# Excavating Buried Memories: Mnemonic Production in the Railways Under London and Berlin [1933-2013]

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A thesis submitted to University College London in fulfilment of the requirements for the degree of Doctor of Philosophy in Cultural Geography

UCL

The Department of Geography

2014

# **Declaration of Authorship and Copyright**

I, Samuel Oliver Crichton Merrill confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Length of main text [including figures and footnotes]: 102,933 words

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## Abstract

In this thesis I explore the production of social memory in the subterranean infrastructural landscapes of the London Underground and the Berlin U- and S-Bahn within a period spanning roughly the last eight decades between 1933 and 2013. To do this I apply an approach that is interdisciplinary in scope, comparative in nature and lies at the nexus of transport and cultural history, historical and cultural geography, and memory, landscape and heritage studies. More specifically this approach necessitates an engagement with the theories and literatures related to landscape, social memory and urban infrastructures in order to create new ways to study the cultural geographic and historic characteristics of urban underground railways, whilst simultaneously problematising the biased application of landscape approaches in non-urban contexts and contributing to the re-theorisation of the relationship of landscape and infrastructure. This is achieved by establishing 'the social memories of landscape' as my central focus, and the actors, processes, structures and discourses implicated in the production of a variety of 'buried memories' as my main concerns.

Thereafter, and upon establishing the main components of this research's mixed methodological and case-orientated comparative approach, I use a series of empirically grounded comparative excavations to shed light on how social memories are produced in the physical, representational and experiential landscapes of the Underground, U- and S-Bahn as exemplified by their cartographies and toponymies, realised and unrealised memorials, and alternative and creative uses of their ruins and vestiges. These excavations contribute in turn to new understandings of the mnemonic actors, processes, structures and discourses that have particular influence and resonance in these urban underground landscapes, and hence serve to demonstrate how the Underground, U- and S-Bahn's subterranean transport contexts influence the production of social memory.

# **Table of Contents**

Declaration of Authorship and Copyright	2
Abstract	3
Table of Contents	4
Acknowledgements	8
List of Appendices	10
List of Figures	11
List of Abbreviations and Acronyms	16
Chapter One	19

Introduction

Chapter Two	29
Theorising the Social Memories of Landscape	
2.1 Introduction	29
2.2 Social memory	30
2.2.1 Plural, contested and dynamic	30
2.2.2 Bodies, representations, and places	33
2.3 Landscape	38
2.3.1 Physical, representational, and experiential	39
2.3.2 Landscape and infrastructure	42
2.3.3 Landscapes of connections, networks and vertices	45
2.4 The social, networked and buried memories of landscape	47
2.4.1 Mnemonic structures, processes, actors and discourses	48
2.4.2 Networked memories	51
2.4.3 Buried memories	52
2.4.4 Excavations: archaeological and psychonanalytical	54
2.5 Conclusion	58
Chapter Three	60
Clearing the Ground: Comparisons, Cases and Methods	
3.1 Introduction	60

3.2 The possibilities and challenges of a comparative approach	60
3.3 The Underground, U- and S-Bahn in context	65
3.3.1. The histories of the Underground, U- and S-Bahn	66
3.3.2 Hidden heritages	76
3.4 Mixed and multi-sited methodologies	80
3.4.1 Data Collection Methods	81
3.4.2 Data Analysis Methods	86
3.5. Conclusion	90

Iconic Landscapes: The Symbolic Heritage of the Underground Diagram and U- and S-Bahn Route-plan 4.1 Introduction 91

91

**Chapter Four** 

4.1 Introduction	91
4.2. Between canon and palimpsest	93
4.3 The development of the diagram and its mnemonic meaning	95
4.3.1 Beck's diagram: an image of the Underground's 'golden past'	98
4.3.2 TfL's nostalgic corporate identity	100
4.4. The Iconisation of the diagram	102
4.5. The diagram's copyright and commercialisation	108
4.6 Maintaining the canon by controlling alternatives	113
4.7. The U- and S-Bahn's symbolic cartographies	118
4.8. Conclusion	130

Chapter Five						132
Naming the Network: The Transport Cartographies	Commemorative	Toponymies	of	Berlin	and	London's

5.1. Introduction	132
5.2 Transport cartographies: city-texts of memory	133
5.3 The changing names of the U- and S-Bahn's	136
5.3.1 Nazification and de-Nazification: 1933 – 1947	136
5.3.2. Cold War ideological division: 1948 – 1989	143
5.3.3. Post-reunification de-commemoration: 1990 – Today	154
5.4 The Underground's toponymic heritage	160
5.6 Conclusion	167

Chapter Six	169
Grassroots Remembrance at Samariterstraße and Stockwell Stations	
6.1 Introduction	169
6.2 Placing Meier's death	171
6.2.1 The U-Bahn as a landscape of fear and conflict	173
6.3 Meier's Memorialisation	175
6.3.1 Meier's memorial plaque	176
6.3.2 Meier's vigil and demonstration	181
6.3.3 The Initiative for an Active Remembrance	188
6.4 Meier's returning mnemonic resonance	192
6.5 The death of Jean Charles De Menezes at	
Stockwell Underground station	194
6.5.1 De Menezes: the final victim of the 7/7 bombings?	195
6.5.2 The memorialisation of 7/7	196
6.5.3 The Justice4Jean campaign	198
6.6 Conclusion	203
Chapter Seven	205
Accounting for the Underground, U- and S-Bahn's Negative Pasts	
7.1 Introduction	205
7.2 Remembering the Underground of WWII	206
7.2.1 Memorialising the Blitz beneath the city	207
7.3 Accounting for the Underground's accidental deaths	211
7.3.1. Memorial compensation for The King's Cross fire	211
7.3.2 The delayed and duplicated remembrance of the	
Moorgate Tube crash	217
7.4 The memorial absences of the U- and S-Bahn	224
7.4.1 The North-South S-Bahn tunnel collapse	225
7.4.2 The flooding of the U- and S-Bahn	232
7.5 Conclusion	238
Chapter Eight	241
Networked Memories: Accessing and (Re)membering London and Subterranean Ghost-stations	Berlin's
8.1 Introduction	241

	242
8.2.1 The closure and abandonment of Aldwych	244
8.2.2 A conduit of remembrance	247
8.3 The Old London Underground Company	249
8.4. The London Consolidation Crew	252
8.5 The continuums and consequences of OLUC and the LCC	257
8.5.1 Securitisation	258
8.5.2. Preservation and Heritagisation	259
8.6 Berlin's buried ghost-stations	263
8.6.1 (Re)membering Berlin's ghost-stations	264
8.6.2 Accessing and photographing Berlin's ghost-stations	267
8.6.2 Brokering access with the Berlin Underworlds Association	270
8.7 Conclusion	274
Chapter Nine	278
Chapter Nine Art from Below: Creating Mnemonic Imaginaries in the U-Bahn and Undergree Hidden Vestiges	
Art from Below: Creating Mnemonic Imaginaries in the U-Bahn and Undergro	
Art from Below: Creating Mnemonic Imaginaries in the U-Bahn and Underground Hidden Vestiges	ound's
Art from Below: Creating Mnemonic Imaginaries in the U-Bahn and Undergro Hidden Vestiges 9.1 Introduction	ound's 270
Art from Below: Creating Mnemonic Imaginaries in the U-Bahn and Undergro Hidden Vestiges 9.1 Introduction 9.2 Memory art in the U-Bahn	ound's 270 279
Art from Below: Creating Mnemonic Imaginaries in the U-Bahn and Undergro Hidden Vestiges 9.1 Introduction 9.2 Memory art in the U-Bahn 9.2.1. The U10 project	ound's 270 279 283
Art from Below: Creating Mnemonic Imaginaries in the U-Bahn and Undergro Hidden Vestiges 9.1 Introduction 9.2 Memory art in the U-Bahn 9.2.1. The U10 project 9.2.2. The Kronos Project	ound's 270 279 283 286
Art from Below: Creating Mnemonic Imaginaries in the U-Bahn and Undergro Hidden Vestiges 9.1 Introduction 9.2 Memory art in the U-Bahn 9.2.1. The U10 project 9.2.2. The Kronos Project 9.2.3. Construction Time Again	ound's <b>270</b> <b>279</b> 283 286 294
Art from Below: Creating Mnemonic Imaginaries in the U-Bahn and Undergro Hidden Vestiges 9.1 Introduction 9.2 Memory art in the U-Bahn 9.2.1. The U10 project 9.2.2. The Kronos Project 9.2.3. Construction Time Again 9.3 Mixing memory at Aldwych	ound's 270 279 283 286 294 300

Conclusions: Excavating Buried Memories beneath London, Berlin and Beyond

Bibliography	323
Appendices	368
Appendix A	368
Appendix B	369
Appendix C	373

## Acknowledgements

I would like to thank a number of people at University College London's Department of Geography, Urban Laboratory and Stadtkolloquium for their backing, guidance and friendship over the past four years. Foremost, I offer my deepest gratitude to my supervisors, Richard Dennis and Andrew Harris. I have been very lucky to have such enthusiastic, attentive and supportive people to guide me throughout my PhD journey. I would also like to acknowledge the encouragement and assistance offered by, amongst others, Matthew Gandy, Alan Latham, James Kneale, Miles Irving, James Esson, Regan Koch, Sandra Jasper, Charlotte Jones, Tauri Tuvikene, Amil Mohanan, Anna Plyushteva, and Astrid Wood. I would also like to note that without the financial support provided by the UCL Graduate School's research scholarship and language grants I would not have been able to pursue this research.

I would also like to thank numerous people at Technische Universität Berlin's Center for Metropolitan Studies (CMS) and Centre for Technology and Society. Firstly, Dorothee Brantz and Hans-Liudger Dienel, for welcoming me into their departments, for offering advice on my research topic, providing me with a Berlin work space and supporting my attendance at a number of international conferences. In addition, I would like to acknowledge the support offered by Massimo Moraglio, Robin Kellerman, Hasso Spode, Riza Baris Ülker, Elisabeth Asche, Eyke Vonderau and Claus Müller. A special thanks is due to the CMS' International Graduate College members: Afia Afenah, Marcela Arrieta, Sabine Barthold, Emily Bereskin, Laura Calbet i Elias, Antonio Carbone, Christian Haid, Patrick Hege, Hanna Hilbrandt, Berit Hummel, Botakoz Kassymbekova, Annika Levels, Johanna Rohlf, Anna Steigemann, Lisa Vollmer, Fran Weber-Newth and Meisen Wong. I would also like to acknowledge the financial support of the Deutscher Akademischer Austauschdienst, whose one-year doctoral grant allowed me to spend additional research time being hosted by TU-Berlin.

Beyond UCL and TU-Berlin, I would also like to express particular thanks to Carlos López Galviz, Keir Reeves, John Schofield, Gordon Pirie and Dhan Zunino-Singh for their moral support, and Sylvia Glover for her help in proofreading sections of this thesis. I am also extremely thankful to all those who gave up their time to be

interviewed during this research and to the staff of the museums, archives and libraries who assisted me during my research.

This last four years would not have been nearly as enjoyable as they were without the company and support of my family and friends. Thank you to all the boys at the Waltham Forrest and Neukölln Hockey clubs, including Millsey, Guy, Boxall, Zetter, Marcus, Timo, Jan and Benny, and to Hans Hack, Luise Strothmann, Seb Seeney, Fiona Deer, Luise and Clara Rellensmann, Anja Merbach, Emily Hamilton, Adrian Henham, Chris Lander, Nick and Laura Woolley and John Baker for all helping me to keep things in perspective and stay sane. Thanks also to the Sundström clan; Kurt, Maria, Olov, Karolina (and lill-John), Gustav and Frida, for welcoming me so warmly and for providing a Swedish sanctuary in which to reenergise between work periods. A huge thank you to my immediate family, Dad, Mutale, Laura, Amy, Becky, Rungano, TJ and the Grahn and Steen entourages, Rich, Ella, Pete, Matt, Ruby and Oscar, for their unconditional love and encouragement, for always believing in me, and for bringing me down a peg or two when I have needed it. Mum, I know that I would have made you proud with the hard work that I put into this thesis - I dedicate it to you. Finally, I would like to thank Sofia Sundström whose love, patience, understanding and advice over the last few years has been unparalleled. Tack raring, Jag alskar dig.

Appendix A	368
Select list of archives, libraries and museums consulted.	
Appendix B	369
The research information sheet and informed consent form that was distributed to interviewees.	outed
B.1. The Research Information Sheet	369
B.2. The Informed Consent Form	371
Appendix C	373
Lists of London and Berlin's past and present subterranean railway ruins a vestiges.	ind
C.1. The Underground's current subterranean disused stations	373
C.2. The U- and S-Bahn's Cold War subterranean ghost-stations	373
C.3. A selection of the U- Bahn's current subterranean vestiges	374

<i>Figure 3.1. Geographic map of the London Underground. Source M.Irving, UCL Geography Drawing Office.</i>	67
<i>Figure 3.2.</i> Geographic map of the Berlin U- and S-Bahn. Source M.Irving, UCL Geography Drawing Office.	68
<b>Figure 4.1.</b> Some of the mental maps collected by Helen Scalway during her <u>Travelling Blind project. Source: Scalway (2014).</u>	<u>92</u>
<i>Figure 4.2.</i> The 2014 London Underground diagram. Source: <i>TfL.</i>	<u>93</u>
Figure 4.3. 1908 London Underground Railways map. Source: LTM.	<u>96</u>
Figure 4.4. 1920 MacDonald Gill map. Source: LTM.	<u>97</u>
Figure 4.5. 1931 Fred Stingemore map. Source: LTM.	<u>97</u>
Figure 4.6. 1933 Henry Beck London Underground diagram. Source: LTM.	<u>98</u>
Figure 4.7. Hutchison's diagram being installed at a station in 1960. Source:	<i>LTM</i> . <b>103</b>
Figure 4.8. Garbutt's 1964 diagram. Source: LTM.	104
Figure 4.9. Beck's plaque at Finchley Central station. Source: Mansfield (2013).	106
Figure 4.10. The diagram on a 2009 British postage stamp. Source: Royal Mail C	Group. 107
Figure 4.11. The 'I'm Going Underground' T-shirt. Source: TfL.	112
Figure 4.12. The Olympic Legends Map. Source: TfL.	116
Figure. 4.13. The 2014 U- and S-Bahn route-plan. Source: BVG.	118
Figure 4.14. 1913 GeHUB Map. Source: Mauruszat (2012).	<u>119</u>
Figure 4.15. 1937 U-Bahn route-plan. Source: Schomacker (2009).	121
Figure 4.16. 1934 U-Bahn route-plan. Source: Schomacker (2009).	121
Figure 4.17. 1960 BVG-East route-plan. Source: Schomacker (2009).	123
Figure 4.18. 1988 BVG-East route-plan. Source: Reineke (2011).	124
<i>Figure 4.19. BVB's route-plan in one of its carriages in November 1989. Source:</i>	<i>LAB</i> . <b>124</b>

Figure 4.20. Passengers consult a BVG-West route-plan in Jannowitzbrücke U-Bahn<br/>station the day after the fall of the Wall. Source: LAB.125

igure 4.22. Spiekermann's May 1992 route-plan. Source: Reineke (2011).	127
<b>igure 4.23.</b> An alternative route-plan in an S-Bahn carriage in 2013. Source: No	otes o
erlin (2013).	12
<b>igure 5.1.</b> Adolf-Hitler-Platz U-Bahn station in 1933. Source: BVG Archives, Die	2
ahrt (1933).	13'
<b>igure 5.2.</b> The cover of the 1 <sup>st</sup> March issue of Die Fahrt featuring a portrait of Vessel. Source: BVG Archives.	Hors 138
<b>igure 5.3.</b> Reichssportfeld U-Bahnhof in 1936. Source: BVG Archives, Die Fahrt 1936).	139
<b>igure 5.4.</b> 1936 U-Bahn route-plan with sections of interest. Source: Opitz (in Re	inek
011).	14
<b>igure 5.5.</b> July 1949 U-Bahn route-plan with sections of interest. Source: Schom	acke
2009).	14
<b>igure 5.6.</b> Thälmannplatz U-Bahn station on its opening. Source: Mauruazat & T 2008).	opel
<b>igure 5.7.</b> Workmen install the station sign shortly before the station's official op	enin
ource: Bundesarchiv.	14'
<b>igures 5.8. and 5.9.</b> The memorial sign outside U-Bahnhof Dimitroffstraße in Jul	y
951. Source: Bundesarchiv.	14
<b>igure 5.10.</b> July 1957 BVG-West U-Bahn route-plan with highlighted sections of atterest. Source: Schomacker (2009).	15.
<b>igure 5.11.</b> The temporary outcome of the renaming of Otto-Grotewohl-Strag	ве L
ahn station. Source: LAB.	15'
igure 5.12. The 1946 LPTB poster: 'Trafalgar Square' by Fred Taylor. Source:	LTN 163
<b>igure 5.13.</b> Trafalgar Square station shortly before its official renaming. So	ource
lifton (in Catford 2011a).	164
<b>igure 5.14.</b> Everywhere I remember having been by Larrissa Fassler, 2009. Soww.september-berlin.com/index.php/page/imagepopup_artist/2745 [Last access in 2014].	

Figure 4.21. The cover of the first integrated route-plan after the fall of the Wall.

Figure 6.2. Mario's four-day vigil in 1998. Source: UDPC.177

171

Indymedia (2004).

*Figure 6.3.* The second permanent plaque (January 1999 – November 2005). Source: UDPC. 178

*Figure 6.4.* The third permanent plaque (November 2005 – November 2006). Source: UDPC. 180

*Figure 6.5.* The fourth and current permanent plaque being installed in 2007. Source: UDPC. 181

*Figure 6.6. The initial grassroots memorial and vigil. Source: Lange (in Schulze 1992).* 182

*Figure 6.7. Flyer advertising the Silvio Meier demonstration in 1993. Source: www.antifa-berlin.info/silvio-meier-doku/ [Last Accessed 24 April 2012 later removed].* 183

Figure 6.8. Reported estimates of Silvio-Meier-Demo participation 1992-2013. Source:Compiled from Die Tageszeitung and Berliner Morgenpost.185

*Figure 6.9.* The 2009 counter-naming of Samariterstraße station. Source: Indymedia (2009). 189

*Figure 6.10.* The 15 Silvio Meier memorial proposals. Source: Author's Field Notes 26 April 2012. 190

*Figure 6.11*. The results of the participatory meeting. Source: Author's Field Notes 26 April 2012. 191

*Figure 6.12.* Exit signs now integrate Silvio Meier into the U-Bahn's text. Source: *Author 2013.* 192

*Figure 6.13.* The 7/7 memorial plaque at Russell Square station and its reference to the sites of the attacks. Source: Author 2011 and TfL. 198

*Figure 6.14.* De Menezes' shrine outside Stockwell station in 2007. Source: Diamond Geezer (2007). 199

*Figure 6.15.* The unveiling of the mosaic in 2009. Source: Smallman (2009). 201

*Figure 7.1. The October 1940 bombing of Balham Underground station. Source: LTM.* **207** 

*Figure 7.2.* The New Balham Plaque on Remembrance Day 2013. Source: Jones (2013). 210

*Figure 7.3.* The unveiling of the King's Cross fire memorial plaques. Source: U-Magazine (1994). 213

*Figure 7.4.* The King's Cross memorial plaque on the 24<sup>th</sup> anniversary. Source: Author 2011. 215

*Figure 7.5. The wreckage of the Moorgate Tube crash. Source. LTM.* 218

<i>Figure 7.6.</i> The Moorgate memorial at Finsbury Square. Source: RJPC 2013.	223
---	-----

*Figure 7.7. The Moorgate memorial plaque. Source: Richard Jones 2014.* 223

Figure 7.8. The North-South S-Bahn Tunnel Collapse. Source: DTB. 226

Figure 7.9. & 7.10. The S-Bahn tunnel collapse victims on public display. Source: Bundesarchiv. 228

*Figure 7.11. & 7.12.* The planned memorials to the S-Bahn tunnel collapse victims. Source: LAB. 230

*Figure 7.13. The press trip at Anhalter S-Bahn station. Source Slupski (1945).* 235

 Figure 7.14. Black and white still of the flood scene from Liberation V: The Last

 Assault, 1971.
 236

*Figure 8.1.* The Under London event. Source: Spectrum Drama (2014). 241

*Figure 8.2.* The disused Wood Lane Station in 1980. Source: Catford (2011b). 244

*Figure 8.3.* The cover image of LURS' November 1994's periodical shows Aldwych the day before its closure and indexes enthusiast interest in the event. Source: Underground News. 246

*Figure 8.4.* One of the articles from the Metro's ghost-station series. Source: Author 2013. 249

*Figure 8.5.* OLUC's plans for the Clapham North air-raid shelter. Source: OLUC (2012). 252

*Figure 8.6. A typical urbex photograph taken at the disused City Road Underground station. Source: Otter (2014).* 256

*Figure 8.7.* Visitors on an Aldwych open day crowd one of the LTM guides. Source: Author 2011. 261

*Figure 8.8.* A sign outside Aldwych station before its 2011 open day. Source: Allen (in Zhang 2011). 262

*Figure 8.9.* The Reopening of Jannowitzbrücke on 11<sup>th</sup> August 1989. Source: Joe001, *Wiki Commons.* 266

*Figure 8.10.* The official reopening of Alexanderplatz U-Bahn station on 1<sup>st</sup> July 1990. Source: LAB. 267

Figure 8.11. A photographer explores Nordbahnhof S-Bahn station in 1989. Source:Halbrock (2013b).269

*Figure 8.12. Historic posters at one of the ghost-stations in 1990. Source: Rolf Zöllner Private Collection.* 269 *Figure 8.13.* The flooded WWII air-raid shelter adjoining Dresdener Straße U-Bahn station. Source: Author 2008. 273

*Figure 9.1.* Do not forget what was! Campaign for peace! by Almaru Lipa, 1958. Source: Musterer (2006). 280

*Figure 9.2.* The West Berlin Senate's 200 km-Plan in 1977 including the U10. Source: *LAB.* 285

Figure 9.3. Kronos-Projekt Trial Launch April 1926. Source: Boden (2011). 287

*Figure 9.4.* The projected computer animation of the Kronos Machine at Innsbruckerplatz station in 2009. Source: Queimadela in (Corcilius 2010). 290

*Figure 9.5. The incomplete U10 Innsbrucker Platz station. Source: Author 2013.* 292

Figure 9.6. A passing U9 train draws the group's attention. Source: Author 2013. 293

*Figure 9.7.* The exhibition of Construction Time Again at Schloßstraße U-Bahn station. Source: Kirchhain (n.d.). 298

*Figure 9.8.* DDR material memories embedded in the model of the planned U10 Greiswalder Straße station. Source: Kirchhain (n.d). 299

Figure 9.9. Berger and McBurney's first visit to Aldwych. Source: Artangel Archive. 302

*Figure 9.10.* The ENSA concert given at Aldwych 0n 9<sup>th</sup> October 1940. Source: The Telegraph (2010). 307

# List of Abbreviations and Acronyms

ABUe.V	Arbeitsgemeinschaft Berliner U-Bahn Eingetragener Verein [Berlin U-Bahn Working Group Association]
ASBO	Anti-Social Behaviour Orders
BRD	Bundesrepublik Deutschland (1949-1990) [Federal Republic of Germany]
[The] Blitz	The sustained aerial bombardment of London by the German Luftwaffe during the Second World War between September 7th 1940 and May 11th 1941.
BUe.V.	Berliner Unterwelten Eingetragener Verein [Berlin Underworlds Association]
BVB	Kombinat Berliner Verkehrsbetriebe (1969-1992) [Berlin Transport Service Combine]
BVG	Berliner Verkehrs-AktienGesellschaft (1928-1938) Berliner Verkehrsbetriebe (1938-1949) Berliner Verkehrsbetriebe (1992-) [Berlin Transport Corporation]
BVG-East	Berliner Verkehrsbetriebe East (1949-1968) [Berlin Transport Corporation East]
BVG-West	Berliner Verkehrsbetriebe West (1949-1992) [Berlin Transport Corporation West]
CCTV	Closed-circuit Television
CDU	Christlich Demokratische Union Deuschlands [German Christian Democratic Union]
CEDC	Central European Development Corporation
CLR	Central London Railway
CPS	Crown Prosecution Service
CSLR	The City and South London Railway
DDR	Deutsche Demokratische Republik (1949-1990) [German Democratic Republic]
District	The Metropolitan District Railway
DLR	Docklands Light Railway
DoE	Department of the Environment
DSLR	Digital Single-Lens Reflex Camera
DTB	Deutsches Technikmuseum Berlin [German Museum of Technology, Berlin]
EH	English Heritage

Entertainments National Service Association
Freie Deutsche Jugend [Free German Youth]
Gesellschaft für elektrische Hoch- und Untergrundbahnen in Berlin (1897-1928) [The Berlin Elevated and Underground Electric Railway Company]
Greater London Authority (2000-)
Greater London Council (1965-1986)
Gesundbrunnen-Neuköllner-Bahn [Gesundbrunnen-Neukölln Line]
The Great Northern and City Railway
Initiative für ein aktives Gedenken [Initiative for an Active Remembrance]
Independent Police Complaints Commission
Intellectual Property Rights
Jugend[Widerstands]Museum [Youth[resistance]museum]
King's Cross Disaster Fund
King's Cross Families Action Group
Kommunistische Partei Deutschlands [German Communist Party]
London Assembly (2000-)
Landesarchiv Berlin [Berlin State Archive]
The London Consolidation Crew
London Passenger Transport Board (1933-1948)
London Regional Transport (1984-2000)
London Transport (1933-2000) – The commonly used public name for LPTB, LTE, LTB, LTE-GLC and LRT that is also regularly but incorrectly used for TfL.
London Transport Board (1963-1970)
London Transport Executive (1948-1962)
London Transport Executive of the Greater London Council (1970-1986)
London Transport Museum
London Underground Limited (1985-)
London Underground Railway Society

Metropolitan	The Metropolitan Railway
NHL	National Heritage List
Nazi Party	Nationalsozialistische Deutsche Arbeiterpartei [National Socialist German Workers' Party]
NSU	Nationalsozialistische Untergrund [National Socialist Underground]
NWP	LPTB's New Works Programme 1935-40
OLUC	The Old London Underground Company
Overground	The London Overground
PfA	Platform for Art
РРР	Public-Private Partnership
REC	Railway Executive Committee
RJPC	Richard Jones Private Collection
SA	Sturmabteilung [Storm Detachment] – The Nazi Party's earliest paramilitary organisation.
S-Bahn	Stadtschnellbahn [City railway].
SED	Sozialistische Einheitspartei Deutschlands (1946-1989) [Socialist Unity Party of Germany]
SS	Schutzstaffel [Defence Corps] – The Nazi Party's major paramilitary organisation.
Sub-Brit	Subterranea Britannica
TfL	Transport for London (2000-)
U-Bahn	Untergrundbahn [Underground railway]
UDPC	Ute Donner Private Collection
UERL	Underground Electric Railways Company of London Limited
UFV	Unabhängige Fraueneverband [Independent Women's Association]
Underground	The London Underground
Urbex	Urban Exploration
VBK	Verbandes Bildender Künstler der DDR [Association of Visual Artists of the DDR]
WCR	Waterloo and City Railway
WWI	World War One
WWII	World War Two

### Introduction

"The subterranean environment is a technological one – but it is also a mental landscape, a social terrain, and an ideological map" (Williams 2008[1990], 21).

This oft-quoted sentence from Rosalind Williams illustrates succinctly the manifold qualities of subterranean space. The work of Williams, like that of Wendy Lesser, reinvigorated the imaginative potential of subterranean space that had waned since society started "to look outward rather than downward" with the onset of the Space Race in the late 1950s (Lesser 1987, 7). Lesser identified the underground as a "boundary between the ordinary and extraordinary" and a point at which "the real and the imaginary overlap – where places in the ground become hidden places in the individual or social mind, and vice versa" (Ibid, 14 & 3). For most city-dwellers the passenger transport networks that pass beneath the surfaces of nearly 170 cities across the world embody "the quotidian qualities of underground space", even if these same networks can, at times, take on exceptional and otherworldly qualities (Pike 2013a, 227). Many consider these underground landscapes in primarily functionalist or instrumentalist terms, as either spaces of routine marking the transition between home and work, or at best as interruptions between locations of leisure. For a long time I was no different in this respect.

My earliest memories of the London Underground,<sup>1</sup> the urban railway that serves the city where I spent my early childhood, are barely that. The boundaries of my world rarely reached as far as the Underground and my closest train station lay on a mainline railway. In fact I can only recall using the Underground on one occasion as a child, accompanied by my mother, in a moment when – much to her panic – there were no alternative means of transport. I left London aged eight but later visited as a teenager and young adult who took advantage of the Underground's utility but never for long enough to really get to know its landscape in any great detail. The first urban railway networks that I truly comprehended were the Untergrundbahn [Underground Railway]

<sup>&</sup>lt;sup>1</sup>Here 'Underground' refers to London's largely subterranean municipal railway network (although some

(U-Bahn) and Stadtschnellbahn [City Railway] (S-Bahn) that weaved under, across, and out from Berlin. Still, during my earliest prolonged stays in the German capital, ten years ago, I used these networks merely to get about and perceived their 'connective tissue' (Crawford 1999) mostly as an interlude in the collection of my first impressions of the city. I certainly did not pay much critical attention to the U- and S-Bahn's social mnemonic significance.

In retrospect this initial disregard seems odd, especially given the interest that, as an archaeology undergraduate student, I had in almost all other 'buried' things. I learnt more about the turbulent twentieth-century history reflected in Berlin's urban fabric as a heritage studies postgraduate student in a German town around 125 km east of Berlin, and realised then that I was not alone in neglecting the social memories of the city's transport infrastructure. While a number of scholars had extensively researched collective memory at Berlin's surface, far fewer, if any, had addressed similar themes beneath the ground in subterranean railways, either in the German capital or elsewhere. The investigation of social memory in subterranean railway networks represented a 'blind-spot' - under-scrutinised and unstudied in any coherent or extensive manner. I channelled my first efforts into realising the scholarly potential of this area, however, not towards the U- and S-Bahn but instead towards the Underground, which I investigated as a landscape of traumatic memories as part of my masters degree (Merrill 2010). These cursory explorations contributed to the conception of the study at hand, while convincing me of the value of pursuing my interests from a spatial perspective and through an interdisciplinary approach. Thus this thesis, which investigates the production of social memory in the railways beneath London and Berlin in the last eighty years, although anchored in cultural geography, also reflects my previous academic training in archaeology and heritage studies and marks a chronological transition in my personal research interests from the undergrounds of the ancient past to those of the recent past and present.

This study is timely because it takes advantage of the receptive atmosphere created by a growing popular interest in urban underground space. This interest is partly highlighted by the explosion of architectural re-use projects, touristic ventures and popular pastimes that make use of the subterranean relics scattered beneath cities, not to mention the contemporary underground developments that are increasingly a consequence of mounting urban densities. In London, for example, there is a growing preponderance for

basement conversions and extensions in private homes in order to overcome a lack of space whilst avoiding complicated planning procedures (Glancey 2007). Meanwhile the specific popular appeal of the Underground has been underlined by its role in the opening ceremony of the London 2012 Olympics and its cameo appearances in the blockbuster film, *Skvfall*, and the internationally popular television series, *Sherlock*. Continuing public interest also surrounds the network's on-going expansion through the CrossRail scheme, which is regularly touted as Europe's largest infrastructural project. While new tunnels started to be bored through London's clay in the pursuit of the city and network's future, others were filled with celebrations of its past. A year-long program of events marked the Underground's 150<sup>th</sup> anniversary in 2013. While the Uand S-Bahn has arguably commanded less public attention, the controversial underground extension of the former's U5 Line (Peters 2010) is a regular topic of the regional and national press, and it too has celebrated commemorative anniversaries, including its centenary in 2002, and more recently in 2013 the 150<sup>th</sup> birthday of its most famous architect, Alfred Grenander. These official commemorations provide a useful counterbalance to my concern for 'buried' social memories, those collective remembrances and narratives that are occluded partly because of the transport network's overall familiarity, and which, collectively, have rarely been the focus of sustained academic enquiry (Merrill 2012).

While few have addressed my specific aims, London and Berlin's underground railway networks, their counterparts in other cities, and subterranean space more generally have been studied in ways that contribute to my overall goals. Of greatest use are those studies that approach subterranean railways with the methods and perspectives of transport and cultural history and historical and cultural geography. It is these lineages of scholarly work that my empirical research most concretely connects to and extends.

A number of transport histories that chart physical and technological developments within wider political, economic and individual biographical contexts have been written for the Underground and U- and S-Bahn. For London there is a dense two-volume account of the city's transport history (Barker & Robbins 1963; 1974) and a number of studies dedicated to the Underground (Wolmar 2005; Day & Reed 2008; Glover 2010) and its deep-level network (Jackson & Croome 1993). Similar multi-levelled histories exist for the U- and S-Bahn (Schneider 1987; Lemke & Poppel 1996; Hardy 1996; Bendikat 1999; Bley 2003; Braun 2008a; Kurpjuweit & Meyer-Kronthaler 2009). These

networks have also been the subject of a number of architectural histories focused on the station architecture of individual architects, styles or periods (Bohle Heintzenberg 1980; Leboff 2002; Brachmann 2003; Bennett 2004; Lawrence 2008; Fioretos 2006; Bongiorno 2007). I rely on these secondary sources for historical and contextual information but also interrogate them as primary materials, which reflect official histories and heritages and dominant mnemonic narratives and interpretations. In other words, I note how many of these sources have been written to mark anniversaries of their respective networks, including most recently a new official history released to coincide with the Underground's sesquicentenary (Bownes et al 2012).

Sitting alongside and overlapping with these transport histories are the cultural histories that can be traced to Wolfgang Schivelbush's pioneering study of nineteenth-century railway journeys (1979) and Benson Bobrick's early cultural readings of the world's subterranean railways (1982; see also Trench & Hillman 1984). More recently a number of scholars, most notably David Pike (2005; 2007), have expanded on the aforementioned works of Lesser (1987) and Williams (2008[1990]) to address further the cultural meaning and representation of subterranean space. Lesser, Williams and Pike's approaches, which originated from the fields of intellectual history and fledgling science, technology and society studies, are primarily based on the analysis of representations of underground space in literature, art and film, and have contributed key theories that have subsequently framed the cultural-historic study of underground railways (Singh 2013). In this respect the work of Williams and Pike has had the greatest academic legacy.

Williams highlighted the changing cultural conception of the underground by showing how dominant interpretations of subterranean space have shifted from religious ideas of a hellish underworld to scientific discourses surrounding the discovery of geophysical space and time (2008[1990]). By extension, an organic protective underground was replaced with the inorganic threatening underground of technological environments (Ibid). While Williams does not discuss underground railways in any great detail, Pike dedicates considerable attention to underground railways within his extensive analysis of subterranean space in London and Paris (2005). Through the application of Henri Lefebvre's triad of spatial production (see p.49-50) and the concept of the vertical city, Pike builds on Williams' work to highlight the shifting conception of the underground from natural, organic and feminine to technological, inorganic and masculine, and to contrast changing tensions between fear and hope, disorder and order, and chaos and control (2005). These works have provided a conceptual apparatus that has subsequently been applied to the cultural study of a number of underground railways across the world, which in turn has contributed to a corpus of literature that now contains, amongst others, individual studies of the New York subway (Brooks 1997), the Moscow Metro (Jenks 2000) and the Buenos Aires' Subte (Singh 2012). Little research of this nature has been published for Berlin but in London Carlos Galviz (2009a; 2009b; 2013), David Welsh (2010) and Haewon Hwang (2013) have all further addressed such themes. Beyond these transport and cultural histories, others have attended to the pasts and presents of underground railways within more spatial registers.

