1177/1743872112468656.
- Hasian, Jr Marouf. 2004. "Remembering and Forgetting the "Final Solution": a Rhetorical Pilgrimage Through the U.S. Holocaust Memorial Museum." *Critical Studies in Media Communication* 21 (1): 64-92. doi: 10.1080/0739318042000184352.
- Hassenzahl, Marc. 2010. "Experience Design: Technology for All the Right Reasons." *Synthesis Lectures on Human-Centered Informatics* 3 (1): 1-95. <https://doi.org/10.2200/S00261ED1V01Y201003HCI008>.
- Hay, Ryan. 2011. GI4 VISIT PALESTINE. Art and Social Movements. Accessed November 11, 2018, [www.blog.ryanhay.es/graphic-influences-iv/gi4-visit-palestine-2/](http://www.blog.ryanhay.es/graphic-influences-iv/gi4-visit-palestine-2/).
- Hein, Hilde S. 2000. *The Museum in Transition: A Philosophical Perspective*. Washington D.C.: The Smithsonian Institution
- Herrington, Jan, Susan McKenney, Thomas Reeves, and Ron Oliver. 2007. "Design-Based Research and Doctoral Students: Guidelines for Preparing a Dissertation Proposal" *Proceedings of ED-MEDIA 2007--World Conference on Educational Multimedia, Hypermedia & Telecommunications Vancouver, Canada: Association for the Advancement of Computing in Education (AACE: Association for the Advancement of Computing in Education* <https://www.learnlib.org/primary/p/25967/>.
- Hilal, Jamil, and Ilan Pappé. 2010. "PALISAD: Palestinian and Israeli Academics in Dialogue." In *Across the Wall: Narratives of Israeli-Palestinian History*, eds Ilan Pappé and Jamil Hilal, 1-18. London, New York NY: IB Tauris & Co Ltd.
- Hilal, Sandi, and Alessandro Petti. 2003. 'Stateless Nation.' Installation. Venice: 2003 Venice Biennale.
- . 2009. Ramallah Syndrome: Side Effects of a Post-Oslo Spatial Regime. Blogpost. Accessed July 19, 2018, <http://ramallahsyndrome.blogspot.com.au/>.
- Human Rights Council. 2015. Report of the Detailed Findings of the Independent Commission of Inquiry Established Pursuant to Human Rights Council Resolution S-21/1. Human Rights Council,. 23 June 2015 Accessed October 24, 2018, [https://www.ohchr.org/Documents/HRBodies/HRCouncil/CoIGaza/A\\_HRC\\_CRP\\_4.doc](https://www.ohchr.org/Documents/HRBodies/HRCouncil/CoIGaza/A_HRC_CRP_4.doc).
- Impact Games. 2013. PeaceMaker: Play the News. Solve the Puzzle. Accessed October 8, 2018, <http://peacemakergame.com/>.
- Inglis, Kenneth S. 2008. *Sacred Places: War Memorials in the Australian Landscape* 3rd ed. Carlton, Victoria: Melbourne University Press.

- International Council of Museums. 2007. Museum Definition. Accessed October 8,, <https://icom.museum/en/activities/standards-guidelines/museum-definition/>.
- International Court of Justice. 2004. Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory Accessed 24 October 2018, <https://www.icj-cij.org/en/case/131>.
- Ioannides, Marinou, and Ewald Quak, eds. 2014. *3D Research Challenges in Cultural Heritage: A Roadmap in Digital Heritage Preservation*. Berlin, Heidelberg: Springer.
- "Israel Targets Children." 2000. *The Palestine Poster Project Archives*, Poster, <https://www.palestineposterproject.org/poster/israel-targets-children>.
- Jacir, Annamarie. 2008. *Salt of this Sea*. DVD. Pyramide Distribution.
- Jacir, Emily. 2001. 'Memorial to 418 Palestinian Villages Which Were Destroyed, Depopulated, and Occupied by Israel in 1948 ', Installation: National Museum of Contemporary Art, Athens (EMST).
- . 2001-2003. 'Where We Come From.' Installation. San Francisco Museum of Modern Art (SFMOMA).
- . 2004-2005. 'Ramallah/New York.' Two channel video (color, sound). New York: The Museum of Modern Art.
- . 2006. Retracing Bus Route no. 23. [Photo essay]. The Electronic Intifada. Accessed July 18, 2018, <https://electronicintifada.net/content/photostory-retracing-bus-no-23-historic-jerusalem-hebron-road/6609>.
- Jacobson, Robert 1999. "Introduction: Why Information Design Matters." In *Information Design*, ed. Robert Jacobson, 1-10. Cambridge, Massachusetts, London, England: MIT Press.
- Jansen, Gregor, and Robert Klanten. 2011a. "Preface." In *Art and Agenda, Political Art and Activism*, eds Robert Klanten and Pedro Alonso, 4-9. Berlin: Gestalten.
- . 2011b. "Think Global, Act Local." In *Art and Agenda, Political Art and Activism*, eds Robert Klanten and Pedro Alonso, 144-215. Berlin: Gestalten.
- Jerald, Jason. 2016. *The VR Book: Human-Centered Design for Virtual Reality* Edited by Tamer M. Özsu. 1st ed. Vol. 8, *ACM Books*: Morgan & Claypool Publishers.
- Joy, Annamma, and John F Jr Sherry. 2003. "Speaking of Art as Embodied Imagination: A Multisensory Approach to Understanding Aesthetic Experience." *Journal of Consumer Research* 30 (2): 259-282. doi: 10.1086/376802.
- Julier, Guy. 2013a. "From Design Culture to Design Activism." *Design and Culture* 5 (2): 215-236. doi: 10.2752/175470813X13638640370814.
- . 2013b. "Introduction Material Preference and Design Activism." *Design and Culture* 5 (2): 145-150. doi: 10.2752/175470813X13638640370652.
- June, Raymond. 2010. "Apartheid Simulacra: Entrance to the Apartheid Museum. Johannesburg." *Flickr*, Digital image, <https://www.flickr.com/photos/raymondjune/5207519174>.
- Juris, Jeffrey S. 2012. "Reflections on #Occupy Everywhere: Social Media, Public Space, and Emerging Logics of Aggregation." *American Ethnologist* 39 (2): 259-279. doi: 10.1111/j.1548-1425.2012.01362.x.
- Jwailis, Yazan. 2017. "The Separation Wall between Beit Hanina and Ramallah." *Wikimedia Commons*, Digital image, [https://commons.wikimedia.org/wiki/File:The\\_separation\\_wall\\_between\\_Beit\\_Hanina\\_and\\_Ramallah.jpg](https://commons.wikimedia.org/wiki/File:The_separation_wall_between_Beit_Hanina_and_Ramallah.jpg).
- Kaygan, Harun, and Guy Julier. 2013. "Global Design Activism Survey." *Design and Culture* 5 (2): 237-252. doi: 10.2752/175470813X13638640370850.
- Kellett, Susan. 2015. "Truth and Love: The Windows of the Australian War Memorial." *Journal of Australian Studies* 39 (2): 125-150. doi: 10.1080/14443058.2015.1021366.
- Keso S. 2009. "South Africa 610: Apartheid Museum Johannesburg." *Flickr*, Digital image, <https://bit.ly/2DjZcRL>.
- Khalidi, Walid. 1997. "Revisiting the UNGA Partition Resolution." *Journal of Palestine Studies* 27 (1): 5-21. doi: 10.2307/2537806.
- Khalili, Laleh. 2007. "'Standing with My Brother': Hizbullah, Palestinians, and the Limits of Solidarity." *Comparative Studies in Society and History* 49 (2): 276-303. doi: 10.1017/S0010417507000497.
- Khalili, Yazan. 2007-2010. 'Colour Correction - Camp Series.' Photography.
- Klanten, Robert, Sven Ehmann, Verena Hanschke, and Lukas Feireiss, eds. 2011. *A Touch of Code: Interactive Installations and Experiences*. Berlin: Die Gestalten Verlag.
- Klimmt, Christoph. 2009. "Serious Games and Social Change: Why They (Should) Work." In *Serious Games: Mechanisms and Effects*, eds Ute Ritterfeld, Michael Cody and Peter Vorderer, 248-270. New York: Routledge.

- Kocsis, Anita, Carolyn Barnes, and Sarah Kenderdine. 2012. "Digital Mediation and Museum Space." *Interiors: Design* 3 (1-2): 107-126. doi: 10.2752/204191212X13232577462655.
- Kraftl, Peter, and Peter Adey. 2008. "Architecture/Affect/Inhabitation: Geographies of Being-In Buildings." *Annals of the Association of American Geographers* 98 (1): 213-231. doi: 10.1080/00045600701734687.
- Krausz, Franz. 1936. 'Visit Palestine.' Poster.
- Lakoff, George, and Mark Johnson. 1999. *Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought*. New York: Basic Books.
- Landers, Richard N. 2014. "Developing a Theory of Gamified Learning: Linking Serious Games and Gamification of Learning." *Simulation & Gaming* 45 (6): 752-768. doi: 10.1177/1046878114563660.
- Landsberg, Alison. 1997. "America, the Holocaust, and the Mass Culture of Memory: Toward a Radical Politics of Empathy." *New German Critique: An Interdisciplinary Journal of German Studies* 71 (Memories of Germany (Spring- Summer, 1997)): 63-86. doi: 10.2307/488559.
- . 2004. *Prosthetic Memory: The Transformation of American Remembrance in the Age of Mass Culture*. New York: Columbia University Press.
- Larsen, Andrew E. 2011. "Checkpoint 300 in Bethlehem." *Flickr*, Digital image, <https://www.flickr.com/photos/papalars/6205594305>.
- Leap Motion. 2017a. Leap Motion Store. Accessed November 13, 2017, <https://store-world.leapmotion.com/>.
- . 2017b. Technology - Leap Motion. Accessed November 13, 2017, <https://www.leapmotion.com/product/vr/#113>.
- Lees-Maffei, Grace. 2012. "Reflections on Design Activism and Social Change: Design History Society Annual Conference, September 7-10,2011, Barcelona." *Design Issues* 28 (2 Spring 2012): 90-92. <http://www.jstor.org/stable/41427830>.
- Levy, Daniel, and Natan Sznajder. 2006. *The Holocaust and Memory in the Global Age* Translated by Assenka Oksiloff Philadelphia: Temple University.
- Levy, Gideon. 2012. Meet the Israelis. Accessed June 29, 2014, <http://www.haaretz.com/opinion/meet-the-israelis-1.472137>.
- Linenthal, Edward T. 1994. "The Boundaries of Memory: The United States Holocaust Memorial Museum." *American Quarterly* 46 (3): 406-433. doi: 10.2307/2713271.
- Lionis, Chrisoula. 2012. *Beyond the Last Sky: Contemporary Palestinian Photography and Video*. Paddington NSW Australian Centre for Photography Ltd. .
- . 2013. "Punchline: The Emergence of Humour in Palestinian Art and Film." College of Fine Arts, UNSW University of New South Wales.
- Loewenstein, Antony. 2009. *My Israel Question* Carlton, Victoria: Melbourne University Press.
- Löwgren, Jonas. 2007. "Fluency as an experiential quality in augmented spaces." *International Journal of Design* 1 (3): 1-10.
- Lukas, Scott A. . 2013. *The Immersive Worlds Handbook, Designing Theme Parks and Consumer Spaces* New York: Focal Press.
- Lunt, Peter, and Sonia Livingstone. 1996. "Rethinking the Focus Group in Media and Communications Research." *Journal of Communication* 46 (2): 79-98. doi: doi:10.1111/j.1460-2466.1996.tb01475.x.
- Lyons, John 2014. "Stone Cold Justice " In ABC Four Corners, . *ABC* <https://www.abc.net.au/news/2014-02-10/stone-cold-justice/5249274>.
- Magid, Jacob. 2018. "Italian graffiti artist arrested for mural of Ahed Tamimi on security barrier." *The Times of Israel*, 28 July 2018. <https://www.timesofisrael.com/italian-graffiti-artist-arrested-for-mural-of-ahed-tamimi-on-security-barrier/>.
- Makdisi, Saree 2010. "The Architecture of Erasure." *Critical Inquiry* 36 (3): 519-559. doi: 10.1086/653411.
- Mäkelä, Maarit. 2009. "The Place and the Product(s) of Making in Practice-Led Research." In *Reflections and Connections: On the Relationship Between Creative Production and Academic Research*, eds Nithikul Nimkulrat and Tim O'riley, 29-37. Helsinki: University of Art and Design Helsinki.
- Mäkelä, Maarit, and Nithikul Nimkulrat. 2011. "Reflection and Documentation in Practice-Led Design Research." In *Nordic Design Research Conference Helsinki*.
- Malegiannaki, Irini, and Thanasis Daradoumis. 2017. "Analyzing the Educational Design, Use and Effect of Spatial Games for Cultural Heritage: A Literature Review." *Computers & Education* 108 (2017): 1-10. doi: 10.1016/j.compedu.2017.01.007.
- Manovich, Lev. 2001. *The Language of New Media* Cambridge, Massachusetts: The MIT Press.

- . 2006. "The Poetics of Augmented Space." *Visual Communication* 5 (2): 219-240. <http://vcj.sagepub.com/10.1177/1470357206065527>.
- Mansour, Rawan. 2012. "Leila Khaled." *Deviant Art*, <https://www.deviantart.com/rawan091/art/Leila-Khaled-342702707>.
- Markussen, Thomas. 2013. "The Disruptive Aesthetics of Design Activism: Enacting Design Between Art and Politics." *Design Issues* 29 (1): 38-50. [https://doi-org.dbgw.lis.curtin.edu.au/10.1162/DESI\\_a\\_00195](https://doi-org.dbgw.lis.curtin.edu.au/10.1162/DESI_a_00195).
- Marsh, Tim. 2011. "Serious Games Continuum: Between Games for Purpose and Experiential Environments for Purpose." *Entertainment Computing* 2 (2): 61-68. doi: 10.1016/j.entcom.2010.12.004.
- Marsupium. 2018. "Bethlehem wall graffiti Ahed Tamimi by Jorit Agoch and others." *Wikimedia Commons*, [https://commons.wikimedia.org/wiki/File:Bethlehem\\_wall\\_graffiti\\_Ahed\\_Tamimi\\_by\\_Jorit\\_Agoch\\_and\\_others.jpeg](https://commons.wikimedia.org/wiki/File:Bethlehem_wall_graffiti_Ahed_Tamimi_by_Jorit_Agoch_and_others.jpeg).
- Marx, Christy. 2012. *Write Your Way into Animation and Games: Create a Writing Career in Animation and Games*. Oxford: Focal Press.
- Masalha, Nur 1999. "A Critique on Benny Morris." In *The Israel/ Palestine Question*, ed. Ilan Pappé, 211-220. London: Routledge.
- McIntosh, Justin. 2004. "Palestinians wearing Che Guevara tshirts." *Wikimedia Commons*, [https://commons.wikimedia.org/wiki/File:Palestinians\\_wearing\\_Che\\_Guevara\\_tshirts.jpg](https://commons.wikimedia.org/wiki/File:Palestinians_wearing_Che_Guevara_tshirts.jpg).
- McKernan, Amy. 2017. "Discomfort at the Australian War Memorial: Learning the Trauma of War." *History Australia* 14 (1): 99-114. doi: 10.1080/14490854.2017.1287005.
- Meadows, Mark Stephen. 2003. *Pause & Effect: The Art of Interactive Narrative* Edited by Arts American Institute of Graphic, *Art of interactive narrative*. Indianapolis, Indiana: New Riders.
- Mer Khamis, Juliano , and Danniell Danniell. 2004. *Arna's Children*. DVD. 20 April 2004.
- Messham-Muir, Kit. 2004. "Dark Visitations: The Possibilities and Problems of Experience and Memory in Holocaust Museums." *Australian and New Zealand Journal of Art* 5 (1): 97-111. doi: 10.1080/14434318.2004.11432734.
- . 2015. "Into Darkness: Affect and Dark Space in Holocaust Exhibitions." *Journal of Curatorial Studies* 4 (3): 434-457. doi: 10.1386/jcs.4.3.434\_1.
- Michael, David R, and Sandra L Chen. 2006. *Serious Games: Games that Educate, Train, and Inform*. Mason, Ohio: Course Technology, Cengage Learning.
- Miceli-Voutsinas, Jacque. 2014. "Contrapuntal Memories? Remember the Holocaust in a Post-9/11 World." *Human Geography* 7 (1): 49-68. <https://hugeog-com.dbgw.lis.curtin.edu.au/v7n1-miceli/>.
- . 2017. "An Absent Presence: Affective Heritage at the National September 11th Memorial & Museum." *Emotion, Space and Society* 24 (2017): 93-104. doi: 10.1016/j.emospa.2016.09.005.
- Miller, Christine Z. 2014. "Lost in Translation? Ethics and Ethnography in Design Research." *Journal of Business Anthropology* 1 (1): 62-78. doi: <http://dx.doi.org/10.22439/jba.v1i1.4262>.
- Millon, Henry A., and Linda Nochlin, eds. 1978. *Art and Architecture in the Service of Politics*. Cambridge, Massachusetts: The MIT Press.
- Mo3. 2014-ongoing Mo3 Facebook. Accessed September 28, 2018, <https://www.facebook.com/pg/mo3blog>.
- Morozov, Evgeny 2009. "The Brave New World of Slacktivism." *Foreign Policy* 19 (5). <http://foreignpolicy.com/2009/05/19/the-brave-new-world-of-slacktivism/>.
- Morris, Michael W, Kwok Leung, Daniel Ames, and Brian Lickel. 1999. "Views from Inside and Outside: Integrating Emic and Etic Insights about Culture and Justice Judgment." *Academy of management review* 24 (4): 781-796. <https://doi.org/10.5465/amr.1999.2553253>.
- Mortara, Michela, Chiara Eva Catalano, Francesco Bellotti, Giusy Fiucci, Minica Houry-Panchetti, and Panagiotis Petridis. 2014. "Learning Cultural Heritage by Serious Games." *Journal of Cultural Heritage* 15 (3): 318-325. doi: 10.1016/j.culher.2013.04.004.
- Nader, Noor. 2016. ""The Holocaust Victims "United States Holocaust Memorial Museum." *Wikimedia Commons*, [https://commons.wikimedia.org/wiki/File:%22The\\_Holocaust\\_Victims\\_%22United\\_States\\_Holocaust\\_Memorial\\_Museum.jpg](https://commons.wikimedia.org/wiki/File:%22The_Holocaust_Victims_%22United_States_Holocaust_Memorial_Museum.jpg).
- National Health and Medical Research Council, Australian Research Council, and Australian Vice-Chancellors' Committee. 2015. *National Statement on Ethical Conduct in Human Research*. Australian Government