For example, the work of historical geographer, Richard Dennis, on the Victorian Underground should be noted (2008; 2013a; 2013b). Meanwhile David Ashford's research on the Underground's cultural geographies as reflected by representations including maps, photographs, artworks, literature and film is one of the most sustained cultural geographic analyses of a single underground railway (2007; 2008; 2010; 2013). Ashford's work is notable for his attempt to provide the first full spatial history of the Underground without relying on the dichotomies introduced by Williams and Pike, but rather by favouring more nuanced and variable readings. To achieve his goals, Ashford, like Pike and others, applies the theories of Lefebvre along with those of Michel de Certeau, but most prominently his spatial-analytical framework relies on anthropologist Marc Augé's concept of the *non-lieu* [non-place]. The non-place concept is often applied to underground railways and their representation (see Hainge 2008) and yet Augé himself seems to have avoided using the terms explicitly in this context.<sup>2</sup>

In fact, in his ethnography of the Paris Métro (2002) and in other writings, Augé stresses that underground railways are deeply social places, involving "personal memories, ancient myths and collective references" (2011, 24). In other words, he contrasts them with the banality and cliché of the non-places with little room for history (unless rendered as spectacle) that are created by processes of globalisation and supermodernity (Augé 2008). Here again the paradoxes of subterranean space are evident as underground railways can simultaneously involve the forms of 'solitary contractuality' that are common to non-places (Augé 2008). These contradictions are partly caused by

<sup>&</sup>lt;sup>2</sup>Neither the word 'subway' nor 'metro' appear in Augé's primary work on non-place (2008).

the fact that, as Augé unequivocally states, neither place nor non-place necessarily exists in an absolute sense and instead these terms provide "an instrument for measuring the degree of sociality and symbolization of a given space" (2008, viii). Non-place, then, is just a different category of place, which, rather than conferring negativity, conveys a more dynamic understanding of place construction (Cresswell 2002). Although Ashford dedicates little energy to problematising the application of the non-place concept within the Underground, his research does usefully chart how the transport network has shifted along a spectrum of varying degrees and forms of 'placeness' at various times in its history (2013). Again, no research of a directly comparable nature to Ashford's has been conducted for the U- and S-Bahn, although Barbara Lang's ethnography of the former does integrate spatial dimensions into its analysis (1994). Lang's little known study is itself unique in applying ethnographic methods to the spaces of the U-Bahn, whereas, yet again, more broadly defined ethnographic methods have found greater application in London (see Heath & Luff 1992; Heath et al 1999; Scalway 2002; Alarcon-Diaz 2007; Vertesi 2008) and beyond (see Tanenbaum 1995; Swerdlow 1998; Augé 2002; Ocejo & Tonnelat 2013).

This thesis builds on and utilises each of these literatures, thanks in part to an attitude that encourages the combination of their contextual, conceptual and methodological insights by approaching the Underground, U- and S-Bahn as landscapes. Subterranean space in general, and underground railways in particular, are rarely considered as landscapes, and therefore the potential to explore the underground as a human habitat through an interdisciplinary research perspective that, Williams claims, should be akin to and include landscape studies (2008) is yet to be fully realised. Instead, on the rare occasions when underground railways are referred to as 'landscapes' the term is used either for purely descriptive purposes (see Welsh 2010) or insouciantly without fully taking into account its research traditions and methodological consequences (see Gibas 2008; 2003; Galviz 2009b). While Augé's non-place can provide one useful spatial framework for considering underground railways, I argue that landscape also provides a key analytical device by which to grasp multiple understandings of the social dynamics of place construction and cultural modes of spatial production in transport infrastructure which can, simultaneously, accommodate categories of space, and (non-)place (Merrill 2014a). In its use of the landscape approach, this thesis finds the greatest affinity in the recent work of cultural geographer, Petr Gibas, who has considered the Prague Metro as

a subterranean technological and rhythmic landscape replete with the ghosts of socialism (2008, 2013). But whilst Gibas shares my concern for the pasts metaphorically and physically buried in the landscapes of underground railways, he has not explored such questions from a comparative perspective and has relied predominantly on the analytical lens of haunting rather than memory.

Beyond the empirically focused literature concerned specifically with underground railways, with this thesis I aim to contribute to a number of wider theoretical debates and academic agendas. Firstly, the thesis adds to the growing corpus of literature that considers the hidden and taken-for-granted facets of the city and urban cultural life (Gandy 2002), and in particular compliments those studies that have addressed urban infrastructures such as sewers (Gandy 1999), technological networks (Kaika & Swyngedouw 2000; Graham & Marvin 2001) and pedestrian walkways (Bélanger 2007). Thus I hope to shed further light on a particular example of urban infrastructural space in order to combat the deficit in research about these places pursued at "the scale of everyday experience" (Rosa 2013, 20). As such the decision to frame my research foci as landscapes acknowledges that this deficit has been most successfully countered by those contributions that recognise the intersection of infrastructure with landscape (Gandy 2011). However, many of these contributions address examples of infrastructure, which, unlike transport networks, are not directly inhabited or experienced by any large number of people on a regular basis.<sup>3</sup> Therefore, I apply landscape as a primary spatial concept and apparatus in order to reiterate the necessity and benefits of investigating direct human experiences of infrastructure as an inhabited place of everyday urban life. In applying these notions specifically to the railways under London and Berlin in order to investigate the production of social memory, I answer Peter Adey's (2013) call to consider the different social and cultural registers evident in inhabited urban undergrounds. Through my particular thematic focus I also aim to demonstrate further the value of widening landscape analyses of social memory to include everyday, quotidian and mundane urban places, besides those produced with the primary social function of remembering. In addition, I argue that my inclusive conceptualisation of landscape with its appreciation of a broad range of actors, processes, structures and discourses as reflected in my concern for social memories of and not just in landscape,

<sup>&</sup>lt;sup>3</sup>Exceptions include the road infrastructures considered by Gandy (2003), Robertson (2007) and Harris (2011).

can yield more nuanced understandings of the production of social memory in the contemporary city.

These theoretical ambitions, along with my empirical objectives, contributed to the following guiding research questions, which I returned to throughout the course of my research.

- What actors, processes and structures are involved in the production of social memory in the Underground and U- and S-Bahn?
- What discourses influence mnemonic production in the Underground and U- and S-Bahn, which are shared singular processes that are contextually mediated and which can be considered contextually unique?
- What is the significance and influence of these landscapes' subterranean transport contexts for the production of social memory?

My efforts to fulfil these ambitions and answer these questions are interdisciplinary in scope and comparative in nature. They are positioned at the nexus of transport and cultural history, historical and cultural geography, and memory, landscape and heritage studies. They are documented in two further introductory chapters, six empirical chapters, and a final concluding chapter.

Chapter Two positions this thesis in relation to some of the wider theoretical literatures that address social memory, landscape and infrastructure in order to communicate the conceptions of these three phenomena, and their interrelationships, that guide my consideration of mnemonic production in the railways under London and Berlin. It also identifies some of the academic agendas that this thesis contributes to, including those those that re-theorise the connections and commonalities of landscape and infrastructure. Overall, the chapter serves to introduce 'the social memories of landscape' as my central focus, and the actors, processes, structures and discourses implicated in the production of a variety of 'networked' and 'buried' memories as my main concerns.

Chapter Three presents the comparisons, cases, and methods that underpin my empirical contributions. I briefly introduce my case-orientated comparative approach and the histories and heritages of the Underground, U- and S-Bahn. Thereafter I discuss the data collection and analysis methods used to investigate each of the individual sub-cases addressed by each of my empirical chapters.

The six empirical chapters are individually structured according to a tripartite understanding of landscape and in concurrence with my comparative objectives. As such, in Chapters Four and Five I deliberate on the Underground, U- and S-Bahn's representational landscapes, while in Chapters Six and Seven I consider the systems' more material aspects, and in Chapters Eight and Nine I focus more on questions of experience. However, the distinctions between these three pairs of chapters are merely an operational device and overall I acknowledge these layers of the landscape to be overlapping and intermingling with one another. Each of these empirical chapters refers to both London and Berlin but at their individual level, not in equal measure. Instead, in each, attention is paid to either the Underground or the U- and S-Bahn first, before the questions and issues revealed by this attention are posed of and reflected back onto the other case. Within these chapters my main, although not strict, time focus is the most recent eighty years, between roughly 1933 and 2013. As will be shown, this periodisation is informed by both empirical historical factors, which include significant political and administrative changes that had impact on London and Berlin's underground railways, and by theoretical considerations, most notably, the generationally determined shift between communicative and cultural forms of social memory that has traditionally been supposed to occur after eight to ten decades (Assmann & Czaplicka 1995).

More specifically, Chapter Four investigates the symbolic visual heritages encoded in the cultural images of the Underground's diagram and the U- and S-Bahn's route-plan. It primarily explores how the iconisation of the former has led to its increasing canonisation and nostalgic use as a vehicle for corporate identities while encouraging the revision of particular corporate memories. Chapter Five, meanwhile, surveys the textual landscapes of the networks, which find expression in their cartographies. Its primary foci are the historically changing commemorative station names of the U- and S-Bahn, which reveal how Berlin's railway networks function as a mnemonic infrastructure for the city as a whole and demonstrate the influence of bureaucratic and institutional constellations on the production of social memory through practices of toponymic inscription.

Chapter Six explores how individual stations can become sites of grassroots remembrance for various and sometimes competing mnemonic communities. Its principal foci are the actors, processes and structures involved in the memorialisation of

Silvio Meier, a young man stabbed to death in a U-Bahn station in 1992. Chapter Seven considers more the official memories accounted for and mediated by the authorities responsible for each transport network. Its chief empirical concerns are the traumatic memories of the negative pasts associated with World War Two and various operational accidents that have gained memorial expression within London's underground rail network.

Chapter Eight examines processes of social remembrances connected to each network's past and present subterranean ruins and vestiges. Chiefly it problematises the possibility of experiencing alternative forms of memory production in these types of places in London due to access constraints and pressures to integrate them into standardised heritage and leisure attractions. In contrast, Chapter Nine details how public artistic practices may provide the means to unlock the ambiguous mnemonic potential of underground space. These claims are substantiated largely through reference to a recent art project in Berlin that was inspired by the abandoned relics of an unfinished U-Bahn line.

Chapter Ten presents my conclusions by positioning the findings of the thesis' empirical chapters in relation to my guiding research questions. It summarises the empirical and theoretical contributions of the thesis and discusses their potential application beyond London and Berlin and their respective subterranean rail networks. To this end it also identifies potential courses for future research while acknowledging the possible limitations of the study at hand.

Overall it is my intention that the buried mnemonic geographies of the Underground, Uand S-Bahn that I excavate in the following pages will not only connect back to the established concerns of historical and cultural geography but will also contribute to the current and continuing interdisciplinary interest in urban infrastructure, landscape and social memory. So, too, I hope that they may add modestly to the emerging and growing debates on volumetric geography and vertical urbanism (see Elden 2013a; 2013b; Adey 2013; Bridge 2013; Harris 2011; forthcoming; Graham & Hewitt 2013) which look likely to influence geographic scholarly agendas in the coming years. Ultimately, however, with this thesis I aim to fulfil Peter Jackson's still valid demand of cultural geographic studies more generally, namely to "be contemporary as well as historical; theoretically informed, yet grounded in empirical work" (1989, 3).

## **Chapter Two**

### Theorising the Social Memories of Landscape

#### 2.1 Introduction

The relationship of memory and landscape is, it seems, approaching an almost selfexplanatory status. Some note that memory is "an inherently geographical activity" and identify geographical perspectives as key to expanding knowledge about how "collective memories are made material in the landscape" (Johnson & Pratt 2009, 453-455). In fact, however, the two terms and their relationship are decidedly difficult to pin down. John Brinckerhoff Jackson famously admitted that after twenty-five years of study, the concept of landscape still eluded him (1979), and Denis Cosgrove considered it an "imprecise and ambiguous concept" (1998, 13). Memory too is a "notoriously slippery term" (Noakes & Pattinson 2014, 4).

This chapter communicates the theoretical conceptions of memory and landscape that guide my consideration of mnemonic production in the railways under London and Berlin. First I outline the plural, contested and dynamic nature of social memory and a sensitivity for different mnemonic media. Thereafter I present landscape as a physically, representationally and experientially constituted spatial category whose theorisation benefits from acknowledging its relationship to and commonalities with infrastructure specifically in terms of connections, networks and vertices. Finally I outline the multilayered and scaled conception of the nexus of social memory and landscape that has guided my methodological approach and empirical research. To achieve this I introduce three phrases: 'social memories of landscape', to elicit a fuller understanding of the range of mnemonic structures, processes, actors, practices and discourses that are implicated in the production of memory within and about landscape; 'networked memories', to reflect the particularities of my field of investigation - urban underground railways; and, to more explicitly frame my central empirical foci, 'buried memories'. Thereafter, I introduce my metaphorical mode of research in terms of archaeological and psychoanalytical excavations.

#### 2.2 Social memory

Since the early 1980s memory has become a central subject and analytical device for a variety of social science disciplines. This 'memory boom' has been so pervasive that Jay Winter declared memory to be the "historical signature of our own generation" (2000, n.p.). Yet much of this research is criticised for being nonparadigmatic, transdisciplinary and centreless (Olick & Robbins 1998) or derided as a facile mode of cultural history that is ineffective in articulating "the connections between the cultural, the social, and the political [and] between representation and social experience" (Confino 1997, 1388). Memory scholars have also been accused of overextending the use of 'memory' to the extent that it has replaced 'culture' as a metahistorical category (Klein 2000; Berliner 2005). To mitigate these critiques, the next section discusses how I conceive social memory.

#### 2.2.1 Plural, contested and dynamic

The foundations of the memory boom lie in the scholarly recollection of the works of a handful of individuals, written between the 1890s and 1920s at a time when national identities and traditions were being 'invented' (Rosenfeld 2009; see Hobsbawm & Ranger 1983). With Hugo von Hofmannsthal's coinage of the term 'collective memory' in 1902, memory was considered for the first time as a social construction (Olick & Robbins 1998; Klein 2000) – a perspective consolidated in the 1920s by the works of, amongst others, Marc Bloch, Aby Warburg and Walter Benjamin (Olick & Robbins 1998). It was, however, Maurice Halbwachs who most explicitly discussed the social aspect of memory at this time.

Halbwachs' *Social Frameworks of Memory* demonstrated how the structures of family, religious, and class groups influenced the acquisition, recollection and recognition of memories. He acknowledged that the past was constantly "reconstructed on the basis of the present" (1992[1925], 38). Halbwachs introduced a diverse range of terminologies to communicate the dynamics of memory across time and between individuals and groups. Amongst them, 'autobiographical memory' referred to those memories of events that an individual had directly experienced, even though these could still be shaped by group membership. Meanwhile, he referred to the memory contained within historical records as 'historical memory', and considered 'history' to be a remembered past that society no longer had an organic connection to, and 'collective memory' an

active contemporary past (Olick 2007). A breadth of sometimes confusing terminologies continues to characterise contemporary memory research (Noakes & Pattinson 2014). Jan Assmann introduced the terms 'communicative memory' and 'cultural memory' to distinguish between individualised short-term collective memories and more widely shared long-term collective memories (2005; see Pentzold 2009). Assmann recognises that "individual memory is always social to a high degree" and describes the "social aspect of individual memory" as 'communicative memory' (2005, 3). Thus he, like Halbwachs, notes that the act of remembering always occurs at the level of the individual even if collective memory "endures and draws strength from its base in a coherent body of people" (Halbwachs quoted in Coser 1992, 22).

Halbwachs reference to 'groups' promulgated a pluralistic conception of social memories that is potentially as diverse and distinctive as the groups and institutions within society (Coser 1992; Legg 2005). Eviatar Zerubavel calls these groups, which often come into conflict with one another "over the social legacy of the past", 'mnemonic communities' (1996, 295). Different social institutions and contexts create and encourage different memories whilst discouraging others so that social memory production becomes a realm of contestation, embroiled in power relations and open to change (Legg 2005). Thus the production of social memory is a political act that is more easily influenced by groups in positions of authority (Confino 1997). Given this, significant emphasis has been placed on the hegemonic role of nation-states in monopolising memory to serve processes of national identity formation while silencing other identities (Olick & Robbins 1998). In turn, critical Marxist approaches highlight how the production of certain memories is disadvantaged by factors including restricted access to state archives and professional historiography (Ibid). However, the inequalities and contestation inherent in mnemonic production mean that memory not only sustains hegemony but can also subvert it (Legg 2007).

To reflect this situation a plethora of types of memory have been identified, including 'official memory', 'vernacular memory' and 'counter-memory'. John Bodnar defines 'official memory' as a "product of elite manipulation, symbolic interaction, and contested discourse...grounded in the power of larger, long-lasting institutions", whereas he defines 'vernacular memory' as "derived from the lived or shared experiences of small groups" (1992, 20 & 247). Meanwhile, the term 'counter-memory'

31

has been applied to a diverse range of memories, variously motivated, that are generally recognised to actively challenge dominantly held memories (Legg 2007).

The study of counter-memory has become so pronounced that some claim it has become synonymous with memory (Rigney 2005). Such studies can emphasise countermnemonic challenges that relate to social or gender-based perspectives and postcolonial critiques (Legg 2005; 2007). But those related to traumatic events have enjoyed most academic attention, partly because these events have both invited processes of forced amnesia and displayed resilience to the nostalgia that is repeatedly claimed to afflict official memory (Klein 2000; Legg 2005; 2007). Academic attention to traumatic collective memories has been mirrored by the national governments that are increasingly willing to accept responsibility for their negative pasts by committing to processes of reconciliation (see Fulbrook 1990; Till 2005 (on Germany) and Coombes 2003 (on South Africa)). In the process what were formerly counter-memories have become official memories, thus demonstrating further the dynamism of social memory. Furthermore groups that pursue the wider legitimisation of counter-memories occasionally do so by using the methods and media of official memory production. Official strategies are tactically employed (de Certeau 1984; see p.49) so that while such groups might oppose official memory agendas, their counter-memories may ultimately end up contributing to them. Thus official memory can be as inclusive and assimilating as it is selective and marginalising. However, the shifting official status of social memories need not be unidirectional. Official memories can also become counter, through processes of revision that deem them incompatible with a society's current needs, and hence encourage their marginalisation (Connerton 1989). Such instances are most pronounced during periods of social revolution and political regime change, even if such transformations inherently reference their predecessors (Ibid). Beyond this, counter-memories need not relate solely to those memories that have previously been occluded – intentionally or otherwise. Anyone is free to "remember other and different things than are encouraged by conventional norms", and although "it takes effort, determination and self-initiation to search out and hold onto counter-memories" it is possible for various groups to successfully maintain such memories, despite the threats of erasure they may face (Gross 1990, 133-134).

Thus the dynamics of memory are tied to transitions in the status of particular memories, judged primarily by the concerns of those with most power in the present. As Legg

notes, "memories are formed and valued" differently over time, but also the memory of an event changes because "each recollection is as much a recollection of the last time the event was remembered as a direct relationship with the event in question" (2007, 457). The result – mnemonic genealogies of dynamic social memories – erodes and blurs the distinction between official and non-official forms of memory, and in this respect Alon Confino's rejection of neatly classified types of memory and his criticism of the oppositional binaries between counter- and official memory are helpful (1997). Instead Confino persuasively argues that different forms of memory should be recognised as constantly commingling (Ibid). In turn the processes of contestation that often subvert hegemonic memory discourses while permeating mnemonic production "from above and below, from both centre and periphery" and which lie at the heart of counter-mnemonic claims can be recognised as key drivers of changes in social memory (Olick & Robbins 1998, 126; Legg 2007).

Jan Assmann and John Czaplicka have explicitly discussed longer-term memory transitions, such as that between communicative and cultural memory (1995) in ways similar to Halbwachs' consideration of the transformation of memory into history (1992). They illustrate how communicative memory has a limited temporal horizon of between 80 and 100 years, roughly four human generations, and after this point communicative memory fades unless it is transformed into cultural memory (Ibid). The memory of the present is therefore the result of as much various processes of forgetting as of those of remembering (Connerton 2008; 2009). While a key legacy of Halbwachs' work is the predominance of a presentist approach to social memory, some have highlighted the weakness of this approach insofar as if it is "pushed to its ultimate consequences, it would suggest that there is no continuity in history altogether" (Coser 1992, 26). It should therefore be noted that even when radically new pasts are produced, traces of former pasts remain and thus social memory is ultimately "a compound of persistence and change, of continuity and newness" (Coser 1992, 26; Connerton 1989).

#### 2.2.2 Bodies, representations, and places

The diversity of phenomena that social memory has been used to denote has led to two ontologically distinct spheres of research involving different methodological and epistemological approaches (Olick 1999). The first addresses individualist forms of social memory, or an "aggregate of individual memories" (Kansteiner 2002, 186).

Jeffrey Olick refers to this as 'collected memory' and characterises its study as relying on quantitative survey and oral history methods and focussing analytically on the individual (1999; for an example see Scott & Zac 1993). This approach arguably places greater emphasis on the consumption, rather than the production, of social memory, but is problematic because it "entails knowledge about reception processes which is beyond the conventional purview of historical know-how" and is "objectively very difficult to establish" (Kansteiner 2002, 192). My approach is more aligned with the second sphere of research that interrogates social memory as "commemorative representations and mnemonic traces" (Olick 1999, 336). While strict distinctions between 'memory makers' and 'memory consumers' are unrealistic (Kansteiner 2002), and I do not wholly neglect issues relating to the consumption of social memory, my primary interest lies with those who produce social memory and the various media that they employ to do so.

Aleida Assmann systematises the consideration of mnemonic media under headings of 'writing', 'image', 'body' and 'places', but in fact acknowledges each to be interrelated (2011). Others refer to mnemonic media as a wide range of 'figures of memory', including "texts, images, rites, buildings, monuments, cities or even landscapes" (Assmann & Czaplicka 1995, 128). They argue that in the course of everyday life these figures of memory cause 'islands of time' to form – spaces of "retrospective contemplativeness" suspended in different temporalities (Ibid, 129). Olick, meanwhile, conceives of these media as 'mnemonic technologies' that have evolved over time and exist alongside the human brain (1999). The most recent additions to this set of technologies are those that relate to the electronic memory revolution of the twentieth century (Olick & Robbins 1998). However, despite the development of an array of externalised mnemonic technologies, individually aggregated forms of social memory are still observable at the site of the human body and should not be limited to ideas of socially framed cognitive memories.

The social memories that are traceable in human behaviour and performance have been conceptualised as 'true memory' (Nora 1989), 'habit-memory' (Connerton 1989) and 'habitual body memory' (Casey 2000). They relate to some of the longest persisting mnemonic media – custom, habit and conduct. Joseph Roach's concept of the 'genealogies of performance' helps explain how bodily memories are historically and culturally transmitted (1996). He claims that 'kinaesthetic imagination' operates as a social framework of memory "in the performance of everyday life, consolidated by

deeply ingrained habits and reinforced by paradigmatic systems of behavioural memory such as law and custom" (1996, 27). While Edward Casey has most extensively addressed the phenomenology of individual acts of remembering (2000), similar perspectives have recently been extended to the more social dimensions of remembering. For example, from Stephen Legg's interest in embodied and surviving forms of memory a new order of mnemonic 'practice' emerges: memory rooted in experience as well as in cultural meanings and social institutions; a memory "beyond historical spaces and processes" that can be "productive and progressive" in allowing a more sophisticated appreciation of the past when considered alongside representational and material memory media (2005, 499). Such practices include the performative commemorative rituals that are re-enacted on specific days in order to maintain social memories through embodied acts of remembrance (Assmann 2011). There are also the more subjective, emotive and alternative mnemonic performances that have been particularly well illustrated by Tim Edensor's work on ruins (2005a; 2005b; 2008; 2010). He argues that the "qualities and affordances of particular kinds of space [such as ruins]... demand a fuller performative, corporeal engagement with space and hence with memory" (Edensor 2005b, 834). In other words, memory "is not located merely in the visible and the narratable but is embodied and affective" (Ibid, 846).

Representational mnemonic media include – perhaps most self-evidently – texts and images, both of which have become enduring and sometimes competing media of memory (Assmann 2011). Through his research on visual symbols, which he metaphorically termed *Leitfossils* [guide-fossils], Warburg showed how primitive myth could be traced in a "symbolic repertoire expressed in Renaissance art and sculpture" (Schama 1996, 210). Thus he demonstrated how artistic symbols acted as mnemonic witnesses, which could be tracked to "yield the deep connections between past and present" and contributed to what he called the *Archive des Gedächtnisse* [the archive of memory] (Ibid, 212-213; Gleyzon 2010). With the arrival of photography the temporal relations displayed in images became more explicit, and consequently some claimed photographs to be the most important medium of memory, given that they were unique in their ability to "translate external images back into the language of living memory" (Assmann 2011, 210). Subsequent visual and digital technological developments have significantly widened the archive of representations that can be considered as media of memory, which, besides physical texts, artworks, and photographs, now includes such

sources as film, television and websites (Eley 2001; 2014). Digital developments have also reformulated the mnemonic properties of texts and images with, for example, the immateriality of digital writing severing the "bond between writing and the human body and memory" (Assmann 2011, 200). Such developments have also affected, and in some instances accelerated, the temporal transition between communicative and cultural memory (Pentzold 2009). The result is a 'new memory ecology' that involves a plethora of new digital memory representations rapidly produced and distributed via websites and online social networking tools, which serve to "mesh the private and public into an immediate and intensely visual auditory past" (Brown & Hoskins 2010, 96; see also Garde-Hansen et al 2009). These digital representations can be considered as the newest addition to what Pierre Nora has referred to as *lieux de mémoire* [realms or sites of memory] – material and non-material entities that act as symbolic elements of "the memorial heritage of a community" (1989; 1996, xvii).

The spatial connotations of Nora's term have seen human geographers repeatedly use it to highlight the mnemonic qualities of places including museums, archives, cemeteries and monuments, even though it is not without critique (Legg 2005). In general, monuments and memorials have become key foci of geographic studies of social memory, as has the wider context of the city (Gross 1990). As Legg notes,

"the urban form is suited to a combative range of memory politics, and to inducing understanding of those politics, because of its density of population and its ability to retain memory traces, whether in the material environment or in social myth" (2005, 496).

In this vein Andreas Huyssen has framed the city as a palimpsest in order to emphasise how different pasts, social memories and collective imaginaries become layered in the urban fabric of the present (2003). Others have used archaeological approaches to investigate how social memories have accrued in the city and across multiple sites over time (see Till 2005; Basu 2013). However, geographers, respecting Halbwachs' acknowledgement that collective memory has a greater chance of enduring when tied to "a physical object, a material reality such as a statue, a monument [or] a place in space" (1992[1925], 204), have tended to focus their attention on discrete physical sites that have become dedicated to social remembrance. These material and spatial expressions of social memory have mostly been considered as examples of official memory, partly because those promulgating other forms of memory commonly lack the "resources to erect and maintain physical monuments" (Legg 2005, 496). For example, the state-led recuperation of counter-memories, as outlined above, has, in recent decades, gained physical expression as counter-monuments (and counter-memorials): "brazen, painfully self-conscious memorial spaces conceived to challenge the very premise of their being" (Young 1992, 271). Here, however, the 'counter' prefix has come to relate primarily to an alternative aesthetic that challenges ideas of figurative monumentalism rather than referring to memories that still run counter to official mnemonic discourses and narratives. It is also important to acknowledge that while such physical expressions may serve to help governments to integrate counter-memories within their official memory, an authority's relationship to its monuments and memorials "is not one-sided", and once built they can "take on lives of their own, often stubbornly resistant to ... original intentions" (Young 1993, 3).

Meanwhile, those promulgating alternative memories, whether in competition with official practices or not, can overcome - and are increasingly overcoming - the structural restrictions that inhibit their ability to create their own sites of memory, permanent or otherwise, as illustrated by the phenomenon of grassroots memorials. Grassroots memorials are considered to express the democratic process insofar as they originate at the lowest levels of society with the intention to influence wider social and political situations, and are distinguishable from other forms of memorialisation given their heightened connection to social discontent and protest and with respect to their spontaneity, temporality, motivation, media coverage and material culture (Magry & Sánchez-Carretero 2011). While attaining official endorsement might not be an explicit goal of grassroots memorial campaigns, this can help further their wider aims. In the first instance, however, grassroots memorials are physically characterised by spontaneous and temporary shrines of material culture that act as emotional repositories - ephemeral material assemblages - "built up without regard to formal regulations or restrictions" primarily by atomised individuals, connected through grief and protest, who can in some instances form more complex organisations (Ibid, 12). As places of memory, they are bounded "by the limitations of the physical environment and by the regulations of the authorities" that often lead to their dismantling and disappearance (Ibid, 19). The mnemonic significance of such places, however, can also endure to be intermittently or regularly reactivated at times of particular social resonance, or might

lead to the institutionalisation of memories through the installation of a permanent memorial.

Monuments and memorials, together with other built forms, whether state endorsed or not, are regularly studied as contributing to wider 'landscapes of memory' (Fulbrook 1999) or 'memorial landscapes' (Dwyer & Alderman 2008). Thus landscapes, particularly urban landscapes, are fertile sites for those interested in studying the spatial production of social memory (Johnson & Pratt 2009; Mitchell 2003). As "material and discursive mediator[s] of cultural values" they provide a context in which to critically question what a society remembers, who controls memory and how memory is contested (Wylie 2007). While landscapes have been investigated as physical (see Holtorf & Howard 2006), representational (see Daniels 1993) and experiential (see Wylie 2005; 2009) realms of remembering, in most instances scholars have focused on only one of these vectors, often tending to emphasise the first and its attention to material manifestations of social memory. Too rarely have scholars realised the full potential of studying mnemonic production through the varied spatial and conceptual lenses that landscape offers. In other words, they often fail to appreciate that landscape can provide a means to capture all three of these vectors of social memory – physical, representational and experiential - as mediated by bodies, representations and places simultaneously (see Tolia-Kelly 2013; Basu 2013). I outline below landscape's usefulness in this respect in reference to the traditions of its cultural-geographic study. This combined with my general understanding of social memory as pluralistic, contested and dynamic ensures that this thesis contributes conceptually to the fields of both memory and landscape studies by targeting a fuller and more inclusive appreciation of the interaction of physical, representational and experiential modes of mnemonic production and simultaneously widening and reconciling the ways in which social memory can be appreciated as spatially produced through, in and about landscape.

#### 2.3 Landscape

Over the last 150 years the cultural-geographic study of landscape has been broadly characterised by three predominant paradigms. These paradigms have been influenced by wider intellectual shifts in materialist, structuralist, post-structuralist and phenomenological epistemologies. Although none of these paradigms elevated one dimension of the landscape and wholly neglected the others, and while the chronology of these shifts was by no means unidirectional or discrete, their consideration in turn provides a means to summarise the physical, representational and experiential foundations of landscape.

#### 2.3.1 Physical, representational, and experiential

The cultural-geographic study of landscape can be traced to the influence of archaeology and human geography's concern for cultural-historical phenomena within the discipline of geology around the turn of the eighteenth century (Ratzel 1882; Semple 1911). Thereafter the replacement of environmental determinism with environmental possibilism was reflected in the greater role afforded to culture in the formation of landscapes by the Berkeley School of Cultural Geography of the 1920s (Winchester et al 2003). One of this school's major contributors, Carl Sauer, thus coined the term 'cultural landscape' in order to highlight how landscape morphology recorded the combined activities of culture and nature (1963[1925]). Sauer's primarily materialist and descriptive approach influenced the later work of William George Hoskins (1955) and Jackson (1984), who emphasised both the empirical and physical qualities of landscape. By the late 1970s their work had helped consolidate the new field of landscape studies, which brought attention to the inclusive, pluralistic, produced, subjective, historical and symbolic nature of contemporary 'ordinary' cultural landscapes, and acted as a bridge between 'old' and 'new' cultural geographies (Meinig 1979).

In the 1980s the social constructivist frameworks of new cultural geography brought representational landscapes to the fore and emphasised that their meaning depends not on their "pragmatic quality but on their symbolic and social function" (Dubow 2009, 646). Thus, landscapes – as representations and the subject of representations – became the foci of critical approaches that aimed to reveal social and cultural formations by pursing interpretative rather than descriptive methodologies, through the use of textual and semiotic metaphors (Wylie 2007). While landscape had previously been interpreted as a text that could be read (Lewis, 1979; Samuels 1979), scholars such as James and Nancy Duncan now worked to destabilise structuralist interpretations of landscapes as fixed texts which privileged the position of a limited number of authors, in favour of post-structuralist interpretations. They used ideas of intertextuality – the near limitless, web-like complexity of readings and meanings – and textual communities – social

groups that shared particular readings – to demonstrate that the writing and reading of landscapes was a political and contested process carried out by groups that attempted to naturalise social relations by elevating certain readings over others (Duncan & Duncan 1988). In this way landscape was further appreciated as a "product of pluralities" (Lewis 1979, 73) – shaped by the social, historical and cultural contexts and discourses surrounding interpretative communities with a bias towards "reflect[ing] hegemonic value systems" (Duncan & Duncan 1988, 118). Cosgrove and Daniels followed similar cultural Marxist traditions, but drew instead on Warburg's semiotic approaches to consider landscape as a 'way of seeing' that was embodied in the historical connection between the appropriation of the physical environment and certain modes of pictorial representation used by social groups to frame their relationships with the land and one another (1989; Daniels 1994; Cosgrove 1998). Their interpretation revealed how landscape could occlude or naturalise socio-economic relations by "functioning symbolically on behalf of the elite" (Wylie 2007, 92). Ultimately neither of these broader representational approaches intended to undermine landscape's materiality, but instead aimed to understand how landscape representations contributed to the meaning of physical landscapes (Cosgrove & Daniels 1989).

These representational approaches, however, were still accused of dematerialising the landscape (Olwig 1996) and so new approaches were developed to pursue interests in additional vectors of power, practice and experience. A new research agenda emerged that asked "not just what landscape 'is' or 'means' but what it does, how it works as a cultural practice": in other words, landscape was not only a symbol but also an instrument of power (Mitchell 2002, 1-2). Subsequently, a new generation of cultural geographers increasingly addressed the "melded materiality and semiosis" (Wylie 2007, 115) of landscape's physical and representational dimensions, and representations were repositioned as not merely reflective or distortive but also constitutive of landscapes (Matless 1992). Thereafter, landscape representations were framed more as forms of practice, performance and agency that contributed to the ongoing production of landscape in ways that opened research to questions of experience (Matless 1996). Since then, in the last two decades, landscape has been increasingly considered within the theoretical frameworks provided by phenomenology in order to emphasise everyday embodied experiences, of which the production and reception of representations are just two examples (Wylie 2007).

Maurice Merleau-Ponty's ideas of phenomenology (1994[1945]) have been applied to landscapes in order to appreciate human movement and multi-sensual engagement within them. For example, Tim Ingold has used a dwelling perspective to identify everyday 'taskscapes' – an array of landscape activities that are identifiable in rhythms expressed in movement and sound (1993). Also, Christopher Tilley has discussed how the human experience of landscape is multi-sensory, temporal, and constructed and constrained by associations, memories and encounters that contribute to an "art of moving in landscapes" (1997). For Tilley, landscapes are "embedded in the social and individual times of memory" and "their pasts as much as their spaces are crucially constitutive of their presents" (1997, 27).

Thus, landscape's full complexity relates to the constant, multiple and nuanced interactions of its physical, representational and experiential dimensions. Fluctuations in one dimension of the landscape lead to changes in the others, revealing how landscape is constantly produced. Therefore I use an approach that draws on and integrates landscape studies' rich and varied theoretical traditions and a range of descriptive, interpretative and embodied methods in order to emphasise the physical morphology and historical superimposition of landscapes; to critically interpret landscapes as subjects and examples of representation; and to explore landscapes' subjective characteristics as sites of experience. This tripartite conceptualisation of landscape is directly reflected in the following empirical chapters. I examine the social memories manifested in my case studies' physical landscapes of transport diagrams and route-plans (Chapters Four and Five) and performed, through practices of exploration and artistic intervention, in the experiential landscapes provided by ruins and vestiges (Chapters Eight and Nine).

By studying the Underground, U- and S-Bahn as landscapes my work contributes to the field of landscape studies by problematising and questioning further the bias in the application of landscape approaches which has seen them only limitedly applied to the contemporary urban context and as illustrated by superficial terminological distinctions between, for example, landscape and cityscape (Gandy 2003). Early landscape research was primarily concerned with historical rural contexts in which cultural groups were conceived as rustic, exotic, folkish or traditional and while the new cultural geographers studied cities, they also mostly confined themselves to historical periods (Cosgrove

1989; Wylie 2007). In the 1990s this started to change as scholars became increasingly interested in ordinary urban landscapes (see Groth & Bressi 1997) and worked to anchor a cultural-geographic model of landscape in the city by investigating how social history became embedded in the urban fabric through processes of preservation and how a sense of place could be mediated by a politics of space (see Domosh 1989; 1998; Boyer 1996; Hayden 1997). Despite this, by the end of the 1990s urban landscape analysis remained the "least developed arena of landscape studies" – a status that still has some credence today (Groth 1997, 256). Phenomenological approaches to landscape suffer from a similar bias and their primary uptake within the disciplines of archaeology and anthropology has seen their critique as overly subjective and individualist (see Hamilton & Whitehouse 2006) exacerbated by accusations that they suffer from a naïve nostalgia that seeks to recapture a primitive and original engagement with the world of the "long ago and faraway" (Wylie 2007, 182). Arguably, the most recent research agendas to have helped address this bias have been those that have attempted to re-conceptualise landscapes in relation to infrastructure.

### 2.3.2 Landscape and infrastructure

In the early 1980s, Jackson redefined landscape as "a composition of man-made or man-modified spaces to serve as infrastructure or background for our collective existence" (1984, 8). While Jackson's efforts tried to emphasise a similarity of purpose between disparate disciplines working with landscape, more recently the growth in interdisciplinary academic interest in urban infrastructure and networked society (see Graham & Marvin 2001) has helped increase recognition of the productive compatibilities of landscape and infrastructure. Matthew Gandy argues, "if we extend our understanding of landscape to encompass the interconnectedness of space and of infrastructure to encompass the experience of space it is clear that that these two domains are closely related" (2011, 57). Currently this task has been most pursued by two distinct academic clusters of research each of which has conceived the nexus between landscape and infrastructure differently.

The first of these clusters connects the disciplines of landscape architecture, planning and design, is grounded in the wider development of urban ecology, and conceives of landscape as infrastructure (Waldheim 2006; Mostafavi & Doherty, 2010). It emphasises the role landscape can play in urban ecological sustainability (Schwartz 2010) and reformulates landscape as "a sophisticated, instrumental system of essential resources, services, and agents that generate and support urban economies" (Bélanger 2009, 79). In other words, infrastructural sites, including those now derelict sites previously associated with industries that damaged the environment, become generative landscapes (Mossop 2006). This reformulation, however, is more complicated for the subterranean infrastructure that is more isolated from the natural processes of the surface. At best, buried transport infrastructures are seen as solutions to urban traffic problems, and although they might be convertible into green-links or eco-routes they are primarily perceived as the "dark and atmospherically toxic" parts of the shadow city that might benefit from improved design but are ultimately difficult to reconcile with the broader aims of urban ecology (Mossop 2006, 173).

The second cluster involves mostly cultural and urban historians and geographers who reject facile rural-urban distinctions in favour of "a broad and inclusive definition of landscape [that] allows the urban experience to be explored in relation to changing conceptions of nature without separating the technical, political, and aesthetic dimensions of urban space" (Gandy 2003, 6). In this sense infrastructure is approached as landscape in order to reveal the productive roles of capital, state, metropolitan cultures and the social and political composition of the city (Ibid, 5). This perspective "is sensitive to the social and historical contexts that produce the built environment and imbue places with cultural meaning" (Ibid, 17). Through its concern for questions of power and ideology, and its use of methods that highlight the mutually constitutive composition of landscape as material and representative, this approach is rooted in the social constructivist traditions of new cultural geography. It is to this cluster of research that my consideration of subterranean urban transport infrastructure most contributes and connects.

The physical foci of these 'infrastructure as landscape' approaches are often what Gandy has called 'phantom spaces' – dilapidated urban infrastructures originally associated with the growth of the modern industrial city (2005). These spaces, and places like Antoine Picon's 'anxious landscapes' and Maria Kaika and Erik Swyngedouw's 'phantasmagorical urban technological networks', encourage aesthetic reformulations and the rethinking of modernity, modernisation and progress (Picon 2000; Kaika & Swyngedouw 2000; Gandy 2011). The infrastructure as landscape approach has thus been mostly applied either to infrastructure that lies on the surface in

a derelict state or to that which is not directly experienced – the infrastructure that transforms nature and transports its cultural resources. As discussed in Chapter One, when it comes to framing subterranean infrastructure as landscape, with very few exceptions (see Gandy 1999) a lacuna still largely persists. Similarly, relatively few scholars have investigated how urban transport networks are perceived and practised as built forms and material features of everyday life, even though such "spaces provide important positions from which we experience the city" (Robertson 2005, 74). One exception is Susan Robertson, whose research on London's Westway elevated motorway as a "material form and space, site of experience and cultural image" (Ibid, 75) finds echoes in my reliance on a tripartite model of landscape. Others meanwhile have considered additional elevated urban transport infrastructures such as flyovers, skywalks (Harris 2011) and railway arches (Rosa 2013), via similar perspectives.

These studies connect to the emerging research agendas in urban studies that are concerned with vertical urbanism (Harris 2011; forthcoming; Graham & Hewitt 2013) and volumetric geographies (Elden 2013a; 2013b; Adey 2013; Bridge 2013). Yet still too often the theories associated with these agendas neglect everyday urban vertices and volumes and display a preponderance to emphasise height and the top-down view over depth and the bottom-up perspective (Harris forthcoming). Specifically, Stuart Elden's call to explore more thoroughly the infrastructural volumes beneath the city (2013) has been met by Peter Adey's appeal to apply different cultural and social registers to these places in order to reveal new narratives about how underground landscapes are inhabited and co-inhabited, and to understand "how these volumes are lived-in or not, what they feel like and how they might be reclaimed or made anew" (2013, 54). In contemplating these weaknesses and responding to these impulses, this thesis contributes to the field of urban studies by investigating the Underground, U- and S-Bahn as subterranean infrastructural landscapes which are inhabited by a substantial number of people on an everyday basis, and sit within wider vertical urbanisms and volumetric geographies. Through my thematic focus on the production of social memory this thesis responds to Adey's appeal by attending to some of the cultural and social registers that are missing from the contemporary understandings of the much frequented infrastructural volumes and landscapes beneath our feet. To date little research has addressed urban infrastructures as realms of social memory, and few studies have explicitly explored the Underground and U- and S-Bahn as landscapes of

44

mnemonic production.<sup>4</sup> Thus, beyond contributing to the field of urban studies by investigating the often-neglected cultural spaces, representations and experiences of some of the city's inhabited infrastructural volumes through the lens of social memory production I also contribute further to this field and that of landscape studies, by initiating a concern for how the concept of landscape might usefully be integrated with the academic agendas concerned with vertical urbanisms and volumetric geographies. Thus in this thesis I conceptualise landscape not only as physically, representationally and experientially constituted but also in terms of connections, networks and vertices.

#### 2.3.3 Landscapes of connections, networks and vertices

The earliest geographic definitions of landscapes focused on a specified portion of the earth's surface categorised by distinctive physical qualities, forms or populations in order to allow their classification (Sauer 1963[1925]; Jackson 1984). Later, cultural geographers, more concerned with the representational dimensions of landscape, redrew these boundaries along visual lines and afforded the faculty of sight an influential role in determining the limits of landscape. Landscapes became bounded and defined by what was visible to one person, from one point at one moment in time – a definition that continues to feature in most English dictionaries.<sup>5</sup> This visual definition of landscape is problematic within the city where the built environment impedes the comprehensive view associated with the artistic landscape conventions that have a compensatory simplicity in non-urban contexts (Andrews 1999). Furthermore this definition is near untenable within underground infrastructures whose empirical centrality in this thesis serves partly to destabilise landscape research's continued privileging of the sense of sight to help elevate experiences of landscapes and those "sensory aspects of the body's spatial experience that go beyond the visual realm (Jasper 2011, 156). In this context then, phenomenological understandings of landscape that foreground body-landscape interactions are more tenable. Thus landscape is "experienced as a journey made, a bodily movement from one place to the other" in which human and other components are enfolded within the essence of a totality of relations and interactions (Ingold 1993, 154).

<sup>&</sup>lt;sup>4</sup>Alarcon-Diaz's Ph.D. thesis (2007) is a rare exception.

<sup>&</sup>lt;sup>5</sup>The Oxford English Dictionary partly defines landscape as "all the visible features of an area of land."

In this vein Tilley conceptualises landscape as temporally as well as spatially constituted by "locales, a set of relational places, linked by paths, movements and narratives" (1997, 34). These paths may change frequently or persist to accrue "sedimented layers of meaning" (Ibid, 27). Urban planner, Kevin Lynch's work demonstrates how these ideas are well suited to the urban context. In *Image of the City* (1960) Lynch emphasises the visual qualities of the urban landscape through the mental images that are the un-sustained, partial, fragmentary products of immediate sensations and memories of past experiences, but he is essentially concerned with human experiences of the city. He introduces five elements (paths, edges, districts, nodes, and landmarks) as constitutive of the urban landscape, revealing a conception of landscape that has much in common with the idea of networked infrastructures. Paths (streets, railway lines, canals etc.) are dominant elements around which others are arranged and related; edges are linear elements besides paths that represent permeable boundaries which can separate or connect areas; districts are sections of the city with a common identifiable character and a territorial extent; nodes are points where paths converge or core foci in districts; and landmarks are external multi-scaled points of reference that function as signifiers of identity and are relied upon for orientation and travel (Ibid). At times Lynch also discusses the impact of verticality in causing human detachment, and frames underground railways as systems of buried paths and "disconnected nether world[s]" that city dwellers struggle to relate to the surface landscape (Ibid, 57). In turn, Lynch considers underground stations as nodes "related along conceptual linkages" and "invisible path systems" around which city residents organise the rest of the city (Ibid, 56-57 & 74). It is this invisibility, in contrast to landscape's traditional visual bias that helps foreground the corporeal dimensions of landscape: Lynch, for example, acknowledges that although subterranean path systems might be visually concealed they can still be kinaesthetically sensed through topographical gradient changes and lateral curves (Ibid, 54).

Tilley and Lynch's work supports my conceptualisation of the Underground, U- and S-Bahn as landscapes composed of connections, assemblages of networked places, punctuated and linked by paths, but also sitting within and crossing the wider vertices and volumes of the city. Thus I conceive of these railways not just as networks in themselves but also as networked with other landscapes, infrastructural or otherwise, both above and below, in a weaving vertical manner. In underground railways vertical interfaces more than horizontal edges act as dominant landscape boundaries. These are crossed either rapidly through vertical descents and ascents to and from subterranean stations, mostly in a city's centre, or more gradually as tracks emerge from underneath the city mostly at its periphery. Such an understanding of landscape is also sensitive to the differing degrees of accessibility afforded to parts of each railway network due to the security and regulatory regimes associated with subterranean space (see Elden 2013a). The subsequent empirical chapters reflect this by addressing both the accessible and inaccessible parts of my chosen landscapes – their public representation in their entirety as transport diagrams and their publically accessible stations (see Chapters Four, Five, Six and Seven) but also their concealed practices such as urban exploration and places such as disused stations (see Chapters Eight and Nine). Overall my networked and layered conception of landscape complements my understanding of the spatial processes, practices, materiality, and metaphors of social memory as outlined below.

## 2.4 The social, networked and buried memories of landscape

Based on my general conceptualisation of social memory and landscape, outlined above, I understand the former to be produced in and around the latter in multiple and overlapping ways whether physically, through material memorials, representationally via a range of both real and virtual images and texts or experientially through the human body. I try to capture a fuller range and diversity of the processes, practices and materialities by which social memory becomes spatially produced, and to appreciate the mnemonic qualities of a wider array of landscapes through a concern for what I call the 'social memories of landscape'. With this phrase I take advantage of the productive ambiguities that Assmann has identified as accompanying the similar rhetoric of 'the memory of places':

"The expression 'the memory of places' is both convenient and evocative. It is convenient because it leaves open the question of whether this is a *genetivus objectivus*, meaning that we remember places, or a *genetivus subjectivus*, meaning that places retain memories" (2011, 281).

With this inclusive approach<sup>6</sup> I respect the spatial layering, superimposition and sedimentation of social memories in the urban landscape (p.36) but simultaneously

<sup>&</sup>lt;sup>6</sup>Under this inclusive approach I also subsume history and heritage. The relationships and distinctions between memory, history and heritage have commanded significant academic attention (see Nora 1989; Schouten 1995; Lowenthal 1998; Harvey 2001; Whelan & Moore 2006) but I subscribe to those perspectives that consider history and heritage as representations of pasts and components of a wider

attempt to move beyond spatialised social memory being narrowly conceived purely in terms of the material or physical attributes of a site or landscape – monuments, memorials, or historic buildings. Therefore my concern for the social memory *of* and not just *in* landscape aims to capture a wider diversity of the social memories connected to any given landscape, and subsequently a fuller appreciation of the structures, processes, actors and discourse involved in spatial mnemonic production.

#### 2.4.1 Mnemonic structures, processes, actors and discourses

The conceptual division of landscape into physical, representational and experiential dimensions, along with the classification of mnemonic media in terms of bodies, representations and places, are both compatible with Lefebvre's tripartite theory for the social production of space. Lefebvre discusses three types of socially produced space: perceived, conceived, and lived (1991). Perceived space or spatial practices relates to the physically restrained realities of individual experience as exemplified by customs and habits. Conceived space or representations of space, meanwhile, is the domain of groups like planners and engineers, exemplified by maps, plans and models. Finally, lived space or representational spaces refers to the symbols, imaginations and ideas that overlay physical space (Ibid, 34-41). These forms of space overlap and are created in an interconnected and processual manner in ways similar to the three dimensions of landscape. The overlap of Lefebvre's core spatial categories, however, complicates their operationalisation. Therefore, although my exploration of the social memories of landscape is compatible with the Lefebvrian theories that have already proven fruitful in the context of underground railways (see Pike 2005; Dennis 2008), I adopt an alternative vocabulary that originates with the traditions of the cultural-geographic study of physical, representational and experiential dimensions of landscape. In order to attend to more specific instances of mnemonic production in and across these dimensions, I focus explicitly on the mnemonic structures, processes, actors and

social memory (see Burke 1989). Certain distinctions between memory, history and heritage, however, should still be acknowledged, even if these relate primarily to "disciplinary power rather than epistemological privilege" (Olick & Robbins 1998, 110). For example, history is perceived to encompass a far stronger 'truth claim' than memory even if this has faced post-modernist challenges (Ibid). Heritage meanwhile shares memory's malleability to a greater degree, insofar as it often tends to fabricate history for ideological and political reasons (Schouten 1995; Lowenthal 1998). Yet in many instances it does so with a greater allegiance to the underlying commercial logic that is invoked by the 'heritage industry' (Hewison 1987). Therefore, here I conceive social memory to be the full spectrum of ways by which the past enters the present, and whilst acknowledging history and heritage's disciplinary and motivational differences I neither equate them to nor perceive them to be necessarily in opposition to memory.

practices involved, as well as the wider societal discourses to which each connects and contributes.

Mnemonic structures encompass broader political, economic and cultural structural conditions that govern what is remembered, when and by whom but also the more mundane bureaucratic, legal and material structures of the local level. With respect to the former, Olick and Robbins state:

"The structure of available pasts presents only some pasts and poses limits to the degree to which they can be changed, while placing other pasts beyond our perceptual reach; the structure of individual choice makes some pasts unavoidable and others impossible to face, and the structure of social conflict over the past means that we are not always the ones deciding which pasts to remember and which to forget" (1998, 128).

Jennifer Jordan, meanwhile, emphasises the latter "as a schema of core processes integral to the production of spaces of concentrated collective memory" (2005; 2006, 176). Amongst the specific structural factors that she addresses are those of land use, landownership and public resonance (Ibid). Each of these can of course change in ways that highlight the mnemonic processes that have already been inferred from the earlier discussion of the plural, contested and dynamic nature of memory. These processes of remembering and forgetting are numerous, varied and often manifested spatially. They include, for example, those that encourage the persistence and consolidation of certain social memories through memorialisation, conservation, maintenance, canonisation, and repetition; those that encourage changes in what is remembered through revision, adaption and contestation; and finally, those that encourage the abandonment of earlier social memories through repression or obsolescence, decay and destruction (Olick & Robbin 1998; Connerton 2008). Mnemonic structures and processes can be reinforced, contested, reformulated and activated by mnemonic actors who pursue practices that are broadly compatible with Michel de Certeau's distinction between the 'strategies' and 'tactics' of everyday life (1984). This distinction between the top-down rationality of strategies and the bottom-up alternative of tactics can be recognised as also pervading distinctions between, for example, official and non-official memory. Therefore the actors who pursue such strategies and tactics, whether intentionally or otherwise, are both institutional and individual.

My sensitivity towards multiple mnemonic actors and communities contributes to the reinvigorated agenda of memory studies research that moves beyond an overemphasis

on state-led memorialisation to better appreciate the role of civil society in the production of memory (Hoelscher & Alderman 2004; Cook & van Riemsdijk 2014). 'Memorial entrepreneurs' (Jordan 2006) and 'agents of memorialization' (Cook & van Riemsdijk 2014) both exemplify types of mnemonic actors with explicit memorial intentions, but these are not the only types. My reference to actors, a term that has gained influence thanks to Bruno Latour's Actor Network Theory (2005), thus serves two distinct purposes. First, it conveys a moderate recognition of non-human agency to ensure that the impact of mnemonic media and technologies, including the landscape itself, in shaping the production of social memory is appreciated. Secondly, it widens who and what can be understood as influencing the production of memory, regardless of whether or not they explicitly intended to do so. In this way my concern for a range of actors involved in social memory production partly takes a cue from the policy mobility and knowledge transfer research that has emphasised the role of 'middling' actors engaged in seemingly banal technocratic and bureaucratic practices (Larner & Laurie 2010). More widely, I recognise that these mnemonic actors, processes and structures are shaped by and contribute to wider societal discourses – the intertextual means by which knowledge is publically constituted, manifested and distributed - which are "crucial to the formation of memory" (Pentzold 2009, 262). I thus also seek to understand the production of social memory by identifying individual memories' constructive discourses (Ibid).

Therefore, overall my understanding of the spatial processes, materialities and practices of social memory as subsumed under the rhetoric of the 'social memories of landscape' pertains to an inclusive approach that is compatible with the type of memory research advocated by Olick and Robbins (1998), namely, that which avoids an unbalanced focus on any particular form of memory and positions 'social memory' as a sensitising term that captures a "variety of mnemonic processes, practices and outcomes and...their interrelations" (Olick 1999, 336).

Beyond providing a means to appreciate the range of structures, processes, actors, practices and discourses involved in mnemonic production across physically, representationally and experientially constituted landscapes, my reference to the 'social memories of landscape' also communicates an inclusivity in terms of application. In other words this phrase serves to rhetorically invert and supplement the commonly held notion of 'landscapes of memory' and circumvent the idea of 'memorial landscapes', in

a bid to demonstrate an applicability beyond those landscapes whose explicit function is to remember, to everyday landscapes like the Underground, U- and S-Bahn whose social memories are more implicit. In this way I aim to problematise further the commonly held perception that Tim Edensor has revealed by contrasting industrial ruins with intentional places of remembrance, namely that "there are places for remembering and places where memories and the past are irrelevant" (2005b, 833).

In turn I consider there to be a hierarchy of urban space, which influences which parts of the city are deemed most suitable for the task of remembering. This hierarchy, can be expressed spatially in horizontal terms where symbolic and other structures deem central urban places more suitable than peripheral areas for those social memories considered most important and officially sanctioned by national governments.<sup>7</sup> However, within this thesis I am most interested in the instances when this hierarchy is reflected in the vertical alignments of the city, and use these occurrences to question the commonly held notion that my chosen landscapes, the Underground, U- and S-Bahn and in particular their subterranean sections should not or are not considered places for social remembrance. Thus my concern for the layering of social memories in urban landscapes is echoed by a similar interest in how these landscapes themselves are layered in the city not just physically as discussed earlier but also within hierarchies of remembrance. With this in mind and in specific relation to the landscapes that principally interest me here – urban underground railways – I conceptually and empirically foreground what I term networked and buried memories.

## 2.4.2 Networked memories

I use the term 'networked memories' to capture the influence that the both virtual and physical networked nature of my chosen case studies has on the production of social memory. In the first instance I use the term to help reflect the developments in digital mnemonic media that are increasingly collapsing the distinctions between the real and the virtual, arguably across all urban landscapes. In this respect memories of landscape, as manifested by visual and textual representations, are increasingly coalescing and overlapping with the social memories that locations physically and experientially reference both materially and through bodily interactions, or, alternatively are providing

<sup>&</sup>lt;sup>7</sup>Such distinctions can, however, be complicated by concerns for locational authenticity especially in cases of traumatic memory (see Till 2005).

substitutes for first-hand corporeal engagement with these places. With the continuation of these technological developments it is likely that representations, which have traditionally been considered as external to the landscapes to which they relate or refer, will, thanks to the provision as such things as mobile Internet and augmented reality, increasingly fuse with the physical landscape and human experiences of it in ways that will create new avenues of social memory production. For that reason, and as I detail in the next chapter, I integrate a range of digital sources into my empirical analyses of mnemonic production. This attempt to spatialise digital mnemonic media, and reconcile remote virtual and online landscape representations with the immediate physical and experiential landscape represents one of this thesis' conceptual contributions. Secondly the idea of networked memories reflects the physically interconnected nature of my chosen case studies whereby processes of mnemonic production in one part of the Underground, U- and S-Bahn can have repercussions for and be limited by the structures of their wider systems and landscapes.

Both these notions of networked memory find expression throughout the following empirical chapters but come to the fore particularly in Chapters Eight and Nine when I introduce the concept of 'networked ruins' in relation to the Underground, U- and S-Bahn's disused stations and vestiges. This concept connects with the work of others who have acknowledged the "collapse and fusion of the physical and the virtual" specifically in relation to industrial and modern ruins (Garrett 2011a, 13), the blurred link between real and imagined ruination (see Dobraszczyk 2010) and the potential for digital landscape representations to provide avenues for remote moments of social remembrance (Garrett & Hawkins 2013). Thus it resonates clearly with the idea that social memories are networked beyond the immediacy of the physical landscape. But furthermore it serves to clearly exemplify how the production of social memory in and about these occluded parts of the landscape is largely determined by their position within functioning transport systems whose on-going operation relies to an extent on these memories remaining hidden or, as I prefer to think of them, buried.

## 2.4.3 Buried memories

To provide empirical focus within the width afforded by my concern for both the social memories of landscape and networked memories I focus on what I refer to collectively as 'buried memories.' This designation is evocative in the way it captures both the

subterranean physical setting of my case studies and the obscured statuses of those social memories that I am most interested in within the collective consciousness of their respective cities and these cities' populations. In this way it partly reconciles social memory's material and cognitive attributes to become, like other psychoanalytical terms that have been applied to the physical environment, "an intermediary between collective and individual memory" (Boym 2001, 54). By extension, within the specific context of the physical urban underground, and partly in reflection of any city's hierarchy of mnemonic space, once extrapolated, I recognise buried memories as contributing to a wider material and imaginary subterranean realm. That which has been framed as "an aspect of the collective unconscious" (Leser 1987, 15), contemplated as the "subconscious of the city, where collective memories and dreams reside" (Kim quoted in Garrett & Hawkins 2013, 12), and, specifically with respect to transport systems, considered as one example of the mundane architecture of a machinic order that collectively contributes to a physical and performative 'technological unconscious' (Amin & Thrift 2007) - in other words, the physical setting of the city's collective unconscious, the shadow of the city's more conscious social memories.

In practical terms I use the designation of 'buried memories' to refer to a plethora of social memories that come from below and which have at various times and places been 'left out' out of mainstream history or become lost, hidden or otherwise occluded (Rigney 2005). These memories are not just physically concealed but are also socially underrepresented as non-official, alternative, or vernacular forms of memory buried within (or by) official renderings of the past or alternatively by the taken-for-granted nature of the Underground, U- and S-Bahn - those that are "hidden beneath layers of the commonplace" (Schama 1996, 14). It is important here to clarify the conceptual link between 'buried memories' and what others have primarily referred to as 'countermemories', in order to demonstrate the original contribution that my use of this vocabulary represents. While there is a degree of synonymy between these terms, given that counter-memory is regularly conceived as that which evokes "buried or repressed remembrance" (Legg 2005, 496) and an interest in buried memories appeals to a similar concern for recovering lost or hidden memories (Rigney 2005), they differ insofar as a concern for buried memories avoids the recognised weaknesses of defining countermemory purely in terms of opposing dominant forces (Rigney 2005; Till 2006). Thus, some of the buried memories that I investigate are counter in nature, and have been

intentionally and explicitly buried (for the clearest examples see Chapters Six, Seven and Eight), but this is by no means true of all the examples. Thus under the rhetoric of buried memories I also consider those social memories that have become occluded for less explicitly oppositional and more mundane reasons, through, for example, processes of creative necessity or cultural inertia. These include the fabricated and imagined social memories that become hidden or face burial because of their short duration (see Chapter Nine) or those memories buried in the everyday representations of transport diagrams and route-plans (see Chapter Four and Five). This provides a breadth of examples through which to analyse how different mnemonic actors, practices, structures, processes and discourses enable these memories to be produced and reproduced in and around the landscape - to surface, or resurface, to remain buried or face reburial.

This processual sensitivity ensures that my use of 'buried memories' does not mask the dynamism of memory by suggesting that these memories' are permanently concealed. Instead I appreciate that the extent to which they are obscured varies across time and space, due to, amongst other reasons, the comingling nature of official and non-official forms of memory. Thus social memory becomes occluded in different ways, by different means, at different moments and in different parts of the landscape. In this way my broad chronological period of interest is legitimised in providing the opportunity to consider the surfacing, burial and resurfacing of social memories over longer 'genealogical' timeframes rather than focussing on discrete 'biographical' moments (see p.86). My research, in revealing the buried social memories of the Underground, U- and S-Bahn, has led to the further convergence of the physical and psychological connotations of the burial metaphor through its reliance on metaphorical acts of archaeological and psychoanalytical excavation.

## 2.4.4 Excavations: archaeological and psychoanalytical

Aleida Assmann acknowledges that the investigation of mnemonic production depends on the use of a "virtually infinite inventory of possible metaphors" (2011, 137) including, amongst others, those of a sometimes overlapping, textual (see Huyssen 2003; Assmann 2006; p.93) spectral (see Gordon 1997; Till 2005; Edensor 2005a; 2005b; Holloway & Kneale 2008; Japser 2011; and Gibas 2013) geological (see Sharr 2010), and technological (see Hoskins 2011) nature. The 'underground' also acts as a metaphor with a range of associations that resonate with my interest in buried memories, including those, as already mentioned, relating to ideas of the unconscious, and those with counter social, political, and cultural overtones that stress a range of phenomena including class hierarchies, criminal activity, non-governmental resistance, and the creative avant-garde (Lesser 1987; Pike 2005; Saler 2008). Landscape, meanwhile, besides offering its own allegorical utility, provides a realm where many of these metaphors collide – it is "the work of the mind. Its scenery is built up as much from strata of memory as from layers of rock" (Schama 1996, 7). Thus the main thematic, conceptual and contextual foci of this thesis – memory, landscape, and the underground - are collectively and individually prone to relying upon and activating a range of metaphors with a diverse array of connotations, which, if one is not careful, can easily trigger the problems associated with overextending the inference of a metaphorical vocabulary within the socially materialised context (see Klein 2000; Kansteiner 2002). Thus it is necessary to expand briefly on my use of metaphor in this thesis, not just with respect to my empirical focus on buried memories but also in terms of the methodological and metaphorical acts of 'excavation' that I rely upon when investigating them.

An archaeological vocabulary is prevalent amidst the spatial metaphors of social memory and tends to emphasise the notion of depth and the possibility of inaccessible memories (Till 2005; Assmann 2011). As Julian Thomas notes,

"Archaeology is widely understood as being concerned with the recovery of knowledge about the past...it evokes notions of the repressed, the lost and the forgotten, and of the drama of discovery, which are often spatialised in terms of the relationship between depth and surface" (2004, 149).

Archaeological methods and processes therefore provide an evocative set of terminologies that can help communicate the layered nature of spatial memory and, here, further resonate with my tripartite or 'stratified' conception of landscape and the production of memory therein. My use of the excavation metaphor also connects to a long tradition of using archaeological terminology within the modernist pursuit of knowledge, of which one of the most famous examples is Sigmund Freud's 'archaeology of the mind' (Thomas 2004; Harrison 2011). Freud recurrently compared the work of the psychoanalyst to that of the archaeologist (Assmann 2011), but in a process of coming almost full circle, many of his theories have returned to influence the academic investigation of the physical environment.

For example, a number of scholars have used nostalgia, a psychological category that Freud studied, in relation to urban space (see Boym 2001; Legg 2004), while others have found his theories on mourning and melancholia insightful in similar contexts (see Gross 1990; Rowlands 1998; Merrill 2013a). Freud originally viewed melancholia as an interruption to the normal mourning process that had a definite end but later saw the two phenomena as contributing to an endless and ongoing process (2001[1917{1915}]; Clewell 2004). His psychoanalytical models of mourning are not only relevant to individual forms of mourning and its propensity towards the repetitive performance of remembering, but also provide a means to consider "the working through" (Adorno 1998[1959]) of difficult national pasts via the application of the concept of active remembrance (Merrill 2013a). These issues are touched upon in Chapters Six and Seven as they deal with what can broadly be termed, traumatic memory. In these chapters further psychoanalytical concepts related to trauma and repression are relevant to my work. The repression of traumatic memory, individually or collectively, as Griselda Pollock highlights, can also be communicated through archaeological models and vertical metaphors of memory; she states, "repression at once erases and encrypts traumatic memories. They are *buried* and thus preserved like relics in the unconscious" (2006, 10 [original emphasis]; see Campkin 2012; 2013). Repressed individual and collective traumatic memories can return with spatial consequences, either involuntarily resurfacing, as manifested for example by post-traumatic stress disorder (see Ballinger 1998), or, as discussed, by being intentionally recovered in order to collectively address difficult pasts. The result in some cases is what Karen Till terms 'wounded cities' -"densely settled locales that have been harmed and structured by particular histories of physical destruction, displacement, and individual and social trauma resulting from state-perpetrated violence" (2012, 6) or what Maria Turmarkin calls 'traumascapes' landscapes "marked by traumatic legacies of violence, suffering and loss" and "a distinctive category of place transformed physically and psychically by suffering" where the past is never finished (2005, 12-13).

This return of previously buried memories, traumatic or otherwise, their resurfacing, recovery and excavation, in turn connects to another of Freud's psychoanalytical concepts – that of the uncanny. The uncanny denotes that which is "nothing new or strange, but something that was long familiar to the psyche and was estranged from it only through being repressed" (Freud 2003[1919], 148), that which "should have

remained hidden and has come into the open" (Schelling quoted in Ibid). The uncanny has been invoked in numerous academic discussions about the aesthetics and form of architectural and memorial space, above and below the surface, both past and present (see Vidler 1987; 1992; Gandy 1999; Nead 2000; Young 2000; Myzelev, 2001 Gibas 2013). Archaeology itself has even been framed as uncanny insofar as the practice of physical excavation renders the past unfamiliar – "the uncanny lies in the act of digging up, not in the property of being buried" (Moshenska 2006, 92; 2012). This resonates with Freud's acknowledgment that to reveal repressed memories could lead to their loss, just as archaeological excavation destroys what it uncovers (Thomas 2004). Thus from a reflective position my investigation of buried memories could be said to be uncanny in itself, and simultaneously eroding its subject of focus. As an extension of this reflexivity I treat the psychoanalytical metaphor of the uncanny with particular care, noting as Gandy does how it serves as a "spatial fetishism of absence, a mythological response to the unseen and the unknown" (1999, 35). Thus when I use these metaphors, either as a subject or mode of research, I do so in a self-reflective and critical manner that respects the fact that when I encounter similar metaphors in my empirical material I acknowledge them to contribute to - as much as communicate - social memory production.

The influence of these dual archaeological and psychoanalytical metaphors is widely discernible across the social sciences from the creative arts to urban studies - on occasion being productively used to establish these areas' intersections and reveal the spatial, material, emotional, and temporal complexities of urban space and transformation (Campkin 2012; 2013). Their influence, however, has arguably been most felt within memory studies, where scholars recurrently draw precedent from the work of not only Freud but also, amongst others, Benjamin, referencing in particular his essay *Excavation and Memory* (1999[1932b]), which in part reads:

"He who seeks to approach his own buried past must conduct himself like a man digging. Above all, he must not be afraid to return again and again to the same matter; to scatter it as one scatters earth, to turn it over as one turns over soil" (Ibid, 576).

Unlike Freud's search for 'objective' hidden individual memories, for Benjamin excavation is an act of active reconstruction that cannot be separated from its target (Assmann 2011). Till notes that Benjamin used the 'digging' metaphor to represent a

"repetitive performance in which the past and the present coincide through place" and connects this archaeological approach to memory with the methodology behind Foucault's history of ideas (2005, 66; see Foucault 1972).<sup>8</sup> Yet in emphasising discontinuity as much as continuity Foucault, also "labors to distance the past from the present" (Poster 1982, 117). Herein lies a weakness of employing the archaeological metaphors, namely that in their ambiguity they can be used to reunite and simultaneously create greater distance between the past and present linked to philosophical conceptions of temporal relationships and the attributes of historical and archaeological knowledge. In other words certain archaeological metaphors, e.g. excavation, might enhance the "belief that the past is entirely separate from the present" (Thomas 2004, 170). Thus Rodney Harrison has suggested 'field survey' as an alternative metaphor to 'excavation', in order to reorient archaeology as "a creative engagement with the present and only subsequently as a consideration of the intervention of traces of the past within it" (2011, 141).

These perspectives caution against the simplified notion that the past and memories of it lie in neat stratigraphic sequences beneath our feet or consciousness, as is sometimes suggested by those who activate archaeological metaphors (Till 2005). My concern for the sedimented and buried layering of both urban landscapes and social memory is thus tempered by a respect for the contemporary surface – the present-past – and thus acknowledges that the past resurfaces in the present in numerous ways - intentional, involuntary or circumstantial. My mode of excavation acknowledges this through the selection of data collection and analysis methods, that, as discussed in the next chapter, can collectively highlight the multi-levelled, scaled and sited co-presence of the past and the present while illustrating durations of continuity and discontinuity.

## **2.5** Conclusion

This chapter has positioned my research within a wider set of theoretical literatures focused on the concepts of social memory, landscape and infrastructure. In doing so it has demonstrated how I contribute to a number of wider theoretical debates and agendas within memory, landscape and urban studies. I do so by widening understanding of the

<sup>&</sup>lt;sup>8</sup>In many instances Benjamin's targets and the sites of a coinciding past and present were the most minor of traces resulting in what was not only a multi-layered but also multi-scaled appreciation of a landscape's social memories. I share these concerns as demonstrated by some of the methods that I introduce in the next chapter (see p.84-85).

ways in which social memory is produced in the urban landscape, increasing the application of landscape approaches within the urban context and specifically in respect to urban infrastructures, and initiating a sensitivity towards both landscape and social memory within the emerging academic agendas of vertical urbanism and volumetric geography while adding to these agendas directly by attending to the cultural qualities of everyday taken-for-granted urban vertices and volumes.

This chapter has also clarified my conceptualisation of the nexus of social memory and landscape by introducing the phrase, 'social memories of landscape' - an inclusive designation that captures a wide array of multi-layered, scaled, sited and interrelated mnemonic outcomes produced in, across and about the physical, representational and experiential dimensions of landscapes, through numerous forms of mnemonic media, and shaped by a diverse range of structures, processes, actors, practices and discourses. Thus my interest in the spatial materialities of social memory is matched by a concern for its spatial immaterialities - the more intangible virtual, and experiential mnemonic qualities of landscapes. In specific relation to my chosen cases, the Underground, Uand S-Bahn, I have introduced the ideas of 'networked' and 'buried' memories. The former serves to appreciate the digitally and virtually networked nature of social memory production, and at the same time the physically networked nature of the landscapes under investigation here. The latter provides an empirical focus that through an archaeological and psychoanalytical metaphorical vocabulary refers to a range of memories that have at different times and places become physically and psychologically buried in the city, and thereafter provides a means to comprehend how I investigate them in the forthcoming empirical chapters through metaphorical acts of excavation. These conceptual ideas are, I believe, well suited to serving and informing my empirical chapters and their task of excavating the networked and buried social memories of the Underground, U- and S-Bahn's subterranean infrastructural landscapes. In the next chapter I outline how I will go about this task by turning my attention to the multiple and multi-sited, levelled and scaled comparisons, cases and methods that I employ.