- National Health and Medical Research Council, Australian Research Council, and Universities Australia. 2007. 'Australian Code for the Responsible Conduct of Research.' Australian Government
- Nelson, Brendan. 2014. "The Australian War Memorial: Its Past and Future." *Institute Proceedings. The Australian War Memorial*. Canberra.
- Newbury, Darren. 2005. "'Lest we Forget': Photography and the Presentation of History at the Apartheid Museum, Gold Reef City, and the Hector Pieterse Museum, Soweto." *Visual Communication* 4 (3): 259-295. doi: 10.1177/1470357205055919.
- Nilsson, Niels Christian, Rolf Nordahl, and Stefania Serafin. 2016. "Immersion Revisited: A Review of Existing Definitions of Immersion and Their Relation to Different Theories of Presence." *Human Technology* 12 (2): 108-134. doi: 10.17011/ht/urn.201611174652.
- Nimkulrat, Nithikul. 2012. "Situating Creative Artefacts in Art and Design Research." In *Making: an international conference on materiality and knowledge, Notodden, Norway*, 16. NordFo. <https://dspace.lboro.ac.uk/2134/10711>.
- Oosterling, Henk. 2011. "Designature! On The Eco-Relational Paradigm." In *Design History Society Annual Conference, Design Activism and Social Change, Barcelona Spain*. Design History Society Annual Conference. <http://www.historiadeldisseny.org/congres/>.
- Ott, Michela, and Francesca Pozzi. 2011. "Towards a New Era for Cultural Heritage Education: Discussing the Role of ICT." *Computers in Human Behavior* 27 (4): 1365-1371. <https://doi.org/10.1016/j.chb.2010.07.031>.
- Overton, Peter, and Mark Zuckerberg. 2018. *Facebook Breach: Facebook Founder Mark Zuckerberg has Apologized after 50 Million Users had their Personal Information Exploited by a Political Consultancy Firm*. online: Nine News (NINE NETWORK). March 22, 2018. <https://search-informit-com-au.dbgw.lis.curtin.edu.au/documentSummary;dn=TSM201803220021;res=TVNEWS>.
- Palestine Open Maps. 2018. Palestine Open Maps. Accessed November 8, 2018, <https://palopenmaps.org>.
- Palestine Remembered. 2000. Palestine Remembered. Accessed August 28, 2018, <http://www.palestineremembered.com/>.
- Palestinian BDS National Committee. 2005. Introducing the BDS Movement. Accessed 29 June 2014, <http://www.bdsmovement.net/bdsintro>.
- Palestinian Journeys. 2018. Palestinian Journeys Accessed November 8, 2018, <https://www.paljourneys.org>.
- Papanek, Victor J. 1985. *Design For The Real World: Human Ecology and Social Change*. 2nd ed. London: Thames and Hudson.
- Papastergiadis, Nikos. 2014. "A Breathing Space for Aesthetics and Politics: An Introduction to Jacques Rancière." *Theory, Culture & Society* 31 (7/8): 5-26. doi: 10.1177/0263276414551995.
- Pappé, Ilan. 2006. *The Ethnic Cleansing of Palestine*. Oxford: Oneworld.
- Partners for Progressive Israel. 2015. "Israel Study Tour - Qalandia Checkpoint." YouTube Video, February 24, 2015, [https://www.youtube.com/watch?v=GJslkV\\_jonk](https://www.youtube.com/watch?v=GJslkV_jonk).
- Passy, Florence. 2001. "Political Altruism and the Solidarity Movement: An Introduction." In *Political Altruism? Solidarity Movements in International Perspective*, eds Marco Giugni and Florence Passy. Maryland: Rowman & Littlefield Publishers, Inc.
- Persuasive Games. 2003. Persuasive Games. Accessed August 24, 2018, <http://persuasivegames.com/>.
- Press, Mike, and Rachel Cooper. 2003. *The Design Experience: The Role of Design and Designers in the Twenty-First Century* Aldershot: Ashgate.
- Punnett, Betty, David Ford, Bella Galperin, and Terri Lituchy. 2017. "The Emic-Etic-Emic Research Cycle." *A I B Insights* 17 (1): 3-6. <https://search-proquest-com.dbgw.lis.curtin.edu.au/docview/1879179938?accountid=10382>
- Quiquívix, Linda. 2014. "Art of War, Art of Resistance: Palestinian Counter-Cartography on Google Earth." *Annals of the Association of American Geographers* 104 (3): 444-459. doi: 10.1080/00045608.2014.892328.
- Rabah, Khalil. 2003 - ongoing. 'The Palestinian Museum of Nature and History and Humankind.' Installation.
- Rabah, Khalil. 2004. 'The 3rd Annual Wall Zone Auction.' Installation and video.
- Rankin, E., and L. Schmidt. 2009. "The Apartheid Museum: Performing a Spatial Dialectics." *Journal of Visual Culture* 8 (1): 76-102. doi: 10.1177/1470412908100901.
- Rankin, Elizabeth. 2013. "Creating/Curating Cultural Capital: Monuments and Museums for Post-Apartheid South Africa." *Humanities* 2 (1): 72- 98. doi: 10.3390/h2010072.

- Räsänen, Marjo. 1999. "Building Bridges: Experiential Art Understanding." *International Journal of Art and Design Education* 18 (2): 195-205. <https://doi.org/10.1111/1468-5949.00174>.
- Rashad, Jonathan. 2011. "Tahrir Square - February 9, 2011." *Wikimedia Commons*, Digital image, [https://commons.wikimedia.org/wiki/File:Tahrir\\_Square\\_-\\_February\\_9,\\_2011.png](https://commons.wikimedia.org/wiki/File:Tahrir_Square_-_February_9,_2011.png).
- Ratto, Matt. 2011. "Critical Making: Conceptual and Material Studies in Technology and Social Life." *The Information Society: An International Journal* 27 (4): 252-269. doi: 10.1080/01972243.2011.583819.
- Riklis, Eran. 2008. *Lemon Tree*. DVD. IFC Films. March 27, 2008.
- Ritterfeld, Ute, Michael Cody, and Peter Vorderer. 2009. "Introduction." In *Serious Games: Mechanisms and Effects*, eds Ute Ritterfeld, Michael Cody and Peter Vorderer, 3-9. New York: Routledge.
- Rizvic, S. , A. Sadzak, B. Ramic-Brkic, and V. Hulusic. 2012. "Virtual Museum Applications and Their Public Perception in Bosnia and Herzegovina." *The International Archives of the Photogrammetry XXXVIII-5/W16*: 421-427. doi: 10.5194/isprsarchives-XXXVIII-5-W16-421-2011.
- Rokeby, David. 1998. "The Construction of Experience: Interface as content." In *Digital Illusion: Entertaining the Future with High Technology*, ed. Clark Jr. Bodsworth, 27-48. New York: ACM Press.
- Roy, Arundhati. 2004. Arundhati Roy - The 2004 Sydney Peace Prize Lecture. November 4, 2004 Accessed September 21, 2017, <http://sydney.edu.au/news/84.html?newsstoryid=279>.
- Rua, Helena, and Pedro Alvaro. 2011. "Living the Past: 3D Models, Virtual Reality and Game Engines as Tools for Supporting Archaeology and the Reconstruction of Cultural Heritage – the Case-Study of the Roman Villa of Casal de Freiria." *Journal of Archaeological Science* 38 (12): 3296-3308. doi: 10.1016/j.jas.2011.07.015.
- Russell Tribunal on Palestine. 2013. Findings of the Final Session of the Russell Tribunal on Palestine. March 16-17, 2013 Accessed 29 June 2014, <http://www.russelltribunalonpalestine.com/en/full-findings-of-the-final-session-en>.
- Rust, Chris, Judith Mottram, and Jeremy Till. 2007. *Review of Practice-Led Research in Art, Design and Architecture*. UK: Arts and Humanities Research Council. <http://shura.shu.ac.uk/7596/>.
- Ryan, Richard M., Scott C. Rigby, and Andrew Przybylski. 2006. "The Motivational Pull of Video Games: A Self-Determination Theory Approach." *Motivation and Emotion* 30 (4): 347-363. doi: 10.1007/s11031-006-9051-8.
- Sa'di, Ahmad H, and Lila Abu-Lughod. 2007. "Introduction: The Claims of Memory." In *Nakba: Palestine, 1948, and the Claims of Memory*, eds Ahmad H Sa'di and Lila Abu-Lughod, 1-24. New York: Columbia University Press.
- Saadeh, Raeda. 2003. 'Crossroad.' Cibacrhome print, mounted
- . 2007. 'Mona Lisa.' Photography.
- . 2013. 'Vacuum.' Two-channel video installation (colour, sound).
- Sabella, Steve. "Seperation Wall Palestine." *Palestine Photo Bank*, Digital image, <https://sabella.photoshelter.com/image/I0000GHoUu.tE4VM>.
- Said, Edward. 1984. "Permission to Narrate." *Journal of Palestine Studies* 13 (3): 27-48. <http://www.jstor.org/stable/2536688> .
- . 1999. *After the Last Sky: Palestinian Lives*. New York: Columbia University Press.
- . 2001a. *Power, Politics, and Culture*. Edited by Gauri Viswanathan. London: Bloomsbury Publishing Plc.
- . 2001b. "Propaganda and War." *Al-Ahram Weekly* (550). <http://weekly.ahram.org.eg/2001/550/op2.htm>.
- Sanders, Elizabeth B.-N. 2002. "From User-Centered to Participatory Design Approaches." In *Design and the Social Sciences: Making Choices*, ed. Jorge Frascara, 18-25. London: Taylor & Francis Books Limited.
- Sansour, Larissa. 2009. 'A Space Exodus ', Video.
- . 2012. 'Nation Estate.' Photography and video.
- Schell, Jesse. 2015. *The Art of Game Design*. Second ed. Florida: Taylor and Francis Group, LLC.
- Schön, Donald A. 1991. *The Reflective Practitioner: How Professionals Think in Action*. Aldershot: Arena.
- Scrivener, Stephen 2000. "Towards the Operationalisation of Design Research as Reflection in and on Action and Practice" *Foundations for the Future: Doctoral Education in Design, La Clusaz, France*, Staffordshire: Staffordshire University Press.

- . 2009. "The Roles of Art and Design Process and Object in Research " In *Reflections and Connections: On the Relationship Between Creative Production and Academic Research*, eds Nithikul Nimkulrat and Tim O'riley, 69- 80. Helsinki: University of Art and Design Helsinki.
- Shedroff, Nathan. 2001. *Experience design*: New Riders Indianapolis.
- Sheridan, Greg. 2014 Evil and Deeply Untrue. News Corp Australia March 1, 2014 Accessed August 20, 2018, <https://www.theaustralian.com.au/national-affairs/opinion/evil-and-deeply-untrue/news-story/80a40debe2610c84bc86ab8374c6edbf>.
- Sherwell, Tina. 2006. "Topographies of Identity, Soliloquies of Place: Topographies of Identity." *Third Text* 20 (3-4): 429-443. doi: 10.1080/09528820600853969.
- Shinar, Dov, and Vladimir Bratic. 2010. "Asymmetric War and Asymmetric Peace: Real Realities and Media Realities in the Middle East and the Western Balkans." *Dynamics of Asymmetric Conflict* 3 (2): 125-142. doi: 10.1080/17467586.2010.531034.
- Shlaim, Avi. 1999. "The Debate About 1948." In *The Israel/ Palestine Question*, ed. Ilan Pappé, 171-192. London: Routledge.
- Shomali, Amer. 2010. 'Visit Palestine.' Poster.
- Stevens, Richard P., and Abdelwahab M. Elmessiri. 1977. *Israel and South Africa: the Progression of a Relationship* New Jersey: North American.
- Suater, Joachim. 2011. "Preface." In *A Touch of Code: Interactive Installations and Experiences*, eds Robert Klanten, Sven Ehmann, Verena Hanschke and Lukas Feireiss, 1. Berlin: Die Gestalten Verlag.
- Suleiman, Elia. 2002. *Divine Intervention*. DVD. USA: Avatar Films.
- . 2009. *The Time That Remains*. DVD. Le Pacte.
- Susi, Tarja, Mikael Johannesson, and Per Backlund. 2007. *Serious Games - An Overview*. Sweden: University of Skövde School of Humanities and Informatics.
- Swift, James. 2014. Handala. MCSwifty. Accessed October 3, 2018, <https://mcswifty.myportfolio.com/handala>.
- Tawil-Souri, Helga. 2011. "Colored Identity: The Politics and Materiality of ID Cards in Palestine/Israel." *Social Text* 29 (2 (107)): 67-97. doi: 10.1215/01642472-1259488.
- Teeger, Chana, and Vered Vinitzky-Seroussi. 2007. "Controlling for Consensus: Commemorating Apartheid in South Africa." *Symbolic Interaction* 30 (1): 57-78. doi: 10.1525/si.2007.30.1.57.
- The Editors of Encyclopaedia Britannica. 1998. Balfour Declaration. Encyclopedia Britannica, Inc. October 26, 2018 Accessed November 7, 2018, <https://www.britannica.com/event/Balfour-Declaration>.
- The Electronic Intifada. 2000. About The Electronic Intifada. Accessed September 10, 2018, <https://electronicintifada.net/content/about-electronic-intifada/10159>.
- The Guardian. 2011. East Jerusalem: Sharing Our House With Settlers - Video. The Guardian., November 25, 2017 Accessed July 26, 2016, <https://www.youtube.com/watch?v=ksnLom8OD9E>.
- The London Charter. 2009. *The London Charter; For the Computer-Based Visualisation of Cultural Heritage*. <http://www.londoncharter.org/>.
- The United States Holocaust Memorial Museum. 2018a. *2107-18 Annual Report* Washington D.C.
- . 2018b. The United States Holocaust Memorial Museum. <https://www.ushmm.org/>.
- Thien, Debroah. 2005. "After or beyond Feeling? A Consideration of Affect and Emotion in Geography." *Area* 37 (4): 450-454. <http://www.jstor.org/stable/20004485>.
- Thrift, Nigel. 2004. "Intensities of Feeling: Towards a Spatial Politics of Affect." *Geografiska Annaler: Series B, Human Geography* 86 (1): 57-78. doi: 10.1111/j.0435-3684.2004.00154.x.
- United Nations General Assembly. 1947. Resolution 181 (II). Future Government of Palestine. Accessed September 10, 2018, <https://unispal.un.org/DPA/DPR/unispal.nsf/0/7F0AF2BD897689B785256C330061D253>.
- Unity Technologies. 2017. Unity - Store. Accessed September 22, 2017, <https://store.unity.com/>.
- Venturi, Robert, Denise Scott Brown, and Steven Izenour. 1972. *Learning from Las Vegas* Cambridge, Massachusetts: MIT Press.
- Visualizing Palestine. 2012. Visualizing Palestine. <https://visualizingpalestine.org>.
- . 2018. "Bethlehem Besieged." *Visualizing Palestine*, Infographic, <https://visualizingpalestine.org/visuals/bethlehem-besieged>.
- Waked, Sharif. 2003. 'Chic Point.' Video (colour, sound) UK: Imperial War Museum.
- . 2009. 'To Be Continued... ', Video work (color, sound) New York: Solomon R. Guggenheim Museum.

- Walker, Nate. 2016. "Like, Share, Lie: How Facebook Enables False and Misleading News." *University Wire*. <https://search-proquest-com.dbgw.lis.curtin.edu.au/docview/2018298019?accountid=10382>.
- Wallace-Murphy, Tim. 2016. *The Genesis of a Tragedy: A Brief History of the Palestinian People*. Nashville, Tennessee: Grave Distractions Publications.
- Walz, Steffen P. , and Sebastian Deterding. 2014a. "An Introduction To The Gameful World." In *The Gameful World : Approaches, Issues, Applications* eds Steffen P. Walz and Sebastian Deterding, 1- 13. Cambridge, Massachusetts The MIT Press.
- , eds. 2014b. *The Gameful World : Approaches, Issues, Applications* Cambridge, Massachusetts The MIT Press.
- Wasson, Christina. 2000. "Ethnography in the Field of Design." *Human Organization* 59 (4): 377-388. <http://www.jstor.org/stable/44127235>.
- Waterton, Emma. 2014. "A More-Than-Representational Understanding of Heritage? The 'Past' and the Politics of Affect." *Geography Compass* 8 (11): 823-833. doi: doi:10.1111/gec3.12182.
- Waterton, Emma, and Jason Dittmer. 2014. "The Museum as Assemblage: Bringing Forth Affect at the Australian War Memorial." *Museum Management and Curatorship* 29 (2): 122-139. doi: 10.1080/09647775.2014.888819.
- Weizman, Eyal. 2007. *Hollow Land: Israel's Architecture of Occupation* London: Verso.
- Wertheim, Peter. 2012. Formal Complaint: 'The Promise'. Executive Council of Australian Jewry Inc. Accessed October 8, 2018, [http://www.ecaj.org.au/wp-content/uploads/2012/08/120105\\_the\\_promise.pdf](http://www.ecaj.org.au/wp-content/uploads/2012/08/120105_the_promise.pdf).
- Williams, Paul Harvey. 2007. *Memorial Museums: The Global Rush to Commemorate Atrocities* Oxford: Berg.
- Witcomb, Andrea. 2007. "The Materiality of Virtual Technologies: A New Approach to Thinking about the Impact of Multimedia in Museums." In *Theorizing Digital Cultural Heritage: A Critical Discourse*, eds Fiona Cameron and Sarah Kenderdine, 35-48. Cambridge, Massachusetts: MIT Press.
- Yin, Robert K. 1994. *Case Study Research: Design and Methods*. 2nd ed. Vol. 5, *Applied Social Research Methods Series* Thousand Oaks, California SAGE Publications, Inc.
- Young, James Edward. 1993. *The Texture of Memory: Holocaust Memorials and Meaning*. New Haven: Yale University Press.
- ZA, NJR. 2008. "South Africa Johannesburg Apartheid Museum." *Wikimedia Commons*, Digital image, [https://commons.wikimedia.org/wiki/File:South\\_Africa-Johannesburg-Apartheid\\_Museum001.jpg](https://commons.wikimedia.org/wiki/File:South_Africa-Johannesburg-Apartheid_Museum001.jpg).
- Zappavigna, Michele, and Ken Hyland. 2012. *Discourse of Twitter and Social Media: How We Use Language to Create Affiliation on the Web*. London: Bloomsbury Publishing.
- Zeedani, Said. 2007. "A Palestinian Perspective on Checkpoints." *Palestine - Israel Journal of Politics, Economics, and Culture* 13 (4): 89-95. <https://search.proquest.com/docview/235708999?accountid=10382>.
- Zvi, Tal Ben. 2006. *Hagar: Contemporary Palestinian Art*. Jaffa: Hagar Art Gallery.
- Zyda, Michael. 2005. "From Visual Simulation to Virtual Reality to Games." *Computer* 38 (9): 25-32. doi: 10.1109/MC.2005.297.

Every reasonable effort has been made to acknowledge the owners of copyright material. I would be pleased to hear from any copyright owner who has been omitted or incorrectly acknowledged.

---

## **APPENDICES**

---



# Appendix A The Ethics Approval Paperwork

## A.1 The Ethics Approval Letter



Office of Research and Development

GPO Box U1987  
Perth Western Australia 6845

Telephone +61 8 9266 7863

Facsimile +61 8 9266 3793

Web [research.curtin.edu.au](http://research.curtin.edu.au)

25-Nov-2016

Name: Andrew Hutchison  
Department/School: Department of Design  
Email: [A.Hutchison@curtin.edu.au](mailto:A.Hutchison@curtin.edu.au)

Dear Andrew Hutchison

**RE: Ethics approval**  
**Approval number: HRE2016-0471**

Thank you for submitting your application to the Human Research Ethics Office for the project **Interactive installations as experiential mediums for Palestinian Narratives of Apartheid**.

Your application was reviewed through the Curtin University low risk ethics review process.

The review outcome is: **Approved**.

Your proposal meets the requirements described in National Health and Medical Research Council's (NHMRC) *National Statement on Ethical Conduct in Human Research (2007)*.

Approval is granted for a period of one year from **25-Nov-2016** to **24-Nov-2017**. Continuation of approval will be granted on an annual basis following submission of an annual report.

Personnel authorised to work on this project:

Name	Role
Bazlamit, Rusaila	Student
Hutchison, Andrew	CI

### Standard conditions of approval

1. Research must be conducted according to the approved proposal
2. Report in a timely manner anything that might warrant review of ethical approval of the project including:
  - proposed changes to the approved proposal or conduct of the study
  - unanticipated problems that might affect continued ethical acceptability of the project
  - major deviations from the approved proposal and/or regulatory guidelines
  - serious adverse events

3. Amendments to the proposal must be approved by the Human Research Ethics Office before they are implemented (except where an amendment is undertaken to eliminate an immediate risk to participants)
4. An annual progress report must be submitted to the Human Research Ethics Office on or before the anniversary of approval and a completion report submitted on completion of the project
5. Personnel working on this project must be adequately qualified by education, training and experience for their role, or supervised
6. Personnel must disclose any actual or potential conflicts of interest, including any financial or other interest or affiliation, that bears on this project
7. Changes to personnel working on this project must be reported to the Human Research Ethics Office
8. Data and primary materials must be retained and stored in accordance with the [Western Australian University Sector Disposal Authority \(WAUSDA\)](#) and the [Curtin University Research Data and Primary Materials policy](#)
9. Where practicable, results of the research should be made available to the research participants in a timely and clear manner
10. Unless prohibited by contractual obligations, results of the research should be disseminated in a manner that will allow public scrutiny; the Human Research Ethics Office must be informed of any constraints on publication
11. Ethics approval is dependent upon ongoing compliance of the research with the [Australian Code for the Responsible Conduct of Research](#), the [National Statement on Ethical Conduct in Human Research](#), applicable legal requirements, and with Curtin University policies, procedures and governance requirements
12. The Human Research Ethics Office may conduct audits on a portion of approved projects.