## **Chapter Three**

# Clearing the Ground: Comparisons, Cases and Methods

#### **3.1 Introduction**

This chapter presents the comparative and methodological perspectives and techniques that have guided my qualitative empirical investigations. After discussing the challenges and possibilities of a comparative approach I introduce my wider case studies, the Underground, U- and S-Bahn, in their geographical, historical and heritage contexts. Then I outline the different methodologies that I used to collect and interpret my empirical material. I conclude by briefly outlining the structure of the rest of the thesis.

#### 3.2 The possibilities and challenges of a comparative approach

Until recently, urban research was not very comparative (Kantor & Savitch 2005). But new research agendas concerned with the comparability of 'World Cities' and cities in the Global South and Global North have rejuvenated comparative urbanism, and provided fresh methodological impulses that address some of the critiques, including the fallacy of scientism and developmentalism and the futility of universalism, that caused comparative methods to lose appeal in urban studies during the 1990s (Nijman 2007a; Ward 2008). Comparative urban research has developed to re-emphasise socalled 'deep analogies' (Stinchcombe 1979), the global processes that affect "places that are widely separated in space and/or time" (Nijmann 2007b, 94) and are "mediated in a variety of ways depending on geographical context" (Nijman 2007a, 2). The advantages of cross-national comparative research, which include the ability, through the systematic study of similarity and difference, to: improve understandings of one's own and other cities; test theories across cities; build more widely applicable theories; challenge claims of universality and exceptionality; and evaluate the scope of certain phenomena (Livingstone 2003), are thus increasingly acknowledged by urban researchers. These aims and others are generally pursued via four different, but sometimes overlapping, strategies of comparison - individualising, universalising, encompassing, and variation finding (Tilly 1984; Robinson 2011). My wider, caseorientated, comparison of London's and Berlin's underground railway networks is supported, at the level of my individual empirical chapters, by a combination of encompassing and individualising comparative sub-cases. The selection of some of these sub-cases was guided by my specific interest in 'networked' and 'buried' memories, and the availability and extent of relevant research material. Thereafter I used encompassing comparisons to allow these multiple and differentiated sub-cases to shed light on my wider cases, and multiple individualising comparative methods to yield new understandings of the sub-cases themselves (Tilly 1984; Nijman 2007b; Robinson 2011). This approach combined with my decision to frame London and Berlin as both objects and contexts of study (Livingstone 2003) allowed me to pursue goals that were:

"both historically interpretative and causally analytic [and] to account for significant historical outcomes...by piecing evidence together in a manner sensitive to historical chronology [while] offering limited historical generalizations [and remaining] sensitive to context" (Ragin 1989, 37).

Yet while the possibilities of comparative research are enticing, in practice it faces multiple challenges and can be as exhausting as it is exhilarating (Livingstone 2003).

For example, cross-national comparisons are regularly critiqued for comparing unlike objects and for sacrificing contextual specificity in pursuit of methodological and theoretical universalism (Ibid). Paradoxically, methods and findings that are too contextualised risk eroding the very grounds for comparison in the first place (Ibid). Achieving sufficient contextualisation across cases and thus a successful comparison, depends partly on drawing on both insider and outsider knowledge and maintaining these multiple (individual or collective) research positionalities in dialogue with one another (Ibid). The success of comparative research also relies on the selection of cases, and while a preference for the 'typical' can be advisable, the selection of exceptional cases can also provide useful insights (Stake 1995; Nijman 2007b). Meanwhile the rigour of comparison can be enhanced by using standardised methods - although this is more complicated for qualitative studies whose data can be highly contextual, reliant on local knowledge and even in a different language (Livingstone 2003). Finally, while the challenge of balancing similarities and differences is key to comparability, some have also noted that the act of comparison separates cases – defining them by contrasting them – and obscures the exchange fostered by the comparison of parallel objects (Ibid; Seigel 2005). All of these challenges can push the prospective comparative researcher towards the 'relativist quagmire' that emphasises the view that "societies and cultures are fundamentally non-comparable and certainly cannot be evaluated against each other" (Chisholm quoted in Livingstone 2003, 482-483).

Some scholars claim the fear of relativism explains why collective memory researchers tend to avoid cross-national comparative methods, but in fact "facing collective memory directly means encompassing the entire range of its content... across nations" (Schwartz & Kim 2002, 210). The relatively scarce qualitative social memory studies that do employ cross-national comparisons rarely discuss the advantages and disadvantages of comparative methodologies. Instead they often implicitly emphasise the impact of different patterns of historical and geopolitical experience and national and international contexts upon social remembrance as a means to identify a wider variety of ways in which social memory is publically negotiated and defined in different countries, and to use these observations in turn to contribute to broader theorisations (see Forest et al 2004). My mode of comparative research continues in this vein but, whereas these earlier studies have usually relied on the collaboration of multiple researchers who separately specialise in the countries under investigation, my sole responsibility for the research at hand served, in many ways, to magnify the general trials of comparative research and create additional practical challenges.<sup>9</sup> In this way any individual comparative researcher "working to reconcile two or more languages, places and periods faces a labor of mediation daunting to behold" (Seigel 2005, 66).

I found direction as to how to overcome some of these challenges from those who suggest incorporating transnational perspectives in order to move beyond traditional comparative studies (Robinson 2002; 2004; Ward 2008).<sup>10</sup> While I remained sensitive to the relational concern of transnational techniques – to the extent that I came across evidence of my two cases' open, embedded and connected nature (Kocka 2003; Ward 2008) – more influential was the ability of transnational perspectives to "use one site to pose questions of another" (Roy 2003). In this way I pursued a comparative method that did not aim to directly evaluate the cases against each other, thus avoiding issues of relativism, scientism and developmentalism, but instead emphasised a process whereby one case interrogated the other through the applications to one case of questions originating from the other. This comparative process was partly heuristic, allowing me

<sup>&</sup>lt;sup>9</sup>These included additional restraints on time, the need to duplicate research phases, the necessity to relocate regularly between my wider cases, and the need to pursue research in a foreign language.

<sup>&</sup>lt;sup>10</sup>This imperative is supported by the influence that the so-called 'transnational turn' has had on historical (see Seigel 2005) and social memory research (see De Cesari & Rigney 2014).

to "identify questions and problems that one might miss, neglect, or just not invent otherwise" (Kocka 2003, 40). It also provided a means to identify other relevant subcases. In other words, transnational perspectives helped me to uphold comparison more as an inductive process, in which my two cases informed each other to reveal that superficially similar phenomena often comprised influential contextual differences, rather than as an evaluative product that encouraged overtly judgmental statements about each case's qualities with respect to the other.

These transnational perspectives also provided a means to present and structure my findings in ways that consistently held each case in tension with the other. Thus in each of the following empirical chapters either London or Berlin is presented as a leading case in which particular questions are primarily addressed before being applied to the following case. This structural device sought to understand whether certain discourses can be characterised as shared singular processes that are contextually mediated or, alternatively, should be considered as contextually unique. It also ensured balance between my two cases, and avoided what some believe to be the unconvincing presentation of comparative analysis through the use of the city-by-chapter approach, capped by an effort to discuss unifying themes (Livingstone 2003; Kantor & Savitch 2005).

However, this comparative process and presentational device is also prone, as some claim all transnational approaches can be, to appearing "a bit too mechanistic" (Kocka 2003, 43). Likewise, in some ways it obscured, more than clarified, my position, as a researcher, on my empirical material and arguments. These aspects of my comparative approach, in favouring impartiality and attempting to hold my cases in 'objective' tension with one another, implicitly avoided some of the judgments that might have tipped the balanced scale - but at the same time would have more explicitly revealed my opinion on the matters under discussion and in turn my research positionality. Despite these potential weaknesses, I claim, my approach still successfully sheds light on the processes of mnemonic production evident in London and Berlin's subterranean railways without needing to overemploy the direct evaluative statements that might invite appeals to relativism and critiques of developmentalism and positivism. In fact, while this approach partly obscured my positionality, paradoxically it also reflected it. This was due to my pre-existing balanced positionality with respect to both London and Berlin, where due to my personal biography I already had dual insider/outsider statuses

in both cities. As a native (for my first eight years) of and a regular visitor to London, when I commenced my doctoral research I returned there from Berlin where I had been intermittently living for, at that time, the past six years. In fact my selection of London and Berlin stemmed in part from the expected benefits that this liminality would provide, a status that I sought to maintain throughout the research period by repeatedly relocating between the two cities.<sup>11</sup>

My selection of London and Berlin also acknowledged the productive affordances gained from differences in the academic and popular resonance of social memory in the two cities. Berlin has become a key site for the investigation of Germany's wider handling of its negative twentieth-century past,<sup>12</sup> and the potential for both the city and nation to act as models for the production of social memory has been shown by numerous scholars to yield theoretical insights and methodological impulses (see Garton Ash 1997; Ladd 1997; Olick 1998; Harjes 2005; Cochrane 2006a; Faulenbach 2009). Thus my decision to study Berlin alongside London demonstrated not only that social memory remains a key and productive area of research in the German capital, but also revealed the potential benefits of applying what in one city resembles an academic meta-discourse to another where the same discourse is far less prevalent. In other words, my comparative analysis partly proceeds by placing mnemonic production in London under the critical academic scrutiny that is more commonplace of Berlin.<sup>13</sup>

More specifically, London and Berlin's subterranean railways lend themselves to a comparative study of social memory production for empirical reasons related to their common geographical and historical attributes and their productive differences. The networks developed over a broadly contemporaneous period and they, their cities, and their countries witnessed shared events that have become significant foci for contemporary social memory, including, most prominently periods of actual and potential global conflict, such as World War One (WWI), World War Two (WWII) and the Cold War. At the same time, however, these events played out differently, and had different consequences for, my cases' wider political, social, economic and cultural contexts. For example, between 1933 and 2013 Germany and Berlin witnessed major

<sup>&</sup>lt;sup>11</sup>Of a research period spanning 50 months (October 2010 - December 2014) I spent 26 months based primarily in London and 24 months in Berlin.

<sup>&</sup>lt;sup>12</sup>This process has been subsumed under the rhetoric of *Vergangenheitsbewältigung* [the struggle to come to terms with the past] (see Adorno 1998[1959]).

<sup>&</sup>lt;sup>13</sup>This contributes modestly to the research agenda that problematises Berlin's supposed exceptionalism (see Latham 2006a; 2006b; Cochrane 2006b; Bernt et al 2013; Merrill & Jasper 2014).

ideological and political shifts and ruptures, compared with greater continuity in Britain and London. While the similar and differing contexts of my two wider cases are useful in revealing different forms of social memory built to differing extents on processes of revision and accumulation, they must also be accounted for and communicated to ensure that crucial distinctions in contextual meanings are appreciated sufficiently to make the overall comparative project successful (see Kantor & Savitch 2005).

#### 3.3 The Underground, U- and S-Bahn in context

London and Berlin are Europe's largest cities by population, although the former is more than twice the size of the latter with around 8.3 million inhabitants, compared to 3.4 million. These differences are reflected in each city's railway passenger figures. In 2012 the U- and S-Bahn recorded 507 and 395 million journeys respectively (S-Bahn-Berlin 2013; BVG 2013a); recent annual figures showed the Underground to have recorded 1,229 million, while the London Overground<sup>14</sup> recorded 124 million (TfL 2013). Despite these differences the two cities' urban rail networks are remarkably similar in size (Figure 3.1 & 3.2). The Underground serves around 270 stations and the Overground, 60 (total c.330). The U-Bahn meanwhile serves 170 stations and the S-Bahn, around 166 (total c.336).<sup>15</sup> In length the Underground and Overground span 402 km and 83 km respectively (total 485 km), while the U-Bahn covers 151 km and the S-Bahn, 332 km (total 483 km). While only smaller sections of the Overground and S-Bahn are subterranean, it is regularly quoted that forty-five per cent (181 km) of the Underground and around seventy-eight per cent (117 km) of the U-Bahn are actually subterranean, for the most part concentrated beneath their cities' centres. Although the geographic spread of the two pairs of networks is relatively even across both cities, there are notable gaps in the Underground's coverage south of the River Thames, and particularly in the southeast where the network's expansion was discouraged due to preexisting suburban mainline railways and particular geological conditions (Farrell 2010). Geology is one of the main factors – alongside technological capabilities, political agendas and economic investment – that determine the feasibility, cost, and ultimately

<sup>&</sup>lt;sup>14</sup>London's closest counterpart to the S-Bahn and hereafter referred to as the Overground. Given that it is predominantly a surface-level suburban railway I do not consider it in any great detail. I include the S-Bahn in my analysis because of its more substantial subterranean sections of track and numerous stations, and because these places relate to a number of specific sub-cases whose consideration benefited my overall goals (see Chapter Seven).

<sup>&</sup>lt;sup>15</sup>These figures do not take into account the over-count caused by interchange stations between the different systems.

the layout of underground railways (Paul 2009). Whereas London's geological stratigraphy is composed of alluvium, gravel and bagshot overlaying a deep stratum of blue clay – an ideal tunnelling medium – Berlin is built on a more problematic marshy subsoil of gravel and sand with a high water table (Havers 1966). Given these geological conditions and in the absence, initially, of advanced tunnelling technologies, the first forays into the British and German capitals' subterranea for the construction of railways were shallow ones, using a construction method known as cut-and-cover,<sup>16</sup> complemented in Berlin by an elaborate system of pumps and boreholes designed to lower the water-table sufficiently to allow construction (Ibid). In London, however, such methods were employed nearly forty years earlier than in Berlin.

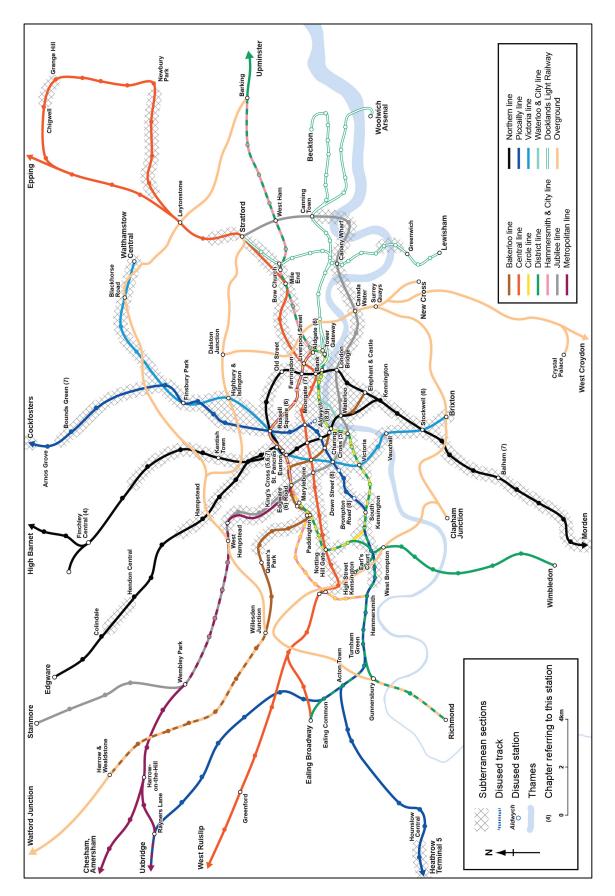
# 3.3.1. The histories of the Underground, U- and S-Bahn<sup>17</sup>

When it opened on 10<sup>th</sup> January 1863, the Metropolitan Railway (Metropolitan), which initially served seven stations over 5<sup>1</sup>/<sub>4</sub> km of London, became the world's first underground railway. In its first year it carried over nine million passengers and by 1870 had expanded to serve around thirty stations (Barker & Robbins 1963; Demuth 2003). In 1868 the Metropolitan District Railway (District) opened its first line and by the early 1870s carried around twenty million passengers annually – half as many as the Metropolitan at that time (Barker & Robbins, 1963). The two companies collaborated to open the Inner Circle Line in 1884, before the City and South London Railway (CSLR) opened its first line in 1890. CSLR's use of a combination of new electric and tunnelling technologies<sup>18</sup> created the first deep-level electric railway in the world.

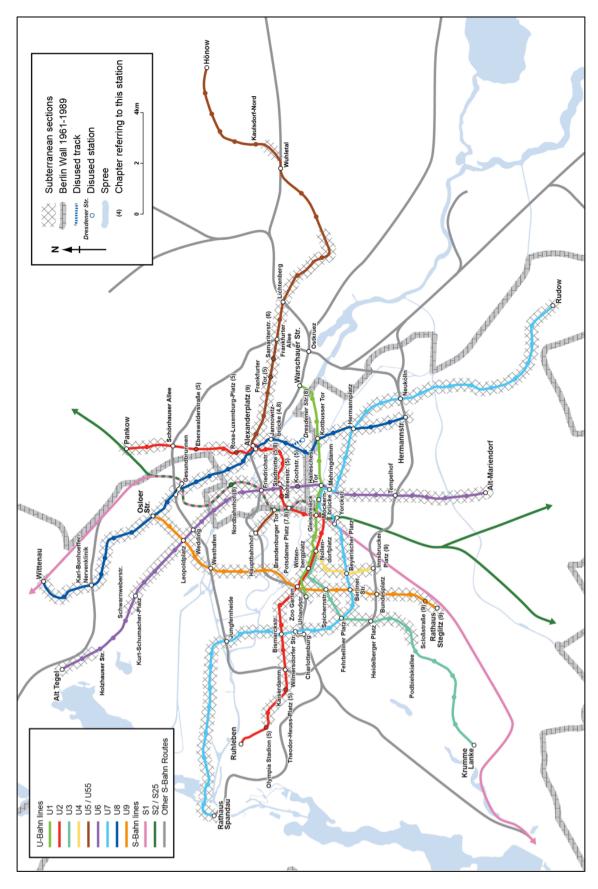
<sup>&</sup>lt;sup>16</sup>This method entailed cutting large trenches for the railway and then covering them with supports for overlying roads and buildings.

<sup>&</sup>lt;sup>17</sup>For the following brief account of the development of London and Berlin's underground railways it should be noted that the interchangeability of Berlin's U-Bahn network has allowed its lines to have their courses and destinations changed to far greater extent than the Underground's.

<sup>&</sup>lt;sup>18</sup>The shield-tunnelling technique developed by Peter William Barlow and James Henry Greathead involved reaching London's clay substratum via isolated vertical shafts before tunnelling horizontally outward (Bownes et al 2012).



*Figure 3.1. Geographic map of the London Underground. Source M.Irving, UCL Geography Drawing Office.* 



*Figure 3.2. Geographic map of the Berlin U- and S-Bahn. Source M.Irving, UCL Geography Drawing Office.* 

By 1900 a further two deep-level electric lines, serving an additional fifteen stations, had been opened by the Waterloo and City Railway (WCR) and the Central London Railway (CLR). This network of worm-like cylindrical tunnels and stations created a new landscape with "a special ambiance" – a world of its own – "far below the streets…self-contained and self-confident" (Jackson & Croome 1962, 7), which soon became collectively known as the 'Tube'.<sup>19</sup>

In 1900 the railway network in Berlin remained limited to the radial-concentric network that was run mostly on viaducts and whose oldest section, the Ringbahn, was constructed in the 1870s to serve military purposes and to transport freight (Ladd 1990; Bley 2003). The east-west radial Stadtbahn was opened for similar purposes in 1882 but because it passed through the city's centre it was also used for passenger transport (Ibid). The city only gained its first subterranean railway in 1902 after plans for an elevated east-west line with an intermediary northern branch were amended to alleviate concerns over the visual impact of its western sections (Lemke & Poppel 1996; Hardy 1996). Thus, Berlin's Gesellschaft für elektrische Hoch- und Untergrundbahnen [Elevated and Underground Electric Railway Company] (GeHUB) built three stations and 2<sup>1</sup>/<sub>2</sub> km of track of the city's first electric railway line underground. In its first year of full operation this line carried around thirty million passengers (Zach & Evers 2003) and the network was soon extended underground to the west and north (Hardy 1996). Then in 1910 the independent municipality of Schöneberg<sup>20</sup> opened its own subterranean railway - a short line with five stations (today's U4 Line). By 1913 GeHUB had extended its network to cover 36 km, mostly through elevated and surface level track, towards the city's peripheries and was now carrying over seventy-three million passengers annually (Ibid; Zach & Evers 2003). This rapid expansion might have continued had it not been for the onset of WWI. The conflict separated not only the first two phases of the U-Bahn's development but also its technologies. Although planned earlier, the U-Bahn lines opened after WWI from 1923 onwards were designed for new larger profile trains (Hardy 1996).<sup>21</sup> The first of these lines were the so-called Nord-[North-South Süd-Bahn Line] and the Gesundbrunnen-Neuköllner-Bahn

<sup>&</sup>lt;sup>19</sup>This term is now commonly used synonymously with the 'Underground' to refer to the whole network including cut-and-cover and surface sections.

<sup>&</sup>lt;sup>20</sup>Schöneberg became part of Berlin under the Greater Berlin Act of 1920.

<sup>&</sup>lt;sup>21</sup>The prewar small profile lines remain in service today and continued to be extended after WWI.

[Gesundbrunnen-Neukölln Line] (GN-Bahn), which along with the rest of the network were alphabetised in 1928 to become the C and D Lines (today's U6 and U8 Lines).

Meanwhile, in the early 1900s London witnessed the first attempts to integrate the rapidly growing and competitive landscape of railways beneath its surface. From 1900, Charles Yerkes, an American financier, bought up numerous unfinished Tube schemes and a controlling stake in the District before merging these assets in 1902 as the Underground Electric Railways Company of London Limited (UERL) (Barker & Robbins 1974). By 1907 UERL completed the construction of the unfinished schemes, which are today known as the Bakerloo, Piccadilly and Northern Lines, and also established a common publicity scheme with the Metropolitan, District, CSLR, CLR, the Great Northern and City Railway (GNCR).<sup>22</sup> In 1910 UERL amalgamated its Tubes as the London Electric Railways Company and by 1913 had taken over CSLR, CLR and the London General Omnibus Company to create the so-called Underground Group so that only the WCR, the Metropolitan and the latter's subsidiaries, the GNCR and East London Railway remained outside its control (Wolmar 2004). However, WWI soon interrupted the line extensions and station improvements that UERL pursued in a "process of knitting together the disparate lines" (Ibid, 206). Besides extension, most of UERL's work programme in the 1920s and 1930s focussed on modernisation (Day & Reed 2008) and placed a new emphasis on design, mostly attributed to the efforts of Frank Pick to transform the network into "a work of public art that united modern painting, sculpture, and architecture into a glorious Gesamtkunstwerk" (Saler 1999, 28; Forty 1986) (see p.98-100). Pick continued to stress the importance of a strong design and corporate identity in his role as head of the London Passenger Transport Board (LPTB), created when the London Passenger Transport Act came into effect on 1<sup>st</sup> July 1933. This law unified all of London's subterranean railways for the first time under the management of a single entity, the first in a series of public transport authorities known commonly as London Transport (LT) until 2000.<sup>23</sup> In its first year LPTB carried 416 million passengers across approximately 365 km of track (Barker & Robbins 1974), a landscape that was now not only to a great extent subterranean but was also now fully integrated and managed as the 'Underground'.

<sup>&</sup>lt;sup>22</sup>Opened in 1904.

<sup>&</sup>lt;sup>23</sup> London Transport' remains in popular use today.

In Berlin the city's public transport was centralised with the creation of the Berliner Verkehrs-Aktiengesellschaft [Berlin Transport Corporation] (BVG) in 1928 following the political and economic foundations provided by the creation of Greater Berlin in 1920 (Reif 2004).<sup>24</sup> BVG, the culmination of Berlin's Social Democrat Councillor for Transport, Ernst Reuter's efforts to create a unified municipal transport network, merged GeHUB with the city's bus and tram providers (Reif 2004). However, it did not affect what had since 1924 become known as the S-Bahn, as this was a subsidiary of the Deutsches Reichsbahn [the German State Railway] (DR), which had been formed in 1920 (Bley 2003). BVG oversaw the opening of Line E (today's U5 Line) as part of a building programme planned to last fifteen years and to construct over 90 km of new track (Reif 2004); by 1930 the network covered 76 km and carried around 257 million passengers (Zach & Evers 2003). The full programme, however, was never realised: instead the transport authority reflected first the economic and political problems of the Weimar Republic, as illustrated by the BVG workers' strike of November 1932, which involved a crude alliance between Communist and Nazi union members (Reif 2004), and later the impact of the rise to power of the Nationalsozialistische Deutsche Arbeiterpartei [National Socialist German Workers' Party] (Nazi Party).

In April 1933 BVG was Nazified through the immediate appointment of the National Socialist, Johannes Engel, as Berlin's State Commissioner for Transport and chairman of BVG's supervisory board (Büro des Reichstags 1934; Schneider 1987; BVG 2013b). Engel soon established a BVG security service to gather information about and intimidate its workforce, and oversaw a purge that removed around 2,000 employees because of their political views (Schneider 1987; BVG 2013b). No new U-Bahn lines were opened during the Nazi period but a North-South S-Bahn line (today's S1 and S2 Lines) was built between 1934 and 1939. It involved the construction of a 6 km tunnel, which passed under a number of watercourses, and six stations beneath the city centre (Braun 2008). With the arrival of WWII these subterranean stations, along with those of the U-Bahn, became a place for the city's population to shelter, particularly during the last days of the battle of Berlin when the city witnessed street fighting and heavy aerial bombing (Moorhouse 2010; Merrill forthcoming). Immediately after WWII the network lay inoperable. Significant sections of the underground network had been completely destroyed or exposed by bombing, and large amounts, including the whole North-South

<sup>&</sup>lt;sup>24</sup>BVG became the Berliner Verkehrsbetriebe in 1938 but retained its original acronym.

S-Bahn tunnel, lay flooded (Berger 1948; see p.232-238). The post-war repairs to the tunnel were only completed in 1947 and the U-Bahn network was returned to its prewar extent only by late 1950. By this time the city's Cold War division had already taken its toll on BVG.

In London, LPTB's 'New Works Programme 1935-40' (NWP) extended the Bakerloo and Northern Lines but was then interrupted by WWII, which suspended the extensions to the Central Line after the completion of the tunnelling (Barker & Robbins 1974; Demuth 2003; Day & Reed 2008). Thereafter the Underground's landscape was quickly reformulated for wartime conditions. For example, the LT was brought under government control with the formation of the Railway Executive Committee (REC). The single greatest aspect of WWII to impact the Underground, however, was the sustained aerial bombardment of London by the German Luftwaffe between September 1940 and May 1941, known as the Blitz, which killed around 30,000, seriously injured over 51,000, and left 1,400,000 people homeless (Field 2002; Bell 2008).<sup>25</sup> While sheltering was initially forbiden in the Underground due to the desire to maintain normal transport services and the authorities' fear that the public would develop a 'deep shelter' mentality (Calder 1969), the defeat of France, the politicisation of the issue by the British Communist Party and the intensification of the air-raids (Gregg 2001) led to permission being granted from late summer 1940, after which shelterers jostled for space with paying passengers on Tube station platforms. Soon unfinished extensions were converted into shelters or munitions factories while a disused station was repurposed as the REC's headquarters. Like the U-Bahn, the Underground also suffered a number of direct bomb hits but overall fared much better (see Chapter Seven; Merrill forthcoming). Post-war rehabilitation efforts were, however, still necessary but were also hampered by a lack of funds, caused partly by LPTB's bundling with other interests in national compensation schemes (Bownes et al 2012). Thus LPTB abandoned many elements of the NWP although it did finally open the Central Line extensions by 1946 (Ibid).

The Labour Government's nationalisation policies led to the replacement of LPTB in 1948 by the London Transport Executive (LTE). Although hamstrung by postwar

<sup>&</sup>lt;sup>25</sup>London also experienced the 'Little Blitz' of early1944 and the flying rocket raids of June 1944 to March 1945.

austerity and a decade of chronic underinvestment, LTE did oversee the start of the Victoria Line's construction in 1962 (Ibid). During LTE's tenure, however, the Underground was mostly characterised by worsening conditions, high levels of overcrowding and breakdowns, which occasionally led to spontaneous passenger protests (Ibid). Subsequently the 1962 Transport Act reorganised London's public transport again and in its centennial year created the London Transport Board (LTB) to manage the Underground. The LTB's activities were restricted by the emphasis placed on road travel by national transport policies characterised by the so-called 'Beeching' cuts to the mainline railway network, and, in London, the Conservative-led Greater London Council's (GLC) pursuit of the 'motorway-box' scheme (Ibid; see Robertson 2007). Still the LTB oversaw the opening of London's first Tube in sixty years, the Victoria Line, in 1969, which in technological terms represented the Underground's "last moment of outright world leadership" (Bownes et al 2012, 197).

Public transport in the German capital was marked more by the political rather than the economic consequences of WWII. The divisive pressure caused by national currency reforms, the Berlin blockade, the split of the Berlin Magistrate,<sup>26</sup> and the foundation of two separate German states,<sup>27</sup> coupled with specific disputes regarding the physical location of BVG's headquarters, personnel policy and competing trade unions, led to the transport authority's split into BVG-West and BVG-East in August 1949 (see Schneider 1987; Reif 2004; Merrill 2014b). BVG's separation saw responsibility for different parts of the network allocated according to the geography of the city's division. The A Lines (today's U2 Line), which crossed the divide, required inter-sector train crews with BVG-West operating the western sections and BVG-East, those in the east. BVG-West retained full responsibility for the B Line (today's U1 Line) since only one of its stations lay in the east. Responsibility for the eastern sections of the C and D Lines, which ran from north to south West Berlin beneath East Berlin, were handed to BVG-East while BVG-West retained responsibility for its western sections, train crews and power supply. Finally BVG-East gained full responsibility for the E Line as it lay entirely in the east.<sup>28</sup> As other BVG passenger services reflected division more markedly, the shared U-Bahn remained the 'last bridge' in the network (Reif 2004, 10), at least until the Sozialistische Einheitspartei Deutschlands [Socialist Unity Party of

<sup>&</sup>lt;sup>26</sup>A West Berlin Magistrate was formed in November 1948 and became the West Berlin Senate in 1950.

<sup>&</sup>lt;sup>27</sup>West Germany was created on 23<sup>rd</sup> May 1949 and East Germany was created on 7<sup>th</sup> October 1949.

<sup>&</sup>lt;sup>28</sup>Trains and other infrastructural assets like depots were also apportioned.

Germany] (SED) of the Deutsche Demokratische Republik [German Democratic Republic] (DDR) constructed the Berlin Wall (hereafter referred to as the Wall) on 13<sup>th</sup> August 1961. The Wall cut twelve railway lines (Taylor 2006), and turned fifteen separate subterranean stations into so-called Geisterbahnhöfe [ghost-stations] (see Chapter Eight).

During Berlin's physical division the fates of the U- and S-Bahn were different on either side of the Wall. In West Berlin, aided by subsidies from the Bundesrepublik Deutschland [Federal Republic of Germany] (BRD), the West Berlin Senate (Senate) adopted the so-called '200-km-Plan' to extend the U-Bahn network to 200 km. Thus the third major phase in the network's development commenced. By 1958 the C Line had been extended to the north and providently a new G Line was opened in 1961 to provide a north-south route that avoided East Berlin (Lemke & Poppel 1996). The Wall, along with a heightened political boycott of the DDR-owned S-Bahn network<sup>29</sup> by West Berliners, motivated further U-Bahn construction in West Berlin, and the C Lines were extended south by 1966, the same year in which BVG-West allocated numbers to each of its lines (Hardy 1996). By the mid 1980s the major extension of the U9 (formerly G Line), U7 (formerly C I Line), and U8 (formerly D Line) had increased the network to cover 122 km (Zach & Evers 2003). The 200-km-Plan also involved the resurrection of plans dating from the 1920s for the U10 (formerly known as F Line) (see Chapter Nine). While sections of the U10 were pre-emptively built in places across West Berlin the line's construction was eventually shelved when the Senate and BVG-West took over the neglected western sections of the S-Bahn network in 1984 and instead focused their attention on their restoration (Gallico 2011).

The physical extensions to the U-Bahn in the east, overseen by the East Berlin Magistrate (Magistrate), BVG-East and its 1969 successor, the Kombinat Berliner Verkehrsbetriebe [Berlin Transport Service Combine] (BVB), hardly compared to those of the west. In East Berlin, Line E, as it remained known until 1990, was extended one stop underground in 1973 and then at surface level to Honow by the summer of 1989. The fall of the Wall shortly afterwards laid the foundations for German reunification, the reconnection of the U- and S-Bahn networks and the reopening of the ghost-stations (see Chapter Eight). Subsequently BVG-West and BVB remerged and were rebranded

<sup>&</sup>lt;sup>29</sup>The S-Bahn remained a subsidiary of DR, which became the DDR's state railway after WWII.

as BVG in 1992 (see Merrill 2014b). Reunification also encouraged the authorisation of a bundle of tunnelling projects, including the extension of the U5 westwards to the city's new government quarter (Peters 2010). The construction of the western sections of this extension began in 1998, but as its nickname, Kanzlerbahn [the Chancellor Line], suggests, it soon attracted criticism for being an unprofitable prestige project (Kurpjuweit 2009). Despite attempts by the reunified Senate to postpone its construction indefinitely, the U55, a 1.8 km stretch of tunnel connecting three stations was opened in 2009 – one of only three minor post-reunification extensions of the U-Bahn network. In 2010 construction of the extension's remaining 2.2 km of tunnel and three stations recommenced with the expectation that they will be completed in 2019 (Spiegel Online 2013).

In London the LTB was transferred in 1970 to the GLC (established in 1965) where a London Transport Executive (LTE-GLC) once again managed the city's transport provision. LTE-GLC oversaw a number of network extensions under revolving Conservative and Labour GLCs and also opened the new Jubilee Line in 1979, although the latter relied heavily on existing track (Bownes et al 2012). In fact continued neglect, poor performance and incidents like the 1975 Moorgate Tube crash (see p.217-224) all eroded public confidence in the network during these years, so that in 1982 only 498 million journeys were recorded, in comparison to the 720 million of 1942 (Ibid). The nadir of this neglect and underinvestment came with the 1987 King's Cross fire (see p.211-217) after the London Regional Transport Act had returned LT to direct government control in 1984 by creating London Regional Transport (LRT).<sup>30</sup> This act also led in 1985 to the creation of London Underground Limited (LUL), a subsidiary of LRT tasked with running the Underground network. The official inquiry into the fire revealed major shortcomings in LRT and LUL's management and safety structures, and led to the resignation of both organisations' chairmen. Their replacements ushered in a new business-orientated approach where customer safety and satisfaction were prioritised (Ibid). Following the fire the government acknowledged the Underground's chronic underinvestment and sanctioned a number of high-cost modernisation and safety improvement projects that aimed to assert "that the Underground was now an owned and managed environment" (Bownes et al 2012, 228; Day & Reed 2008). Meanwhile the success of the Canary Wharf development and the inadequacy of the

<sup>&</sup>lt;sup>30</sup>The GLC was abolished in 1986.

Docklands Light Railway (DLR) led to the Jubilee Line extension which was opened in stages from May 1999, but not without significant overspend and delays (Ibid).

The failures of the Jubilee Line legitimised the Labour Government's decision to operate the Underground as a public-private partnership (PPP) following the creation of the Greater London Authority (GLA) and LRT's replacement with Transport for London (TfL) in 2000. In 2003, thirty-year contracts were signed with two companies, Metronet and Tube Lines, to maintain the Underground's infrastructure and rolling stock while TfL operated the publicly-owned LUL (Ibid) but the PPP proved to be a failure. Metronet went into administration in 2007 and was then transferred to TfL. Tube Lines was bought out by TfL following a funding shortfall in 2010 (Ibid). At the same time TfL's network grew to include, in 2007, the Overground's orbital and suburban lines, and then in 2010 the Crossrail development was authorised. The Crossrail project, whose tunnel boring began in 2012, will create an additional 42 km of track beneath London. It will require the major redevelopment of numerous centrally located subterranean stations and will in effect be "London's next Tube, but on a mainline scale" (Ibid, 255) when it opens in 2018.

## 3.3.2 Hidden heritages

In July 2011 Britain's Heritage Minister, John Penrose announced that sixteen Underground stations were to be added to the National Heritage List of England [NHL]:

"Millions of people pass through London's Underground system every day, with little thought for the historic design and architectural features that are right under their nose as they hurry underground to catch their trains. Tube stations are great examples of the capital's hidden heritage" (DCMS 2011, n.p).