**Special Conditions of Approval**

None

**This letter constitutes ethical approval only.** This project may not proceed until you have met all of the Curtin University research governance requirements.

Should you have any queries regarding consideration of your project, please contact the Ethics Support Officer for your faculty or the Ethics Office at [hrec@curtin.edu.au](mailto:hrec@curtin.edu.au) or on 9266 2784.

Yours sincerely



Dr Catherine Gangell  
Manager, Research Integrity



## A.2 A Sample from the Invitation for Participation Email

The invitation emails were sent through the supervisory team to the nominated experts at Curtin University. This is a sample of one of these emails sent by Prof Erik Champion.

An invitation to view an exhibition at SoDA, Curtin, Thursday 8th December 2016



Erik Champion <erik.champion@curtin.edu.au>

Mon 21/11/2016, 10:18 AM

[redacted]@curtin.edu.au>; Andrew Hutchison <A.Hutchison@curtin.edu.au>; +1 more



Reply all | v

Dear [redacted]

I would like to invite you to the testing of a prototype interactive video installation by PhD student Rusaila Bazlamit on the 8<sup>th</sup> Dec at the AV Lab in the School of Design and Art (SoDA), Room 219, Building 202. Both Andrew Hutchison from SoDA and myself are supervising Rusaila.

You are being invited as an expert in a field relevant to this research, and we would be honored if you agree to be one of the domain experts who test the installation and give feedback. Approximately 20 other Curtin staff have been identified as having a relevant discipline interest/experience, in art, media, communications, exhibitions, curation, interaction design, etc.

Rusaila's research investigates the potentials of interactive and digital installations to carry complex political/conflict narratives experientially and spatially. She has created a prototype interactive installation specifically focusing on narratives of the conflict in Palestine. The work seeks to inform the viewer of the difficulties of the Palestinian people, though the research outcomes may have benefits for other marginalized groups seeking to project their own version of events in conflict situations.

The work does not include any visual depictions of violence, and is less graphic than what you might see on the news on TV. While the installation doesn't contain any graphical or explicitly violent footage, it

does use oral histories/interviews with participants who have been directly affected by events past and ongoing in the Middle East. It is possible that this subject matter may make you feel uncomfortable. Naturally, this is not for everyone, and it will be understood if you should decline this invitation.

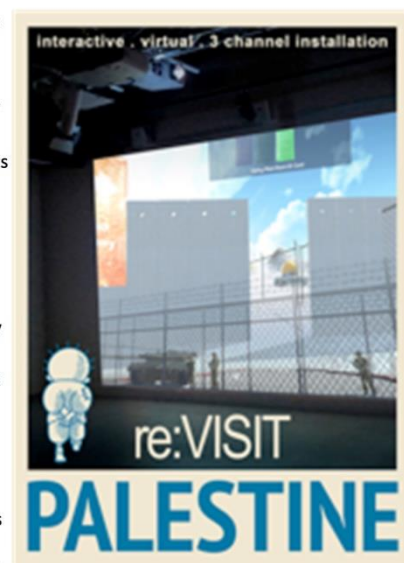
Please note that the installation is a work in progress and at this stage your input and feedback will enrich Rusaila's own reflections on the process of using this media as an activist designer tool.

[You can arrive at any time between 10AM-3PM on Thursday 8 December 2016 to experience the installation, possibly by yourself, or with others who are there at the same time, as would occur in a real exhibition.](#) You will be welcomed by either Andrew Hutchison or Erik Champion. With your permission, your interaction with the work will be video recorded (a wide angle GoPro camera mounted in the corner of the studio) while Rusaila is not present, so she can review the video at a later time. Afterwards, you'll have a discussion with Rusaila and her supervisors, to explore how well you think the work is achieving its objectives. Your feedback will be audio recorded, with your permission, for Rusaila's reference. The whole process will not take more than 1 hour.

We hope that you will find this to be an interesting opportunity to see what can be done with a relatively low budget immersive media work in SoDA, dealing with difficult cultural material. All of the techniques used in Rusaila's work are also available to staff and students at Curtin, so it will be hopefully also be informative to your own practice.

If you are interested in being part of this please let me know so I can send you the formal consent form and further information sheet, or call me if you have any questions?

Kind regards



### A.3 Consent Form Sent to Participants

#### CONSENT FORM FOR PARTICIPATION IN RESEARCH

Use of Interactive and digital Installations as Design Activism Tools

I .....

hereby consent to participate as a member of experts focus group for the research project on using interactive and digital installations as design activism tools.

1. I have read the information provided.
2. Details of procedures and any risks have been explained to my satisfaction.
3. I agree to audio/video recording of my information and participation.
4. I am aware that I should retain a copy of the Information Sheet and Consent Form for future reference.
5. I understand that:
  - I may not directly benefit from taking part in this research.
  - I am free to withdraw from the project at any time and am free to decline to answer particular questions.
  - While the information gained in this study will be published as explained, I will not be identified, and individual information will remain confidential.
  - Whether I participate or not, or withdraw after participating, will have no effect on any treatment or service that is being provided to me.
  - I may ask that the recording/observation be stopped at any time, and that I may withdraw at any time from the session or the research without disadvantage.

**Participant’s signature.....Date.....**

I certify that I have explained the study to the volunteer and consider that she/he understands what is involved and freely consents to participation.

**Researcher’s name.....**

**Researcher’s signature.....Date.....**

## INFORMATION SHEET

Use of Interactive and digital Installations as Design Activism Tools
---

### RESEARCH OVERVIEW

The core question of this research is to investigate the potentials of interactive and digital installations to carry complex political/conflict narratives experientially and spatially. Thus, it falls under the category of Digital Communications Design. The research will examine case studies that employ the practice of 'Experience Design' and 'Design Activism'. A fundamental method of this research is experimentation with digital media and tools to construct a prototype of an interactive installation. The research will also investigate the role of the Internet, and social media in presenting alternative, activist narratives. All of the images, video, sounds, etc. will be sourced from existing sources in organizational archives that are freely available via social media/the Internet. This use of existing material is a key point of investigation for the research, as it asks the question "Can a compelling interactive exhibition be created with relatively few resources". In order to carry out the investigation, a prototype of an interactive environment will be created, reviewed and evaluated. The actual media elements (video, images, sounds) will attempt to communicate alternative narratives that challenge the dominant narrative in mainstream media, as is increasingly common in the context of social media.

### THE PROTOTYPE

The prototype is of an interactive digital installation, which uses multiple projections, virtual environment, images and videos. The prototype of the interactive installation will be exhibited in the media lab at the School of Design and Arts.

There are no graphic scenes of violence, injury or combat. The narrative will focus on the aftermath of conflict, including interviews with historians/participants many years after the events they are describing. Although there will be no actual depictions of violence, or its direct physical impact on human bodies, the material still has the potential to upset a viewer.

### THE TESTING

As experts in the field of design, digital media and communication you are asked to experience the installation. Your interaction with the work will be video recorded. After the installation run, you with other experts participating in the testing will sit with the researcher and supervisors and give your verbal feedback, which will be audio recorded. The feedback will be in a critique and discussion mode commonly practiced in creative arts and design fields. Your feedback will help the researcher evaluate the installation and its potential effectiveness as a design activism communication tool.

## DATA MANAGEMENT PLAN

All the data collected including transcript of audio recording will be securely saved on the research drive of the Chief Investigator; Dr. Andrew Hutchison, for 7 years in accordance to the University's policies on data management and storage.

# Appendix B Copyright Releases

## B.1 Permissions to Use my Own Published Work

Gmail - Edited version of your intellect article. RESPONSE N...

<https://mail.google.com/mail/u/0?ik=df6f081a61&view=pt&sea...>



Rusaila Bazlamit <super.devoika@gmail.com>

---

### Edited version of your intellect article. RESPONSE NEEDED BY OCT 16th

---

**Amy Rollason** <amy.r@intellectbooks.com>

Thu, Oct 18, 2018 at 4:15 PM

To: Jacki Morie <jfmore@gmail.com>

Cc: super.devoika@gmail.com, "Denise Doyle (Dr)" <D.Doyle@wlv.ac.uk>

Hi all,

Thanks for passing this query on to me, and I'm happy to help with this. The terms in the consent form generally relate to more official platforms of publication (other academic journals/books for example), as we seek to preserve the originality of our content. As your article draws from your thesis, and your thesis draws in turn from the article, I am happy to grant permission for this so long as it is only accessible through the repository. I would ask that you add a full citation of the article to your thesis, but other than that, signing the form will not restrict you from using this content in your thesis.

Best of luck with finishing it! I am glad we've been able to work with you at this point in your academic career and look forward to your further research,

With best wishes,  
Amy

[Quoted text hidden]

--

*For news, publications, call for papers, free articles and more, sign up to our mailing list through [this link](#).*

--

Amy Rollason | Senior Production Editor

A: Intellect, The Mill, Parnall Rd, Fishponds, Bristol BS16 3JG, UK

E: [amy.r@intellectbooks.com](mailto:amy.r@intellectbooks.com)

T: +44 (0)117 9589910

W: [www.intellectbooks.co.uk](http://www.intellectbooks.co.uk)

18/ Oct/ 2018

**Intellect Ltd.**

**The Mill, Parnall Road, Fishponds BS16 3JG, UK**

Dear **Intellect Ltd.**

I would like to reproduce this work (**Rusaila Bazlamit (2018), Communicating Experiential and Spatial Qualities of The Occupation of Palestine Using Mixed Video-Virtual Environment, *Virtual Creativity*, Intellect Ltd.** ) in my doctoral thesis which I am currently undertaking at Curtin University in Perth, Western Australia. I am carrying out this research in my own right and have no association with any commercial organisation or sponsor.

Once completed, the thesis will be made available in online form via Curtin University's Institutional Repository space (<http://espace.curtin.edu.au>). The material will be provided strictly for educational purposes and on a non-commercial basis.

I would be most grateful for your consent to the copying and communication of the work as proposed. If you are willing to grant this consent, please complete and sign the attached approval slip and return it to me at the address shown. Full acknowledgement of the ownership of the copyright and the source of the material will be provided with the material.

I look forward to hearing from you and thank you in advance for your consideration of my request.

Yours sincerely

**Rusaila Bazlamit**

**PERMISSION TO USE COPYRIGHT MATERIAL AS SPECIFIED BELOW:**

**Rusaila Bazlamit (2018), Communicating Experiential and Spatial Qualities of The Occupation of Palestine Using Mixed Video-Virtual Environment, *Virtual Creativity*, Intellect Ltd.**

I hereby give permission for Rusaila Bazlamit to include the abovementioned material(s) in his/her higher degree thesis for Curtin University, and to communicate this material via the espace institutional repository. This permission is granted on a non-exclusive basis and for an indefinite period.

I confirm that I am the copyright owner of the specified material.

Signed: 

Name: Amy Rollason

Position: Senior Production Editor, Intellect

Date: 18/10/2018



**Title:** Communicating experiential and spatial qualities of complex political narratives using mixed video-virtual environments

**Conference Proceedings:** 2017 23rd International Conference on Virtual System & Multimedia (VSMM)

**Author:** Rusaila Bazlamit

**Publisher:** IEEE

**Date:** Oct. 2017

Copyright © 2017, IEEE

**LOGIN**

If you're a **copyright.com user**, you can login to RightsLink using your copyright.com credentials. Already a **RightsLink user** or want to [learn more?](#)

**Thesis / Dissertation Reuse**

**The IEEE does not require individuals working on a thesis to obtain a formal reuse license, however, you may print out this statement to be used as a permission grant:**

*Requirements to be followed when using any portion (e.g., figure, graph, table, or textual material) of an IEEE copyrighted paper in a thesis:*

- 1) In the case of textual material (e.g., using short quotes or referring to the work within these papers) users must give full credit to the original source (author, paper, publication) followed by the IEEE copyright line © 2011 IEEE.
- 2) In the case of illustrations or tabular material, we require that the copyright line © [Year of original publication] IEEE appear prominently with each reprinted figure and/or table.
- 3) If a substantial portion of the original paper is to be used, and if you are not the senior author, also obtain the senior author's approval.

## B.2 Thesis Images Copyrights

Figure	Original Creator	Website	Licence type
Figure 1.1	Magne Hagesæter	<a href="https://commons.wikimedia.org/wiki/File:Hawara_checkpoint_2.jpg">https://commons.wikimedia.org/wiki/File:Hawara_checkpoint_2.jpg</a>	CC BY-SA 3.0
Figure 1.2	Yazan Jwailes	<a href="https://commons.wikimedia.org/wiki/File:The_separation_wall_between_Beit_Hanina_and_Ramallah.jpg">https://commons.wikimedia.org/wiki/File:The_separation_wall_between_Beit_Hanina_and_Ramallah.jpg</a>	CC BY-SA 4.0
Figure 1.3	Andrew E. Larsen	<a href="https://www.flickr.com/photos/papalars/6205594305">https://www.flickr.com/photos/papalars/6205594305</a>	CC BY-ND 2.0
Figure 2.1	Jonathan Rashad	<a href="https://commons.wikimedia.org/wiki/File:Tahrir_Square_-_February_9,_2011.png">https://commons.wikimedia.org/wiki/File:Tahrir_Square_-_February_9,_2011.png</a>	CC BY-ND 2.0
Figure 2.2	Visualizing Palestine	<a href="https://visualizingpalestine.org/visuals/bethlehem-besieged">https://visualizingpalestine.org/visuals/bethlehem-besieged</a>	CC BY-NC-ND 4.0
Figure 2.3	Palestinian Open Maps	<a href="https://palopenmaps.org/#/">https://palopenmaps.org/#/</a>	CC BY-NC-ND 4.0
Figure 2.4	Palestinian Journeys	<a href="https://www.paljourneys.org/en">https://www.paljourneys.org/en</a>	CC BY-NC-ND 4.0
Figure 4.1	AgnosticPreacher sKid	<a href="https://upload.wikimedia.org/wikipedia/commons/e/e9/United_States_Holocaust_Memorial_Museum_interior.JPG">https://upload.wikimedia.org/wikipedia/commons/e/e9/United_States_Holocaust_Memorial_Museum_interior.JPG</a>	CC BY-SA 3.0
Figure 4.2	Noor Nader	<a href="https://upload.wikimedia.org/wikipedia/commons/8/8b/%22The_Holocaust_Victims_%22United_States_Holocaust_Memorial_Museum.jpg">https://upload.wikimedia.org/wikipedia/commons/8/8b/%22The_Holocaust_Victims_%22United_States_Holocaust_Memorial_Museum.jpg</a>	CC BY-SA 4.0
Figure 4.3	Estigman	<a href="https://commons.wikimedia.org/wiki/File:Shoes_of_the_Fallen.jpg">https://commons.wikimedia.org/wiki/File:Shoes_of_the_Fallen.jpg</a>	CC BY-SA 4.0
Figure 4.4	AgnosticPreacher sKid	<a href="https://commons.wikimedia.org/wiki/File:Holocaust_Remembrance_Week.JPG">https://commons.wikimedia.org/wiki/File:Holocaust_Remembrance_Week.JPG</a>	CC BY-SA 3.0
Figure 4.5	NJR ZA	<a href="https://commons.wikimedia.org/wiki/File:South_Africa-Johannesburg-Apartheid_Museum001.jpg">https://commons.wikimedia.org/wiki/File:South_Africa-Johannesburg-Apartheid_Museum001.jpg</a>	CC BY-SA 3.0
Figure 4.6	Raymond June	<a href="https://www.flickr.com/photos/raymondjune/5207519174">https://www.flickr.com/photos/raymondjune/5207519174</a>	CC BY-ND 2.0
Figure 4.7	Keso S	<a href="https://bit.ly/2DjZcRL">https://bit.ly/2DjZcRL</a>	CC BY-ND 2.0
Figure 4.8	Steven dosRemedios	<a href="https://bit.ly/2T9ijUb">https://bit.ly/2T9ijUb</a>	CC BY-ND 2.0
Figure 4.9	Australian War Memorial	<a href="https://www.awm.gov.au/visit/visit-or-information/galleries/post-1945-galleries/iroquois/">https://www.awm.gov.au/visit/visit-or-information/galleries/post-1945-galleries/iroquois/</a>	Fair Dealing



Figure	Original Creator	Website	Licence type
Figure 4.10	Australian War Memorial	<a href="https://www.awm.gov.au/visit/visit-or-information/galleries/post-1945-galleries/kapyong/">https://www.awm.gov.au/visit/visit-or-information/galleries/post-1945-galleries/kapyong/</a>	Fair Dealing
Figure 4.11	Bidgee	<a href="https://commons.wikimedia.org/wiki/File:Australian_War_Memorial.jpg">https://commons.wikimedia.org/wiki/File:Australian_War_Memorial.jpg</a>	CC BY-SA 3.0
Figure 5.1	Elia Suleiman	<a href="http://heidisaman.tumblr.com/">http://heidisaman.tumblr.com/</a>	Fair Dealing
Figure 5.2	Larissa Sansour	<a href="http://www.larissasansour.com/exodus.html">http://www.larissasansour.com/exodus.html</a>	Fair Dealing
Figure 5.3	Emily Jacir	<a href="https://www.documenta14.de/en/artists/22266/emily-jacir">https://www.documenta14.de/en/artists/22266/emily-jacir</a>	Fair Dealing
Figure 5.4	Emily Jacir	<a href="https://www.moma.org/calendar/exhibitions/1425">https://www.moma.org/calendar/exhibitions/1425</a>	Fair Dealing
Figure 5.5	Heimo Aga	<a href="https://heimo.photoshelter.com/image/I0000b2muto.JRIM">https://heimo.photoshelter.com/image/I0000b2muto.JRIM</a>	Fair Dealing
Figure 5.6 – Figure 5.7	Larissa Sansour	<a href="http://www.larissasansour.com/nation_estate.html">http://www.larissasansour.com/nation_estate.html</a>	Fair Dealing
Figure 5.8	Unknown	<a href="https://bit.ly/2PpM6cV">https://bit.ly/2PpM6cV</a>	Fair Dealing
Figure 5.9	Larissa Sansour	<a href="http://www.larissasansour.com/nation_estate.html">http://www.larissasansour.com/nation_estate.html</a>	Fair Dealing
Figure 5.10	Justin McIntosh	<a href="https://commons.wikimedia.org/wiki/File:Palestinians_wearing_Che_Guevara_tshirts.jpg">https://commons.wikimedia.org/wiki/File:Palestinians_wearing_Che_Guevara_tshirts.jpg</a>	CC BY-ND 2.0
Figure 5.11	Eman	<a href="https://commons.wikimedia.org/wiki/File:QalandiaWallBarghouti.JPG">https://commons.wikimedia.org/wiki/File:QalandiaWallBarghouti.JPG</a>	Public Domain
Figure 5.12	Rawan Mansour	<a href="https://www.deviantart.com/rawan091/art/Leila-Khaled-342702707">https://www.deviantart.com/rawan091/art/Leila-Khaled-342702707</a>	Allowed to download from Artist's Devian art page
Figure 5.13	Sharif Waked	<a href="https://www.guggenheim.org/artwork/24754">https://www.guggenheim.org/artwork/24754</a>	Fair Dealing
Figure 5.14	Mo3	<a href="https://www.facebook.com/mo3blog/">https://www.facebook.com/mo3blog/</a>	Fair Dealing
Figure 5.15	Marsupium	<a href="https://commons.wikimedia.org/wiki/File:Bethlehem_wall_graffiti_Ahed_Tamimi_by_Jorit_Agoch_and_others.jpeg">https://commons.wikimedia.org/wiki/File:Bethlehem_wall_graffiti_Ahed_Tamimi_by_Jorit_Agoch_and_others.jpeg</a>	CC0 1.0
Figure 5.16	Mo3	<a href="https://www.facebook.com/mo3blog/">https://www.facebook.com/mo3blog/</a>	Fair Dealing
Figure 5.17	Raeda Saadeh	<a href="https://curiator.com/art/raeda-saadeh/mona-lisa">https://curiator.com/art/raeda-saadeh/mona-lisa</a>	Fair Dealing
Figure 5.18	Unknown	<a href="https://www.palestineposterproject.org/poster/israel-targets-children">https://www.palestineposterproject.org/poster/israel-targets-children</a>	Fair Dealing

<b>Figure</b>	<b>Original Creator</b>	<b>Website</b>	<b>Licence type</b>
Figure 5.19	Hany Abu-Assad	<a href="https://imdb.to/2qJjVaj">https://imdb.to/2qJjVaj</a>	Fair Dealing
Figure 5.20	Elia Suleiman	<a href="https://www.youtube.com/watch?v=T2Hz7Z-RMug">https://www.youtube.com/watch?v=T2Hz7Z-RMug</a>	Fair Dealing
Figure 5.21	Raeda Saadeh	<a href="http://sharjahart.org/sharjah-art-foundation/projects/vacuum">http://sharjahart.org/sharjah-art-foundation/projects/vacuum</a>	Fair Dealing
Figure 5.22	Taysir Batniji	<a href="http://www.taysirbatniji.com/project/to-my-brother-2012/">http://www.taysirbatniji.com/project/to-my-brother-2012/</a>	Fair Dealing
Figure 6.1	Naji Al-Ali	<a href="http://www.handala.org/interact/index.html">http://www.handala.org/interact/index.html</a>	Allowed to download on the website
Figure 6.2-6.7	Rusaila Bazlamit	N/A	Own Work
Figure 6.8	James Swift	<a href="https://mcswifty.myportfolio.com/handala">https://mcswifty.myportfolio.com/handala</a>	Fair Dealing
Figure 6.9 – Figure 6.11	Rusaila Bazlamit	N/A	Own Work
Figure 6.12	Elia Suleiman	N/A	Fair Dealing
Figure 6.13- Figure 6.15	Rusaila Bazlamit	N/A	Own Work
Figure 6.16	Franz Krausz Amer Shomali	<a href="http://www.blog.ryanhay.es/graphic-influences-iv/gi4-visit-palestine-2/">http://www.blog.ryanhay.es/graphic-influences-iv/gi4-visit-palestine-2/</a>	Fair Dealing
Figure 6.17	Rusaila Bazlamit	N/A	Own Work
Figure 7.1 and Figure 7.16	Rusaila Bazlamit	N/A	Own Work
Figure 8.1	Rusaila Bazlamit Partners for Progressive Israel	N/A <a href="https://www.youtube.com/watch?v=GJslkV_jonk">https://www.youtube.com/watch?v=GJslkV_jonk</a>	Own Work Fair Dealing
Figure 8.2	Rusaila Bazlamit	N/A	Own Work
Figure 8.3	Rusaila Bazlamit Steven dosRemedios	N/A <a href="https://bit.ly/2T9ijUb">https://bit.ly/2T9ijUb</a>	Own Work CC BY-ND 2.0
Figure 8.4	Rusaila Bazlamit	N/A	Own Work
Figure 8.5	B'Tselem	<a href="https://www.btselem.org/">https://www.btselem.org/</a>	Fair Dealing
Figure 8.6	Rusaila Bazlamit Mondowiess	N/A	Own Work Fair Dealing
Figure 8.7- Figure 8.9	Rusaila Bazlamit	N/A	Own Work
Figure 8.10	The Guardian	<a href="https://www.youtube.com/watch?v=ksnLom8OD9E">https://www.youtube.com/watch?v=ksnLom8OD9E</a>	Fair Dealing
Figure 8.11	Rusaila Bazlamit	N/A	Own Work

Figure	Original Creator	Website	Licence type
Figure 8.12	Partners for Progressive Israel	<a href="https://www.youtube.com/watch?v=GJslkV_jonk">https://www.youtube.com/watch?v=GJslkV_jonk</a>	Fair Dealing
Figure 9.1- Figure 9.2	Rusaila Bazlamit	N/A	Own Work
Figure 9.3	Steve Sabella	<a href="https://sabella.photoshelter.com/image/I0000GHoUu.tE4VM">https://sabella.photoshelter.com/image/I0000GHoUu.tE4VM</a>	Fair Dealing

## Explanation of Copyright Licences

**Fair Dealing:** Can reproduced images for academic review purposes under the “Fair Dealing” provisions of the Australian Copyright Act.

**Public Domain:** No copyright. Anyone can use these images for any purpose without having to attribute the original creators.

**CC0 1.0:** Creative Commons Public Domain Dedication. No copyright. A Anyone can use these images for any purpose without having to attribute the original creators.

**CC BY-ND 2.0:** Creative Commons Attribution -NoDervis. Can share images for any purpose. But no remixing of the original work is permitted. Original creators should have appropriate credit.

**CC BY-SA 3.0:** Creative Commons Attribution-ShareAlike. Can Share images for any purpose. Can adapt and remix or transform the work for any purpose but when distributing must be under the same license as the original. Original creators should have appropriate credit.

**CC BY-SA 4.0:** Creative Commons Attribution-ShareAlike International. Can Share images for any purpose. Can adapt and remix or transform the work for any purpose but when distributing must be under the same license as the original. Original creators should have appropriate credit.

**CC BY-NC-ND 4.0:** Creative Commons Attribution-NonCommercial-NoDerivatives International. Can Share images for non-commercial purposes. Cannot adapt and remix or transform the work for any purpose. Original creators should have appropriate credit.



## Appendix C List of Palestinian Artworks Discussed in this Thesis

Artist	Title of Artwork	Year	Media	Size	Current Collection
Jumana Aboud	The Pomegranate	2005	Video work/ installation	3' 00"	Sharjah Art Foundation
Naji Al-Ali	Handala	1975	Cartoon	variable	N/A
Jawad Al Malhi	House #197	2008	Digital print	600 x 80 cm	Barjeel Art Foundation
	Measures of Uncertainty	2013-2014	A series of paintings (acrylic on canvas)	Variable	Barjeel Art Foundation
Taysir Batniji	GH0809	2010	Series of 20 C-Prints (Duratrans) on translucent glossy paper	Prints 21 x 29.7 cm, plexi glass 30 x 38 cm Total dimension 222 x 167 cm	N/A
	Untitled #2	2010	Drawer, mirrors, red pencils shavings	N/A	N/A
	Watchtowers	2008	Series of 26 B&W photographs, digital prints	40 x 50 cm	N/A
	Untitled	2014	Glass bunch of keys	N/A	N/A
	Transit	2004	Video	6' 30"	N/A
	Impossible Journey	2002-2009	Performance	N/A	N/A
	To My Brother	2012	Series of 60 hand carvings from photographs on paper	30.5 x 40.5 cm	N/A
Thameen Darby	Google Earth Nakba Layer	2006	Google Earth Layer Map	N/A	Google Earth
Sandi Hilal and Alessandro Petti	Ramallah Syndrome	2009	Blog	N/A	N/A

Artist	Title of Artwork	Year	Media	Size	Current Collection
Sandi Hilal and Alessandro Petti	Stateless Nation	2003	Installation	Variable	2003 Venice Biennale
Emily Jacir	Memorial to 418 Palestinian Villages Which Were Destroyed, Depopulated, and Occupied by Israel in 1948	2001	Refugee tent, embroidery thread, record book	Dimensions variable	National Museum of Contemporary Art, Athens (EMST)
	Ramallah/New York	2004 - 2005	Two channel videos (colour, sound)	38' 50''	The Museum of Modern Art
	Retracing Bus Route no. 23	2006	Photo essay	N/A	The Electronic Intifada
	Where We Come From	2001-2003	Installation / Chromogenic print and laser print mounted on board	variable	San Francisco Museum of Modern Art
Yazan Khalili	Colour Correction - Camp Series	2007-2010	C-type prints	variable	N/A
Khalil Rabah	The 3rd Annual Wall Zone Auction	2004	Installation and Video	7' 22''	N/A
	The Palestinian Museum of Nature and History and Humankind	2003 - ongoing	Installation	variable	N/A
Raeda Saadeh	Mona Lisa	2007	C-type print	106 x 81 cm	N/A
	Crossroad	2003	Cibachrome print, mounted	102.2 x 102.2 cm	N/A
	Vacuum	2007	Two channel video installation colour sound	17' 07''	Sharjah Art Foundation
Larissa Sansour	A Space Exodus	2009	Video (colour, sound)	5' 29''	Distributed by mec Films.
	Nation Estate	2012	Video (colour, sound) and C-type prints	9' 00''	Distributed by mec Films.

<b>Artist</b>	<b>Title of Artwork</b>	<b>Year</b>	<b>Media</b>	<b>Size</b>	<b>Current Collection</b>
Amer Shomali	Visit Palestine	2010	Inkjet print	N/A	N/A
Sharif Waked	To Be Continued	2009	Video (colour, sound)	41' 33"	Solomon R. Guggenheim Museum, New York
	Chic point	2003	Video (colour, sound) 3:4	5'	Imperial War Museum, UK among others





## Appendix D List of Films Discussed in this Thesis

Director	Title of Film	Year	Genre	Duration	Languages
Hany Abu-Assad	Omar	2013	Drama	96 minutes	Arabic
	Paradise Now	2005	Drama	90 minutes	Arabic English
Mohammed Alatar	The Iron Wall	2007	Documentary	52 minutes	Arabic English
Emad Burnat and Guy Davidi	5 Broken Cameras	2011	Documentary	94 minutes	Arabic Hebrew
Mehdi Felfeil	A World Not Ours	2012	Documentary, Biography, History	93 minutes	Arabic English
Costa Gavras	Hanna K.	1983	Drama	111 minutes	English
Annemarie Jacir	Salt of this Sea	2008	Drama	109 minutes	Arabic English
Juliano Mer Khamis	Arna's Children	2004	Documentary	84 minutes	Arabic Hebrew English
John Pilger	Palestine is Still the Issue	2002	Documentary	53 minutes	English
Otto Preminger	Exodus	1960	Action, Drama, History	208 minutes	English
Eran Riklis	Lemon Tree	2008	Drama	106 minutes	Arabic Hebrew
Elia Suleiman	The Time That Remains	2009	Semi-biographical drama	109 minutes	Arabic Hebrew English
	Divine Intervention	2002	Black comedy	92 minutes	Arabic Hebrew English



# Appendix E Visual Documentation of the Prototype

## E.1 Brainstorming Sketches

These are some of the sketches of the brainstorming phase as discussed in Chapter 6. These sketches illustrate some of the main ideas that were provoked at the early stages of the design. Some of these ideas were implemented and incorporated into the final prototype design. These sketches are only included to illustrate the brainstorming phase and the range of ideas explored.

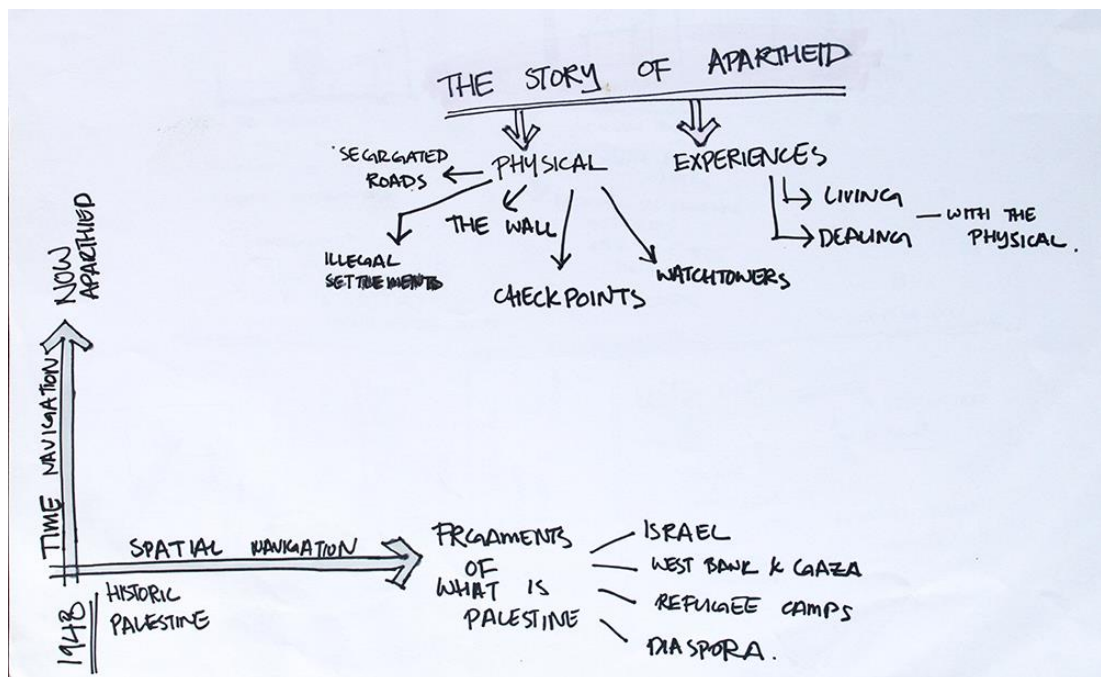


Figure E. 1: Brainstorming sketch analysing apartheid.

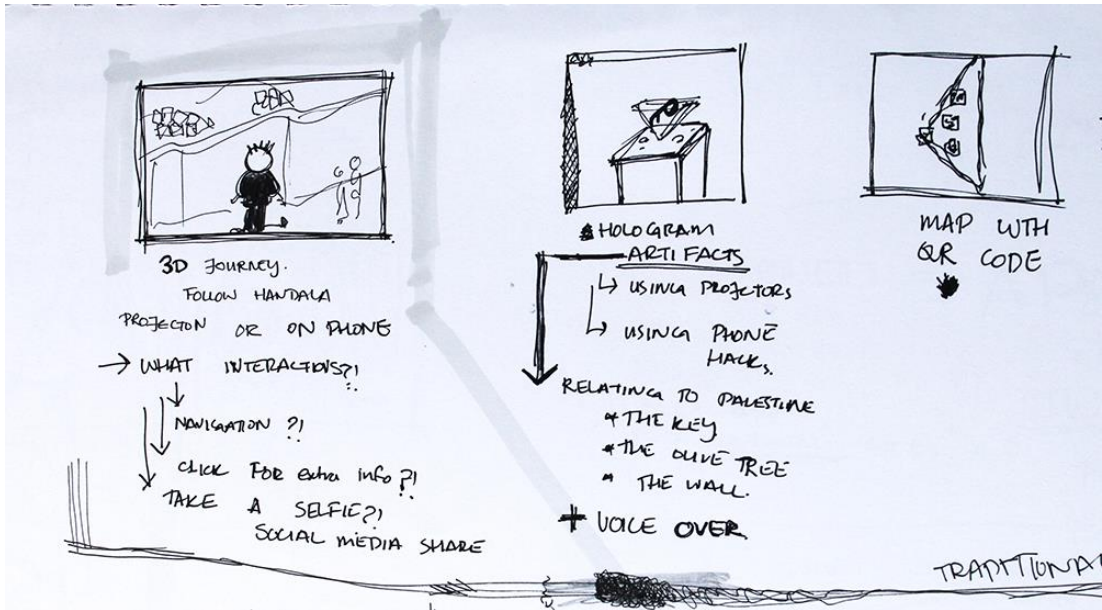


Figure E. 2: Brainstorming sketch examining possible concepts.

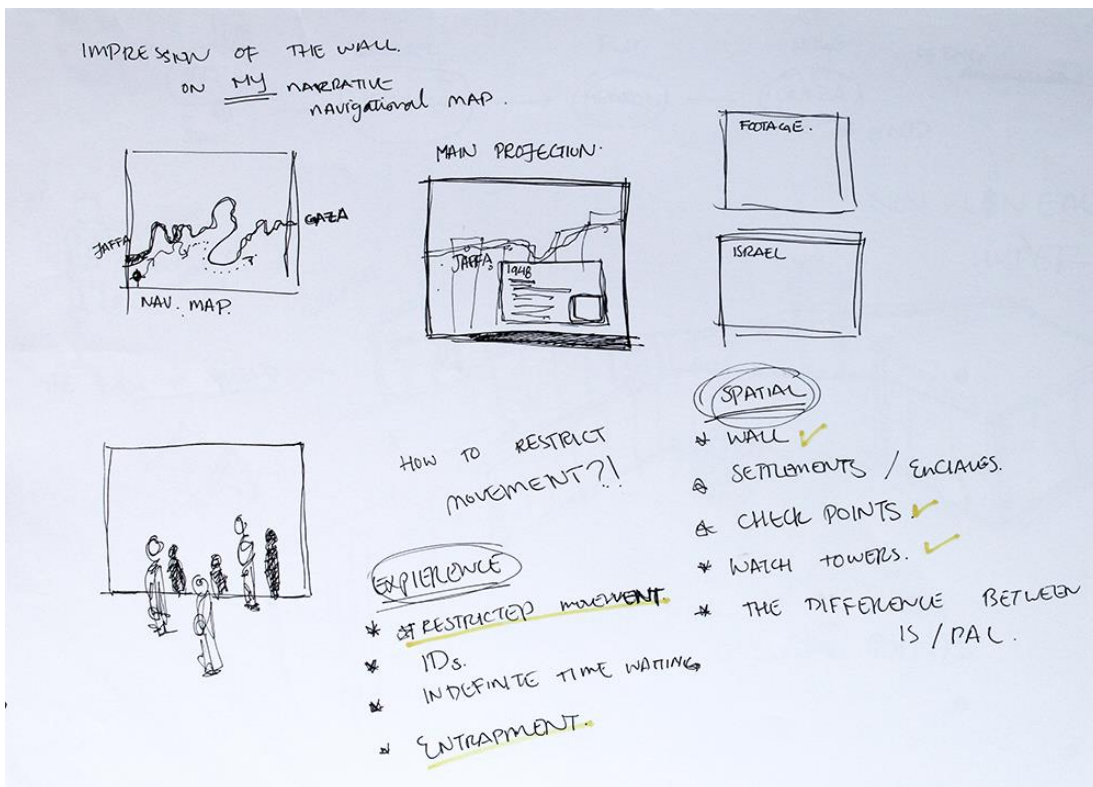


Figure E. 3: Brainstorming sketch examining possible concepts.

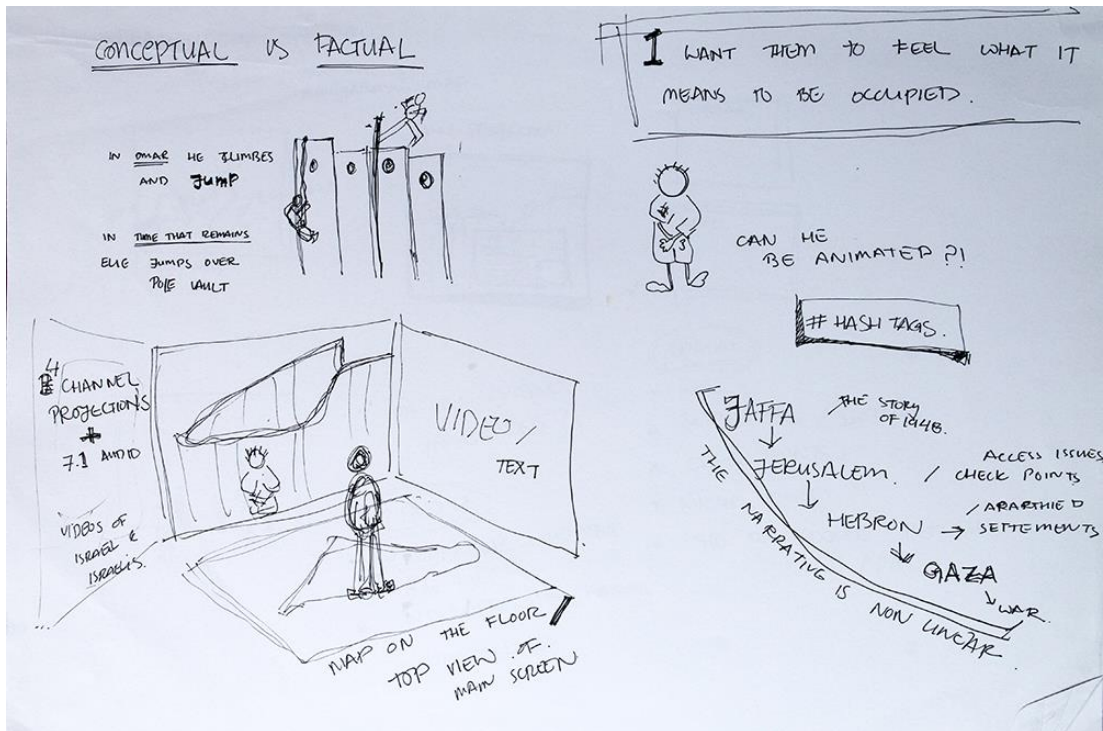


Figure E. 4: Brainstorming sketch examining possible exhibiting arrangements.