The new listings brought the overall number of nationally heritage-listed Underground stations to seventy – more that twenty-five per cent of the network's total – and many more feature prominently in local conservation areas (Ashworth 2008; Keate 2013). The first to be listed in the early 1970s were some of the surface-level stations designed in the early 1930s by the Underground's most famous architect, Charles Holden. A little later Kennington became the first deep-level station to gain protection. The fact that the heritage listing of Victorian and Edwardian Underground stations, which did not commence in earnest until the late 1980s, was preceded by examples of Holden's modernist architecture hints at LT's earlier recognition of the value of its interwar

'golden past' (see p.98-100). Only in 1987, when Baker Street Underground station was listed, having been extensively restored four years earlier, did an original Metropolitan station gain representation on the NHL. Around the same time English Heritage's (EH) plans to survey the whole network were cancelled because of LT's fear that heritage protection might restrict the changes required after the King's Cross fire (Keate 2013). Thus heritage management was (and in many ways continues to be) considered as subservient to the other challenges posed of the publicly accessible parts of the network, including those related to fire, health, safety and security management or disability access (Ashworth 2008).

More recently, as the newly listed stations testify, EH and TfL have developed a more effective partnership and the latter has become more committed to managing its heritage, particularly during its time as a PPP. This new management structure led LUL to draw up heritage inventories to guide private contractors and, in 2005, to create a new job position when Mike Ashworth was employed as the first Design and Heritage Manager. Soon after several heritage-based design principles and a good practice guide (LUL 2006) were adopted before LUL introduced its own heritage plaque scheme in 2007 (Ashworth 2008). Each of these tools, along with the advisory notes that exist for all stations, including those recently built, today contribute to the transport authority's prescriptive approach to heritage and design management (Ibid). The most recent EH survey sought to ensure that a representative selection of the Underground's historic phases were granted heritage protection and thus addressed the deficit of heritage-listed stations dating to the Underground's Edwardian expansion by listing multiple works by UERL architect, Leslie Green (Keate 2013). Still there is the clear acknowledgment that, as Ashworth succinctly put it, the Underground's "heritage has to work for its living" (2008, 117).

It has done so primarily as a vehicle for TfL's brand and corporate identity, which emphasises, more than most periods of the Underground's past, the interwar years that saw Pick foster a design ethic founded on the notion of 'fitness for purpose' (see p.98-100). This is still the era most represented on the NHL. TfL also utilises its heritage through the activities of the London Transport Museum (LTM). The LTM was established in 1980 and was registered as a charity in 2008. It existed earlier as the London Transport Collection from 1973, and during the 1960s was part of the British Museum of Transport. Essentially the LTM carries out the curatorial duties required of

TfL by the GLA Act of 1999, with TfL being one of its major financial sponsors (LTM 2013).

Berlin's closest counterparts to the LTM are, firstly, the Berlin U-Bahn museum, which was established in 1997 by the Arbeitsgemeinschaft Berliner U-Bahn Eingetragener Verein. [Berlin U-Bahn Working Group Association] (ABUe.V.), and secondly, the Berlin S-Bahn museum, also established in 1997, which displays the collections amassed by its volunteers since the 1980s to the public on two days every month, in an intentionally 'non-academic' manner (Berliner S-Bahn-Museum 2014). The former can be traced back to a group of BVB employees who curated decommissioned rolling stock during the early 1980s but failed in their attempts to transfer their collection to the Deutsches Technikmuseum Berlin [German Museum of Technology in Berlin] (DTB) in the early 1990s (ABUe.V. 2014). Like the S-Bahn museum it operates a very limited and mostly voluntary public programme and opens for one day each month, occasionally organising more specialised tours (see p.291-294). Meanwhile, the DTB, which was established in 1982, maintains a railway collection and archive that is primarily national rather than municipal in scope. While BVG has less of an institutionalised heritage framework than TfL it also presides over numerous heritageprotected properties.

As of 2007, eighty-six stations – over fifty per cent of the U-Bahn network – were heritage protected (Bongiorno, 2007). Here, unlike in London, large stretches of tunnels and the routes themselves are included on heritage inventories (Ibid; cf. Ashworth 2008). The first parts of the network to be heritage listed were added in 1977 in East Berlin (Kutscher 2008). For the most part, however, both BVG-West and BVB were reluctant to allow listing, although for the city's 750<sup>th</sup> anniversary in 1987 they both supported separate restoration projects (Ibid; Staroste 2008). BVG-West restored the entrance hall of Wittenbergplatz U-Bahn station, originally designed by the Swedish architect, Alfred Grenander, in 1913 (Kutscher 2008). Meanwhile, BVB converted Klosterstraße U-Bahn station, also designed by Grenander, into a modest museum of the city's transport history by installing large enamel signs featuring Berlin's historic rolling stock. Grenander can be considered to be the U-Bahn's counterpart to Holden, although he is generally less well-known to Berliners than Holden is to Londoners. His career predated that of the English architect by about two decades and, in fact, there is strong evidence to suggest that the Swede's underground architecture in Berlin influenced Holden's

practice in London after Pick and Holden visited the German capital during wider architectural tours of Europe (see Weber, U 2006). Between 1902 and 1930 Grenander designed over fifty U-Bahn stations, many of which are now heritage listed.

German reunification brought opportunities to conserve historic stations that had sat undisturbed for nearly thirty years, but also brought risks associated with their rapid rehabilitation and the need to ensure that they met minimal safety and operational demands (Staroste 2008). These tensions resulted in numerous disagreements between Berlin's Conservation Office, who listed numerous stations during the 1990s, and BVG, who fought against the costs incurred and the restrictions imposed on their redevelopment plans by heritage listing (Ibid). Only in 2001 did the two parties agree on a heritage framework that eased these disagreements (Ibid). Today concern for the U-Bahn's heritage has spread to more recent periods, as illustrated by the growing awareness of the historic value of some of the fifty eclectic and colourful U-Bahn stations designed by Rainer Rümmler between 1966 and 1996, which might have destroyed earlier architectural fabric but now face a similar threat from contemporary upgrade programmes.

In 2002 BVG marked the U-Bahn's centenary by installing commemorative plaques at all of the stations opened in 1902. Fifty years prior to this, BVG-West had also marked the U-Bahn's fiftieth anniversary with rather muted celebrations whose highlight was the presentation by the Commandant of the British Sector in Berlin, Charles Coleman, of a Wittenbergplatz U-Bahn station sign in the style of the Underground (Meyer-Kronthaler & Kurpjuweit 2009). In 2013 BVG celebrated what would have been Grenander's 150<sup>th</sup> birthday by installing a memorial stele at Alexanderplatz U-Bahn station. In London, meanwhile, 2013 was extensively celebrated as the 150<sup>th</sup> anniversary of the Underground as a whole. In the British capital commemorative events took place throughout the year, following the highlight: a series of heritage steam train journeys along the original route of the Metropolitan (Merrill 2012; Pike 2013b). For the most part these events echoed the diverse range of mnemonic strategies that LT had used to mark the network's centenary in 1963, including exhibitions, television documentaries, film screenings, historical re-enactment, rolling stock parades, heritage train journeys and the inauguration of memorials, but they could also occasionally be traced to the earlier more modest celebrations of the fiftieth anniversary of 1913 and the opening of the Metropolitan itself (Merrill 2012). In this sense they sat in a long line of commemorative genealogies that provided an opportunity to reassert the Underground's chronological primacy following the loss of its technological leadership to modern competitors (Ibid). Thus, after taking part in the first heritage steam train journey of January 2013, London Mayor, Boris Johnson told members of the press, "the London Underground is one of the greatest mass-transit systems in the world, if not the greatest. It's the oldest and the best" (The Telegraph 2013).

These official histories and heritages and their primary emphasis on each network's physical development, technological milestones, pioneering architects and engineers, and celebratory moments provide both context and contrast to the non-official social memories that primarily interest me here: the 'buried memories' that I seek to understand through a series of empirical 'excavations' that in the forthcoming chapters rely on the application of an array of mixed methodologies.

### 3.4 Mixed and multi-sited methodologies

Memory research "demands liminal practices" situated between disciplines and "not just combinations of, but, more accurately, hybridized methods" (Radstone 2000, 13). Similarly, transport historiography will only benefit from the research agendas of the so-called cultural and spatial 'turns' if "a pluralism of methodologies and evidence" is adopted (Divall & Revill 2005, 106). Thus in the following empirical chapters I apply a broad range of collection and analysis methods within a multi-sited approach in an attempt to 'follow' the production of particular social memories (Basu 2013; see also Marcus 1995). This approach requires methodological dexterity and a range of research skills but provides a means of tracing social memories across historical archives and ethnographic and geographic fields (Ibid). Thus for the collection of data I relied on three primary methods (and their respective sites): archival research, participant observation, and field survey, complemented by key informant interviews, although the material generated by the first of these methods became most pronounced overall. In turn I pursued a range of qualitative and inductive analysis methods to interpret this material within the theoretical frameworks established in the last chapter, and in order to contribute to an overall comparative understanding of my main and sub-level cases.

### 3.4.1 Data Collection Methods

#### Archive Research

During archival research I consulted a wide array of institutional archives, libraries and museums (see Appendix A). The material that I viewed at these repositories included (but was not limited to): newspaper articles; planning and policy documents; decisions, minutes and records; visual representations including architectural drafts, plans, diagrams, maps and photographs; publicity material, such as posters and pamphlets; staff and enthusiast magazines; personal accounts and recorded oral histories; and ephemera. I also accessed a number of professional and amateur online digital collections and approached the Internet as an archive (Pentzold 2009; Rogers 2013). This allowed me to widen the material I collected to include sources viewed online, such as digitalised collections of physical documents and also the contemporary personal commentaries provided by social networking sites and personal websites.

In its function as an archive the Internet has recently been acknowledged to be a key realm of social memory by a growing number of studies that examine the digital mnemonic mediums mentioned in Chapter Two (p.36). Thus the Internet not only provides material related to mnemonic production but is in itself a key site and vector of social memory (Gehl 2009; Pentzold 2009; Garde-Hansen et al 2009). The same is true of the physical archives that have traditionally been recognised as the preserve of state institutions and sites of official memory that exercise power not only through modes of inclusion and exclusion, but also through the degrees of public access that they grant (Olick & Robbins 1998; Schwartz & Cook 2002; Basu 2013). Recently, however, and aided by the growing accessibility of archiving technologies, there has been an increase in independent, community-led and often politically motivated archives (Flinn 2011). Accordingly, during research I also consulted a number of physical and digital grassroots archives (and personal collections) associated with, amongst others, enthusiast societies and autonomous political groups.

The impossibility of archives, physical or digital, to reflect all features and facets of society is manifested by acts of power that determine their contents through processes of inclusion, distortion, omission, erasure and restriction (Carter 2008). Therefore silences and limits can appear in archives intentionally, passively or unconsciously due to their function as a vehicle of state power, or for more mundane reasons related to

their rationalisation, reorientation, or financial and spatial restraints (Ibid). I came across such silences and limits during my research for a range of reasons including the intentional and the circumstantial - deactivated Internet links and blog postings, the destruction of archive holdings during WWII, and restrictive public access policies. Many of these silences and limits were used as an additional means to shed light on processes of social memory production in ways that appreciated that "silence is never absolute" (Carter 2006, 225) and thus 'absent-presences' can be read "against the grain" (Schwartz & Cook 2002, 15) in order to understand their "poetics of exclusion" (Greetham 1999, 19).

### Participant Observation

I maintained an 'ethnographic sensibility' while visiting archives (Basu 2013) but mostly collected ethnographic material during periods of formal and informal participant observation in the field. Although the demarcation of ethnographic fields remains controversial, I defined mine, according to standard disciplinary practices primarily in geographic terms as the networks of the Underground, U- and S-Bahn (Gupta & Ferguson 1997; Des Chene 1997). Besides conducting informal participant observation during my everyday use of the networks I also pursued formal periods of participant observation involving prolonged, repeated and deeper engagements with particular places, communities and their respective memories, including those focused on commemorative events and public tours. I recorded my observations and reflections in a field journal, with photographs, and occasionally with audio and video recordings.

My chosen field complicated ideas of community, with the social experience of underground railways most regularly framed by notions of solitude and Georg Simmel's idea of blasé indifference (1997[1903]). Yet community and indifference are not necessarily mutually exclusive in the city (Tonkiss 2005) or on public transport (see Bissell 2010) and therefore I observed both 'imagined' (Anderson 1991) and actual mnemonic communities such as groups of enthusiasts, activists and artists. Studying underground railways ethnographically also complicated the notion of 'field' as traditionally defined by exotic contexts, maximal degrees of cultural difference and small-scale communities or groups (Des Chene 1997). In this way, and hoping to learn how city-dwellers "make sense of their social worlds", within the particular context of social memory production, my ethnographic approach echoed those first developed by

the Chicago School of urban sociology of the 1920s and 1930s (Anderson 2009, 372). Despite this school's legacy, hierarchies continue to define ethnographic research and tend to elevate prolonged and immersive periods of fieldwork in non-Western contexts over alternatives (Chene 1997).

While such hierarchies are being eroded by the uptake of multi-sited ethnographies (Basu 2013) they continue to hint at a concern for the researcher's critical distance despite the common acceptance that "participants are also observers, insiders double as outsiders and ethnographers become immersed in the lives of strangers" (Han 2010, 11). Balancing these roles can be difficult and for multi-sited approaches can involve the regular renegotiation of the researcher's identity and positionality (Marcus 1995). Ultimately, overemphasising observation can undermine more complete understandings of what is researched while strong participation

"might result in what is called "going native", that is ...over-identifying with and being an uncritical celebrant of the subculture" (Thornton quoted by Bennett 2002, 140).

Recently, however, some have argued that 'going native' provides key avenues of understanding facilitated by the autoethnographic method (Garrett 2011). In fact the autoethnographic method is far more sophisticated than – and should be distinguished from – 'going native' insofar as it not just about the researcher's self-exposure for its own sake but provides a means to reintegrate the researcher's body and mind into his or her scholarship and ensure self-reflexivity (Spry 2001). Thus at times I used autoethnographic approaches to unseat my privileged position as the researcher and communicate my presence and positionality (Ibid). These and others techniques allowed me to address the social memories embodied or 'buried' as habits, performances, emotions and affects in, not just others' bodies, but also my own, thereby opening ethnographic interactions to self-observation and reflection, and appreciating that "what happens within the observer must be made known...if the nature of what has been observed is to be understood (Behar quoted by Ibid, 711; see for example p.291-293). However, my overall approach of triangulating these (self-)observations with other data, and placing them within a broader concern for the production of social memory, is perhaps best described as more an analytic rather than purely evocative form of autoethnography (see Anderson 2006).

The increasingly blurred boundaries between research and activism across the critical social sciences and, in turn memory studies (see Kitchin & Hubbard 1999; Till 2012) also complicate criticisms of over-participation. In this respect I favoured critical distance over deeper involvement and decided not to contribute actively to grassroots memory campaigns (see Chapter Six and Seven) unless explicitly invited to do so.<sup>31</sup> At the same time, illustrating that memory research and researchers often become "part of the phenomenon that they seek to explain" (Olick & Robbins 1998, 133), I occasionally, intentionally or serendipitously, facilitated scenarios which provided opportunities to observe ethnographically the production of social memory in and about my main cases.<sup>32</sup>

## Field Survey

During my research I applied a hybridised form of field surveying as a means to capture contemporary material details of the landscape. This combined the methodologies of contemporary archaeology (see Harrison & Schofield 2010) and cultural geography and recognised the productive compatibilities of the two sub-disciplines (see Hill 2014). As a non-intrusive archaeological method which establishes areas of interest by identifying both human and technological processes on the surface, this method helped "break down the conceptual division between sites and landscapes" and provided a means to confidently extrapolate findings from one place to wider environments (Green 2002, 55). Furthermore, through an emphasis on surfaces it was applied to the stratigraphic sequences displayed in the vertical, as much as the horizontal, planes of the built environment (see Morriss 2002). The compatibility of archaeological modes of field survey with those associated with the cultural-geographic study of landscape study, such as Sauer's morphological method (1963[1925]), allowed their use to complement my wider systematic observations of the processes that have shaped the Underground, U- and S-Bahn with a sensitivity for discrete features, traces and artefacts.

Through this sensitivity and its urban context of application, my mode of field survey was reminiscent of the 'flânerie' associated with the work of Benjamin, although it differed due to its more concerted and focused approach. For Benjamin, flânerie was an

<sup>&</sup>lt;sup>31</sup>No such invitations were received.

<sup>&</sup>lt;sup>32</sup>For example I organised a visit to the disused Aldwych Underground station as part of an academic workshop (see Chapter Eight) and co-organised a public conference to mark the Underground's 150<sup>th</sup> anniversary.

implicit search for traces and minor, often unexceptional or ordinary, objects and places, in appreciation of their ability to disclose knowledge (Tonkiss 2005). In Benjamin's flâneries memory played a significant role as he viewed urban landscapes as capable of giving rise to both autobiographical and social remembrances – "buildings, spaces and objects hold onto meanings as pasts that are no longer visible press on the experience of the present" (Ibid, 120). In fact, in recalling how, in Paris he had learnt the 'art of straying' Benjamin revealed the extent to which for him flânerie and memory were also entwined with the underground.

"I cannot think of the underworld of the Métro and the North-South line opening their hundreds of shafts all over the city, without recalling my endless flâneries" (1999[1932], 598).

Thus I used field surveys to identify concentrations and traces of the past that could implicitly or explicitly function as foci of memory, whilst appreciating the wider anthropological dynamics that shaped the Underground, U- and S-Bahn's landscapes as a whole. Just as Benjamin attended to the discrete 'thingness of space' (Merrifield 2002) this method garnered information from a diverse range of material details including graffiti, stickers, waste, information boards, elements of interior decoration and signage.

## Key Informant Interviews

I also collected material through nineteen semi-structured interviews<sup>33</sup> and numerous informal correspondences and conversations with a range of key informants who were purposely selected based on their potential value to research goals related specifically to individual lines of investigation.<sup>34</sup> These communications served to fill thematic and chronological gaps in the material recovered by other means, but also helped identify additional lines of research. The majority of interviews were audio recorded and were either partially or fully transcribed where deemed necessary. Informal correspondences and conversations were mostly conducted through email and social networking sites, or during archive visits and participant observation periods, and were usually recorded either electronically or in my field journal.

<sup>&</sup>lt;sup>33</sup>A research information sheet and informed consent form were given to each interviewee according to UCL regulations (see Appendix B).

<sup>&</sup>lt;sup>34</sup>A list of the interviews and communications referred to in this thesis is provided in the bibliography.

## 3.4.2 Data Analysis Methods

## Genealogies and Biographies

I used archive material to reveal and demonstrate the genealogies of particular mnemonic foci. This genealogical approach contributes to a historiography of social memories, which helps illustrate how the status of various social memories has changed through time due to the actions of various structures, processes, actors and discourses, by highlighting discontinuity as much as the continuity that usually underlies traditional historical reconstructions. Foucault writes,

"Genealogy does not pretend to go back in time to restore an unbroken continuity that operates beyond the dispersion of forgotten things... On the contrary, to follow the complex course of descent is to maintain passing events in their proper dispersion; it is to identify the accidents, the minute deviations – or conversely, the complete reversals – the errors, the false appraisals, and the faulty calculations that gave birth to those things that continue to exist and have value for us" (1977, 146).

Thus genealogical approaches emphasise plural, alternative, power-laden and potentially contradictory pasts making them well suited for the study of social memory. A genealogical emphasis is also compatible with the data collection methods outlined above insofar as it requires "a knowledge of details" and depends "on a vast accumulation of source material" (Ibid, 140).

My genealogical approach to social memory aims to advance the biographical approach considered by Till (2006; 2012). Till notes how the latter runs the risk of being deployed in an overly predictable, narrow and simplistic manner (2006). Despite parallels between the two approaches, care has been taken to avoid these risks by complementing a biographical concern for discrete moments with a genealogical interest in longer durations. Thus the genealogical approach aims to illustrate how the mnemonic nature of sites (with or without explicit memorial functions) changes over time and how particular events, mnemonic practices and places can become institutionalised as forms of official memory rather than simply providing a means to narrate these processes. An appreciation of the co-mingling nature of different forms of memory and the changing motivations and interests of their respective actors, along with a focus on less or non-oppositional creative forms of counter-memory, all, in turn, help to minimise the risk of repeating some of the other weaknesses of the biographical

approach, which relate to the conception of counter-memory in purely oppositional terms and the presupposition of the existence of coherent group identities and agendas.<sup>35</sup>

## Ethnographic Analysis

As is standard practice, I commenced the analysis and interpretation of ethnographic material during its collection (LeCompte & Schensul 1999). I focused my ethnographic observations by triangulating them with the material collected by other means, and identified themes to question further (Lofland et al 2006). These included particular mnemonic practices, episodes and encounters which were questioned more explicitly to reveal their frequency and magnitude, structural and processual organisation, causes and consequences (Ibid, 144). I continued to analyse the ethnographic material I had collected after my main fieldwork period by returning to these themes afresh in connection with other research materials and the dominant discourses that these revealed.

This extended period of analysis and reflection often relied on my personal memory of ethnographic episodes, to the extent that the production of social memory both influenced and became susceptible to the cognitive processes of my autobiographical memory. In practice I rewrote my fieldnotes as more substantial journal entries immediately after returning from the field, and then edited these to appear throughout this thesis as brief observational ethnographic statements. This communicative technique adds to the understandings of social memory in ways similar to Till's geoethnographic method and its use of episodic fieldnotes to expose her experiences to the interpretations of the reader, question "the process of ethnographic research" and undermine her "narratives and claims to authority" (2005, 23), in keeping with a broader autoethnographic approach. Thus ethnographic statements in this thesis reveal my positionality and constituent role as a producer of social memory but also provide a means to communicate the more performative, emotional and affective geographies of mnemonic production evident in my case studies. Principally, then, I use ethnography to capture and communicate how my chosen landscapes and their associated social memories sparked individual reactions and performances associated with some of the

<sup>&</sup>lt;sup>35</sup>I also seek to avoid Till's other critiques of the biographical approach, which include its repeated failure to engage critically with the role of the media (see Chapter Six) and its disregard of the individual mnemonic experiences and affective materialities of place that can circulate through media to influence wider notions of social memory (see Chapter Eight and Nine).

most marked of human emotions (see Anderson & Smith 2001), whether negative like grief and mourning (see Chapters Six and Seven) or positive like excitement and enthusiasm (see Chapters Seven and Eight). Secondly, moving towards more affectual registers that avoid self-expressed emotional experiences and the objectification of particular emotions, I used autoethnographic reflection to consider how the affect of social memories could move both within and between bodies (Tolia-Kelly 2006; Pile 2010). The possibility of me and others being affected by the emotive embodied memories of another individual, for example, became evident when observing individual moments of mourning (see p.215-216). Leaving aside the wider ethical problems of emotional and affective geographies (see Anderson & Smith 2001; McCormack, 2003; Pile 2010), these moments created ethical dilemmas linked to the moral entitlement of the individuals I observed to forms of personal remembrance. My 'intrusions' through observation meant that I continued to feel the affective impacts of these encounters well beyond their occurrence - identifying them in the emotional terms of guilt as much as empathy and hoping to minimise the former by, for the most part, preserving the anonymity of those I observed even when their identities were revealed, voluntarily or in the course of further research.<sup>36</sup>

### Representational and Discourse Analysis

I analysed representational material using broadly semiotic approaches in order to reveal deeper cultural meanings and social memories. This mode of analysis draws on the art-historical approaches first developed by Warburg and later adopted by others such as Cosgrove, Daniels (1988) and Schama (1996). These approaches contribute to what Gillian Rose calls a 'critical visual methodology' (2006). This methodology ensures that explorations into the visual agency of representations, including their potential to create ways of seeing and act as vehicles for the production and reproduction of social difference, are framed by an appreciation of their wider social and individual contexts (Ibid). Rose's methodology proposes the analysis of images at three primary sites: those of production; those of the image itself; and those of consumption, and with respect to three modalities: the technological; the compositional and the social (Ibid). It integrates elements of discourse analysis, where discourses are

<sup>&</sup>lt;sup>36</sup>This research received clearance from the UCL Research Ethics Committee and was conducted in accordance with the ethical guidelines provided by the Royal Geographical Society (2006) and the Association of Social Anthropologists of the UK and the Commonwealth (2011)(see Merrill 2011a).

defined as particular intertextual knowledges that have the power to shape thoughts and actions articulated through representations and practices, with Rose demonstrating that discourse analysis can be conducted first at the level of any single representation, which can then be linked to a wider discourse analysis concerned with institutions and practices (Ibid).

Rose's two levels of discourse analysis are methodologically distinguishable. The first level requires the collection of a large quantity of varied representational data that can help provide intertextual interpretations through a process of immersion or, alternatively, relies on a selective procedure that favours the quality of the material, its detail and its potential to provide unique perspectives on existing discourses or highlight new discourses (Ibid). This method is acknowledged to rely partially on the commonsensical skills of good scholarship, interpretative sensitivity and reflexivity, but the adoption of certain basic strategies can help ensure this. These strategies include the suspension of preconceptions, immersion, the identification of key themes, an awareness of complexity and contradictions, consideration of absences, and finally attention to detail (Ibid). Such perspectives complemented the critical reflexive attitudes that I maintained throughout my research, which can be attributed to my post-processualist training in archaeology and its emphasis on the bias caused by researchers' preconceptions, the presentist and political nature of contemporary interpretations and the selectivity that determines in advance the research object in question (Johnson 1999). The second level is more attuned to highlighting the production and reiteration by institutions and their practices of discourses and their constituent material (Rose 2006). In this way it provides a means to connect the interpretation of different forms of material, whether archival, representational or ethnographic. Thus I use this level of discourse analysis throughout the thesis, and not only with respect to the analysis of representations. In other words I attempt to show how the intertextuality of all my different sources of material reveal discourses which have changed over time, reflect power relations and have implications for the production of social memory in the subterranean landscapes of the Underground, U- and S-Bahn.

# 3.5. Conclusion

In this chapter I have outlined the comparative and mixed methodologies that have guided both the selection and investigation of my main and sub-cases. I have also introduced in greater detail the landscapes of the Underground, U- and S-Bahn in order to provide context for the empirical excavations of the next six chapters. By considering networked memories and excavating buried memories identified primarily in archive, field survey and ethnographic material, these chapters trace the genealogies of social memories while highlighting their constituent mnemonic structures, processes and actors along with the wider discourses to which they conform, connect and contribute across the representational, physical and experiential layers of the railways under London and Berlin.

An attention to networked and buried memories across the different scales of these railway networks, e.g. from their everyday landscapes as a whole, through the ordinary daily places that can be beset by extraordinary events, to the anomalies of hidden spaces, plays on the underground's ability to bring together "two different degrees of reality" (Lesser 1987, 3), referring specifically to the quotidian and otherworldly qualities of my chosen cases (Pike 2013a). Thus the social memories that the following six chapters are concerned with are both mundane and exceptional. In Chapters Four and Five I address those memories that are visually and textually encoded in the cartographies that represent each railway network's overall landscape. In Chapters Six and Seven I focus on the socially disadvantaged material and absent memories of publically accessible parts of the network that are associated with grassroots actors and traumatic events. Finally, in Chapters Eight and Nine I turn to the memories of the networks' hidden places, whose potential can be experientially restricted and regulated but also creatively realised.

# **Chapter Four**

Iconic Landscapes: The symbolic heritage of the Underground diagram and U- and S-Bahn route-plan.

## 4.1 Introduction

In 1996, the artist Helen Scalway, asked over 100 people to draw the Underground network from memory while they waited underground for their trains (2000). The majority of her respondents did so by citing the dominant official representation of the network, the London Underground diagram that is commonly known as the Tube Map (hereafter diagram). Some of their sketches recreated the diagram with remarkable accuracy while others were more fragmentary (Figure 4.1). Scalway concluded that the diagram "opened up a different kind of space for the imagination...shared yet not shared", a sort of "labyrinth of the communal imagination" (2000, xvii). Since then, in a similar cognitive mapping exercise in which participants were asked to draw London, Janet Vertesi showed how the diagram was used to 'tame and enframe' the British capital's chaotic street pattern (2008). Vertesi's study probed the power of the diagram's highly stable representation by investigating, through the application of Lynch's ideas of urban imageability, how it influenced human interaction with the city as a whole (Ibid). Her study also reiterated how the diagram has become a symbol of the city as "instantly recognisable as Big Ben or Tower Bridge" (Percey 1991, 722). Others, meanwhile, have acknowledged that the diagram is now also an icon of modernism, graphic design, and cartography (see Pike 2002; Hadlaw 2003; Bownes et al 2012; Hornsey 2012; Dobbin 2012) and have emphasised its degree of visual continuity -"unchanged in its basic design since first sketched in 1931" (Pike 2002, 101) – despite its recurrent adaptation over the last eighty years to reflect the physical expansion of London's railway network.

In this chapter I approach the diagram (Figure 4.2), and its Berlin counterpart, the Uand S-Bahn route-plan, as cultural images, whose nuanced, accumulating, but sometimes ignored visual changes can be accounted for by considering their status to fluctuate between real and imagined canons and palimpsests – changing but paradoxically considered constant (Merrill 2013a). Here I am most interested in those processes that have contributed to their canonisation and in particular the process of iconisation. Therefore after substantiating this theoretical approach I turn empirical attention to how the diagram came to be iconic, the consequences of this for LT's corporate identity and memory, and the means by which the transport authority has subsequently utilised and protected the diagram's iconicity. To achieve these goals I summarise the history of the diagram and highlight the official past of the Underground's interwar 'golden years' that it references most prominently. In turn I position its current use by TfL as partly the reflection of the transport authority's organisational nostalgia. Thereafter I chart how the diagram has come to be considered an icon and how this status brought about revisions in LT and TfL's corporate memory and the nullification of temporal distinctions between past and present diagrams through a heightened appreciation of their design origins. Then I consider control of and contestation over the diagram, firstly by reviewing the evolving copyright procedures that restrict its production and distribution and secondly by examining the recent growth in alternative online forms of the diagram and TfL's changing response to the copyright infringements they represent. I then move to address comparable processes in Berlin and highlight how the symbolism of the U- and S-Bahn's cartographies has been far more dynamic in reflecting various changing pasts, and is only now beginning to gain an iconic status following around two decades of design consistency.

*Figure 4.1.* Some of the mental maps collected by Helen Scalway during her 1996 *Travelling Blind project. Source: Scalway (2014).* 

#### Figure 4.2. The 2014 London Underground diagram. Source: TfL.

#### 4.2. Between canon and palimpsest

The Underground diagram is not just a cartographic device and a source of practical knowledge with normative value. It is also a visual landscape, "a cultural image, a pictorial way of representing, structuring or symbolising surroundings", a source of formative values with meanings connected to social memories and identities (Daniels & Cosgrove 1988, 1). Hence it shapes both "the self-image and worldview of the group and the conduct of the individual" (Assmann 2006, 44). These meanings, memories and identities can be deciphered by applying the Warburgian semiotic approaches (p.35) now commonly used by multiple academic disciplines and sub-disciplines, including critical cartography, to examine images' historical context of production and embodied ideas (Daniels & Cosgrove 1988). Critical cartographers uses these perspectives to reposition maps as active social documents and images that construct knowledge and exercise power thus revealing their social-politicised nature (Crampton & Kygier 2006; Harley 1988). They achieve this by: analysing the unique circumstances of the production and consumption of maps; paying attention to deliberate and non-deliberate distortions and their implicit or explicit rules of inclusion and exclusion; considering their representational hierarchies and 'subliminal geometries'; interpreting their embedded signs and emblems; acknowledging that acts of repression can also be

present during maps' reception as much as production; and finally by recognising that maps themselves can become symbolic (Harley 1988; Barton & Barton 2004). While these approaches have tended to emphasise the power of dominant groups with control over cartographic production (Harley 1988), greater attention has recently been paid to the counter or alternative mapping practices that have increased – partly thanks to the development of the online open-source mapping tools that provide for a "greater pluralism of cartographic expression" (Harley 1988; 1989, 87; Crampton & Kygier 2006). In addition the continued critical study of maps has led to the increasing dissolution of previously assumed binaries of representation/practice, production/consumption and map/space in favour of performative approaches that emphasise that maps are practiced representations or 'representational practices', used by numerous social actors, and social actors who are themselves constantly implicated in dynamic processes of (re)writing and (re)reading (Del Casino & Hanna 2006).

As will be established, a number of scholars have already fruitfully applied some of these semiotic and critical cartographic approaches to the diagram (see Pike 2002; Hadlaw 2003; Ashford 2010; Hornsey 2012). Yet their analyses often suffer from an unbalanced focus on one version of the diagram, usually the original, with the result that they "concentrate on a product at the expense of the process" (Percey 1991, 722). A historical perspective that is focused on the image of the diagram and framed by Egyptologist and memory theorist, Jan Assmann's processual notion of canonisation (2006) provides one means by which to avoid these weaknesses. An emphasis on canonisation does not mean that the diagram is canonical in the literal sense. In fact the diagram can just as easily be framed as a palimpsest. A palimpsest in its literal meaning is a document of overlaid texts characterised by processes of erasure, review and reuse. The term's metaphorical use in disciplines outside palaeography, such as in archaeology, architecture and geography, has seen it refer to the temporal configuration of space and the memory traces embodied within it (Huyssen 2003; Merrill 2013a). When applied to the diagram, the term's literary origins are reconciled with its metaphorical application, insofar as the diagram is a palimpsestic visual image that simultaneously acts to configure the urban space that it communicates. These palimpsestic qualities are perhaps most clearly discernable in the commemorative toponymies of the U- and S-Bahn's textual landscape and route-plan that are the foci of the next chapter.

In juxtaposition to the palimpsest, the canon is a text that resists alteration and addition. Thus Assmann's notion of canonisation can be useful in framing how the diagram's design principles – and subsequently its visual image – have become increasingly closed and resistant to change, with implications for the continuity of its cultural meanings and the social memories and identities to which they relate (2006; Merrill 2013a). For Assmann, canonisation triggers "a fundamental change in cultural continuity" (2006, 39). It is:

"an intervention that subjects the constant flow of traditions that are being handed down to a strict process of selection. This intervention consolidates the selection and sanctifies it, that is to say, it exalts it to the status of an ultimate authority and in this way calls a halt to the stream of tradition once and for all (2006, 19).

To better appreciate the diagram's canonisation it is necessary to understand its history and design development, its 'stream of tradition'. While this history may not include a definitive act of closure, which creates a canon in the truest sense, it does involve particular moments of canonisation, which all subsequent diagrams reiterate in ways akin to Assmann's 'secondary literature': referential interpretations that can also become canonised so that "cultural memory is organized... in first-, second-, and in certain circumstances even third-order canons" (Assmann 2006, 41).

## 4.3 The development of the diagram and its mnemonic meaning

From the 1860s until the early twentieth century the majority of the maps produced by London's competing underground railways displayed routes as bold lines superimposed on a street map of the city (see Leboff & Demuth 1999). In this early period a range of maps selectively displayed or omitted collaborative and rival companies and connections, in order to grant their producers competitive advantage. This started to change when UERL, formed in 1902, brokered a deal between the city's underground railways to pursue a joint publicity scheme, which included a map created in 1908 that was "designed and used extensively to educate the public" of the network's growing integration (Jackson & Croome 1964, 132). This map displayed London's subterranean railways boldly as colour coded lines against a simplified street plan (Figure 4.3). Some of this map's editions even omitted topography altogether, echoing the architectural and technological developments that had dislocated the Underground from the city above, thus making it more underground (Dennis 2013b).

### Figure 4.3. 1908 London Underground Railways map. Source: LTM.

The 1908 map was the first to feature prominently throughout the network's physical landscape. It appeared on large enamel and illuminated signs, was distributed in a pocket format six million times in its first year and was promoted by commissioned posters and even a board game (Jackson & Croome 1964). It acted as the foundation for later standardised designs that incrementally disregarded topography and geography through the processes of cartographic abstraction that were discernable in the maps designed by Macdonald Gill between 1920 and 1924 (Figure 4.4) and subsequently those created by Fred Stingemore between 1925 and 1933 (Figure 4.5).

Figure 4.4. 1920 MacDonald Gill map. Source: LTM.

Figure 4.5. 1931 Fred Stingemore map. Source: LTM.