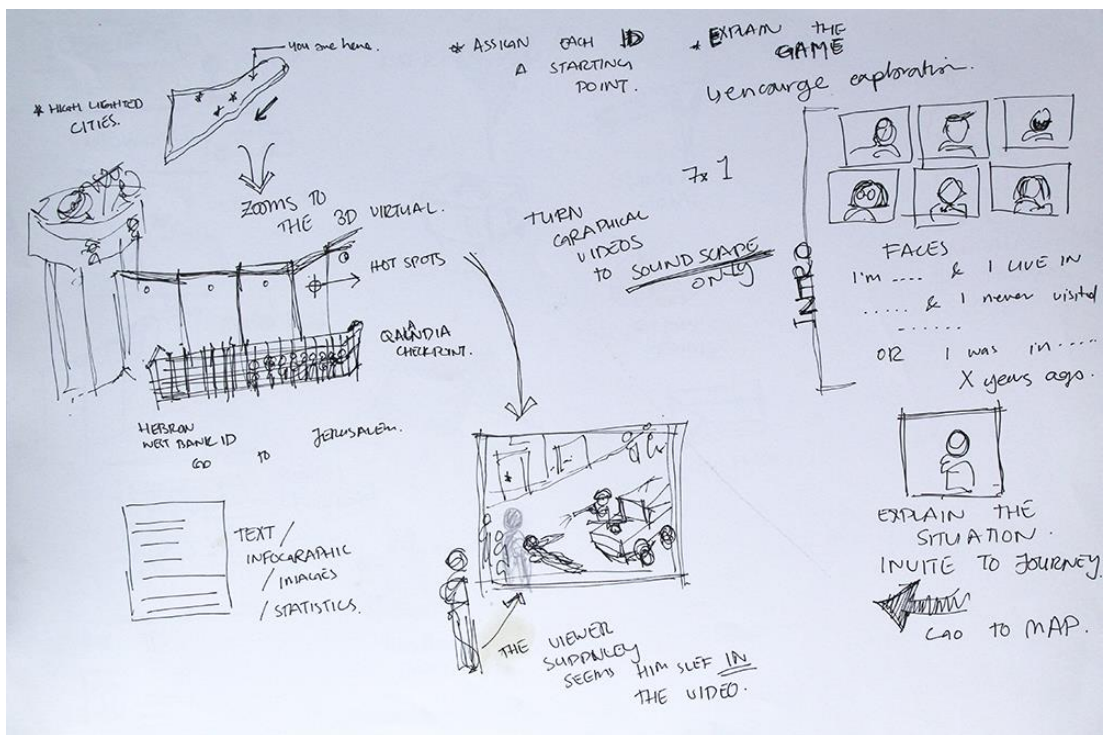


Figure E. 5: Brainstorming sketch examining possible concepts that can be used in the experience.

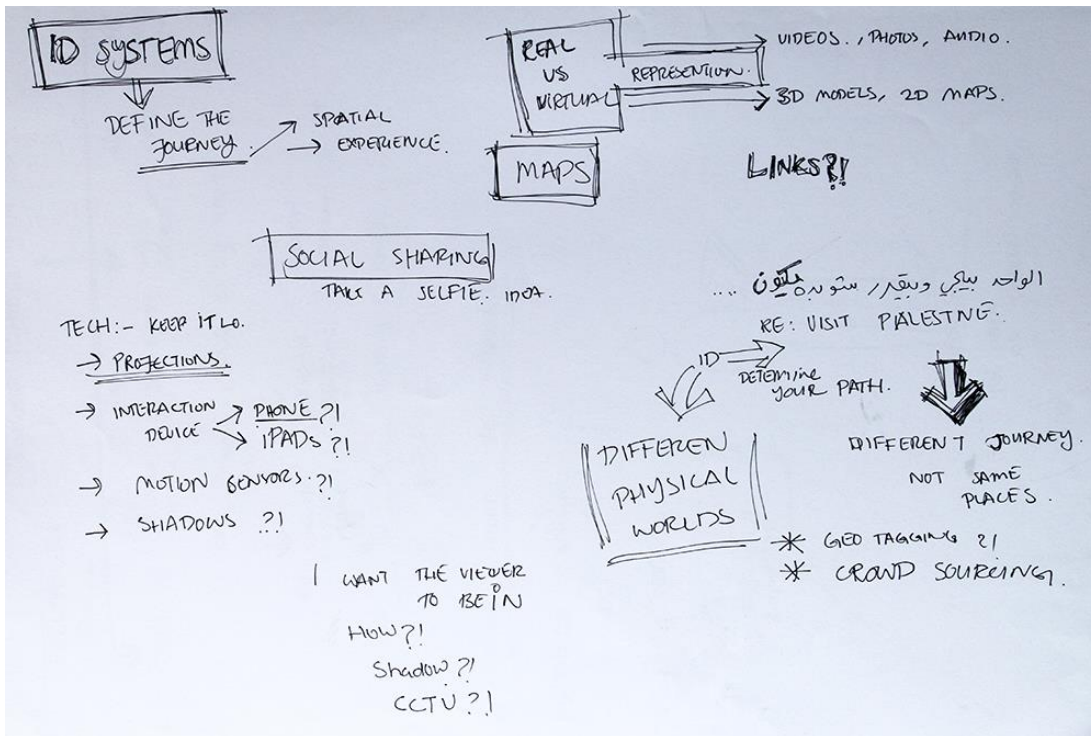


Figure E. 6: Brainstorming sketch examining possible uses of the ID system in the design of the prototype.

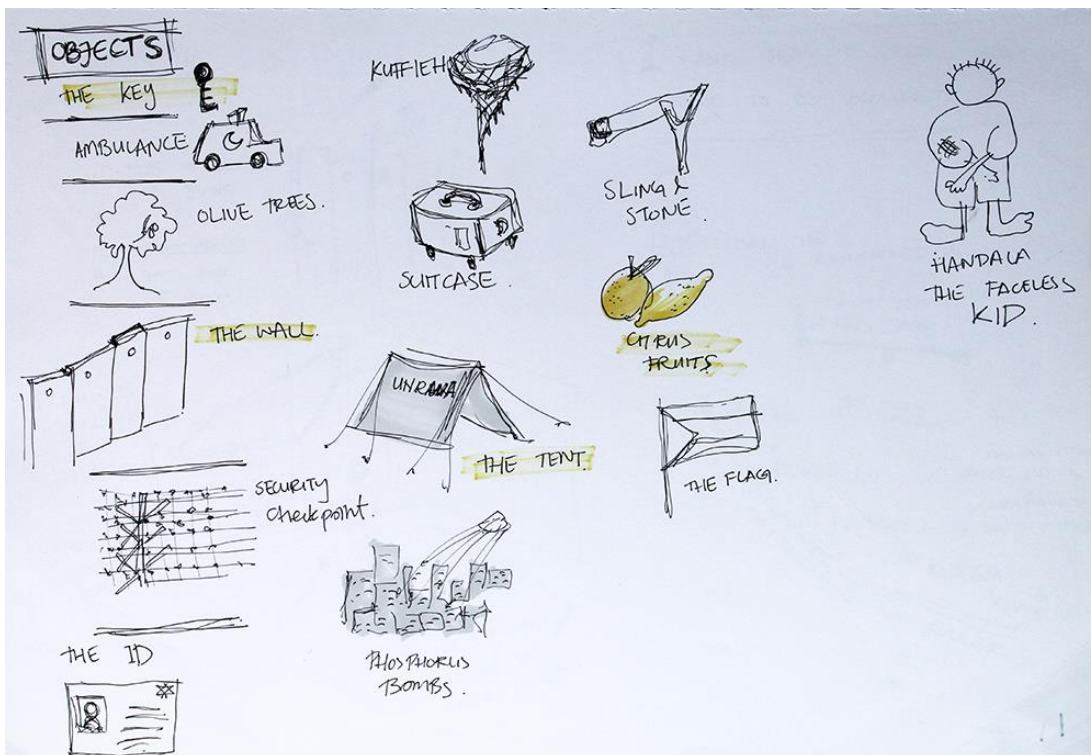


Figure E. 7: Brainstorming sketch examining key objects of memory that can be used in the design.

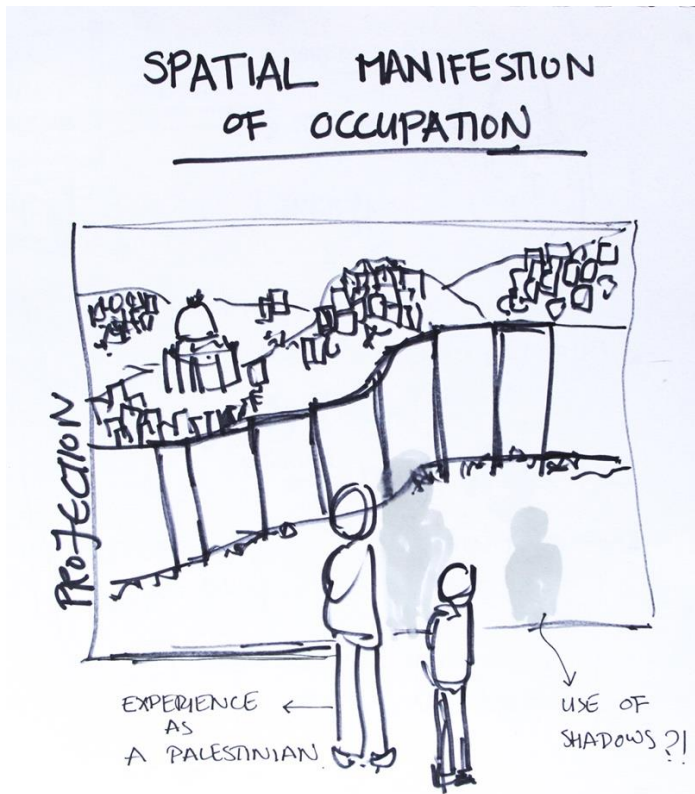


Figure E. 8: Brainstorming sketch examining possible exhibiting arrangements.

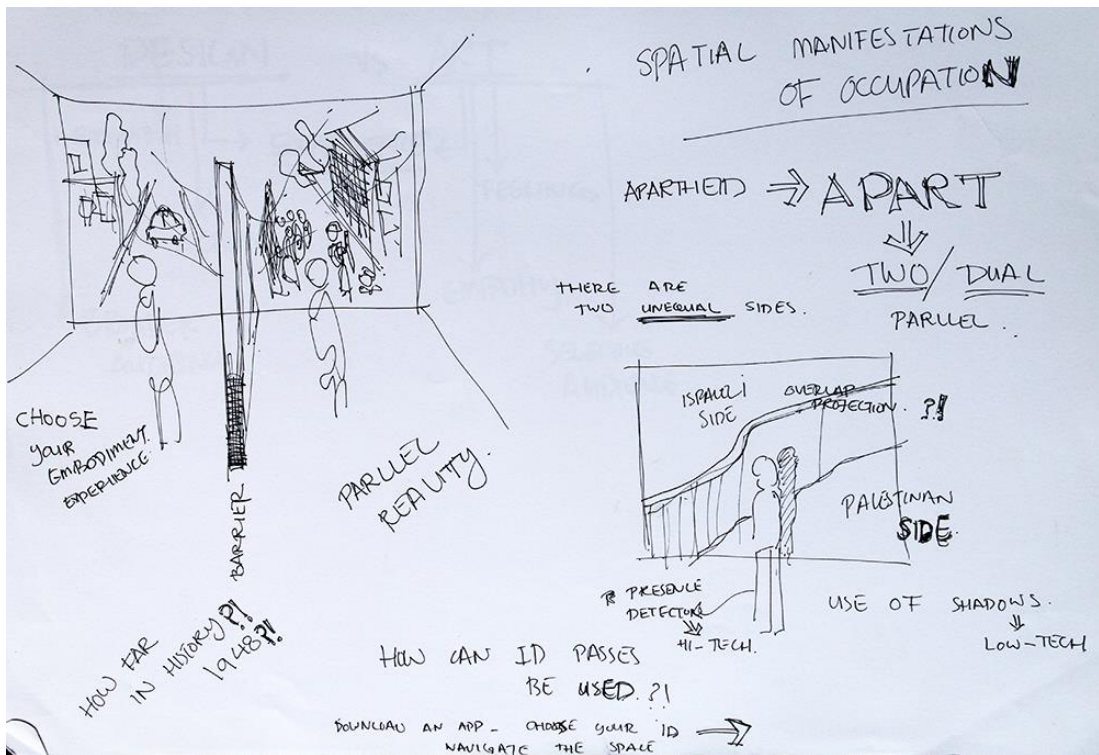


Figure E. 9: Brainstorming sketch examining possible exhibiting arrangements.

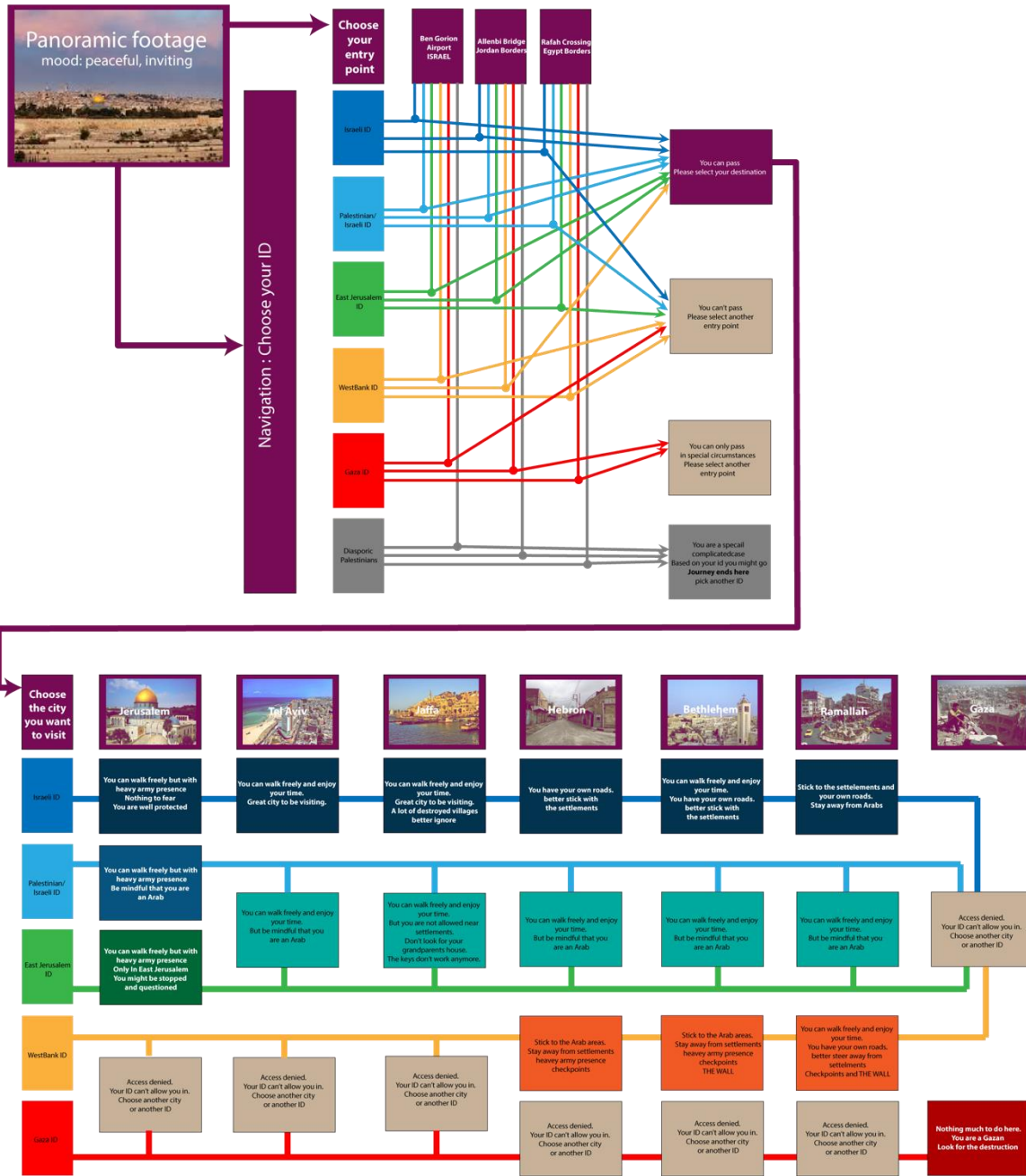


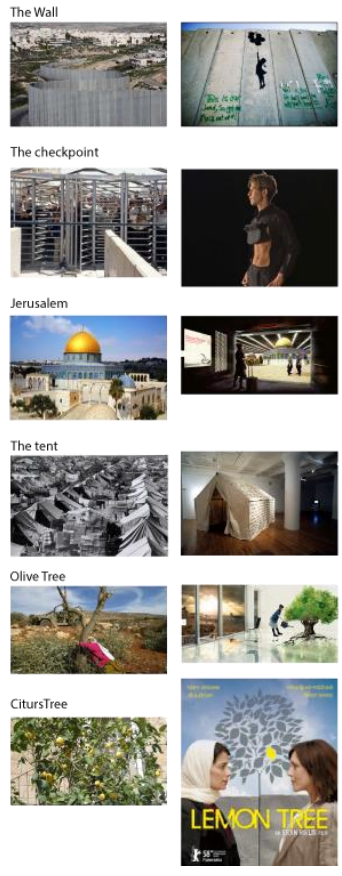
Figure E. 10: A conceptual matrix of creating the experience based on ID cards.



**Historical Highlights**



**Symbols**



**Figure E. 11: Mood Board.**

## E.2 Images from Inside the Virtual Environment



Figure E. 12: A still shot from the middle of the Jaffa scene.



Figure E. 13: A still shot toward the end of the Jerusalem scene.



Figure E. 14:A still shot from the middle of the Gaza scene.

### E.3 Flow Diagram of the Spatial Experience

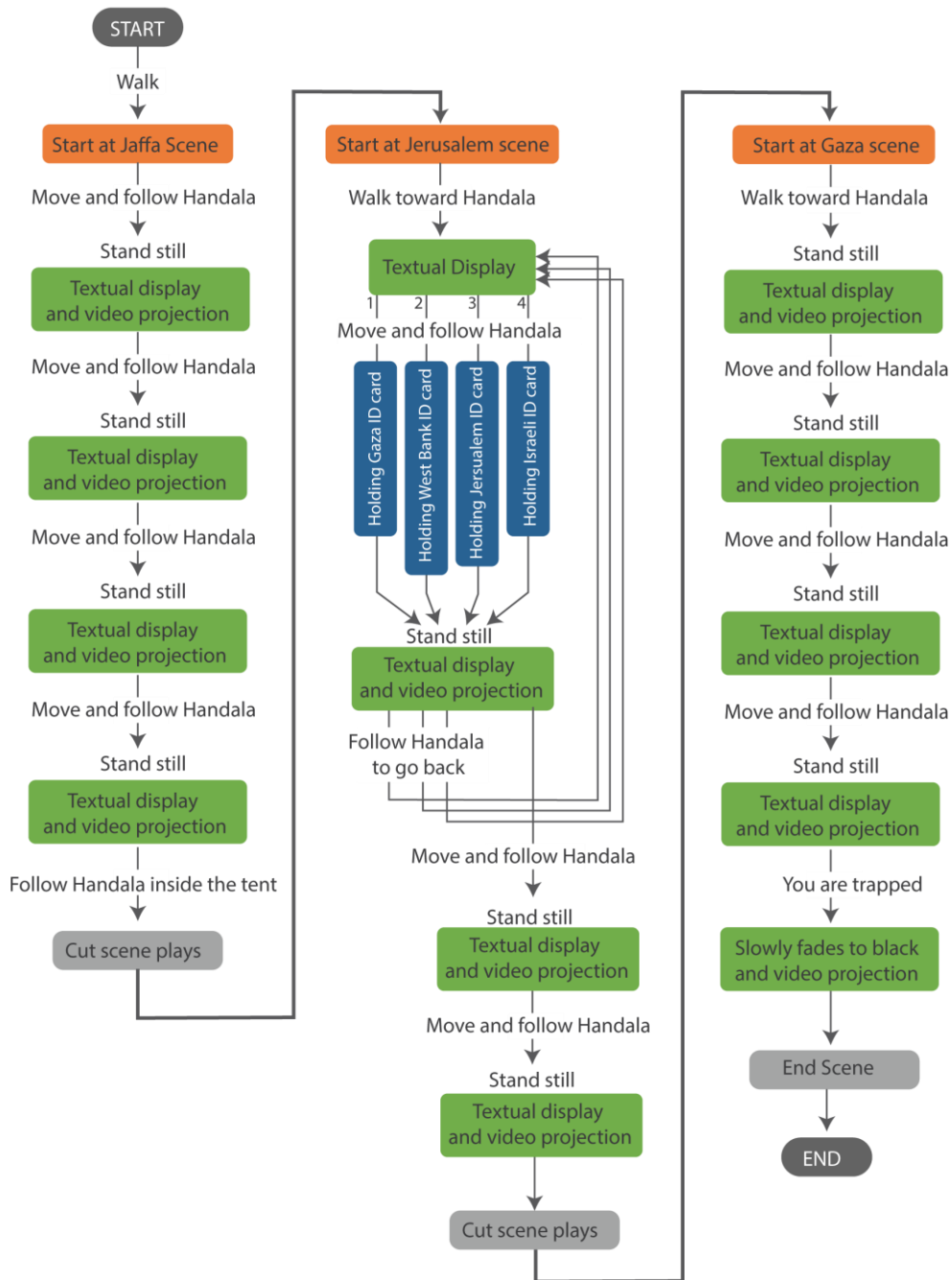


Figure E. 15:Flow diagram explaining the progression of the journey through the spatial experience.

## E.4 Installation Documentation Images



Figure E. 16: During one of the testing sessions, the participants are crossing a checkpoint to leave Jerusalem while a video of Palestinians at one of Jerusalem's biggest crossings is being projected.



**Figure E. 17: During one of the testing sessions, the participants are attempting to cross a checkpoint while holding a Jerusalem ID card while a video of a family in Jerusalem disposed of their home .is being projected.**



**Figure E. 18:** During one of the testing sessions, the participants are moving away from the checkpoint after trying the different ID cards while a video of Palestinians stuck at the checkpoint is being projected.



Figure E. 19: During another testing session but with the same experience as the one described in the image before.





**Figure E. 20:** During one of the testing sessions, the participants are standing just before the checkpoint to enter Gaza while a video explaining the Siege of Gaza is being projected.



**Figure E. 21:** During one of the testing sessions, the participants are walking through a long tunnel which is part of the crossing to enter Gaza while a video explaining of Gazan sharing their stories of living under the Siege is being projected.

## E.5 The Textual Displays Appearing in the Virtual Environment

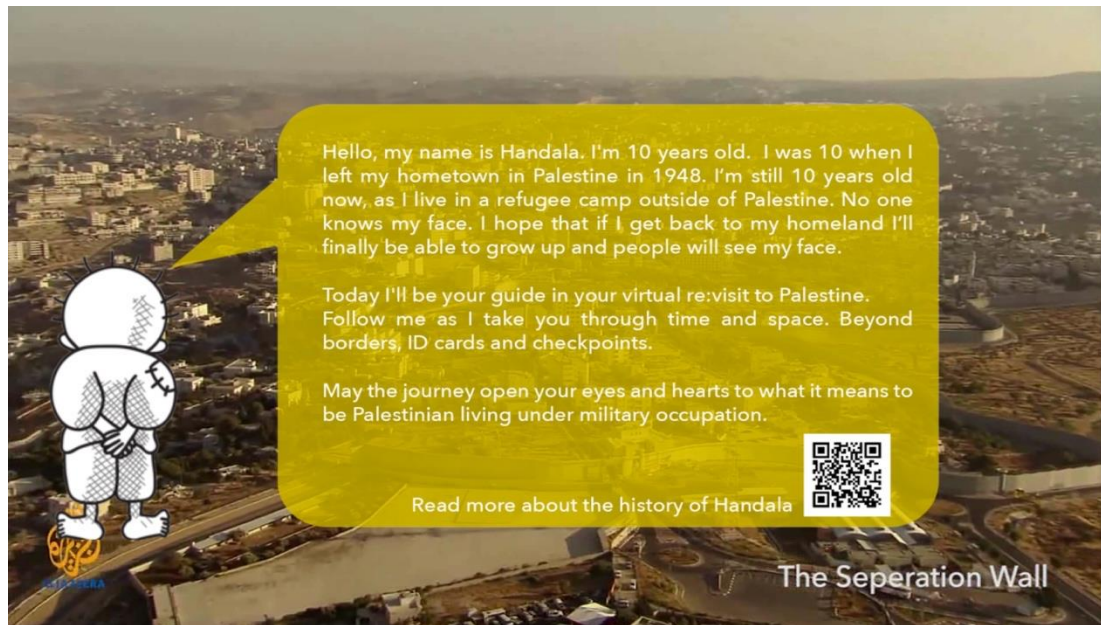


Figure E. 22: The textual display from the Introduction scene.

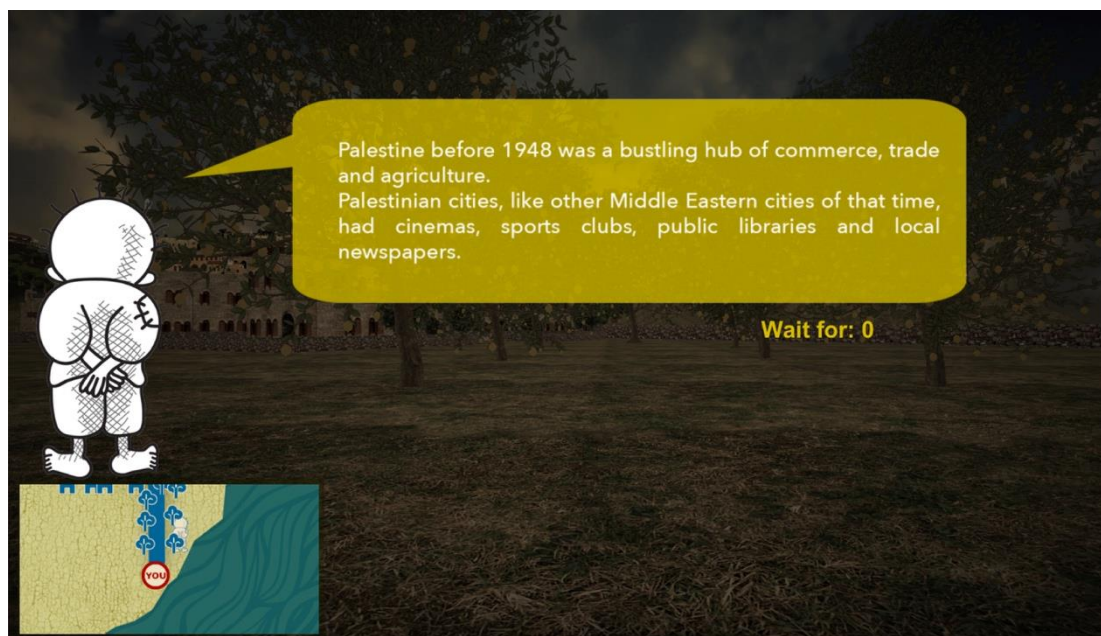


Figure E. 23: The first textual display from the Jaffa scene.

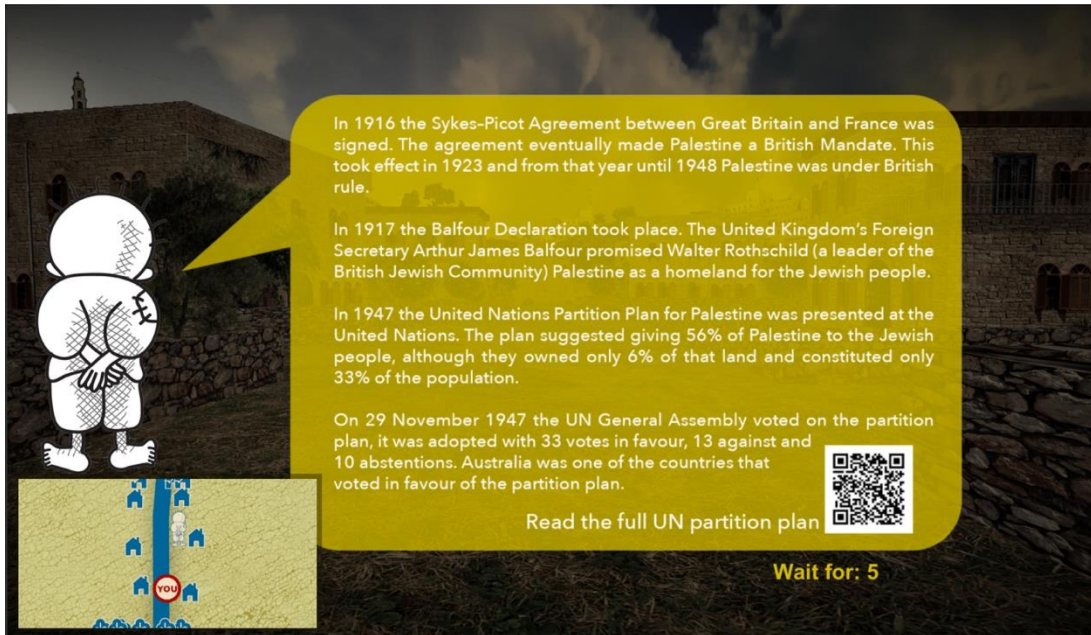


Figure E. 24: The second textual display from the Jaffa scene.

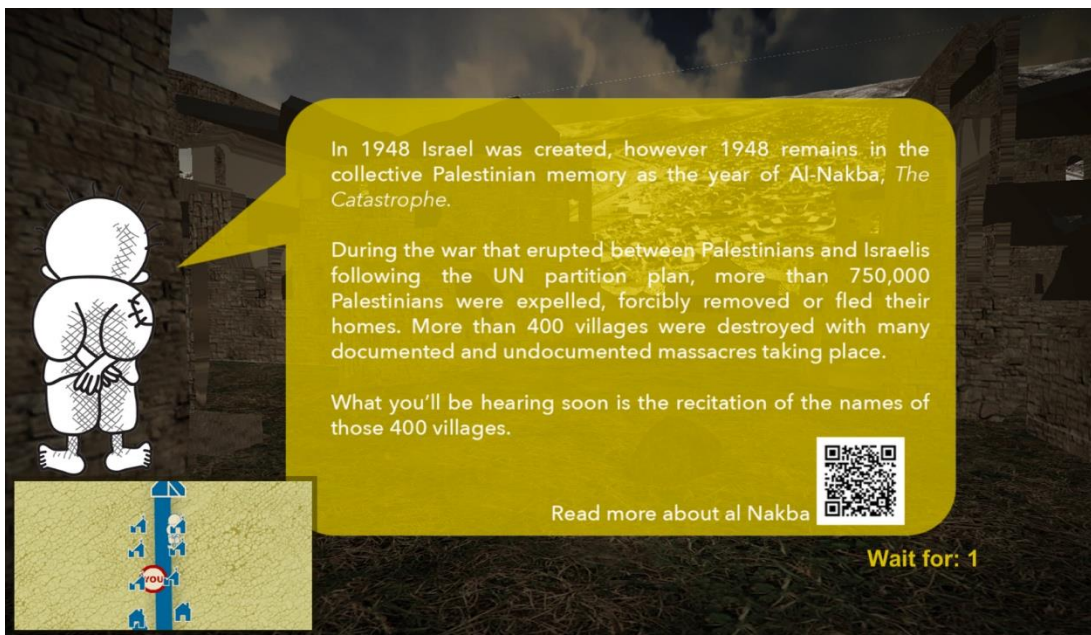


Figure E. 25: The third textual display from the Jaffa scene.



Figure E. 26: The fourth textual display from the Jaffa scene.

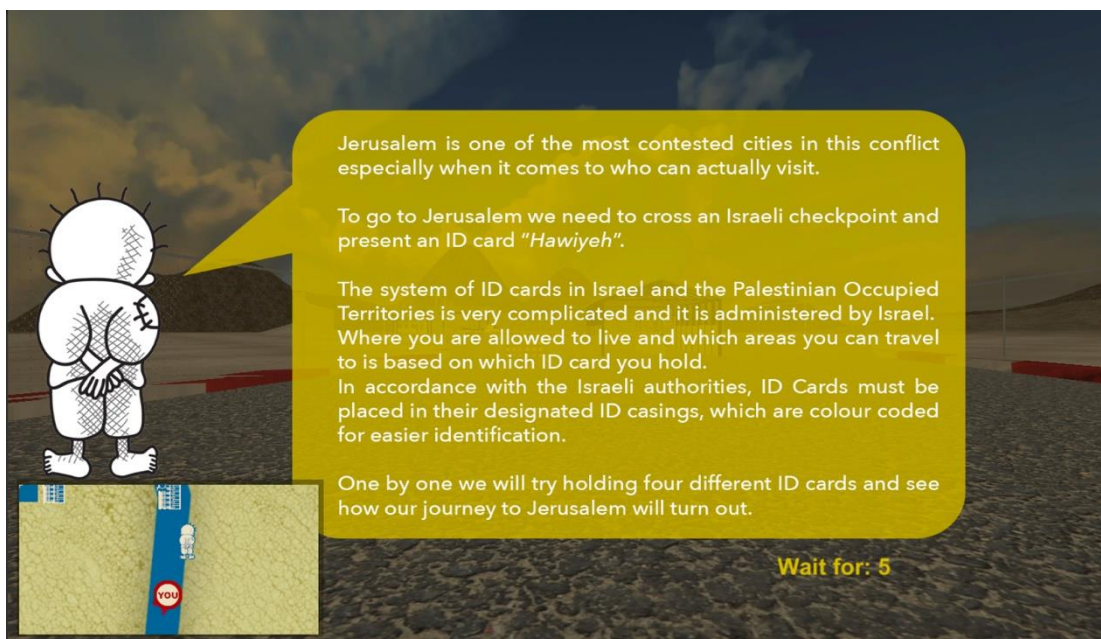


Figure E. 27: The first textual display from the Jerusalem scene.



Figure E. 28: The second textual display from the Jerusalem scene.

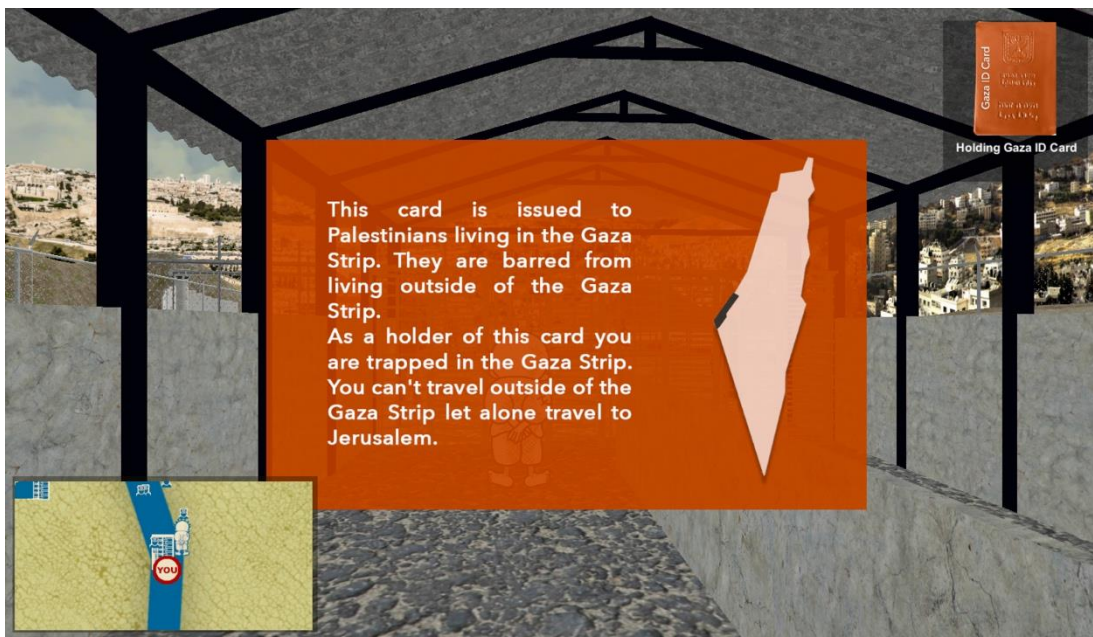


Figure E. 29: The third textual display from the Jerusalem scene.



Figure E. 30: The fourth textual display from the Jerusalem scene.

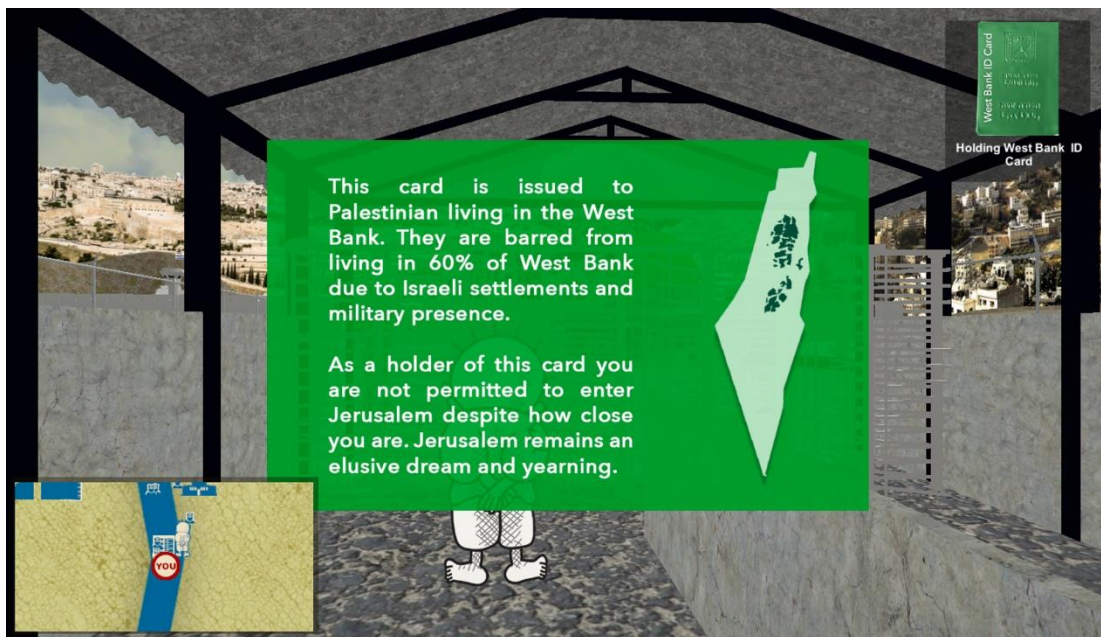


Figure E. 31: The fifth textual display from the Jerusalem scene.



Figure E. 32: The sixth textual display from the Jerusalem scene.



Figure E. 33: The seventh textual display from the Jerusalem scene.





Figure E. 34: The eighth textual display from the Jerusalem scene.

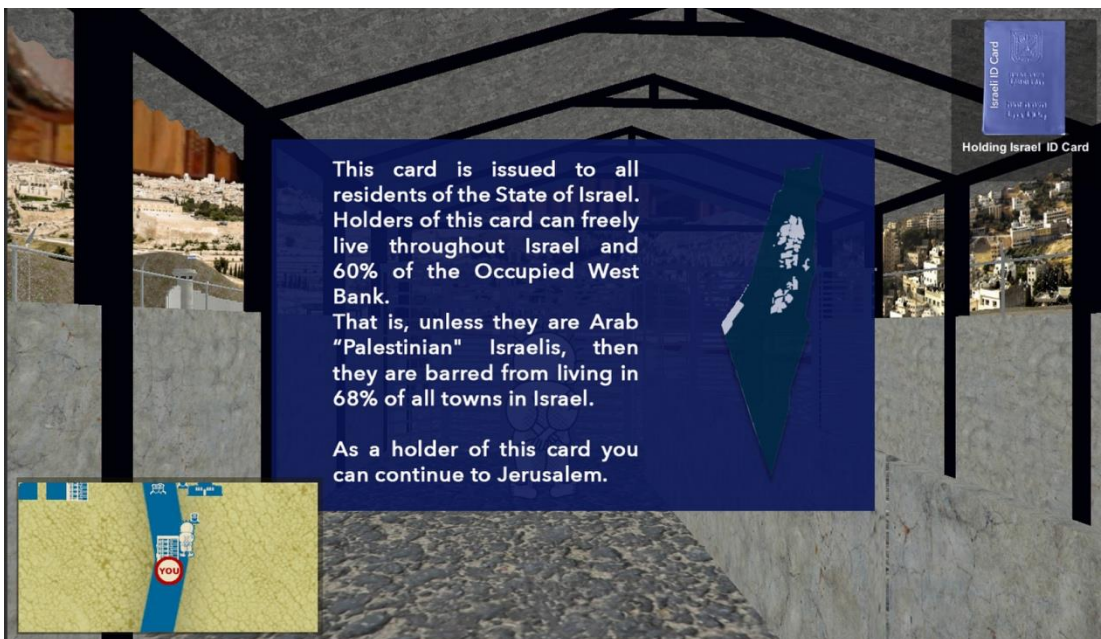


Figure E. 35: The ninth textual display from the Jerusalem scene.