The culmination of the Underground map's representational abstraction came shortly before the transport network's full integration in 1933. In January of that year a new diagrammatic map appeared in the Underground. It had been designed by one of UERL's engineer draughtsmen, Henry Charles Beck, during his spare time between contracts in 1931 (Figure 4.6). UERL's publicity department had in fact rejected an earlier design by Beck but accepted his revised design in 1932, and publically released it six months before LPTB came into being. Beck's diagram consolidated the Underground landscape's cartographic isolation from the city above. Its main design principles were: the expansion of the central area of London and the contraction of its peripheral areas, the use of straight horizontal, vertical and diagonal lines connected by standardised angles of ninety and forty-five degrees, and the use of ticks and interchange symbols to represent stations. The diagram quickly proved to be a public success – it was printed 750,000 times during its first month of circulation and a further 100,000 times a month later (Garland 1994).

## Figure 4.6. 1933 Henry Beck London Underground diagram. Source: LTM.

### 4.3.1 Beck's diagram: an image of the Underground's 'golden past'

Beck's 1933 diagram has become an object of regular academic analysis. For example, Pike has referred to it as a "canonical product of modernism" that "codified a particularly modernist conception of space" (2002, 101-103). The diagram, he claims,

reflects an interwar period characterised by modernist movements in the visual arts, film and literature that contributed to the creation of an example of Lefebvrian 'abstract space' – planned, rational and conceptualised rather than experienced (2002, 101; 2005). At the same time he argues that the diagram's legacy has "been both to constrain the limits of reverie and to perpetuate its possibility" (2002, 112) in ways that also emphasise alternative visions of modern urban space as much as mainstream rationalist ones (see also Ashford 2011; 2013). Hadlaw adds that by resonating with strategies of 'temporal accounting' the diagram reflected particular logics of modernity and urbanity, tied to the increasingly interconnected social conditions of the early twentieth century, and changing public concepts of distance and time (2003).<sup>37</sup> Thus the diagram contributed to a genealogy of not just modernist space (Pike 2002) but also technologies that made London a 'networked city' (Dennis 2008). Hornsey has also shown how the diagram's perpetual performance and becoming during moments of use was well suited to LT's "hegemonic quest for rhythmic orchestration" even if it simultaneously allowed for forms of more individual narrational mapping (2012, 686). Thus in many ways the Underground's new image exemplified Gilles Deleuze and Félix Guattari's idea of the diagrammatic machine which "does not function to represent, even something real, but rather constructs a real that is yet to come, a new type of reality" (2004, 142; see Gandy 2005; Farias 2011).

These interpretations do not fail to acknowledge the diagram's particular context of production or the receptive institutional conditions that it enjoyed given the network's growing integration and UERL's and LT's greater organisational emphasis on corporate design in the years leading up to and beyond 1933. Yet they rarely explore the fact that the modernist Underground provides a dominant mnemonic reference point that all subsequent diagrams have since cited. This 'golden past' refers to the period beginning in the 1910s and stretching, arguably, until the early 1940s when Frank Pick, first as the publicity officer of UERL, later as the managing director of the Underground Group and finally as the Chief Executive Officer and Vice Chairman of the LPTB, pursued a *Gesamtkunstwerk* of modern art, architecture and design in order to create a strong and recognisable corporate identity which unified the system and encouraged the public to

<sup>&</sup>lt;sup>37</sup>In fact the diagram's standardisation of geographic distances could be assumed to a have resulted in false temporal accounting that may have even served to benefit LPTB financially by inducing "people to undertake journeys they might otherwise have hesitated to make" (Forty 1986, 237). The earlier U-Bahn route-plans that showed travelling times between each station (see Figure 4.14) were more transparent in this respect.

travel more (Forty 1986; Merrill 2012a). This period is today retrospectively characterised by an appreciation of its clean modernist aesthetics and its efficient 'fitness for purpose' design ethic typified by, amongst other factors, the London Underground roundel logo introduced in 1908 (see Lawrence 2013), the development of the Johnston typeface between 1913 and 1916 (see Lucas 2013), and the patronage of Holden's station architecture between 1923 and 1942 (see Lawrence 2008).

Saler has addressed this period in his study of the Underground's interwar 'medieval modernism' (1999; see also Ashford 2011; 2013). Saler does not refer to Beck's diagram, presumably because of the simple fact that it was not commissioned by Pick and was hence not a planned part of the latter's totalising modernist vision. Its origins did not, however, restrict it from coalescing with and becoming a powerful component of that vision in ways that served the transport authority's collective project to communicate the Underground as a rational, "orderly, well-regulated and democratic space" (Dennis 2008, 337). Thus the diagram contributed historically specific, public notions of the ease of travel and circulation in an unhindered modern environment, and as a result is still "often wrongly attributed to the culture of modernism that Pick had established at the Underground" (Bownes et al 2012, 136).

### 4.3.2 TfL's nostalgic corporate identity

The diagram, along with other elements associated with the Underground's 'golden past', are today all emphasised in TfL's contemporary design and heritage policies (see p.76-78), with that period providing a normative past that TfL aspires to emulate and continues to evoke (Merrill 2012a). Thus Pick's 'culture of modernism' still provides the blueprint for TfL and its subsidiaries' contemporary corporate identity and branding strategies, as the LTM website testifies:

"Our approach to our visual identity echoes that taken by Frank Pick in the early 20<sup>th</sup> century... Pick's strategy worked and led to the implementation of one of the earliest examples of a clear and consistent corporate design policy that has survived for over a century and still inspires us today" (LTM 2014).

In many ways, however, rather than having *survived* this corporate design policy was *revived*. Pike notes that "the unified elements of Pick's plan did not survive the 1930s" even if "his legacy dominated what there was of an Underground identity arguably until ... the early twenty-first century" (2013, 519). Thus TfL's use of the diagram today can be partly considered as one aspect of its 'organisational nostalgia', a phenomenon that

results in a scenario where "organisational members often cling doggedly to images of a 'golden past' during or after restructuring and corporate culture change" (Strangleman 1999, 727).

TfL's organisational nostalgia for its interwar past might be traced to the heritage listing of the first examples of Holden's Underground architecture in the early 1970s. But this was partly the result of the external appreciations of architectural historians, including most famously Nikolaus Pevsner (Keate 2013), rather than the transport authority's own internal impulses. In this sense the fortunes of Holden's architecture were similar to those of Beck's diagram whose iconic value, as will be established, was first recognised outside the transport authority. By the mid 1980s a brand and corporate identity consultancy firm contracted by LT to conduct a review of its signage found that the reality of LT's corporate identity did "not match the myth" (HLS 1984, 70). In other words, by then the interwar design ethics that LT claimed to abide by had been eroded (Roberts 2008). The same consultancy firm was eventually contracted to help restore the corporate identity of the Underground, and subsequently focused significant attention on standardising the diagram's design by the early 1990s (Ibid). The renewed emphasis on LT's corporate identity at this time coincided with changes to the organisation's overall corporate culture in the wake of years of government underinvestment and the King's Cross fire (see p.211-217). The return to the strong visual icons associated with the interwar Underground, including the diagram, within LT's corporate identity thus served as a means by which to rebuild memory of the network as a rational and managed environment. TfL later consolidated the strategy of using the past to its benefit, as illustrated, for example, by the creation of a heritage and design officer job position (Ashworth 2008; see p.77). Today TfL's nostalgic impulses continue to favour representations of the past that, like the diagram, communicate the Underground as a rationalised place.

The genealogy of the diagram's iconisation confirms LT and TfL's changing valuation of the Underground's 'golden past'. It illustrates how their official acknowledgement of the diagram's iconic value not only reflected a developing sense of organisational nostalgia but also necessitated that they revise their corporate memory of Beck, whose fame is a contemporary rather than historical fact (Hadlaw 2003).

### 4.4. The Iconisation of the diagram

After 1933, LT recurrently commissioned Beck to update and refine the diagram until 1959 and even in an unofficial capacity after he left the organisation in 1947 (Garland 1994; Dobbin 2012). His involvement in the diagram's design ended abruptly amidst bad tempers and copyright disagreements with LT in 1960, when the organisation adopted a new diagram designed by its Publicity Officer, Harold Hutchison. Hutchison's angular diagram was ill conceived and proved unpopular with the public (Dobbin 2012) (Figure 4.7), which may explain why during the four years it was used the first indications of the iconisation of Beck's diagram became apparent. In 1963 a newspaper supplement dedicated to the Underground's centenary noted the rarity of Beck's earliest diagrams and their value to collectors of modern printed ephemera (Mclean 1963). A popular history of London's Tube railways published a year later, however, failed to mention Beck or the diagram – an omission that demonstrates Beck's public anonymity at the time (Jackson & Croome 1964). In 1965 the British design periodical, *DESIGN* first noted the diagram's potential classic status (Hughes-Stanton 1965) and four years later Ken Garland published the first design history of the diagram (1969). Garland, who became friends with Beck during his research, acknowledged at the time that the "full recognition of the considerable achievement of Henry C. Beck (who designed the diagram) is long overdue" (quoted in Penrice 1975, 19). Just as Garland's parentheses reminded his readers of Beck's authorship, his article commenced a process of social recollection that would continue over the next forty years.

In 1964 Hutchison's diagram was replaced by that designed by LT's Assistant Secretary, Paul Garbutt. Garbutt's diagram returned to many of Beck's techniques, perhaps in recognition of the wider design industry's growing appreciation of Beck's diagrams. However, Garbutt also introduced new strategies which, combined with Beck's, led to a period of design stability founded on the consolidated diagrammatic principles that remain mostly unchanged today. Garbutt's main design contributions included the narrowing of the eastern end of the Circle Line and the use of the Central and Northern Lines as horizontal and vertical axes (Figure 4.8). Further specialist articles about the diagram appeared in the 1970s (Penrice 1975; Doyle 1978; Walker 1979) but again an official history of that time did not mention the diagram or its origins despite discussing the significance of earlier maps and using a derivative of the diagram to illustrate the

system's physical expansion (Barker & Robbins 1974).<sup>38</sup> Thus while the diagram's iconic status grew amongst graphic design professionals, official acknowledgment remained lacking.

During the 1970s and 1980s the diagram's design was led by external companies coordinated by a newly appointed in-house graphic designer, who subsequently worked in consultation with Garbutt to standardise further the diagram's design principles (Roberts 2008). In 1980 Garland donated some of the original design sketches that he had inherited following Beck's death in 1974 to the Victoria and Albert Museum (Taylor 1980). The museum's interest further reflected the public's growing appreciation of the diagram. This iconic status was confirmed in 1987 when the diagram featured in a television documentary series called *Design Classics*, which explicitly introduced a wider British public to the diagram's original author.

Figure 4.7. Hutchison's diagram being installed at a station in 1960. Source: LTM.

<sup>&</sup>lt;sup>38</sup>These omissions may have reflected the fact that one of the book's authors, as a high-level LT employee in 1960, had contributed to the heated correspondence between LT and Beck at the time of their disagreement.

#### Figure 4.8. Garbutt's 1964 diagram. Source: LTM.

From the late 1980s onwards LT subcontracted the diagram's design to various external cartographic companies and eventually employed one to computerise the design (Roberts 2008). Thereafter the need to standardise diagrams for various formats led to the development of design principles based on universal specifications published in 1993 (Ibid). In turn the diagram's continued computerisation eased its modification and amendment although in its main principles it remained relatively unchanged during the 1990s. In this decade LT displayed the earliest signs of its official remembrance and recognition of Beck's role in the diagram's design. In 1990 the LTM hosted an exhibition about the network's cartographies, which featured Beck's work prominently (Garland 1994). The press response to the exhibition suggested, however, that it did not deal adequately with the circumstances surrounding the replacement of Beck's diagram. One journalist revealed the negative way by which Beck's design had come to an end (Haigh 1990). Another reviewer wrote in Living Marxism that Beck had been "ripped off. They never even put his name on the map" but tempered his rhetoric with the acknowledgement that the exhibition had gone "some way towards giving" Beck the recognition that he deserved (Banks 1990, 46). However, still in 1991 those writing about the diagram claimed, "few would be able to name its designer" (Percey 1991, 722).

Beck's further official recognition followed the LTM's 1993 refurbishment and the opening of a map gallery named after him, which featured one of his original designs, donated by Garland (Garland 1994). A LTM curator at the time considered this acquisition to be one of the most important the museum had made in the past ten years (Allen 1993). Garland's bequest perhaps reflected his belief that Beck had finally received the recognition he deserved, and the following year, in association with the LTM, Garland published his history of the diagram, including a detailed account of the events that led to the end of Beck's involvement in its design (1994). In the same year LT memorialised Beck and his diagram by installing an official commemorative plaque at Finchley Central Underground station (Figure 4.9). Since then, Beck has gained increasing official recognition and public coverage, even if in the mid 1990s he was still popularly considered a "forgotten hero" (Bryson 1995, 41).

With the creation of TfL, the official remembrance and recognition of Beck's original diagram and the design principles it introduced have become more explicit during a period when the latter have been increasingly tested by the physical expansion of the network. Ever since the diagram's specifications were standardised in 1993 they were used to integrate minor additions to the physical network, but they were challenged to a far greater extent when they were called upon to visually accommodate the decision to hand over operation of the orbital railways (which would become the Overground) to TfL in 2007. Some have argued that since the addition of the Overground the utility of Beck's design principles has been severely eroded, and that the diagram has become congested to the extent that alternatives that depart from Beck's iconic design might be required (Roberts 2008). Despite such challenges TfL has demonstrated a nostalgic preference for the rationalised past which is visually configured by Beck's diagram and its design principles.

#### Figure 4.9. Beck's plaque at Finchley Central station. Source: Mansfield (2013).

In 2003, on the seventieth anniversary of its public release, TfL returned Beck's name to the diagram through a disclaimer that states, "this diagram is an evolution of the original design conceived in 1931 by Harry Beck" and in the same year a local history group erected a plaque at Beck's former home in Finchley. The widespread use of the name Harry (instead of Henry) in the commemorative language that now surrounds Beck is revealing, insofar as only Beck's friends used this nickname during his life (Garland 1994). Thus its use might be interpreted as an official attempt at posthumous reconciliation, or, alternatively, as reflecting the popular position that Beck now occupies in the cultural consciousness of Londoners. The first diagram to feature Beck's name in forty-three years was initially made available for purchase in a limited edition cartographic collection released by the LTM that same year. In a neat linear arrangement set into a large card folder, the 2003 diagram sat next to reproductions of the 1932 Stingemore map (Figure 4.5) and Beck's first and last diagrams from 1933 and 1960. The collection thus charted a selective design history that occluded Beck's messy replacement and omitted the contributions of subsequent designers like Hutchison and Garbutt.

Since the seventieth anniversary the diagram has featured in further television documentaries (see Crane 2004) and has been voted Britain's second most popular design – beating the Supramarine Spitfire but coming behind Concorde (Jury 2006). In 2009 a contemporary diagram echoing the distinctive Circle Line shape introduced and

perfected by Garbutt featured on a first class postage stamp attributed to Beck as part of a series of stamps featuring British design classics (Figure 4.10). The stamp highlights how the diagram's design stability that commenced under Garbutt's guidance in the mid 1960s has contributed to the common public belief in a single unchanging diagram, retrospectively attributable to Beck. The stamp reflected what Roberts has called the diagram's "mythical single design" (2008, 6) and demonstrates how past and present diagrams can coalesce to become branded as a common icon by TfL. Such a process is also evidenced by LTM displays that use computer animation to retrospectively apply the diagram to the past, in order to demonstrate the physical development of the Underground network. In the animation, which is also available as a book (Demuth 2003), the diagram's distinct visual language is used to communicate stages of the network's development that were not visualised in such a way at that time. The Underground's competitive and chaotic pasts are translated into the language of a rationalist modernity that is still upheld to characterise the network today.

#### Figure 4.10. The diagram on a 2009 British postage stamp. Source: Royal Mail Group.

More recently, in 2013, the LTM and TfL were instrumental in the installation of an EH plaque to Beck at his birthplace in Leyton, east London, on the occasion of the eightieth anniversary of the diagram's public release and as part of the Underground's wider 150<sup>th</sup> anniversary celebrations (BBC 2013a). Prior to this, in 2012, the diagram had featured extensively in another LTM exhibition dedicated to the Underground's cartographies, which, like its 1990 predecessor, omitted reference to the negative way

that Beck and LT's collaboration came to an end. The book that accompanied the exhibition provided marginally more detail about this (Dobbin 2012) but in general LTM publications tend to omit or relegate to the footnotes any specific details of either the negative end to Beck's involvement in the diagram's design or the diagram's copyright status (see Bownes et al 2012). This suggests that the exact circumstances of Beck's departure are still perceived to be a potential source of negative publicity. Such an approach reflects how far the LTM is answerable to TfL. The LTM's head of trading, Michael Walton, commented, "we are always slave and must be slave to TfL's aims and aspirations…we don't run away and do stuff that does not support and enhance brand value" (quoted in Burgoyne 2013, 51).

The iconisation of the diagram, which first began within the design industry, led to the wider – and official – recognition of Beck's role in its design. It did so to the extent that Beck attained a far more prominent position in the city's collective memory than he had ever had before, and also to the degree that his authorship expanded to be popularly ascribed to all Underground diagrams, thus underplaying the important contributions of his successors. The official recognition of the diagram's iconic status by LT and Tfl, meanwhile, necessitated that they revise their corporate memory of Beck and play down the negative way in which his involvement in its design came to an end amidst arguments related to its copyright. LT and TfL's concerns for the diagram's copyright not only reflected the potential commercial benefits that accompanied its iconisation but also simultaneously contributed to its canonisation. As Vertesi has noted, the diagram is highly stable in its singular view partly because "it is so heavily copyrighted and controlled by…brand regulations" (Vertesi 2008, 10).

#### 4.5. The diagram's copyright and commercialisation

LT's decisions regarding the copyright of the Underground's cartographies have always reflected the British copyright laws which provide protection for intellectual property rights (IPR). The Copyright Act of 1842 did not apply to artwork, designs or ideas "expressed in graphic or diagrammatic form" (Feather 1994, 148) but its 1911 replacement did. Shortly thereafter, Gill became the first person to have his name appear on an official Underground map. Later it was replaced by Stingemore's initials, reflecting the trend of directly referencing the diagram's author that would persist until the 1980s.

Beck assigned his copyright of the diagram to LT in November 1937 in exchange for a small fee, the promise that he would conduct or edit all future work to the diagram and the agreement that his name would always appear on it (Garland 1994). By the time this agreement came into question, when Beck's design involvement was curtailed in 1960, the 1956 Copyright Act was in force. The 1956 Act had responded to developments in copying technologies but had neglected the issue of moral rights, and thus failed to advance the author's position (Feather 1994, 204-207). Against this background, Beck complained and referred to the 1937 agreement but his correspondents at LT declared that no record of such an agreement existed (Garland 1994).

Unlike Beck, both Hutchison and Garbutt were high-level full-time employees of LT when they designed their diagrams. Hutchison's diagram was the result of an official redesign process and hence its copyright resided with the organisation. The question of the copyright of Garbutt's diagram was more reminiscent of Beck's, as he had also designed his diagram in his spare time. This seems to have caused a period of confusion over the diagram's copyright, which was only resolved following an official request for Garbutt to assign copyright to LT in 1978.<sup>39</sup> This request came amidst LT's growing recognition of the diagram's commercial value, and its first recorded legal action over its unauthorised commercial use by a T-shirt company.<sup>40</sup> At this time a new LT shop offered the diagram for sale, as a poster, a tea-towel, a jigsaw and notably a T-shirt.<sup>41</sup> Thus while the souvenir value of the diagram had been acknowledged much earlier and it had been occasionally sold in the first LT shop, opened in in 1964, it was not until the late 1970s that LT displayed "an increasing awareness of the power of the brand, particularly as more and more people began requesting copies of the map to include in their own publications" and started to exploit the diagram's commercial value in earnest (Walton quoted in Burgoyne 2013, 51; Dobbin 2012).

In the early 1980s LT used the diagram to generate extra revenue in a number of ways. Firstly, between 1981 and 1985, in a short-lived venture that proved insufficiently profitable, the pocket-sized version of the diagram was enlarged to make room for

<sup>&</sup>lt;sup>39</sup>[T]ransport [F]or [L]ondon [H]istorical [A]rchives: LT000107/032, Extract from Minutes from Meeting 128 of the Executive, 02/08/1978.

<sup>&</sup>lt;sup>40</sup>TFLHA: LT000107/032, Letter from Chief Solicitor to Dalles Print Transfers Limited, 09/08/1978.

<sup>&</sup>lt;sup>41</sup>TFLHA: LT000134/016, London Transport Shops Catalogue. London Transport Shops Staff Price List March 1978.

advertisements.<sup>42</sup> Secondly, the decision was taken to request royalties from publishers that reproduced the diagram from 1983.<sup>43</sup> Initially this decision attracted the criticism of a Lord Reilly, who was disappointed to find the diagram omitted from his 1982 diary – presumably because its publisher did not want to use it amidst uncertain licensing agreements. Reilly argued that his diary's publishers were doing LT a service in providing free publicity.<sup>44</sup> Reilly's sentiments in fact reflected how the organisation had previously approached the diagram's reproduction. Following the immediate success of Beck's original, Pick had suggested that LT "should be prepared to subsidise maps and other printed matter required by visitors to London" (quoted in Dobbin 2012, 107). Now, though, LT's Merchandising Officer argued,

"...unless we try we shall never know whether a considerable amount of money is being denied London Transport ... [who] could do with the cash!"<sup>45</sup>

Worsening safety and performance records and heightened crime and vandalism levels from the mid 1970s until the late 1980s, caused by long-term chronic under-investment (Day & Reed 2008), and a mid 1980s economy drive (Ridley 1985) highlighted just how cash-strapped LT was at this time, and in turn how attractive inviting advertising onto the diagram and charging for its reproduction must have seemed. However, that LT sought legal advice about a request to use the diagram in a television game in 1985 demonstrated that the diagram's copyright was still somewhat in doubt. LT's solicitor informed its board that:

"...there have been difficulties in establishing beyond doubt that the copyright in the Underground map is indeed vested in L.R.T. On the other hand, in all our dealings with the outside world, no one has ever challenged our right to the copyright. With that one slight reservation, I can see no difficulty at all in dealing with the Underground map in any way you wish."<sup>46</sup>

These copyright doubts may have related to Beck and Garbutt's earlier involvement, but by 1985 LT had effectively secured – or was at least perceived to have secured – the right to use the diagram in any way it saw fit. The Underground's Chairman and Chief Executive at the time further offered,

<sup>&</sup>lt;sup>42</sup>TFLHA: LT000689/121, Memo from Railway Planning Officer to Advertising and Publicity Officer, Ref 233/CL, 19/02/1985.

 <sup>&</sup>lt;sup>43</sup>TFLHA: LT000689/122, Memo from Merchandising Officer to Planning Liaison Officer, 11/05/1981.
 <sup>44</sup>TFLHA: LT000611/130, Correspondence between London Transport and the Rt Hon Lord Reilly, 14/08/1981.

<sup>&</sup>lt;sup>45</sup>TFLHA: LT000689/122, Memo from Merchandising Officer to Planning Liaison Officer, 11/05/1981.

<sup>&</sup>lt;sup>46</sup>TFLHA: LT000375/060, Memo from Solicitor to LRT to the Commercial Director, 14/06/1985.

"anything that gives good (and free) publicity to the Underground system is to be welcomed but we must ensure that it is executed in a proper fashion and does not give rise to any malpractices."<sup>47</sup>

Thus, along with the new licensing policies, the diagram was still officially recognised as a means to gain free publicity for the Underground. Meanwhile LT's attention to possible malpractice provided an early indicator of how copyright policy became linked to the control of the diagram's use and distribution.

Shortly before the 1988 Copyright, Designs and Patents Act48 came into effect reflecting the continuing and growing significance of copyright in the everyday life and institutions of Britain – LT began including explicit copyright notices on its diagrams and in 1991 it decided to develop its own IPR policy. In 1994 this policy was published as a set of official guidelines that gave the LTM responsibility for the protection and exploitation of LT's IPR. These guidelines aimed to maintain and manage valuable copyright assets, including the network's roundel logo, Johnston typeface and diagram, elements that were recognised "not only [to be] fundamental aspects of London Transport's corporate identity" but to also to embody an explicit symbolic value (LT 1994, 12). The policy recommended proactive management in order to protect and distinguish LT's name and branded services while realising the full commercial potential of its IPR, and ensuring that those who wished to be associated with the organisation could do so in an "orderly and commercial manner" (Ibid, 4). Subsequently reissued and complemented by a public awareness scheme in 1999 (LTM 1999), the first guidelines noted that the licensing of the diagram for just twenty different products generated considerable income (LT 1994). In 2005, TfL established a new Intellectual Property Development Department, and copyright administration was moved from the LTM to TfL's headquarters. The remit of this department expanded to include Ecommerce with the launch of a new online shop and an increase in product development. Today's guidelines recognise that frequent changes in the diagram mean that action against infringers relies on copyright and urges all TfL employees to be vigilant and report any infringements so that the public recognises that TfL pursues "a consistent and rigorous policy of enforcement" (TfL 2003, 13).

<sup>&</sup>lt;sup>47</sup>TFLHA: LT000375/060, Letter from Dr. Tony M. Ridley to Mr. B.J. Hooper, 26/06/1985.

<sup>&</sup>lt;sup>48</sup>The basis for British copyright law today.

Today the exact licensing revenue raised by the diagram for TfL remains confidential (Boersma  $2012^*$ )<sup>49</sup> but it has been reported that the annual income generated by all licensing and merchandising is over £5 million (Burgoyne 2013). The diagram's increased economic value is evidenced by the fact that the LTM's online shop currently stocks over 120 items featuring it, including a very popular T-shirt (Figure 4.11). Today the cost of a standard license to reproduce the diagram is between £150.00 and £1,500.00. Meanwhile Christie's auction house recently valued an original poster version of Beck's 1933 diagram at between £2,000.00 and £3,000.00 (Christie's 2012).

#### Figure 4.11. The 'I'm Going Underground' T-shirt. Source: TfL.

The formalisation of TfL's IPR policy has occurred during a period of digital development that some prophesied might end copyright altogether (Vaidhyanathan 2001). This period has intensified from the mid 1990s onwards with the growth of the Internet. The Internet allows perfect digital copies to be distributed more quickly and widely than ever before, reiterates copyright's eternal "war with technology" and presents the most recent threat to copyright holders who wish to control the distribution of their content (Lessig 2006, 172-173). Thus the domain of copyright has grown from "regulating a tiny portion of human life, to regulating absolutely every bit of life on a computer" (Ibid, 193). The growth of E-commerce meanwhile demonstrates that the digital world provides opportunities for copyright holders as well as threats, and while

<sup>&</sup>lt;sup>49</sup>The use of \* throughout this thesis indicates reference to the interviews and conversations undertaken during my research, which are listed at the end of the bibliography.

the potential for copyright infringement and piracy is increasing so too are the tools by which to prevent such actions. Overzealous copyright protection in a digital environment, however, carries greater risks to stages of amateur cultural production than it does to professional (Ibid). These stages of cultural production, motivated more by the creative act than the pursuit of monetary profit have always been part of the way culture has developed and are key to democratic cultural production. Such stages echo how cultural images "have flowed through and been revised by discursive communities everywhere for centuries", whereby they are "substantially – sometimes almost unintentionally – distorted through many small revisions" (Viadhyanathan 2005, 126). While the creative appropriation of the diagram can be argued to be a by-product of its iconic status, the strict control of its creative reuse through copyright policies ultimately results in the further canonisation of the image whose branding value lies in the nostalgic memory of the Underground's normative interwar past.

#### 4.6 Maintaining the canon by controlling alternatives

Digitalisation has increased the diagram's subjection to various forms of 'critical mapping practices', counter or alternative mapping processes which have seen the diagram 'mashed' in order to serve new everyday and artistic purposes or to function as a vehicle of resistance (Crampton & Krygier 2006). These practices are symptomatic of a wider, new, democratic and pluralistic cartography (Harley 1989). They also reflect the degree to which London's public believe that they own – and thereby have the right to modify – the diagram, as suggested by TfL's Brand Development Manager, Saskia Boersma: "a lot of people don't realise the map is not in the public domain. They somehow feel they have ownership of it" (2012\*). Such practices surround the diagram in numerous and varied ways, and include some that are politically confrontational. The most prevalent examples, however, relate to the amateur creative practices of mapmashing that were initially considered to infringe upon TfL's copyrights.

Today on the Internet numerous alternative diagrams can be viewed which have been created by manipulating the official diagram in a bitmap or vector form using graphic design software. Most often these diagram 'mash-ups' see station names changed and certain information or elements removed, or in some cases, added. Many can be said to imitate the precedent set by artist Simon Patterson's Turner Prize shortlisted lithograph, *The Great Bear* created in 1992. In this work Patterson replaced the names of the

stations with those of famous personalities in order to create constellations of celebrities or 'stars'.<sup>50</sup> While others should be accredited with having begun the digitisation of the Underground diagram for creative purposes earlier (interestingly at a time concurrent with LT's functional digitisation of the diagram) and having first conceived of the artistic potential of replacing transport cartographies' station names (see Abrams 1990, 2013\*; Merrill 2013a; 2013b), Patterson's work has had the most enduring effect in popularising the practice, thanks to its widespread exposure. This exposure, coupled with the spread of new computer technologies, led to an increase in the number of individuals disrupting the official diagram by changing its design and station names in various ways.

*The Great Bear* has subsequently been considered to function as an "intricate memory walk" by undermining easy connections and challenging the viewer "to investigate the principles of its organization ... gaps, mistakes and inside jokes" (Pike, 2002, 116). Patterson himself stated, "I like disrupting something people take as read" (quoted in Greenberg 1994, 47) but the disruption of the diagram's image was limited to the degree defined by LT as its copyright holders. Patterson had wanted to distribute the altered diagram to the public but it was felt that this would cause too much confusion on the network (Boersma 2012\*). Hence it is an endorsed disruption whose own copyright, held by Patterson and TfL, restricts it from being displayed on the website of its custodians, the TATE Gallery. TfL's response to those who latter imitated and emulated Patterson, however, was anything but an endorsement.

Initially, before online social networks such as Facebook<sup>®</sup> and Twitter<sup>®</sup> were commonplace, these alternative diagrams were distributed as forwarded emails, either indiscriminately or between peer groups of enthusiasts (Marshall 2012\*). One such enthusiast, Geoff Marshall, started to collect the doctored diagrams and then displayed them on his website from around 2004. In March 2006 solicitors representing TfL informed Marshall that displaying his collection amounted to a copyright infringement and he agreed to remove them. Before doing so, however, he publicised TfL's request on his website and discussed it on a local radio programme. As the story spread and received online public comment, around seventy individuals chose to 'mirror' his site in protest and solidarity.<sup>51</sup> Accordingly TfL's attempt to suppress exposure of copyright-

<sup>&</sup>lt;sup>50</sup>Hence his reference to the astronomical constellation of Ursa Major.

<sup>&</sup>lt;sup>51</sup>Mirroring is a process that creates further exact copies of websites.

infringed content resulted in a seventy-fold increase in the collection's public distribution and subsequent awareness of it. Eventually, Marshall and the majority of his mirrors, who were in breach of TfL's copyright policy insofar as they did not have licenses to reproduce the diagram in an amended form, removed their content following further requests from TfL's solicitors.<sup>52</sup> The components of the diagram that trigger copyright infringements are its shape – in other words the combination of the design principles primarily developed by Beck and Garbutt – and the LT roundel, typeface and station names (Boersma 2012\*). Because Marshall and others had in most cases used the official diagram and then changed station names they were deemed to have violated TfL's copyright (Ibid).

One of the few online official responses to these events<sup>53</sup> demonstrates that TfL's actions were motivated by: a desire to reduce any confusion caused by the circulation of alternative and potentially obsolete diagrams, a point reiterated by Boersma (2012\*); by the need to maintain TfL's legal claim and ownership over the diagram; and, finally, by a responsibility to protect TfL's design heritage and brand. Marshall speculated that TfL's request was motivated by the recognition that alternative diagrams might generate income for TfL, and coincided with a short-lived TfL online map shop (2012\*). His claim was supported by the fact that an endorsed alternative diagram (the first since Patterson's) was released and made available for sale at the LTM shop shortly before TfL pursued legal action against Marshall. Since these events alternative diagrams have become more and more common and are increasingly tolerated by TfL. For example, in 2009 *The Telegraph* published an online collection of the best mash-ups (Chivers 2009) and The Londonist website, which receives around 1.2 million page views a month and distributes content through email, podcasts, Twitter<sup>©</sup> and Facebook<sup>©</sup>, featured thirtyfive posts tagged as relating to 'alternative tube maps' between October 2010 and March 2014.<sup>54</sup> TfL's new tolerance of the alternative diagrams may be in recognition of the difficulties of enforcing such a stringent copyright policy and the bad publicity that such enforcement might bring.

A stated benefit of TfL's diagram licensing scheme is that it allows the consistency and accuracy of the diagram to be monitored and maintained across the public domain, thus

<sup>&</sup>lt;sup>52</sup>Wood provides a brief account of these events albeit without Marshall's consultation (2010).

<sup>&</sup>lt;sup>53</sup> See comment forty-two at www.geofftech.co.uk/iblog/2006/03/10/all-mapped-out/comment-page-4#comments, [Last accessed 3 Jun 2014].

<sup>&</sup>lt;sup>54</sup>See: http://londonist.com/tags/alternative-tube-maps, [Last accessed 3 Jun 2014].

ensuring that confusion is avoided and the practical utility of the diagram is not eroded (Boersma 2012\*). However, TfL's growing tolerance of alternative diagrams has led it to produce its own for retail. For example, in 2010 an *Underground Film Map* was released to coincide with the London Film Festival, in 2012 an *Underground Olympic Legends Map* was released in preparation for the London 2012 Olympics (Figure 4.12); later in 2013 the English Football Association and TfL collaborated on a football-themed diagram to mark their joint 150<sup>th</sup> anniversaries. Ironically some of these diagrams have caused the confusion that TfL's licensing policy aims to prevent: for example, a Belgian newspaper misinterpreted the Olympic-themed diagram to suggest that during the games the stations would all be renamed after former Olympians (Peeters 2012). The potential threat of the digital world to spread misinformation, it seems, can be activated just as much by the copyright holders as those who infringe copyright in creative ways. But at the same time TfL has demonstrated that it is adept at harnessing the branding potential of even the subversive tendencies that undermine one of the strongest symbols of its corporate identity.

## Figure 4.12. The Olympic Legends Map. Source: TfL.

Developments and growing literacy in mobile digital technology suggest that the future will see an increase in the practices that create alternative diagrams. Already some enthusiasts carry electronic custom copies of the diagram in which the information displayed is tailored to personal relevancy and taste (Marshall 2012\*). At the same time the increasing complexity of the network and a growing congestion of lines and stations continues to challenge the utility of the diagram's design principles with designers expected to fit about 100 additional stations into a diagram that is still printed in the same size and format used in 1933 (Roberts 2012\*). Therefore a number of commentators have noted that the wholesale redesign of the diagram might be necessary, and have in some instances developed diagrams designed for public use based on different cartographic principles (Roberts 2008; 2012\*; Smithers 2009; Beanland 2011; Noad 2012\*). Amongst them Mark Noad's London-Tubemap has enjoyed perhaps the most success and is now available as a Smartphone application (Noad 2012\*). The London-Tubemap website notes that the new map "has no connection to Transport for London and does not represent the official depiction of the London Underground system."<sup>55</sup> It seems unlikely that it ever will and the design principles first developed by Beck are likely to continue to dictate the official depiction of the Underground's landscape in the immediate future. Thus even as these alternatives serve to destabilise the diagram, in years to come its connection through Beck to the Underground's 'golden past' and its subsequent iconisation will likely continue to render it a nostalgic image whose future appears secure thanks to its increasing canonisation and continuing visual continuity.

Contrasting with the diagram's consistency is the degree of design variance that has characterised the U- and S-Bahn's different *Übersichtspläne* [route-plans] over the last eighty years. Whereas in London the myth of a single iconic diagram circulates, in Berlin there is far greater awareness of the changing symbolic cartographies that have reflected the geo-political ruptures and ideological shifts of Berlin's twentieth-century history (Gottwaldt 2007; Manicke 2010). Only in the last twenty-five years have these shifting symbolisms settled, and only recently has the current route-plan (Figure 4.13) come to be thought of as iconic. The 'golden past' to which it nostalgically refers, as will be demonstrated, relates to Germany and Berlin's political reunification and BVG's explicit pursuit of corporate branding and identity policies at that time.

<sup>&</sup>lt;sup>55</sup>See http://www.london-tubemap.com/# [Last accessed 9 Jun 2014].

#### Figure 4.13. The 2014 U- and S-Bahn route-plan. Source: BVG.

#### 4.7. The U- and S-Bahn's symbolic cartographies

The earliest official U-Bahn route-plans, published by GeHUB, adopted the representational strategies common in London at that time, namely, bold red lines superimposed on a simplified street map (Figure 4.14). For the most part, this style continued to characterise the U-Bahn's official cartographies until 1928, when the first BVG *Liniennetz* [line-network] was published for sale (Gottwaldt 2007). In its first iteration the line-network was a large format map that featured, on one side, a detailed street map showing all BVG tram, bus and U-Bahn services along with S-Bahn connections, and on its other side, amongst a series of maps and timetables, a standardised U-Bahn route-plan which was also separately available in a pocket format.

These formats persisted until the late 1980s, at least in West Berlin, and highlighted how, for the majority of their history, the cartographies of the U-Bahn, unlike those of the Underground, were supplementary to, more than a substitute for, the city's detailed street maps. Thus, for much of its history, the U-Bahn was less cartographically isolated than the Underground. The earliest representation of the U-Bahn on Berlin street maps, like those produced by the Pharus publishing house from 1902 onwards, which were displayed in U- and S-Bahn stations from 1923, reinforces this claim, insofar as it often emphasised the transport network's vertical variations (Pharus n.d.). Pharus maps distinguished between elevated and subterranean sections of track and used different pictographic elements to communicate not only the transition from above to below, but also the difference between underground stations and elevated stations, but such distinctions did not immediately find expression on the route-plans produced exclusively for Berlin's railways.<sup>56</sup>

#### Figure 4.14. 1913 GeHUB Map. Source: Mauruszat (2012).

The first U-Bahn route-plans that were individually distributed by BVG used a range of colours to indicate the different lines but by the late 1930s these had become standardised monochrome schematics that ignored topography but respected geography to a greater degree than the contemporaneous Underground diagram (Figure 4.15). Prior to this, however, a BVG U-Bahn route-plan dating to July 1934 suggests that the adoption of diagrammatic principles was briefly considered (Figure 4.16). In this route-plan many of the U-Bahn's routes are regularised as straight lines and the Ringbahn is standardised as a perfect oval. One possible explanation behind the failure of the diagrammatic impulses, so popularly adopted in London, to take hold in Berlin lies in fascism's and specifically Nazi Germany's relationship to modernist art.

<sup>&</sup>lt;sup>56</sup>These vertical distinctions and also the explicit display of travelling times returned to feature for various periods on later BVG-East route-plans.

While the Underground diagram has been celebrated as the "most original work of avant-garde art in Britain between the wars" (Hobsbawm quoted in Pike 2002, 101) the outcomes of similar artistic tendencies in Germany at that time were derided as *Entartete Kunst* [degenerate art] by a Nazi regime whose propagandist reliance on a mythic past was, for a long time, commonly assumed to have been entirely incompatible with a modernist aesthetic and technological future (Antliff 2002). The notion that German fascism and modernism were mutually exclusive, however, has since been revised, given that the Nazi's first attempts to deride pictorial abstraction initially met internal resistance, and also because of the regime's later acceptance of some forms of modern design and industrialism as embodied by what Herf termed 'reactionary modernism' (Ibid; Herf 1984). It remains possible, however, that the condemnation of modern art by Adolf Hitler at a Nuremburg party rally in September 1934, which effectively established Nazi Germany's official attitude towards modern art (Antliff 2002), may have decided the fate of the partially abstracted and diagrammatic route-plan whose future lay in the hands of a thoroughly Nazified DR and BVG.

After the end of WWII, colour-coded lines quickly returned to the U-Bahn's route-plans and they once again began to follow quasi-diagrammatic principles (see Figure 5.5, p.144). BVG's division in 1949 led to the duplication of route-plans from 1951 onwards. The city's Cold War division was first reflected in the design of BVG-West's pocket format route-plans that were released in January 1952 and marked the U-Bahn's fiftieth anniversary. The sector border was displayed for the first time, as if pre-empting the DDR's decision to close its borders in late May of that year, and thus require that all West Berliners acquire a travel permit to visit East Berlin (Taylor 2006). The hatched black line that at first represented a political boundary and the DDR's fluctuating border regulations (see Figure 5.10, p.153) came, in August 1961, to represent the solid topographical feature of the Wall. Figure 4.15. 1937 U-Bahn route-plan. Source: Schomacker (2009).

Figure 4.16. 1934 U-Bahn route-plan. Source: Schomacker (2009).

Even before the Wall's construction BVG-East began to publish a highly selective cartography as exemplified by the July 1960 diagrammatic plan that only showed the sections of the U-Bahn located in East Berlin (Figure 4.17). From 1961 until 1989 the course of the Wall would mark the western limits of the route-plans published by BVG-East and BVB. These route-plans, which tended to avoid showing the border wherever possible, at first reverted to geographic principles, and given the limited potential offered by East Berlin's two U-Bahn lines soon integrated the S-Bahn. From then on, the U- and S-Bahn networks, which had in earlier cartographies avoided representing each other in order to gain competitive advantage, were increasingly given equal weight on the route-plans of the East. In contrast, the S-Bahn route-plans of the 1960s produced by the DDR's state-owned DR mapped its network in full across East and West Berlin, along with the Eastern U-Bahn network. The Cold War boycott of the S-Bahn by West Berliners after the construction of the Wall quickly saw the network labelled a ghostrailway (Die Zeit 1962), and eventually forced DR to operate a severely reduced service and abandon nearly half of its track (Zach & Evers 2003). Despite this, the western sections of the S-Bahn continued – for a while at least – to represent a possible means by which the DDR could generate some, albeit meagre, foreign income.

BVG-West supported the boycott by removing cartographic references to the U-Bahn's interchanges with the S-Bahn in the west.<sup>57</sup> But it never applied the same judgment to the eastern sections of the U-Bahn. Although BVG-East's U-Bahn network was often shown at reduced size and less boldly, it remained on BVG-West route-plans throughout the twenty-eight years of the city's physical division, in part because of the greater possibilities during this period for West Berliners to access East Berlin. The symbolic content of these design decisions should, however, not be overlooked. Even though no direct interchange between the networks was possible,<sup>58</sup> BVG-West route-plans continued to show the U-Bahn line dissected by the Wall as if it were still notionally connected, and unrelentingly displayed the eleven redundant, guarded ghost-stations. BVG-West's U-Bahn route-plans became increasingly diagrammatic in style during the 1950s (see Figure 5.10, p.153), and by 1974, through a process that reflected

<sup>&</sup>lt;sup>57</sup>The SI, S2 and S3 Lines were eventually added to BVG-West's route-plans when they took over their responsibility in 1984.

<sup>&</sup>lt;sup>58</sup>A complicated process at Friedrichstraße station required passengers to switch trains in order to cross the border.

the global uptake of Beck's paradigmatic cartographic principles (Aynsley 2004), came to rely solely on straight lines at gradients of multiples of ninety and forty-five degrees.

In East Berlin during the 1970s the U-and S-Bahn route-plans were combined under various different diagrammatic styles that often integrated and displayed travel times, but continued either to omit reference to West Berlin altogether or, if showing regional S-Bahn links beyond the city, to render it as an artificially contracted *terra incognita* (Figure 4.18). While symbolically BVG-West's cartographies never gave up hope of a reunited Berlin, BVB's continued to promote isolationism and the city's division to its passengers right up until the fall of the Wall (Figure 4.19), even if it, like its western counterparts, continued to develop transport plans for scenarios that might see it become responsible for the entire city in the future (Heilein 2013\*; Kohl 2014\*).

Figure 4.17. 1960 BVG-East route-plan. Source: Schomacker (2009).

Figure 4.18. 1988 BVG-East route-plan. Source: Reineke (2011).

Figure 4.19. BVB's route-plan in one of its carriages in November 1989. Source: LAB.

After the fall of the Wall, BVB's route-plans were quickly rendered obsolete by those of BVG-West, which were better prepared for reunification due to the very fact that their designs had never publicly given up on the idea of a unified city. Copies of BVG-West's route-plan were quickly attached to the walls of Jannowitzbrücke U-Bahn station, the first former ghost-station located in the East to reopen, just two days after the fall of the Wall (Figure 4.20). It therefore became implicated in mutual processes of exploration for many East and West Berliners who in November 1989 visited foreign worlds on the other side of the Wall for the first time (Book 1995). Maps and guides to these unknown hinterlands quickly flooded Berlin, which saw these places 'cartographically incorporated' (Ibid).

# *Figure 4.20.* Passengers consult a BVG-West route-plan in Jannowitzbrücke U-Bahn station the day after the fall of the Wall. Source: LAB.

In many ways the BVG-West route-plan already incorporated the BVB's U-Bahn network, but the first truly integrated and reunified route-plan was released in January 1990. This route-plan saw BVG-West's cartographic techniques applied to East Berlin's U- and S-Bahn network, supplemented by subtler references to regional rail connections with the Brandenburg hinterland. In the words of the German transport historian, Alfred Gottwaldt: "as in the whole re-unification process the Western map won the battle" (2012\*). Each of East Berlin's U- and S-Bahn lines were rendered in their own bold colour and in the style of earlier BVG-West plans. The symbolism of the plan was reinforced by its cover, which showed Berliners crossing the border and overcoming the Wall at the Brandenburg Gate, a symbol in East and West for different versions of German unity (Figure 4.21).<sup>59</sup>

# *Figure 4.21.* The cover of the first integrated route-plan after the fall of the Wall. Source: DTB.

The route-plans distributed around this time, although symbolic of reunification, also revealed the protracted duration of the process. The boundaries of West Berlin were still marked by a dashed line that indicated BVG-West's area of operation, and subsequently a different fare-zone. Even after BVG-West and BVB's official programme of reintegration in 1992, known as *Fusion 92*, the continuing economic disparity across the city was indicated by the route-plan, thanks to the two fare-zones, which remained evident until 1995 (Merrill 2014b). *Fusion 92* was accompanied by a rebranding

<sup>&</sup>lt;sup>59</sup>On the Brandenburg Gate as a symbol of German unity see Ladd (1997).

exercise carried out with the help of graphic designer, Erik Spiekermann, and his company, MetaDesign. In an exercise that partly aimed to emulate LT's precedent in corporate design and branding Spiekermann and MetaDesign thoroughly redesigned the new BVG's corporate image, with the side effect of providing a new set of visual icons for the freshly reunified city (Heinickel 2013). Besides a revamped electric yellow colour scheme, Spiekermann's rebranding involved a new logo, typeface, way-finding system and – significantly – a new route-plan, which was released in May 1992 (Figure 4.22). While his route-plan, like many of its West Berlin predecessors, was influenced by Beck's diagrammatic principles, it symbolism was unique to the German capital, and Spiekermann, perhaps more than any other graphic designer, "contributed to the transformation of the city, from the emblem of Cold War division to the new capital of a unified Germany" (Ansley 2004, 220). At the time Spiekermann acknowledged that he and his firm were "cleaning up a post-war situation" (quoted in Kinross 1993, 32) and later he acknowledged, "the historical effort that fell to me and my agency...was to bring together the two halves of the city" (quoted in Krüger 2011, 55).

### Figure 4.22. Spiekermann's May 1992 route-plan. Source: Reineke (2011).

Spiekermann's route-plan represented a clear break with all earlier designs in terms of both scale and geometrics, even though it most closely resembled its western predecessors (Gottwaldt 2012\*). Its design was clearly influenced with future

developments in mind – not least the return of the western sections of the Ringbahn that had been decommissioned by DR in the 1980s, which it already displayed, in places, as 'under construction'. In the following years Spiekermann's route-plan visually reinforced how the city's transport network became an allegory for Berlin's continuing reunification. The replacement of the dotted lines that marked routes due for restoration by the bold lines of operating lines reflected the unified city's increasing reconnection. It visually indexed the excitement and interest that the physical process of the transport network's reunification continually commanded, as discernable in the magazines of transport enthusiast groups. It echoed, first, the U2's reconnection in November 1993 (see Meyer-Kronthaler 1991a; 1992), and then the closing of the last U-Bahn gap between Schlesisches Tor and Warschauer Straße in October 1995 (see Meyer-Kronthaler & Poppel 1995). But perhaps most significantly it charted the sow closure of the Ringbahn, a process that was only completed in 2002 (see Bock 1997; 2000; 2001; Demps 2002; Meyer-Kronthaler 2002; Jacob 2002), and the reversal of the S-Bahn network's Cold War fortunes that had rendered it "a negative term" (Zach & Evers, 2003, 280). Thus while the more rapid reinstatement of the U-Bahn's former ghoststations was as an early and much celebrated sign of reunification (see Chapter Eight), the return of the Ringbahn better illustrated the longer lasting consequences of the city's Cold War division and the realities of its reunification.

Spiekermann's design remains the basis of today's route-plan and as such has provided a semi-stable image, especially since 2002 when the Ringbahn's closed hexagonal shape came to underpin its image and reflect the undivided whole of Berlin's city centre. Perhaps unsurprisingly, around this time some of the earliest explicit references were made to the route-plan's status as an "important symbol of Germany's reunification" were made (Ansley 2004, 221). Now over twenty years old, the current route-plan rivals the degree of design consistency that characterised those of the 1930s and 1940s, as well as those of BVG-West between 1965 and 1989. In addition there is increasing evidence that it has begun fulfilling Spiekermann's own measure of symbolic success: "as soon as a symbol is appropriated, then it's successful" (quoted in Abramsohn & Bowen 2011). In 2002 the press published an alternative route-plan to mark the U-Bahn's centenary. In the style of Patterson's *The Great Bear*, it featured new humorous station names that supposedly better reflected the 'New' Berlin (Frankfurter Allgemeine Zeitung 2002). Similarly, a 2008 poster produced by a music company renamed the

route-plan's stations after musicians and bands.<sup>60</sup> Thereafter, in 2011, artist, Benny Nero released an anagram version, which he briefly publicised and sold online, while even more recently alternative route-plans have been covertly installed in S-Bahn carriages (Figure 4.23).

# *Figure 4.23.* An alternative route-plan in an S-Bahn carriage in 2013. Source: Notes of Berlin (2013).

These mash-ups may have encouraged BVG to protect their copyright, and today Nero's route-plan is only hinted at by persisting digital echoes and defunct links.<sup>61</sup> BVG only freely permits the route-plan's non-commercial private use as stipulated by German copyright law, but offers it on a range of items for sale, including T-shirts, mouse-pads and mugs. In October 2008 BVG invoked copyright law against Jonas Witt, who had used the route-plan without permission in a new iPhone application, which he distributed for free (Ihl 2008). Although non-commercial his public distribution and failure to acknowledge BVG's copyright meant Witt was forced to remove the route-plan from the application. Official BVG statements at the time emphasised their concern for the interests of their passengers, despite the positive feedback that the application had received after being downloaded over 20,000 times. Perhaps more significantly, BVG also announced its intention to release a similar service across all mobile

<sup>&</sup>lt;sup>60</sup>[D]eutsches [T]echnikmuesum [B]erlin: IV.1 A0839, My City Babylon by Underground Map, 2008. <sup>61</sup>See: www.klonblog.com/2011/12/28/der-berliner-anagramm-netzplan/, [Last accessed 3 June 2014].

platforms, but in an interesting twist *Verkehrsverbund Berlin-Brandenburg*, the regional transport authority that incorporates BVG, supported Witt's efforts by supplying timetable data and allowing him to use the route-plan, so long as it carried their logo, and not that of BVG.

#### 4.8. Conclusion

In this chapter I have reviewed the changing image of the Underground diagram and the U- and S-Bahn route-plan, and shown that while the former has become increasingly standardised and fixed since the 1930s, the latter has only experienced such processes since the early 1990s. Before then the dominant visual representation of the U- and S-Bahn fluctuated in ways that symbolised wider ideological impulses. In London the wholesale uptake of diagrammatic principles of cartographic representation by Beck, was a watershed for a diagram that today, thanks to its iconisation, still invokes its original period of development and a normative modernist past. In Berlin, by contrast, it was not so much the uptake of diagrammatic principles in the mapping of the networks on both sides of the Wall that was significant as the adoption of a single set of cartographic rules to represent the newly reunified city. Thus the city's route-plan today embodies the memory and spirit of the city's reunification. Both cartographies encode pasts that, while unique to their cities, have been produced through the comparable mnemonic processes of canonisation and, more subtly through the revisions and transitions pursued by their respective transport authorities and their graphic designers.

Through their cartographic canons, London and Berlin's transport authorities provide dominant cultural images that act as vehicles of social memory and identity, partly through the normative pasts that they reference. In other words, the afterlives of these graphic designs recall the earlier twentieth-century pasts of their conception, whether in terms of an interwar modernist past, as in London, or of a pre Cold-War past resurrected following reunification, as in Berlin. Furthermore, they do so in nostalgic ways that benefit the corporate branding strategies that each transport authority has, to various extents and at various times, relied on to enhance their public identity and reputation. The success of these cartographies in this respect, along with their iconic and symbolic status, has been illustrated by their widespread creative adaptation, which reveals how each image is popularly regarded as publicly owned – belonging to Londoners and Berliners respectively – as the image of a landscape commonly

perceived to be public space, in the traditional sense that it is publicly accessible (see Tonnelat 2010). At the same time, the degree to which these conceptions of the public ownership of the visual landscape of the Underground, U- and S-Bahn are tolerated by each city's respective transport authority is highlighted by their use of copyright procedures to maintain and protect their cartographies and the pasts to which they relate.

This officially fostered iconicity prevents new cartographic designs from gaining support, despite the potential need for alternative design principles, especially in London, given the continued physical expansion of the network. The earlier expansion of the network that each cartography has accommodated since its original introduction since 1933 in London and since 1992 in Berlin - demonstrates that whilst the diagram and route-plan can be generally interpreted as canonised icons and symbols whose continuity of design rules and principles occlude their shifting nature a more detailed visual excavation reveals their palimpsestic character. Both, for example, contain echoes and traces of previous design iterations, strategies, elements and decisions. Both also contain absences and erasures of hidden spaces, which are physically connected to but representationally isolated from the publicly accessible operational transport system - the networks' disused ruins and unfinished vestiges (see Chapters Eight and Nine). The palimpsestic nature of Underground, U- and S-Bahn's cartographies is, however, best revealed by their texts of station names, whose official revision, particularly in the case of Berlin, reflects the mnemonic production of commemorative toponymies. Unlike the creative, imaginary and purely representational renaming practices considered in this chapter, these toponymic practices had greater impact on the network's physical landscapes and, in turn, their everyday users. It is to these mnemonic toponymies that I turn my attention in the next chapter.

### **Chapter Five**

Naming the Network: The Commemorative Toponymies of Berlin and London's Transport Cartographies

### 5.1 Introduction

Place and street names contribute to a 'city-text' that reflects official versions of the past and particular political identities (Azaryahu, 1986; 1990; Pred 1990). Commemorative street naming in Berlin dates to a 1813 Prussian royal decree that reassigned responsibility for street names from the city's government to the Prussian State (Katzur 1982). Soon Berlin's streets commemorated its Hohenzollern rulers and Prussian military victories and heroes (Azaryahu 2011a). In the twentieth century Berlin's changing city-text reflected political and ideological revolutions (Azaryahu 2012) through the toponymic additions, erasures, and revisions associated with the city's Weimar Republic, National Socialist, Cold War and post-1989 periods. In the same period London's street names generally displayed a greater degree of stability and continuity (Azaryahu 1996) but historically they too had not been impervious to change. In the second half of the nineteenth century around 1,500 of London's streets were officially renamed, primarily to address the toponymic duplication caused by the creation of new city boroughs (Owen 1982; Hunt 2014) and later official renaming programmes occasionally reflected political sensitivities, as exemplified by the replacement of Germanic street names following the onset of WWI (Hunt 2014). Whereas the changes to London's street names have seldom been the focus of detailed academic scrutiny, Berlin's phases of commemorative street renaming have been extensively studied by, Maoz Azaryahu, who has demonstrated their connection to issues of social memory, power, and identity (1986; 1990; 1996; 1997; 2011a; 2012). The often parallel process of renaming Berlin's U- and S-Bahn stations has, however, rarely been explored within the theoretical frameworks provided by Azaryahu and the wider field of critical toponymy studies.

Therefore, in this chapter I chart the toponymic changes that the U- and S-Bahn and their associated cartographies have reflected since 1933. Overall this serves to demonstrate how these transport networks' toponymies have been used to foster

common memories and identities amongst city-dwellers that rarely relate to the U- and S-Bahn themselves. Here I conceive of the U- and S-Bahn as a mnemonic infrastructure in ways comparable to Dhan Zunino-Singh, who, by drawing on the work of Anderson (1991), has framed the Buenos Aires Subte as a particular cultural artefact, similar to the newspaper or novel, which can be harnessed to create moments of simultaneity, and through such things as murals, to imagine national communities (2011). Thus I argue that the U- and S-Bahn's textual landscapes are manipulated due to their increased everyday visibility through processes of memory production, which emphasise the influence of their transport authorities as bureaucratic entities. To achieve this I first introduce the relevant theoretical perspectives offered by critical toponymy studies. Thereafter I dedicate the majority of the chapter to reviewing the means by which the U- and S-Bahn's station names were changed and the mnemonic motivations that underpinned such changes in three periods of the twentieth century, 1933 – 1947, 1948 - 1989 and 1990 until today. In each period the relationship of station naming to street naming is explicated, highlighting the significance of Berlin's municipal railways' changing institutional contexts and revealing moments of contestation and debate. This analysis of the changing names of the U- and S-Bahn's network and route-plan is then contrasted with the relative stability of the Underground's toponymies. Consideration of these toponymies within an historical perspective also reveals that station names have been recurrently viewed as part of their respective networks' and cities' heritage while highlighting that the most recent forces to influence the renaming of stations are more economic than commemorative in nature

#### 5.2 Transport cartographies: city-texts of memory

Azaryahu frames Berlin's 'city-text' of street names as a 'text of memory' written, rewritten, read and re-read by multiple authors and readers who co-construct meaning, with the result that inconsistencies and contradictions related to the text's own specific history arise (2011b). He and others also acknowledge the influence of a range of actors who, as co-authors, resist official naming practices through 'counter-naming' challenges, the continued use of old toponyms, or by unconsciously facilitating a place name's accumulation of new meanings divorced from the political rationale behind its original naming (Pred 1990; Azaryahu 2011b; Rose-Redwood et al, 2010). These dynamics mean the city's toponymic text of memory is characteristic of both a canon and palimpsest – "street names that commemorate historical figures and events canonize and evince a version of the national past in the cityscape" but this does not "obscure the fact that other versions of history coexist whose subversive potential affects their suppression or marginalization" (Azaryahu 1997, 480). These coexisting and often competing histories are inscribed in a city's street names over a prolonged period of time so that, although serving recurrent canonising aims, a city-text "at any given time is the sum of former additions and erasures, and in this capacity is a palimpsest" (Rose-Redwood et al 2010, 459-460).

Official naming practices act as a stratagem which creates order, control and discipline by imprinting a "dominant ideology upon the topography" of the city through a two way process involving the "emplacement of new signifiers and the displacement of old signifiers" (Pred 1990, 135). The palimpsestic pasts referred to by these often contradictory city-texts are naturalised insofar as,

"the utilization of street names for commemorative purposes enables an official version of history to be incorporated into spheres of social life which seem to be totally detached from political contexts or communal obligations, and to be integrated into intimated realms of human interactions and activities" (Azaryahu 1996, 321).

The social memory that a city-text of street names embodies is impossible to read in its entirety or in any prescribed order, and it is not intended to be read as such (Ibid). In other words it is buried in the experiences of everyday life and use, and thereby free from the critical reflection of most people who encounter and use it. The social memories of toponyms can be excavated, and the palimpsestic attributes of the city-text and the canonising motivations of its authors untangled and revealed, through the interpretation of the characters and events to which they refer. City-texts mostly comprise "those historical figures [and events] who are located on the 'positive' side of the 'good-evil' axis predominating in a particular rendition of the past" (Azaryahu 1996, 327). The selection of these figures and events is not only dictated by ideological considerations but also procedural decisions. In Berlin's case this has historically involved multiple political levels and configurations with a variety of ideological motivations (Azaryahu 1997), including the district assemblies, state and federal governments, which have enjoyed fluctuating influence over toponymic practices.

As yet these perspectives have rarely been critically applied in a sustained manner to transport networks and their cartographies. While traditional toponymic surveys of the Underground have been undertaken (Harris 2001; Hilliam 2010) and others have noted how the altering station names displayed by changing U- and S-Bahn route-plans have reflected historical moments of growth and destruction, and "testified to the passage of time" (Gottwaldt 2007, 6), these networks and their cartographic representations have neither been framed as city-texts in Azaryahu's terms nor critically analysed as commemorative toponymic landscapes. This may be because they are commonly considered as mere reflections of wider street naming processes that serve purely functionalist purposes, rather than as commemorative apparatuses. However, such perspectives overlook the particularities of their context of production, whose investigation can contribute understandings as to how toponymic practices in transport networks reflect wider forms of cultural construction and constituent processes of commemoration. Station names trigger social and autobiographical remembrances (Augé 2002) even if in everyday use and life their original meanings and the motivations behind their choice often remain buried. As Augé states,

"The train threads its way through our history at an accelerated speed; relentless it commutes without fail and in both directions, among great people, high places, and great moments, passing without delay...Taking the subway would thus mean, in a certain way, celebrating the cult of ancestors. But obviously, this cult, if it exists, is unconscious; many station names say nothing to those who read or hear them, and those to whom they have something to say do not necessarily think of the thing when they pronounce the name" (2002, 17-18).

Station names, however, arguably gain a greater degree of visibility for a wider range of people than individual street names. The city-texts of transport cartographies are more magnified and, unlike street maps, potentially readable in their entirety. They also reflect a more prescribed order of reading linked to the sequential passing of stations and connections between different lines. Thus transport cartographies, with their simplified and connective nature, are knowable to diverse communities and populations throughout the city. They are the executive summaries of the wider city-text of street names, a separate level in a toponymic hierarchy that otherwise affords greater status to the centre over the periphery, to main thoroughfares over back streets, and to existing commemorative functions over mundane roles (see Azaryahu 1996). Significantly, however, the authorship of transport network city-texts is subject to different structures, processes and actors that, while influenced by wider street naming programmes, are not necessarily wholly or merely reflective of them.

#### 5.3 The changing names of the U- and S-Bahn

Berlin's transport network and its cartographies, like its streets and their maps, have historically been characterised by changing sets of toponyms associated with various political regimes. Each of these regimes has honoured certain historical figures and events whilst expunging others, with the result that today's route-plan can be interpreted as a palimpsest. To understand the genealogy of this palimpsest it is necessary to chart the toponymic history of the route-plan with respect to Berlin's wider political and ideological shifts and their associated street renaming programmes. In this way the mnemonic production of the U- and S-Bahn's toponymic landscape is revealed to reflect wider societal processes related to Nazification and de-Nazification, Cold War ideological division, and post-reunification de-commemoration. In addition the actors involved and contestations activated by station renaming proposals and programmes are also highlighted.

#### 5.3.1 Nazification and de-Nazification: 1933 – 1947

Around a month after the Enabling Act of 1933 provided the legal basis for Hitler's Nazi dictatorship and a day after Hitler's forty-fourth birthday, Reichskanzlerplatz, a traffic interchange situated in an area of the prosperous Charlottenburg-Wilmersdorf district known as the Westend, was renamed Adolf-Hitler-Platz in honour of Germany's new leader.<sup>62</sup> The official renaming was bureaucratically uncomplicated given that the 1813 Prussian royal decree had essentially nationalised naming rights in the city (Azaryahu 1986; 1997).<sup>63</sup> Three days later the name change of the related U-Bahn station, for which the already Nazified BVG (p.71) was responsible, occurred (Figure 5.1) (Hardy 1996).

During the following twelve years the Nazi authorities renamed and reemphasised so many streets that at the end of WWII some commentators estimated that hundreds if not thousands of toponyms would need to be rectified in order to reflect the ideals of the new post-war Germany (Berliner Zeitung 1945a; 1945b). Many of these street names commemorated the Nazi elite, former WWI generals, famous battles, and the German nation in ways that aimed to communicate the Third Reich's omnipresence, power and

<sup>&</sup>lt;sup>62</sup>Albert Speer later envisaged Adolf-Hitler-Platz as the western end of Nazi Germany's planned world capital, Germania, which would be renamed after Benito Mussolini thus freeing the Führer's name to take up a more central location (Bock 2006).

<sup>&</sup>lt;sup>63</sup>This decree remained active until Prussia's dissolution in 1947.

expected thousand-year duration. During this time around a dozen U-Bahn and a handful of S-Bahn stations were similarly renamed. Besides Adolf-Hitler-Platz, the most politically explicit example to affect Berlin's transport cartographies was the 1934 renaming of Schönhauser Tor U-Bahn station to become Horst-Wessel-Platz.<sup>64</sup> BVG's staff magazine, *Die Fahrt*, announced that the change had taken effect from 1<sup>st</sup> May, presumably as part of the Nazi regime's May Day celebrations. The renaming also marked the culmination of BVG's commemoration of the fourth anniversary of Wessel's death, which had started two months earlier with an issue of *Die Fahrt* dedicated to the 'martyr' (Figure 5.2).

## *Figure 5.1.* Adolf-Hitler-Platz U-Bahn station in 1933. Source: BVG Archives, Die Fahrt (1933).<sup>65</sup>

The timing of the station's name change demonstrated the commemorative importance attached to the U-Bahn's toponyms by the Nazis. This was further evidenced by the fact that the station's name was changed before the square which it served received Wessel's name later that month, and while Schönhauser Allee, the street to which the original station name referred, remained in use. The square which received Wessel's name was not chosen at random, as it had been the former address of the headquarters of the communist newspaper, *Die Rote Fahne* (Azaryahu 2011a). Thus the Nazi regime

<sup>&</sup>lt;sup>64</sup>Wessel was a member of the Nazi Party's paramilitary Storm Detachment [Sturmabteilung] (SA) who became a Nazi martyr after he was shot and killed in Berlin in 1930 by Albrecht Höhler, a member of the Alliance of Red Front-Fighters.

<sup>&</sup>lt;sup>65</sup>This photograph displays the counter-marking practices that are evident throughout the BVG archive's holdings of *Die Fahrt*, which may reflect post-war de-Nazification processes and legislation.

utilised the U-Bahn's toponyms to reinforce and emphasise its efforts to combat memories of resistance associated with particular places in the city that were deemed incompatible with its political ideology.

# *Figure 5.2.* The cover of the 1<sup>st</sup> March issue of Die Fahrt featuring a portrait of Horst Wessel. Source: BVG Archives.

In addition the Nazi regime used U- and S-Bahn station names to propagandistically manipulate other realms of cultural life in the city. For example, a number of station renamings were ordered in preparation for the 1936 Olympics. Stadion U-Bahn station was renamed Reichssportfeld (Figure 5.3) and Eichkamp S-Bahn station became Deutschlandhalle following the construction of the Olympic venues of the same names. In fact, although its Nazi heritage is rarely acknowledged, today's Stadtmitte U-Bahn station also received its name in this period, to help orientate foreign visitors. Route-plans produced by private cartography firms catering for the tourists attracted by the event emphasised these toponyms further (Figure 5.4). Thus between 1933 and 1945 the station names of the Berlin U- and S-Bahn became, for the first time, an explicit commemorative apparatus for supporting the Nazi regime's propagandistic aims. Whilst in this period station name changes primarily reflected those that occurred in the city's

streets, they did not always do so unidirectionally and certain examples demonstrate the particular toponymic significance attached to U- and S-Bahn stations at this time.

## *Figure 5.3. Reichssportfeld U-Bahnhof in 1936. Source: BVG Archives, Die Fahrt (1936).*

After WWII a protracted and drawn-out process of street renaming took place in Berlin, overseen by Karl Maron, the Kommunistische Partei Deutschlands [German Communist Party] (KPD) and later SED member, appointed as Deputy Mayor of Berlin. Maron set in motion a decentralised process that gave the city's district assemblies responsibility for toponymic de-Nazification. At the same time, however, this process was complicated by the decision to simultaneously address the city's duplicated names. It was characterised by various durations of street renaming activity and differing approaches across districts. Although many of the most explicit Nazi street names were quickly replaced following German capitulation, often with temporary signs, the official process of street renaming, which had implications for BVG's station naming decisions, was only officially completed in July 1947, and even then appeals and petitions continued until 1949 (Azaryahu 1986; 1990; 2011a). Therefore the official and sometimes commemorative renaming of U- and S-Bahn stations occasionally preceded that of the city's streets, partly because the visibility that the route-plans afforded toponyms, which had originally been utilised by the Nazis, also helped ensure and indeed necessitate, in the most explicit cases, their rapid post-WWII removal. Thus the S-Bahn station that referred to Hitler's birthplace was quickly renamed and the earliest post-war BVG route-plans expunged his and Wessel's names and restored earlier names even though the relevant streets had not yet been officially renamed.

*Figure 5.4.* 1936 U-Bahn route-plan with sections of interest. Source: Opitz (in Reineke 2011).

However, BVG's efforts to rename other U-Bahn stations during the same period were delayed by the wider process of street renaming being somewhat confused when it came to establishing the depth of toponymic de-Nazification that was required. In January 1946 BVG Personnel Director, Wilhelm Knapp,<sup>66</sup> wrote to the city's Department of Transportation asking them to quickly resolve the street renaming process because the uncertainty was hindering BVG's operations and its intention to print various street maps and route-plans.<sup>67</sup> In his letter Knapp offered his own proposals. While he was happy for Reichkanzlerplatz to return he preferred that the name of Karl Liebknecht, the co-founder with Rosa Luxemburg of the KPD, replace Wessel's rather than see Schönhauser Tor restored. Sophie-Charlotte-Platz and Paradeplatz U-Bahn stations, he ventured, should be renamed after the recently deceased German artist Käthe Kollwitz and novelist and Jewish emigree Franz Werfel. Knapp's proposals were forwarded to the Allied Military Administration for approval but received no definitive decision. BVG was then informed that a list of renamed streets would not be available for another month and that in the meantime they should not make any further name changes within their network.<sup>68</sup>

Knapp's proposals reflected his political standpoint but his suggestion to commemorate Werfel seems a far-sighted and potentially early attempt at symbolic reconciliation in a period of post-war memory politics that would soon evolve to occlude the Jewish victims of WWII (see Herf 1997). The suggestion to replace a former Prussian monarch, meanwhile, heralded the SED's later attempts to rid Berlin's city-text of 'imperialistic' and 'monarchic' references. Regardless of Knapp's motivations, his proposals went unheeded. As the delay continued BVG took a more authoritative stance by asking for permission only "for the record" to rename Berg Straße and Petersburger Straße U-Bahn stations after Karl Marx and Nikolai Besarin given that these changes had already been applied to streets by their relevant district assemblies and had been reported by the press.<sup>69</sup>

Maron was, in fact, personally responsible for renaming a square and street after Besarin, the commander of the Soviet occupying forces in Berlin, on the first

<sup>&</sup>lt;sup>66</sup>Knapp, like Maron, was a KPD and later SED member.

<sup>&</sup>lt;sup>67</sup>LAB: BVG to Department of Transportation, Änderung von Bahnhofsnamen bei der U-Bahn, 03/01/1946, B Rep.011 Number 16.

<sup>&</sup>lt;sup>68</sup>LAB: Department of Transportation to BVG, Änderung von Bahnhofsnamen bei der U-Bahn, 07/02/1946, B Rep.011 Number 16.

<sup>&</sup>lt;sup>69</sup>LAB: BVG to Minister Kraft, Umbenennung von Straßen, 22/05/1946, B Rep.011 Number 16.

anniversary of his death. Maron's use of his powers in this way ushered in the prevalent practice in East Berlin of using the de-Nazification of the city-text as a means to introduce first the Soviet Union's and later the DDR's own political toponymic pantheon. Of the decision to honour Besarin in this way Maron wrote, "there can only be a few Berliners able to remember that do not agree with this decision whole-heartedly... Berlin owes its first city commander after the final defeat of the Hitler regime an exceptional amount" (1946, 1). As Azaryahu notes, the debt of gratitude that the renaming paid the Soviet Union as a liberating force was unlikely to have been supported by all Berliners (1986), especially those who experienced the widespread brutalities associated with the Red Army's advance on Berlin.