Figure E. 36: The tenth textual display from the Jerusalem scene.

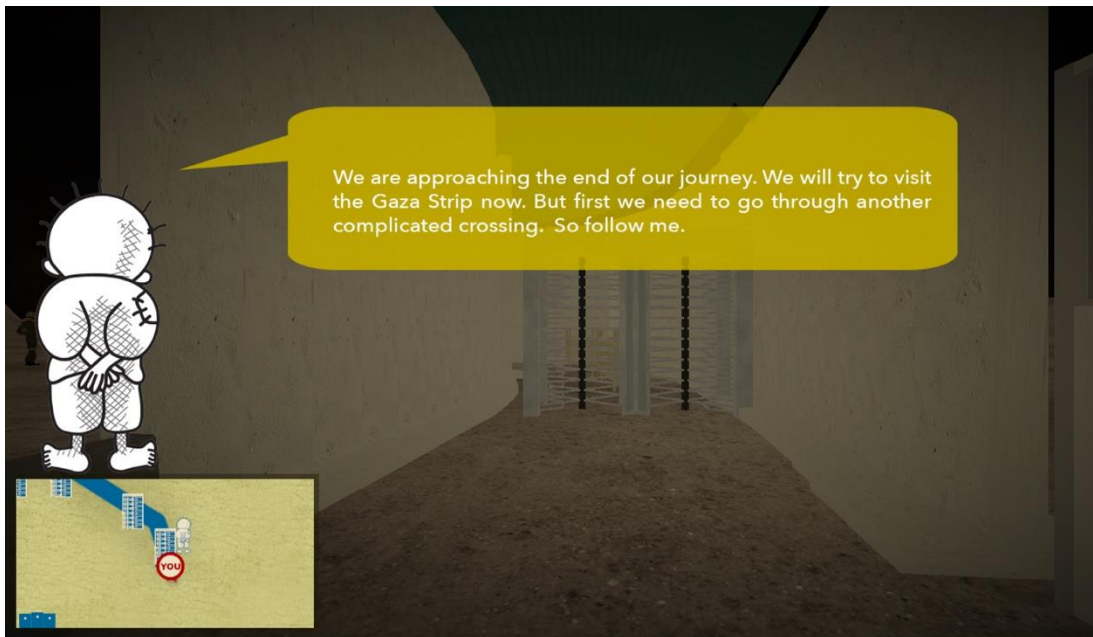


Figure E. 37: The first textual display from the Gaza scene.



Figure E. 38: The second textual display from the Gaza scene.



Figure E. 39: The third textual display from the Gaza scene.



And so it ends here. We come to the end of our journey. I hope that you experienced a different viewpoint of Palestine. However, what you experienced today is only a small dose of what Palestinians deal with everyday.

Figure E. 40: The first textual display from the Ending scene.



Palestinians are still living under harsh circumstances subjugated to Israeli military occupation, restriction of movement, fear of detention, deportation or death, apartheid policies and blockade. Many other Palestinians like myself are living as refugees in Exile mostly unable to visit their hometowns or any of the cities you virtually visited today.

Figure E. 41: The second textual display from the Ending scene.

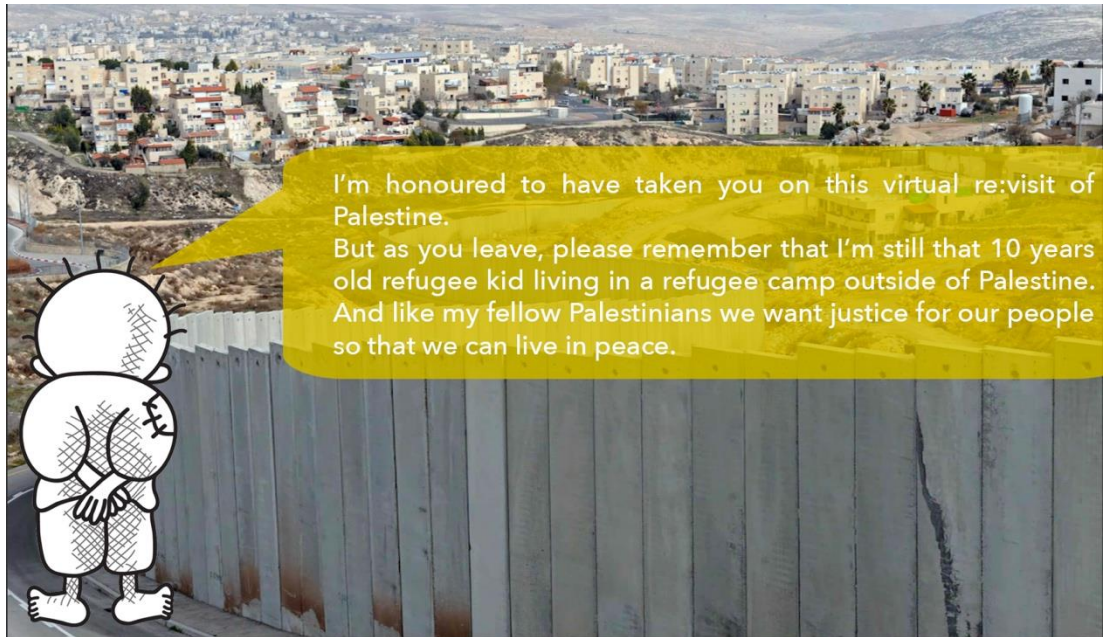
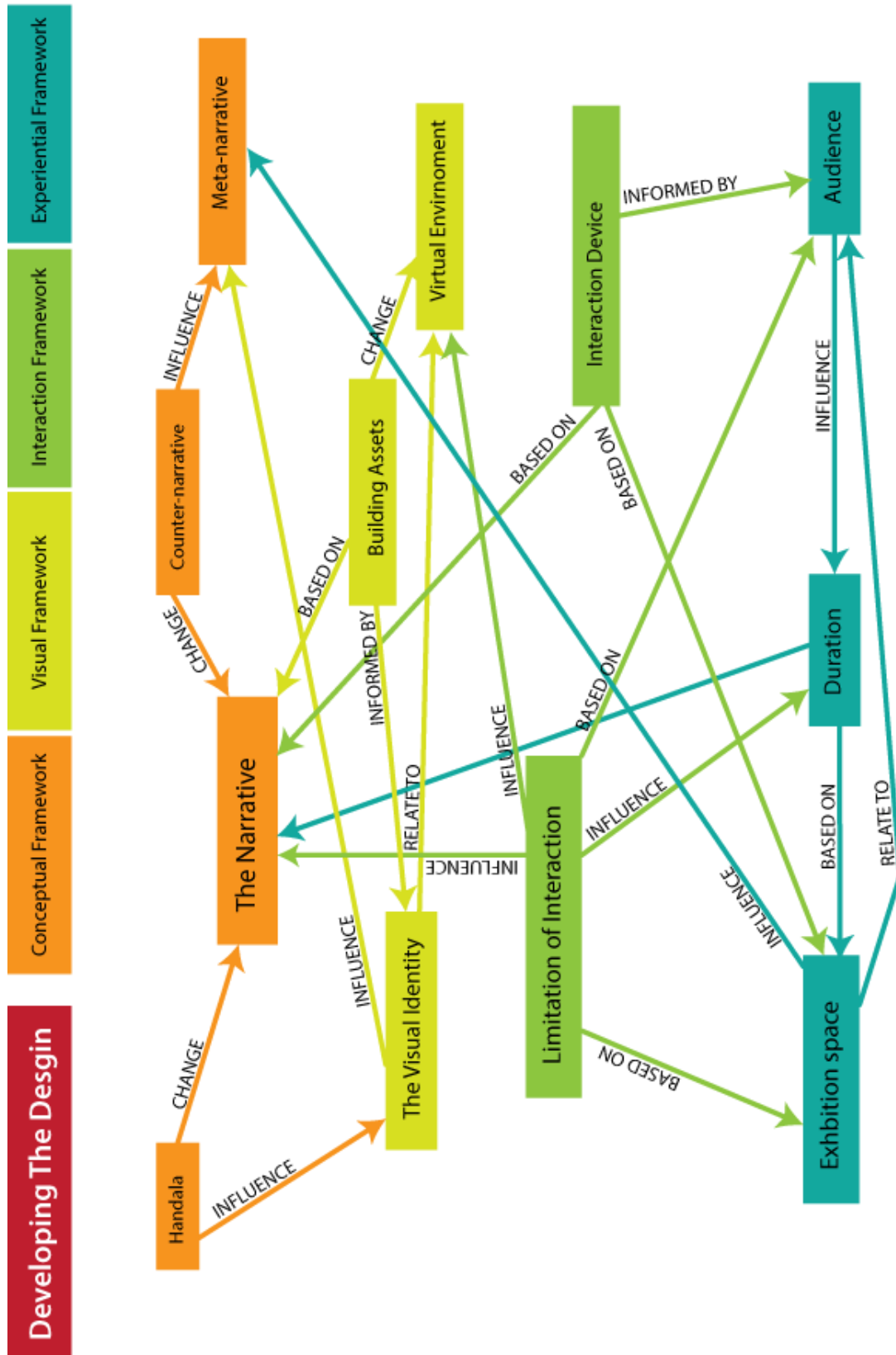


Figure E. 42: The third textual display from the Ending scene.

## E.6 Mind Map of the Intersectionality between the Different Frameworks









# Appendix F The Test Questionnaire

## F.1 A Sample from the Invitation Email to Fill in the Questionnaire

Survey followup on testing "re:Visit Palestine"



Rusaila Bazlamit

Mon 3/04/2017, 11:43 AM

@curtin.edu.au; Rusaila Bazlamit <[redacted]> [redacted]



Reply all | v

Dear Dr. [redacted],

I hope this email finds you well. I want to thank you for being part of the expert group that tested the interactive installation's prototype "re:Visit Palestine", which I have created as part of my PhD research. Your input and feedback have been very helpful in informing my research.

As a follow up for your feedback as an expert, I would like to kindly ask you to fill in this short survey, which will help me collect some quantitative data. This information will enrich my findings and ultimately my research outcomes.

Please follow this link to complete the survey. <http://www.surveymoz.com/s3/3474637/Experts-group-testing-of-re-Visit-Palestine>

It will not take more than 15 mins of your time.

I have also attached the poster, information card and two images of my installation to remind you of the installation.

If you have any further questions or comments please don't hesitate to contact me.

Looking forward to receiving your feedback.

Kind Regards,

Rusaila Bazlamit

Ph.D. candidate Design  
M.Sc. Design and Digital Media  
B.Sc. Architecture

## F.2 The Questionnaire

### Experts group testing of "re:Visit Palestine"

#### General Information About You.

1. What is your age group? \*

- 30 or younger
- 30-40
- 40-50
- 50-60
- 60 or older

2. What is your gender? \*

- Female
- Male

3. What are your main areas of expertise "please tick all that applies". \*

- Design
- Digital Media
- Media Studies
- Communication Studies
- Art
- Visualization

4. Any other areas of expertise you would like to add?

#### Reflections On The Content Of The Installation

5. Prior to this installation testing, I felt that I had a good understanding of the Palestinian/Israeli Conflict. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

6. After this installation testing, I felt that I gained better understanding of the Palestinian /Israeli Conflict. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

7. I felt that the installation was one-sided and lacked objectivity. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

8. After this experience, I felt that I'm more sympathetic toward the Palestinians. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

9. I would recommend this installation for other people to visit and experience. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

10. Have you ever been to the Middle East? \*

- Yes
- No

11. Have you ever been to Palestine or Israel ? \*

- Yes
- No

12. If yes, have you seen similar scenes to what you saw in the videos of the installation?

- Yes
- No

## Reflections On The Design Of The Installation

13. I found that the virtual environment had no effect on my experience. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

14. I felt there was a lack of instructions on how to navigate the virtual environment. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

15. I didn't feel any connection with Handala "The cartoon character guide". \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

16. I found the video footage quite emotive. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

17. I felt that the sounds were effective in gauging my attention while exploring the virtual environment. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

18. I felt that the installation was too long. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

## Reflections On The Technology Of The Installation

19. In general, I feel confident using technology. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

20. I feel confident playing video games. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

21. I found the technology of using the Leap Motion Controller difficult. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

21. I found the technology of using the Leap Motion Controller difficult. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

22. I felt that the use of mixed media "audio/visual" to be confusing and overwhelming. \*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

23. Before finishing this survey, please share any further comments or thoughts in regards to your experience with the installation.

Never enter passwords or other sensitive information on this form. [Report Abuse](#)

Back

Submit

## **Appendix G Summary of the Debriefing Sessions following the Test Sessions**

### **G.1 Session 1:**

#### **General reflections on the experience**

##### **Participant 1:**

- She said she was confused at the start. She was expecting an art installation. She did not realise it was an interactive work. She had to rethink, but she was not sure what she was looking at. She was not sure if she was looking at work that belongs to a museum, rather than an art gallery space, where she is required to interact with the work differently. She is worried about the distinction she is making between art object and looking at objects like a piece of information.
- She said she is a visual person more than a verbal person. So, she felt a conflict between reading script, watching image and hearing voice over too all the same time. So, she had difficulty as to where she should place her attention. Eventually, her strategy of reading overrode the effective dimensions of what she was looking at.

##### **Participant 2:**

- He said he was not sure what he was looking at either. He was expecting things to run rather than having to interact with it. If he had known before or had some instructions beforehand, he would have behaved differently.
- He was reading more about Middle Eastern history. He recognised the complexity of the conflict and how old it is. He said that what was represented is a continuation of many centuries of unfair behaviour going there. But now it is Israelis who are doing it. "It would be so nice if people were left alone to go on with their lives". When he saw the images, he got a stronger impression of how people are powerless.
- He reflected that all the walls and gates are going against what this place was always, a place to gather and do a trade. "Making it as unlike Jerusalem as it can possibly be".
- He showed a lot of sympathy and understanding of the conflict.

##### **Participant 3:**

- She said that her parents are Lebanese. So, she had heard stories about the war from them.
- She felt that the interaction aspect should have been clearly signed so that people know what to do.
- She is a fan of interactive elements in museum spaces. For example, the Anzac one in Albany. She can see this work beautifully fit into a museum space.
- She was a bit confused by the aesthetic of Handala not matching the rest of the environment. But when she understood the backstory “explained by Andrew” made a total sense and added an emotional dimension.
- She found the videos very emotive and made her understand more.
- Some of the aesthetic might be worked on and enhanced a bit more.
- She liked the ID cards and how it affected people’s journeys.

## **Handala, and their positionality within the experience**

### **Participant 3:**

- She said that he felt like a tourist being guided by him. But when he was trapped, she felt trapped too.
- She questioned the length of the whole installation and how much can we hold people’s attention for. And whether this is a show of its own or part of a show. She suggested that we need to think more about this issue.

### **Participant 1:**

- She felt that the end particularly was a crucial aspect of the experience, how she could not go out of it.
- She cannot read cartoons, and thus she could not identify with him.
- She is not good at reading images and text together.
- Reflecting on the video; the most powerful one was of the crossing and people trapped like cattle. It was highly emotive.

### **Participant 2:**

- He said that some people might not have the persistence to be trapped and forced to wait.
- He suggested considering if it can be done once for them to understand but then they can continue to move on.

- Agreed with Participant 1 about the power of the crossing footage and being treated like cattle.

## **Reflections on using the Leap Motion**

### **Participant 2:**

- Using game controller like a Wii might make this more usable
- It got better as he got used to it.
- It is not a familiar interface.
- He thinks that this would be interesting in schools for kids.

### **Participant 1:**

- Using motion pads on the floor would be interesting.
- She said that she is a bit of Luddite and she is not good with computers that why she did not try to use the Leap Motion.
- The moment she was attracted to it was when I used it. The way my hand hovered over it. There was something poetic/ethereal about it.

### **Participant 3:**

- Was letting others try it but would be happy to give it a try.
- For her, she thinks it is inviting.

## **One thing that you would change about it**

### **Participant 1:**

- The interface of the interactive box. Stop it looking like a computer.

### **Participant 2:**

- Agrees with Participant 1.
- Think about the timing. To have a short version if people want to see only five or ten minutes of it.

### **Participant 3:**

- Needs a bit of finessing in terms of the visuals and interactivity.

## G.2 Session 2:

### General reflections on the experience

#### Participant 4:

- He said it reminded him of Iraq and how the Palestinian issue was important back then in the early 1970s. But they did not know much about what is happening there. They only knew the Ba'ath Party version of events. He understood better during the time he lived in Jordan. And he noticed that some Palestinians benefited from this situation.
- He thought that the way Palestinians talk or promote their issues is not the right way.
- For him, the conflict is more than people losing their land. It is more cultural and a conflict between two systems. We need to understand it better. And there are more things that need to be clarified.
- He said that this installation is touching on some of these issues. It shows it, and you can interact with it.
- He said he is not very comfortable looking at 3D things and games. But he thinks it is a generational issue.

#### Participant 5:

- He said that it is the second time in his career that he sees something that addresses this subject using multimedia.
- He was part of the earlier team of a game "Peace Maker". So, one of the early discussions he had with that team was about how can they make use of multimedia to take up different positions. For that game, you can either play it from the Israeli side or the Palestinian side. The game shows you that you cannot solve the conflict. So, in this installation, he thought that it would be helpful to have more voices in the experience that come from the other side. He understood that I want to portray from the first-person perspective and bring more attention to the Palestinians' perspective and their side. But he thought it will be helpful to bring the other side every once and awhile.
- He suggested maintaining that the story is being told through that little child but unveil more of the everyday life particularly the freedom of movement.
- He thought that the installation showed that very well and it can be further dramatised.
- He said he is born German. And this is why he thinks of the bigger picture. And he knows how the Nazis have an influence on how Israel came into being. He



suggested that I should consider having this mentioned in the big picture. How I start with the big picture, and then I zoom in to the child and then wrap up with the big picture again. That will sum it up and wrap it nicely.

- He thought that I have done very well with this deeply political issue. For example, the use of the term “complex situation” in my intro text. He said that this is a deeply personal view, and it is my view, and I am allowing visitors to experience it through the view of this child “Handala”.

## **Handala, and their positionality within the experience**

### **Participant 5:**

- He suggested that I carry more the view of this child avatar. He explained that if you are designing children stuff or telling the story through children points of view, never tell the story from above down. Tell it from down upward; the perspective of the child.
- He advised that I think of the guide and what is the role of the guide. How does it trickle into everything, the camera position, the way that you move, and the pace you are moving at...
- He did not establish a connection with Handala as the backstory of his creation is missing. It is not enough to have part of his story in the introduction text. Especially if the story is non-linear.
- He suggested I think more about how to enrich and help people get better experiences. Work more on the interface; for example, has a reset button if they get stuck that will bring them back and reposition them. Allow them to know more about Handala.
- It is pivotal that if there is a backstory for Handala to have that clearer in the narrative.

### **Participant 4:**

- He said that he knew the character and how the cartoonist himself created it as a representation of himself.
- He felt that Handala is guiding him to more knowledge and what he is seeing.
- This work has opened up something different for him.

## **Reflections on using the Leap Motion**

### **Participant 5:**

- He would have constrained the user. Building a carousel where the user has to go inside. He said that I need to think how to get across the feeling of constraint to the user. The checkpoints are wider than the reality. He would have made it harder for the user.
- He suggested reading for Peter Vible (was not clearly pronounced in the audio) who wrote an article about confined spaces.
- How can the user feel the confinement in the real space and not just the virtual one?
- Confinement is at the core of this experience.
- Agreed with Participant 4 about the use of odours. For example in the early stages of the installation, they talk about fruits and vegetables. It can be a very powerful way to enhance the experience.
- Despite the confinement might stand in the way of the user experience but he thought it needs to be more strongly depicted in the installation.
- One of the biggest challenges of new media is that the majority of people will not be familiar with Leap motion hence they will take time to know how to navigate and that will eat up time from the experience.
- He felt the movement is free, but the experience should be confined, and that is a bit at odds.
- He thought it might be better to use a joystick but build it into a cage or something.
- He said that if you are using an interface that people are not used to it will create confusion and eat up time.

#### **Participant 4:**

- Suggested engaging more senses in this experience, for example, the use of smells like in New Zealand airport.

#### **One thing that you would change about it**

They were not asked this question due to the limited time available.

## **G.3 Session 3:**

### **General reflections on the experience**

#### **Participant 6:**

- He said he had a very positive feeling walking in.
- He would have loved watching all the videos. He found them very engaging.
- The whole work was very revealing to him especially about the different zones and that sense of threshold and obstruction. It was tense for him. He felt he could be in those people's shoes and that was compelling for him.
- He did not like how two screens were peripheral and both sides. He felt that despite them being identical that he has to choose which screen to look at which created an interesting tension for him.
- He wanted the videos to be in front of him.

#### **Participant 7:**

- She liked how the two screens were different. It gave her an immersive feeling. So, she could choose where to look.
- She came late, so she felt that she was in the middle and wished she could start at the beginning. So, she felt she is the middle of the story. She felt she landed somewhere and not sure what is happening.
- Because we were progressing quickly, she felt she needed more time to absorb everything. She wanted to dwell and take time reading things.
- She thought it was an amazing experience and created a lot of emotions and interest. But she felt overwhelmed because of how quick we were moving.

#### **Participant 8:**

- He found the story very emotive. A mishmash of personal and political lives.
- He felt that the way technology is being set up is getting in the way of him forming emotional connections.
- The emotional connection for him came from the video. But the spatial connection came from the VR. So, he wanted to be able to look around more easily.
- The spatial experience for him just put what he saw in the videos in context. But the emotional connection is only coming from the videos.
- The multichannel for this was a bit distracting, and he did not know where he should place his focus.

- If he were alone, he would have watched each video till the end. He would not continue moving until he finished watching the video.
- My explanations to them filled in the gaps. But what when I am not there. My work has to be fool and idiot proof so that I am sure that people will experience it the way I want them to experience it.

## **Handala, and their positionality within the experience**

### **Participant 8:**

- He felt that if he did not understand the backstory of Handala, aesthetically it did not work for him as a designer. Visually Handala needs to connect with the narrative. The backstory is an incredible one but how can that be weaved into the story and made meaningful to the viewers.
- The whole experience is very powerful, but the way it is set up is preventing him from creating an emotional connection.

## **Reflections on using the Leap Motion**

### **Participant 8:**

- The leap motion did not work for him. He spent time figuring out how to move correctly. It must be much more intuitive. As a viewer, he wanted to connect to the content immediately.
- The accuracy of the control is problematic.
- A joystick would have been better. The technology is too complex and not intuitive enough.
- He suggested giving the illusion of interactivity as some games do, while in reality the user is only progressing his character from one point to another that is pre-determined.
- He suggested thinking about how to create a more claustrophobic experience by constructing say a box, and then the person has to go inside then it is a single experience. This can be helpful as. First, it will restrict who can come in, but then there is the emotion that the viewer is already locked in.
- For him, he walked in having nothing of the historical background. But if he walked into a confined space, it will let him act differently.
- Technology is working against this work.
- The leap motion absolutely has to go.

### **Participant 6:**

- Any interface you are going to have. There will be always an element of difficulty and will not accessible to all. Unless you use sophisticated head-mounted display.
- I have all the material that I need to do what I want to do.
- He thought it needs to be a linear experience. Because to his understanding, it is about going from A to B to D.... Experiencing that compression of somebody controlling your movement and have complete control over you with no choice.
- He thought that one person should drive it. It is a one-on-one thing. Or we could have a group coming in together, but they can leave, but you should not have anyone else come in while it started running.
- He suggested that no one can come in once it started.

## **One thing that you would change about it**

### **Participant 6:**

- Training. He once had an exhibition where the viewers had to be trained one on one on how to interact with the work, which involved a suite, and a head-mounted display. It was like military training
- He would have someone to teach people how to use the Leap and not be as clumsy as he was using it.
- He would get rid of one of the two identical screens. Unless I want to weave this tension into my viewer's experience.
- Thinking about how the viewer and Handala are the only two in the virtual environment but the reality has many more people. So, to think about how can we work around that without populating the environment with figures.
- Immersion is not about large scale. Immersion is about constricting alternatives and not having distractions.

### **Participant 7:**

- She agreed with Participant 6 about the idea of having a go at the Leap Motion before starting the experience. And have someone explain to her who the guide is and what she can do when she is in there.
- A hands-on tutorial induction thing. So, when she comes in, she comes prepared.
- VR worked for her. She felt that physically moving through that environment; she was moving through the story. She identified the linearity of the narrative with the physical movement in the space.

### **Participant 8:**

- He said that putting a limitation on the control seems in line with my philosophy of wanting to represent the restriction of movement. But it also will simplify the interaction. Because the interaction now is not simple and causing a problem with forming a connection with the work.
- He advised on the need to restrict the margin of error.
- He reflected that I am working against the established paradigm of VR. Because VR is about freedom. He thinks it is powerful, but the interaction is not there yet.
- He felt that in a big room he needs to have a small space where he is made to feel uncomfortable.
- He thought that I do not need to use VR. It is not central to my narrative.

## **G.4 Session 4:**

### **General reflections on the experience**

#### **Participant 9:**

- He noted that from the technical side; I need to train the user how to navigate this experience. The cognitive load on how to use this space should be as low as possible.
- The iPad instructions screen did not attract his attention.
- He would put some easy level at the beginning where the user can train on how to use the Leap, where there are only VR things. And he can look around and time to train with the Leap Motion.
- The navigation and text should be put upright or on a different screen like the iPad.

#### **Participant 10:**

- He felt that there were a lot of technical barriers to actually understand what he was looking at in video and text.
- For him, the navigation got a bit easier with time. But having a lot of text and the video at the same time was not good.
- He had to watch the videos to read the subtitles and then he had to go back and forth to read between the two screens. That made him lose some of the information especially in the early stages.
- He only looked at two screens max at one time. So, he did not understand the need for three screens.
- He felt that the video media in itself was very affective.

### **Handala, and their positionality within the experience**

#### **Participant 10:**

- He did not mind being taken on the journey. But at the same time, he sometimes felt that he had to follow him and concentrated on that only which affected his experience.
- But he thought the barriers were effective. Because he knew what he had to do of keep going back and try to enter using the different IDs.
- The triggers to move ahead are not clear. He was looking for them.
- He said that the brief about the character should be inside the installation.

- He felt that there was a lack of 3D sound effects that would have helped in creating cues for the viewers.

### **Participant 9:**

- He liked how we enter and then we are pulled back on the crossing, and it took him some time to realise that this is how it is in reality. For him, it was a nice effect, and he suggested that I can even gamify things more, or the viewer can jump over in the virtual environment or some gamification elements in there.
- He felt a bit unsure about the lack of visibility of the trigger points. He wanted to see more, but he only had the text in front.
- The screens were a bit disconnected. For example, I could put the Palestinian viewpoint on one screen and then the Israeli viewpoint on the other. And then the guy in the middle is contrasting those two and maybe go back to the Palestinian viewpoint.
- He said that I should have more attention to how I tell the narrative to make the people feel more attached to somebody.
- He did not feel attached to Handala. He was running away all the time. There were no signs to tell him where to go. He could not empathise with him. The text talking about him was not enough, it looked like a lot of text.
- Understanding the character should be in the installation not before it. For example, for him to slowly explain who he is and why we cannot see his face. He might jump between screens to make the viewers get used to the different screens. And let him say you need to follow my pathway to understand what happened to me.
- He thinks that different sound cues like explosions and so on can help the viewer direct their attention between the different screens. He advised that I should make the sound cues more distinctive.
- He mentioned his book “Serious Storytelling”.

## **Reflections on using the Leap Motion**

### **Participant 9:**

- I need to make people aware about the Leap motion so maybe a yellow border or something to make it clear to the people.
- Having two screens, the VR and video were confusing because you jump back and forth and you lose the attention of the yellow text. So, they are distracting from one another.



## **One thing that you would change about it**

### **Participant 9:**

- Training the user how to use the interface.
- Put the navigation panel somewhere more central
- Put one thing that explains the whole thing. “Now test the scene”. Some sort of instruction.
- He mentioned a book about navigation. UK professor named Spencer.

### **Participant 10:**

- Reduce the amount of looking around and listening you have to do.
- Simplify the front. Let the videos talk more.

## **G.5 Session 5**

### **General reflections on the experience**

#### **Participant 11:**

- There were moments when he was captured by the video. Because he wanted to hear. But he wondered if he can stay as he thought whose turn is to control the leap.
- He was very conscious of disrupting the other viewer's control. So that made it a bit fragmented. So, there were moments when he was fully immersed in the narrative but had to step back.
- At the early beginning, he did not know where to focus his energy. Between reading and immersion and controlling.

#### **Participant 12:**

- He did not have a great emotional reaction to anything. But felt like he could. Expect that he was focusing more on making the thing works out.
- He was not sure when he was able to move on because of the way I set it up. There was confusion between moving ahead, video playing and then having to stop.
- So, he had two frames of mind where he thought he could have an emotional experience but he cannot have this with this run-through. And then thinking how this emotional experience would be.
- The video material is really engaging.
- He generally liked the things that happened with the things he controlled. And he liked that he can control it although he would not care if there was no facility to control it at all.
- He thought the virtual environment was interesting and novel. But it distracted him from paying attention to the content. And then he was happy not to use it.

### **Handala, and their positionality within the experience**

#### **Participant 11:**

- He thought it was a good idea of having him as the guide. He felt he was being led.
- But he is not sure whether having the caricature was the right way to go about it. His first impression was that this character do not feel quite right here. Because of

the subject matter but also because of its visual manifestation. But then he got over it and got used to it and accepted it.

- The idea of having a child as a guide is good. It is just the visual manifestation.

**Participant 12:**

- He wanted to know more about the character. He felt that his story was significant but he did not get any sense of it in the piece and he was wondering if we would get to know more about him.
- So, he liked the idea. But he wanted to be exposed to more info about him before the piece.
- It did not immerse him in terms of feeling he is there or having the experience of someone there. But he felt Handala is guiding him. And he liked that from a usability perspective.
- He would have liked more information about the full significance of Handala either before or during the installation.

**Reflections on using the Leap Motion**

**Participant 12:**

- It probably detracted from the experience for him. But he does not like interaction as a general thing.
- So even if it had worked perfectly and much more intuitively set up, he would be happy without any facility for him to interact. And the thing just playing on its own and guiding him through.
- He was more focused on how to operate the Leap Motion and lost his focus on the content.

**Participant 11:**

- He is interested, from a research point of view, with new modes of interaction.
- He is fascinated to see people encounter new forms of interaction and that makes him infinitely curious about them.
- But at the same time, his patience for them when they do not work is much shorter.
- So, when he got stuck was an added frustration, which he did not want because he is interested in the content.

**One thing that you would change about it**

**Participant 11:**

- The field of vision was too wide, and he would have liked for the content to be also in front of him. Because there was no incentive for him to keep moving and he had to move his body to face the video physically.
- He suggested bringing the content to one field of view.

**Participant 12:**

- He would take away the interaction and have the same audio-visual material. It would be a fly through. You can potentially have a timing control only.

## **G.6 Session 6**

### **General reflections on the experience**

#### **Participant 13:**

- As she is not a gamer, it took her some time to figure out how to navigate. But it was easy to catch up on when people were more used to it.
- She would have liked to have another sensory experience that would trigger the halting or stopping at the checkpoint like the vibration you get when using on a game controller.
- The educational message is very clear. But there is more than that. There is the capacity to expand on that through the sensory experience that we get although only through technology, more experience of the harsh reality of that.
- The ‘move on’ trigger was triggering her to move on, but she wanted to stay and finish the video.

#### **Participant 14:**

- Thought it was fabulous. Content-wise obviously is very powerful.
- He felt there was too much information. So, he suggested slowing down the sequencing.
- Maybe the younger generation might find it easier and not bothered by the multiple sources of information. But for him, he preferred one single narrative at any given moment.
- He thought the idea of walking through the urban areas and the checkpoints was good. It is things we do not see on the news.

#### **Participant 15:**

- He was not aware of this reality at all.
- He thought we needed the interactive part else the work becomes like a documentary.
- As a work of art, it opened other avenues and locations where people can experience this as opposed to a documentary.
- It is important to have the interactive part, but like the others, he agreed that integration, on the one hand, the things that demand to be seen “the collated footage” and the experience of getting through the checkpoint. That integration is difficult. There is a bit of tension, the actual problem of navigation, too much time

to know how to do it which diverted his attention from the meaning and the content. Although he thought that part is essential.

- It is an important experience, but there are some problems in it.

## **Handala, and their positionality within the experience**

### **Participant 13:**

- She said that she understood the premise behind Handala but she felt she was an outsider trying to catch up but from a distance. And it created a disconnection, and it was a good thing for her as she thinks it achieved some of the things I want to achieve.

### **Participant 14:**

- Thought it was a great avatar and he liked the idea of not being able to see his face because he is always forward moving.
- He did not feel and can never feel he is a Palestinian.
- He sympathised with Handala as he is a little person and his land is devastated.

### **Participant 15:**

- He reflected that you had to have someone to lead the viewers through. If you did not have someone in the environment to follow you would not necessarily go on the right path and you might wander around. So, you need a guide, and it was essential to have him.

## **Reflections on using the Leap Motion**

### **Participant 13:**

- She liked the interactive component and thought it was enjoyable. For her, it added something to the work.
- The work was hovering in three spaces for her: video game/ documentary/ artwork. She was not sure where it sat exactly.
- She was thinking whether more video game components are needed especially at the checkpoints like being given the ID card or a buzz in the joystick or something that will add to the experience of being at a checkpoint.
- She reflected that there was something really interesting about using your hand and being part of the work. Being exposed to something you are not familiar with and then having to try and navigate through. It was difficult for her to navigate

through and she is not in that environment. For her this in itself offers an interesting experience.

- About having a choice, she wanted to expand by saying people can have limited choices and have definitive realisations of the futility, inability and absurdity of some of those choices or the inability to move forward. For example, if one person got the gold star card and went all the way through but then another person really was halted and could not go any further would be an interesting thing and would show viewers the difference of these different ID classes.

#### **Participant 15:**

- The aspect of enjoyment is an important part. Quoted Walter Benjamin saying that artists made dire poverty beautiful so the bourgeoisie would admire the beauty of poverty while those people are suffering. But he disagreed with him because although it dilutes the power of the message he thought that if you give a really challenging message whether it is the dead people of the Holocaust or the Palestinians that people will actually turn away from it. But that enjoyment part of that game element in it, like here, gave a way in which to some extent does detract from the power but finds a way leading into the power. In a way, it draws people in, and then they are exposed to something.
- If it was a 20 mins documentary of the Palestinians, people would not be tempted to come and see it.

#### **Participant 14:**

- He agreed that it should not be seen as a game. He would have been happy without the interactive element because of the sheer immersion and the power of the narrative of the story.
- But also thinking that interactivity makes you active in some way not just your brain but physically too.
- He asked whether I could make the viewer have a choice of which ID.
- Having the choice and making a wrong one would enhance feeling entrapped.

### **One thing that you would change about it**

#### **Participant 13:**

- Make the space between the archival footage and the environment more seamless, so they have the same level of significance.
- Think of the time factor. How long do you want people to sit with the work? Two and a half min is the average people sit with a video art piece.

#### **Participant 15:**

- Improve the ease with which you can navigate. To keep your attention to the installation.
- He said that shelling is news, people in queues is not news. Therefore, seeing this type of footage here is meaningful.

**Participant 14:**

- Put the side screens up in the middle after you had a chance to read the text and then just fade up. Allow enough reading time.
- Talk about the number of Palestinian refugees somewhere along the journey.



## Appendix H Proposed Plan of Action for Future Development of the Prototype “re:Visit Palestine”

Phase	Main Tasks	Detailed Tasks	Expertise Needed
Planning	1. Decide on exhibition venue	<ul style="list-style-type: none"> <li>• Decide on duration and expected audience</li> </ul>	Team leadership Project management
	2. Define the project's needs	<ul style="list-style-type: none"> <li>• Define project team</li> <li>• Outline budget</li> <li>• Seek funding</li> </ul>	Project management
Designing: Conceptual	1. Work on the narrative	<ul style="list-style-type: none"> <li>• Write an overview of major changes to the narrative</li> <li>• Write the narrative in full details</li> <li>• Prepare a 2D storyboard</li> <li>• Review the narrative</li> <li>• Finalise the 2D storyboard</li> </ul>	Team leadership Design 2D illustration
	2. Work on the brand identity	<ul style="list-style-type: none"> <li>• Work with the visual identity team</li> <li>• Build strategies for online engagement</li> <li>• Implement strategies for online presence and engagement</li> <li>• Revise and respond to changes as they come</li> </ul>	Team leadership Graphic design Copyright Media /PR
Designing: Visual	1. Work on the virtual environment	<ul style="list-style-type: none"> <li>• Prepare detailed 2D sketches of each scene.</li> <li>• List all the 3D assets that need to be created/ sourced</li> <li>• Work on creating/ sourcing the assets and put them in an inventory</li> <li>• Build each scene with the assets all imported with the correct materials</li> <li>• List all the needed audio files</li> <li>• Create/source the needed audio files</li> </ul>	2D illustration Game design 3D animation Sound design

Phase	Main Tasks	Detailed Tasks	Expertise Needed
	2. Work on the videos	<ul style="list-style-type: none"> <li>List all the needed video file</li> <li>Source/edit the needed video files</li> <li>Following up on any copyright issues</li> </ul>	Video editing Translation
	3. Work on the visual identity	<ul style="list-style-type: none"> <li>Design the visual brand which includes, logo, Advertising materials and information cards</li> <li>Create a website</li> </ul>	Graphic design Website design
Designing: Interaction	1. Build interaction in the virtual environment	<ul style="list-style-type: none"> <li>Identify all the needed interactive elements and commands in the narrative</li> <li>Create/ program those elements</li> </ul>	Game design Game development
	2. Work on the input device	<ul style="list-style-type: none"> <li>Search for possible input devices to be used</li> <li>Experiment/ hack the technology</li> <li>Create and code the interaction with the virtual environment</li> <li>Test and refine</li> </ul>	Game design Game development
Designing: Experiential	1. Work on exhibition space	<ul style="list-style-type: none"> <li>Edit the narrative and the intended journey in reflection to the physical space</li> <li>Create any needed physical props or intervention within the existing space</li> </ul>	Game design Exhibition crew
	2. Work on the input device	<ul style="list-style-type: none"> <li>List existing equipment available</li> <li>Source out any missing yet needed equipment</li> <li>Calibrate equipment to the exhibition's need</li> </ul>	Game design Exhibition crew Team leadership
Testing	1. Create a modified prototype	<ul style="list-style-type: none"> <li>Find a test group</li> <li>Do a test run of the exhibition</li> <li>List all bugs and issue</li> </ul>	Game design Game development

Phase	Main Tasks	Detailed Tasks	Expertise Needed
	2. Prepare final version	<ul style="list-style-type: none"> <li>• Address any problems or unresolved issues</li> <li>• Test again</li> </ul>	Game design Game development
Setting up	1. Setting up the exhibition	<ul style="list-style-type: none"> <li>• Set up computer and equipment</li> <li>• Calibrate equipment</li> <li>• Build and set up any physical props</li> </ul>	Game design Exhibition crew Team leadership
	2. Prepare the exhibition ephemera	<ul style="list-style-type: none"> <li>• Design exhibition brochure, poster, information card and banners</li> <li>• Distribute as needed</li> </ul>	Graphic design Team leadership
	3. Advertising	<ul style="list-style-type: none"> <li>• Advertise the exhibition in different outlets</li> <li>• Work with the meta-narrative team</li> <li>• Create an online buzz, for example, a Facebook event, hashtag, Instagram feed.</li> </ul>	Team leadership