The decision taken by the working-class western district of Neukölln, to rename Bergstraße after Karl-Marx, meanwhile, demonstrated that in this ambiguous moment certain political figures were celebrated in both East and West Berlin prior to the consolidation of the Cold War's dominant ideological perspectives. This example also potentially highlights the confusion experienced in determining the exact limits of Berlin's Nazi city-text. Had Bergstraße accumulated Nazi meanings and memories despite dating to the 1870s? This confusion impacted upon BVG's operations. A Berlin cartographer contracted to produce BVG's maps and route-plans excused the delay in fulfilling his contract because even by March 1947 it remained "unclear to what extent the term "Nazi-name" applied and whether militaristic names should also be changed." <sup>70</sup> As the official list of street renamings approached completion, Knapp wrote to Ernst Reuter, then the city Councillor for Transport and Utilities, to confirm the planned changes to station names and to reemphasise that passengers were still waiting for BVG's new maps and route-plans.<sup>71</sup>

Only then did the extent of the memories of Nazism buried in the U-Bahn's station names become clearer. For example, Belle-Alliance-Straße U-Bahn station, whose name predated 1933 and signified the Napoleonic battle known in Britain as Waterloo, was deemed too implicated in Nazism's construction of militaristic myths and was hence replaced by first Franz-Mehring-Straße and then more permanently

<sup>&</sup>lt;sup>70</sup>LAB: Landkartenhandlung und Geographischer Verlag to BVG, Straßenplan von Gross-Berlin, 17/03/1947, B Rep.011 Number 16.

<sup>&</sup>lt;sup>71</sup>LAB: BVG to Department for Transport and Utilities, Umänderung von Straßennamen, 28/05/1947, B Rep.011 Number 16. Knapp and Reuter would later become two of the main protagonists of disputes that eventually led to BVG's division (see Merrill 2014b).

Mehringdamm in honour of the Spartacus League member. Similarly, Gardepionierplatz U-Bahn station, which referred to a nearby military parade ground, was renamed Südstern. Other station names dating to the Nazi period (e.g. Stadttmitte and Innsbrucker-Platz) or with meanings and associations that were actively promoted by the National Socialist regime (e.g. Richard-Wagner-Platz and Hermannplatz), however, escaped a similar fate. In the same correspondence Knapp, noting that Horst-Wessel-Platz would be official renamed after Rosa Luxemburg, argued that the station he had previously hoped would take Karl Liebknecht's name should now take Luxemburg's. Again his suggestion was ignored, as a 1949 BVG route-plan testifies (Figure 5.5).

#### 5.3.2. Cold War ideological division: 1948 – 1989

The division of the city Magistrate in 1948 and later administrative split of the BVG in 1949 created new institutional configurations responsible for the naming of Berlin's streets and stations (Merrill 2014b). From then on the U- and S-Bahn's toponymic landscapes reflected the country, city and transport network's increasing political and ideological division. Just eighteen days after the establishment of BVG-East, the East Berlin Magistrate decided to rename Kaiserhof U-Bahn station in the central district of Mitte after Ernst Thälmann, the former KPD leader and antifascist martyr who had been murdered in Buchenwald concentration camp five years to the day earlier (Berliner Zeitung 1949). The station's renaming did not directly reflect a street renaming. While Wilhelmplatz, a square close to the station, was also renamed after Thälmann, the street after which the station had originally been named retained its name until the early 1960s. Thus this renaming, as with Horst-Wessel-Platz earlier, reflected the intentional decision to embed Thälmann's name in as many spheres of everyday life as possible whilst simultaneously erasing references to Germany's monarchic past. At first, the square's renaming was planned for 11<sup>th</sup> September 1949 to coincide with the annual Memorial Day for the Victims of Fascism that had first been established in 1945 (see Herf 1997). In fact, it was delayed until 30<sup>th</sup> November 1949 to coincide instead with the numerous events that marked the first anniversary of the new East Berlin Magistrate (Magistrate). On that day a huge portrait of Thälmann was hung above a podium in the square from which the East Berlin Mayor, Friedrich Ebert, addressed the amassed crowd.

*Figure 5.5.* July 1949 U-Bahn route-plan with sections of interest. Source: Schomacker (2009).

Four months later the significance that the DDR placed on the toponyms of its cities and towns entered into the country's legislature with a law that decreed that in East Germany,

"streets, roads and squares that carry militaristic, fascist and anti-democratic names or such named after people, places and other terms which are associated with military, fascist or anti-democratic acts, should be renamed by 31<sup>st</sup> July 1950" (quoted in Azaryahu 2012, 394).

While the renaming of Thälmannplatz U-Bahn station had been completed on paper by this deadline its ceremonial renaming was delayed until its reopening in 1950 following the extensive restoration needed because of its complete destruction during WWII. Thus train services ceremonially returned to the station on 18<sup>th</sup> August 1950, the sixth anniversary of Thälmann's death.

Prior to this, news of the station's reconstruction was regularly reported in the DDR press in order to create anticipation for its re-opening amongst the city's population. The station became one of the earliest prestige techno-architectural projects to contribute to SED propaganda. For example, it was reported that in keeping with the station's importance, which tacitly meant its status as the first Eastern station on the inter-sector A Line, its interior would be clad in red marble undisturbed by advertising (Neues Deutschland 1950a; Berliner Zeitung 1950a). This choice of material connected the station's reconstruction to other high-profile soviet building projects of the time including the Soviet Embassy on Unter den Linden, the restoration of Humboldt University's entrance hall and to a lesser extent the Treptow Soviet War Memorial, which used polished red granite rather than marble.<sup>72</sup> Later, in an amplification of rhetorical strategies first used for the re-opening of Hausvogteiplatz U-Bahn station, Thälmannplatz U-Bahn station's design and its introduction of new technologies saw it hailed, at least in the DDR press, as Berlin's most modern and beautiful U-Bahn station (Neues Deutschland 1950b; 1950c; Berliner Zeitung, 1950b). On its opening further prestige was drawn from the fact that despite being "reminiscent of the palace-like metro stations of Moscow" the project to restore the station had lasted just 108 days (Neues Deutschland 1950d).

<sup>&</sup>lt;sup>72</sup>These projects, but most persistently, Thälmannplatz U-Bahn station attracted the popular myth that the red marble used had been taken from Hitler's Reich Chancellery even though its Thüringen origin had been reported in the earliest press reports of the station's reconstruction (see Knobloch 1982; Mittig 2005; Mauruzat & Topel 2008).

The station's aesthetics, speed of restoration, and commemorative naming echoed strategies that had earlier been employed in Moscow to create what Jenks has called 'the metro spectacle' (2000). The spectacle of Thälmannplatz U-Bahn station's restoration and its propagandistic use was most evident during its official reopening. Now DDR newspaper reports emphasised how a station destroyed by "Anglo-American bombs" had returned to life decked for its re-inauguration in flowers and the flags of the DDR nation, capital city, and labour and youth movements (Berliner Zeitung 1950b, 6). Twenty members of the Freie Deutsche Jugend [Free German Youth] (FDJ), who would later voluntarily work at the station, were greeted on the station's platform by Thälmann's wife and daughter during a ceremony that involved speeches by Knapp, who was by then the new Executive Director of BVG-East, and representatives of the Magistrate and SED that each stressed Thälmann's merits within the struggle for peace (Ibid). The station's simple entrance was embellished by the presence of BVG flagbearers and, as with the street renaming, an large portrait of Thälmann (Figure 5.6), while beneath the ground his freshly installed and polished name shone out against the red marble of the tunnel walls (Figure 5.7).

*Figure 5.6. Thälmannplatz U-Bahn station on its opening. Source: Mauruazat & Topel (2008).* 

## *Figure 5.7.* Workmen install the station sign shortly before the station's official opening. Source: Bundesarchiv.

The station, its name and the personality it referenced were merged through an act of toponymic inscription that deliberately contributed to the construction of place and constituent processes of memory production. This was achieved so successfully in fact that nine years later an article in the BVG-East staff newspaper celebrated the ninth anniversary of the station rather than the fifteenth anniversary of Thälmann's death (Unsere BVG Zeitung 1959). A new everyday and supposedly invincible place of memory had been created, where Thälmann's name would live forever without fear of Nazi concentration camps or Anglo-American bombing raids. One journalist wrote,

"in the future millions of people will read the station name "Thälmann" and remember that this man was a champion of socialism and peace. We remain obliged to ensure that what has now arisen from the ruins more beautiful than ever is never again destroyed by bombs" (Berliner Zeitung 1950b).

In reality, as a visit to the station today testifies, its architectural finish was somewhat crude, and the uneven and make-shift application of the marble highlights a physical and aesthetic weight that the simple and austere station seems unable to bear, as if symbolic of the DDR's wider attempt to emulate Soviet socialism.

Thälmannplatz was not the first or last station to reflect the commemorative toponymic impulses of the Magistrate. Earlier, on the occasion of Joseph Stalin's seventieth birthday in December 1949, Frankfurter Allee and its U- and S-Bahn station became Stalinallee reflecting not only the spread of Stalin's cult of personality but again a wider intentional processes of place-making and memory production. In this case the renaming ceremony coincided with the laying of the first cornerstone of the twokilometre monumental ensemble of eight-storey apartment blocks designed in the Soviet Union's socialist classicist style, which became symbolic of the DDR's initial aspirations for the post-war reconstruction of Berlin (Neue Zeit 1949). Three months later Danziger Straße and its U-Bahn station were renamed to honour Georgi Dimitroff, the first communist leader or Bulgaria, following his death in July 1949 (Berliner Zeitung 1950c). DDR President Wilhelm Pieck and Prime Minister Otto Grotewohl joined Ebert at the renaming ceremony and drew on Dimitroff's anti-fascist history by proclaiming that his name represented "an obligation to strengthen the fight against the enemies of democracy" (quoted in Neue Zeit 1950, 2). On the second anniversary of Dimitroff's death a memorial sign was placed in front of the station attached to three flagpoles. One side of the sign read, "The life of Georgi Michaloff Dimitroff, the true companion of Lenin and Stalin, the unyielding revolutionary and antifascist tribune to all fighters for the cause of peace and democracy, serves as an inspiring example of communism" (Figure 5.8). The other showed Dimitroff amongst what seems to be other members of the DDR and Soviet political pantheon (Figure 5.9).

Rosa Luxemburg and Julian Marchlewski, other members of this pantheon, also received the honour of having streets and stations named after them. The twenty-fifth anniversary of death of the Polish communist Marchlewski's was celebrated in March 1950 with a renaming ceremony attended by a Polish delegation including its Deputy of Defence (Neues Deutschland 1950e).<sup>73</sup> Luxemburgplatz U-Bahn station, as first requested by Knapp in 1947, finally became a reality on 1<sup>st</sup> May 1950, International Workers' Day (Berliner Zeitung 1950d). The propagandistic aims of these toponyms continued long after the stations' ritualistic renaming. During the celebrations of the twentieth anniversary of the DDR portraits and quotations of the 'great revolutionaries' were displayed at their respective stations (Neues Deutschland 1969).

<sup>&</sup>lt;sup>73</sup>During Berlin's 750<sup>th</sup> anniversary in 1987 a stone relief of Marchlewski was installed in the station.

# Figures 5.8. and 5.9. The memorial sign outside U-Bahnhof Dimitroffstraße in July 1951. Source: Bundesarchiv.

Following this initial period of topopnymic revision a further pronounced wave of renamings took place between April and May 1951, illustrating a shift in the DDR's ideological underpinnings from anti-fascist democratic to socialist principles (Azaryahu

1986). Azaryahu tentatively connects this later wave with the preparations for the Third World Festival of Youth and Students that took place in Berlin in the summer of 1951 (Ibid). The festival, which was crucial in acknowledging the DDR's membership in the international socialist community, reiterated how global events have historically encouraged renaming programmes in the city. Like the 1936 Olympics, it also had consequences for the toponymic landscape of the U-Bahn when Schwarzkopffstr U-Bahn station was renamed Walter-Ulbricht-Stadion: for the first time an active DDR politician, the SED's General Secretary, entered the U-Bahn's pantheon.

The station name changes pursued in East Berlin during the late 1940s and early 1950s did not, however, escape criticism and on occasion they became the sources of toponymic grievances that were expressed due to the idiosyncratic division of the network. For example, Walter-Ulbricht-Stadion U-Bahn station, which lay on the C Line (today's U6), was run by BVG-East but served by trains that were owned, staffed and managed by BVG-West, a scenario that also frequently characterised the A and D Lines (today's U2 and U8). Thus U-Bahn stations and carriages became a site where political and ideological opinions and identities could be contested, and often with direct reference to the transport network's toponymic landscape. The renamed BVG-East stations occasionally faced ridicule as one commentator in a 1950 issue of the *Berliner Zeitung* demonstrates:

"When I recently used the U-Bahn...and the conductor announced 'Dimitroffstraße' instead of as before 'Danziger Straße' there was regrettably no lack of irrelevant, stupid and from some passengers, even despiteful remarks. Even though the carriage was full besides me there were only a few passers-by who protested against it" (Berliner Zeitung 1950e, 2).

As Pred has noted of late nineteenth-century Stockholm, such examples of mockery were used as tactics to contest official (re)naming strategies (1990). They represented "resistance that, with all its humorous resort to irony, sarcasm, ridicule, and social inversion, demonstrated the ability of the otherwise trammelled to penetrate and demystify the word of the élite Other" (Ibid, 137).

From at least 1951 BVG-East started to produce its own U-Bahn route-plans, showing all of the stations' new names but for those route-plans produced by BVG-West it was another matter. This was brought to the attention of the *Berliner Zeitung* by a schoolchild who in August 1951 noticed that some route-plans still showed Kaiserhof

instead of "our beautiful Thälmann-Bahnhof" (Berliner Zeitung 1951a, 4). The newspaper later explained why out of date route-plans persisted and publically revealed some of the lesser-known details of BVG's administrative division.

"The BVG in the democratic sector [BVG-East] informs us of something that many Berliners do not know... the Berlin U-Bahn, with the exception of the E Line, is operated by the West Berlin BVG. Although BVG-West has the new route-plans available, they refuse to install them. They rely on the decisions of the West Berlin government which does not recognise the renaming of streets and squares in the democratic sector of Berlin" (Berliner Zeitung 1951b, 8).

The BVG-West route-plans that at this time quickly reflected any changes to station names in West Berlin did not immediately accord the same respect to the East Berlin station names changed after the division of the city's government. From 1952 BVG-West did display the new eastern station names on their route-plans, but only as a subscript in a smaller font beneath what they considered to be the still legitimate former names (Figure 5.10). When the BVG-West redrew its route-plan in 1959 the result, with its hierarchical arrangement of station names, was labelled by the DDR press as another example of 'Schönberger Logik', the biased approach of the West Berlin Senate.<sup>74</sup> Its journalists sarcastically reminded BVG-West's cartographers to:

"write the stations in the eastern sector: Dimitroffstraß, Marchlewskistraße, Walter Ulbricht Stadium and Thälmannplatz only in small print under the old name – as always!" (Neues Deutschland 1959).

BVG-West's approach to BVG-East's commemorative toponymy, however, was anything but consistent and did not simply reflect the view that the Magistrate was politically illegitimate. It also displayed selective decisions based on ideological values. For example, when in 1958 the Magistrate decided to reinstate Besarinstraße U-Bahn station's former name, Frankfurter Tor, BVG-West route-plans respected this change and Besarin quickly disappeared from the network's toponymic landscape. This was the case even though the original renaming of the station had been authorised by a unified, although increasingly fractious, post-war Berlin Magistrate, an authority that retained greater political legitimacy in the view of the West than the East Berlin Magistrate responsible for the name's reversal. Thus the second renaming that was more compatible with the political and ideological perspectives of West Berlin may have been viewed as correcting an earlier toponymic injustice. BVG-West's selective

<sup>&</sup>lt;sup>74</sup>The West Berlin Senate was based in the district of Schönberg.

approach was evidenced again when de-Stalinization saw Stalinallee revert to Frankfurter Allee in 1961. Again this change was fully respected by BVG-West routeplans, whereas Thälmann, Luxembourg, Dimitroff, Marchlewski and Ulbricht remained either in subscript or parenthesis.

This logic continued to characterise BVG-West route-plans until the early 1970s when finally they started to show just one name per station. Meanwhile, during roughly the same period, the West-Berlin Senate ordained its own pantheon in the western half of the U-Bahn's city-text. BVG-West renamed stations after Ernst Reuter in 1953, Theodor Heuss, the first president of the BRD, in 1963 and emphasised in 1975 an earlier street-renaming decision that commemorated the Berlin airlift. For the most part, however, the mnemonic text of the West Berlin U-Bahn was made possible not by renaming procedures but thanks to the large scale extension of the network from the 1950s onwards. These extensions saw new stations named after the Social Democrat politician Kurt Schumacher in 1956, the former West Berlin Mayor Walther Schreiber in 1971, the first post-war chancellor of West Germany, Konrad Ardenauer, in 1978 and the German-Jewish left-wing political activist Franz Neumann in 1987.

Perhaps unsurprisingly while BVG-East cartographers still represented the whole system in their route-plans (see Chapter Four) they retaliated against the Western renamings by either ignoring the changes or by using the same subscript that had been used in the West to dishonour the DDR's 'heroes'. This wrangling over the representation of and respect for various station names ended in the early 1970s, not least because by then the Western U-Bahn no longer appeared on East Berlin's route-plans, and because the construction of the Wall and the end of inter-sector U-Bahn traffic had made BVG-West's toponymic resistance somewhat redundant. The end of these representational conflicts ushered in greater degrees of textual canonisation for BVG-West's route-plans than it did for those of BVG-East's successors, BVB.

*Figure 5.10.* July 1957 BVG-West U-Bahn route-plan with highlighted sections of interest. Source: Schomacker (2009).

For example, in 1973 Walter-Ulbricht-Stadion, which was by then a non-operational ghost-station (see Chapter Eight), was renamed Stadion der Weltjugend in order to mark the tenth World Festival of Youth and Students. Meanwhile in 1986 Otto Grotewohl replaced Thälmann on the U-Bahn route-plan. Thälmann did not, however, disappear from the route-plan altogether. Instead he moved from the centre of the DDR's capital towards its periphery with the inauguration of the Ernst-Thälmann-Park S-Bahn station (previously Griefswalder Straße) that served a newly built housing complex and park that featured a monumental bronze bust of the anti-fascist martyr.<sup>75</sup>

In BVG-West route-plans the DDR-run S-Bahn networks in both West and East Berlin were rarely shown after the construction of the Wall and the onset of West Berliners' boycott of the system. BVG-West supported the boycott by dropping toponymic suffixes that indicated where to transfer between the U-Bahn and S-Bahn (Hardy 1996). In contrast, BVG-East route-plans integrated the two systems from the late 1960s and thus in the East the U-Bahn's city-text merged with that of the S-Bahn's, which already included stations named after Vladimir Lenin, Karl Marx and Friedrich Engels and would later include those named after, amongst other political figures, Karl Maron himself. The last members of the DDR political and military elite to join the routeplan's mnemonic text were Albert Norden, Heinz Hoffmann and Paul Verner, thanks to the rare opportunity to name new stations that was provided by the opening of an extension to the E Line (today's U5) in July 1989. Their names, however, remained part of the U-Bahn's toponymic landscape for only around two years.

#### 5.3.3. Post-reunification de-commemoration: 1990 – Today

During the early 1990s the DDR's city-texts, like those of the Nazi regime after 1945, were extensively revised. In this instance, however, the main framework for a variety of renaming programmes, which varied in their approach and depth of intervention, was provided by national reunification and democratisation rather than de-Nazification (Azaryahu 1997). In this respect different municipal governments pursued minimalist and maximalist approaches to their parts of the city-text in an attempt to expunge the names that held Soviet and DDR symbolic value (Ibid). The latter approach hoped to extend the purge to de-commemorate the toponymic heritage of German socialism more generally (Ibid). Whilst in Berlin spontaneous acts of counter renaming took place

<sup>&</sup>lt;sup>75</sup>The housing complex and park retains this name today and Thälmann's monument is now a protected landmark.

following the fall of the Wall, official street-renaming measures were only undertaken after Germany's official reunification on 3<sup>rd</sup> October 1990 and Berlin's district and city assembly elections in December 1990 (Ibid). At first, East Berlin's street names were de-commemorated by decisions made by the former East Berlin districts that pursued a more minimalist approach but later a more maximalist approach was imposed by the reunified Senate that was led by the Christlich Demokratische Union Deutschlands [German Christian Democratic Union] (CDU), whose cause was further helped by legislation designed to guide the transfer of the federal capital from Bonn to Berlin, and by an independent renaming commission report published in 1994 (Ibid).

It was the Senate's more maximalist approach that had the greatest impact on the U-Bahn route-plan, which in many cases pre-empted the changes that, for administrative and bureaucratic reasons, took longer to be reflected in street maps. In July 1991, CDU representative Günter Toepfer called for the renaming of the U-Bahn stations that carried the names of the DDR's former 'greats' (Neue Zeit 1991a). Toepfer declared that, in this instance, the Senate did "not have to wait for the district assemblies and could accelerate the elimination of Stalinist names from the streetscape through their own actions" (quoted in Ibid, 22). Whereas the S-Bahn lay further outside the Senate's direct influence and thus retained some of its DDR names until 1993, little stopped the Senate from ordering name changes within the U-Bahn network. Two and half months after Toepfer's comments, on the first anniversary of Germany's reunification, nine station name changes came into effect. The changes were conducted with such haste in order to coincide with the anniversary that the signs at some stations were misspelled and elsewhere a renamed station pre-emptively referred to a street that did not yet exist (Neue Zeit 1991b; Meyer-Kronthaler 1991b).

Amongst other changes the names of Dimitroff, Grotewohl, Marchlewski, Norden, Hoffmann and Verner were all removed occasionally replaced by new historic personalities deemed more ideologically suited to the city's post-unification future. Meanwhile Otto-Grotewohl-Straße U-Bahn station took the name of nearby Mohrenstraße and thus inadvertently emphasised Germany's colonial past (Figure 5.11).<sup>76</sup> At a time when there was considerable public outcry over the de-

<sup>&</sup>lt;sup>76</sup>There has been growing pressure, including the use of counter-naming tactics, from a number of citizens' initiatives to have this street and station renamed because of its racist undertones and as a

commemoration of street names and the demolition of East German monuments, some commentators argued that the speed of the changes and the lack of public consultation represented a 'cloak and dagger' operation (Meyer-Kronthaler 1991b). The man primarily responsible for this operation was the CDU Senator for Transport, Herwig Haase, who personally re-inaugurated Dimitroffstraße U-Bahn station's new name, Eberswalder Straße. In fact only one of the nine stations renamed at this point reverted to its previous name. Stadion der Weltjugend once more became Schwarzkopffstraße, a toponym that had remained present in the street map throughout the DDR period. Continuing administrative, bureaucratic and political battles to revive older street names meant that Dimitroffstraße (renamed 1 November 1995), Otto-Grotewohl-straße (renamed 1 October 1993) and Marchlewskistraße (still in use) all outlived the stations that served them. Haase took advantage of the U-Bahn's particular institutional context to inaugurate new station names that shifted their functional reference to alternative streets. Thus old incompatible toponyms were replaced in a way that partially isolated the U-Bahn station renaming decisions from wider continuing protests and simultaneously created further arguments for the renaming of the streets that the stations previously referred to. Many members of the Senate, particularly Haase, clearly expected that in time these names would disappear from both street maps and U-Bahn route-plans, as many in fact did.

These changes might, however, have been more sweeping. Haase's plans had also applied to Rosa-Luxemburg-Platz but on hearing about them the *Unabhängige Fraueneverband* [the Independent Women's Association] (UFV), an organisation originating from various DDR autonomous women groups who had originally agreed on their manifesto at a theatre located at Rosa-Luxembourg Platz, criticised Haase, BVG and BVB and spoke out against the planned change (Neues Zeit 1991c; Die Tageszeitung 1991a). The UFV declared that Haase would not succeed in erasing history by replacing the station's name and eventually gained the support of Berlin's CDU Mayor, Eberhard Diepgen (Ibid). Although Haase still announced the name change in the hope that it might take place at a future date, the UFV's prediction ultimately proved true and Luxembourg's name remains in Berlin's city-text and the U-Bahn's route-plan today (Die Tageszeitung 1991b).

gesture of the city's commitment to addressing, what many believe, has been the inadequate handling of the memory of German colonialism (see Bergt, 2009; Schmalenbach & Bobileva 2014).

### *Figure 5.11.* The temporary outcome of the renaming of Otto-Grotewohl-Straße U-Bahn station. Source: LAB.

The lack of public participation characterised by the official renaming of U-Bahn stations at a time when the renaming of East Berlin was firmly in the media spotlight can be juxtaposed against an early example of counter-naming that took place shortly afterwards. On the evening of 20<sup>th</sup> November 1991, autonomous groups simultaneously and covertly renamed two S-Bahn stations in remembrance of Antonio Amadeu and Jorge Joao Gomandai, the recent victims of the rise in far-right attacks that had accompanied reunification (Die Tageszeitung 1991c). A flyer distributed during the action declared the intentions behind the counter-naming, and in turn illustrated the mnemonic potential of station names in general. It stated that the groups responsible wanted "these names to stay in the memory of the public. We want people to remember them and their deaths" (Ibid). Here was an explicit example of the tactical "use of naming to recover memory and meaning" (Pred 1990, 138). These counter-naming tactics would later be used in connection with other mnemonic causes as discussed below and in one instance would coalesce with other memorial expressions in the landscape of the U-Bahn, as the next chapter will show.

Despite these grassroots efforts, those with the greatest influence over station naming practices are still institutional actors: the Berlin Senate, BVG and the city's individual

district assemblies. However, sometimes these actors can disagree in ways that lead to costly repercussions, as was the case for the Frankfurter Tor U-Bahn station, renamed in October 1991 to refer to the nearby Friedrichshain town hall (Meyer-Kronthaler 1991b). When plans to move the town hall became apparent, BVG reinstated the station's former name in June 1996 on the orders of Friedrichshain's district assembly. In September 1996 the Senate ordered the reinstatement of the station's first name, Petersburger Straße and then a year later changed its decision and renamed the station Frankfurter Tor once again (Berliner Verkehrsblätter 1996; Bollwann 1997). These name changes eventually resulted in a bill amounting to 33,600 DM<sup>77</sup> for BVG, a public cost that was considered unacceptable by the press (Ibid). In contrast, shortly before this fiasco, a subtler station name change exemplified one of the earliest examples of the privatisation of naming rights in Berlin's U-Bahn and the possible influence of corporate lobbyists.

In April 1996 Kochstraße U-Bahn station became Kochstraße–Checkpoint Charlie. The costs associated with the renaming were covered by the Central European Development Corporation (CEDC), an American investment corporation that had purchased former borderlands in the area from the Senate in 1992 with the intention of building the 'Checkpoint Charlie' business centre (Berliner Verkehrsblätter 1996). Here toponymic inscription again contributed to the construction of place, characterised in this case by the heritagisation and commercialisation of the American-influenced Cold War history of the site (Frank 2009). As one of the city's first major post-1989 urban development projects, CEDC's plans were also exemplary of the unabated economic speculation associated with Berlin's reunification and the expected return of capital city status. However, the loss of CEDC's main investor led them to abandon the project in 1997 (see Luescher 2002). Although no longer displayed on the route-plan the Checkpoint Charlie suffix still appears on station signs and thus acts as a subtle reminder of the unfulfilled promises of the city's reunification.

Since the late 1990s economic discourses – and particularly the question of who foots the bill – have increasingly influenced station-renaming decisions, occasionally with repercussions for campaigns with commemorative intentions. While private companies have successfully lobbied and paid for the renaming of stations (see Die Tageszeitung

<sup>&</sup>lt;sup>77</sup>Approximately equivalent to €17,200 or £13,600 today.

2003) there have also been instances when station renaming has been brought about due to associated marketing strategies. In 2009, for example, Berlin's Natural History Museum entered the U-Bahn's city-text following two years of negotiation with the Senate about the creation of a 'themed' station, which was intended to increase museum visitation and was initially expected to cost €300,000 (Die Tageszeitung 2007a; Mohnhaupt 2009). Eventually the museum paid for the renaming of the station, along with just €5,000 to convert advertising billboards for use in a far more modest rebranding strategy than had first been envisaged (Ibid). The associated costs of station renaming could also be used as an argument against commemorative street renaming processes. It was reasoned, for example, that certain streets could not be renamed as such decisions would trigger a supposedly more expensive change to station names. Of course street name changes also bore public costs, but these lay with the district assemblies who were directly responsible for the renaming decision. Station naming, meanwhile, remained the preserve of the Senate as mediated by BVG, and so economic arguments could be used to resist or limit controversial street name changes decided upon at the district assembly level. This is what happened when *Die Tageszeitung* started a campaign to have Kochstraße renamed after Rudi Dutschke, the German student leader, in 2004 on the twenty-fifth anniversary of his death.<sup>78</sup>

This campaign quickly met stiff opposition from CDU members but eventually succeeded in having an eastern section of Kochstraße renamed in 2008. The western section of the street was not affected by the name change because BVG 'interfered' and campaign leaders were forced to acknowledge the costs of renaming the station if the whole street were to be renamed, and therefore compromised by lobbying for the renaming of only Kochstraße's eastern section (Die Tageszeitung 2004; Die Tageszeitung 2007b). Although never borne out, some had even grander plans. An Alliance 90/Greens politician demanded that the debate should not be restricted to the district assembly level and that Berlin Mayor Klaus Wowereit should demonstrate how 'Red' he was, and signal that Berlin "is able to deal with its recent history", by leading the Senate in endorsing the similar renaming of Uhlandstraße U-Bahn station, the closest station to the site of the assassination attempt that eventually claimed Dutschke's life (quoted in Die Tageszeitung 2005a, 21). Although this demand did not garner much

<sup>&</sup>lt;sup>78</sup>Kochstraße was chosen because it was the address of the Axel Springer publishing company, whose anti-student sentiment, many claimed, had been a direct contributor to Dutschke's death. On Dutschke see Barclay (2010).

serious response, it still serves to demonstrate the higher commemorative status afforded to station names over those of streets in a toponymic hierarchy: the former is representative of the collective memory of the city as a whole, as endorsed by the Senate, and the latter reflects the political and commemorative will of individual district assemblies.

While economic concerns have become more influential on toponymic decisions in the absence of wider political and ideological shifts, the idea of using station names as a means to generate financial income through sponsorship deals has only briefly been discussed in Berlin. In 2005, CDU transport advisor, Alexander Kaczmarek claimed that the sale of naming rights for U-Bahn stations could save the city of Berlin tens of millions of Euros annually (Die Tageszeitung 2005). He proposed that private companies could take over the cost of maintaining and manning stations in return for seeing their brand inscribed in the transport system's physical and representational landscape (Ibid). Other political parties, however, dismissed the proposal and noted the absurdity of replacing historically developed names with accrued social meaning with crude corporate advertising (Ibid). In the British capital, similar debates have recently come to the fore, emphasising the extent to which the Underground's toponymy has come to represent part of London's heritage, even if the original decisions and cultural meanings behind its station names have often become obscured by additional accrued associations.

#### 5.4 The Underground's toponymic heritage

If the past can be read as a "compound of persistence and change, of continuity and newness", then the past that is hidden in the toponymy of the Underground's diagram is characterised to a far greater extent by continuity and persistence than that of the U- and S-Bahn route-plan (Coser 1992, 26; see also Schwartz 1982). The naming of Underground stations in London has served as a commemorative apparatus and mnemonic infrastructure to a far lesser degree than in Berlin, and the instances of ideologically motivated station name changes are in general far fewer. Early in the network's history, rival companies sometimes pursued name changes to gain economic and competitive advantage (see Dennis 2013c). Other historic name changes are visible to Underground passengers today thanks to the preservation of historic tiling patterns

which incorporated former names.<sup>79</sup> However, in the absence of major political and ideological shifts such as punctuated Berlin's twentieth-century history, the Underground's toponymic landscape has, like its cartographic diagram, displayed a startling degree of stability since 1933.

For the most part the diagram's toponyms refer to what are today considered more as London neighbourhoods or landmarks, rather than specific streets as is more common in Berlin. These toponyms exert their own influence over collective identities and memories as they often predate and supersede London's official administrative areas, or alternatively have served to erase memory of the names relating to pre-industrial hamlets. As Vertesi states, "this association between station names and London locations runs so deep that whole neighborhoods...gain their identities from the naming of the local station" (2008, 14). Thus it is not uncommon for Londoners when talking of their place of residence or work to refer first to the nearest Underground station rather than to the official boroughs in which they are located. For example, Finsbury Park and Manor House are commonly chosen as reference points rather than Haringey or Hackney. The everyday choice and use of these referents is of course influenced by a myriad of other factors, such as the perceived and shifting value attached to the social and economic associations of each borough, neighbourhood and landmark by any particular individual, but this tendency remains indicative of the influence that those toponyms that are emphasised by the Underground's text continue to have over the production of not just social but also individual memories.

Traditional toponymic surveys of the Underground have revealed the deep-rooted lineages of London's station names (Harris 2001; Hilliam 2010). They have emphasised how today's diagram subtly communicates, amongst other meanings, the former boundaries between the city and countryside that have been lost due to London's urban expansion. Also communicated is a deeper past, often characterised by toponyms that preceded the Underground's construction and, whose etymologies suggest, referred to ancient personalities, settlements and landmarks (Ibid). Hence, whereas the U- and S-Bahn's pantheon is drawn largely from historical figures of the twentieth century, the

<sup>&</sup>lt;sup>79</sup>This is the case for the Piccadilly Line's Arsenal station, which was Gillespie Road station from 1906 until 1932 when it took the name of a popular football club whose home ground was located nearby.

Underground's is truly a 'cult of ancestors' that includes first- and third-century Saints and fifth- and sixth-century Saxon chieftains alongside more recent British monarchs.

Besides these unconscious mnemonic connections, the Underground diagram also echoes explicit examples of the British capital's collective memory, as certain memorials have become synonymous with their locations. For example, John Nash's Marble Arch and Sir Christopher Wren's Monument have both lent their names to Underground stations. Underground station names also remember bygone memorials. King's Cross Underground station, like its wider area owes its name to a monument erected in 1836 to the memory of George IV, but which proved so unpopular that it was totally demolished by 1845. The everyday use of the toponym, however, continued and was further consolidated by its application to the mainline station that was constructed in 1851. Where the memorial disappeared the toponym persisted, but the latter's mnemonic reference to George IV is far from evident in the name's common use. This situation applies to many of the Underground stations, where their names have been semantically displaced and become deeply sedimented in everyday use (Pred 1990; Azaryahu 1996). The additional layers of significance accrued during the lives of subsequent generations of station users have often occluded the mnemonic genealogy and historical meaning of station names, which have become "more and more detached from the historical referent and overlaid with other symbolic meanings" (Ibid, 322).

Given the Underground's toponymic stability there are few examples of historic names changes with sufficient mnemonic significance to compare with those of Berlin. One of the exceptions is the unusually complicated toponymic history related to recurrent developments and extensions in the area around today's Charing Cross and Embankment Underground stations. The extension of the Jubilee Line, after various temporary and intermediary name changes, eventually instigated the physical amalgamation of the Trafalgar Square and Strand Underground stations under the name Charing Cross in 1979. From the opening of the Trafalgar Square station in 1906 until then, all of the Underground's cartographies had referenced the British naval victory over the French and Spanish of 1805 and the square named after it, which had been "designed as an imperial space" in the nineteenth century and had subsequently become an emblem of the British Empire, a spatial focal point and a source of civic and national pride (Driver & Gilbert 1999, 13; see also Mace 1976). The Underground occasionally referenced and reinforced this pride, as evidenced by a poster released during WWII

that subtly propagandised Britain's previous military superiority and predicted victory in the nation's then current military engagement (Figure 5.12).

#### Figure 5.12. The 1946 LPTB poster: 'Trafalgar Square' by Fred Taylor. Source: LTM.

Despite the significance of Trafalgar Square, there was little public resistance or comment about the station's name change (Figure 5.13). Within LT, however, some expressed their doubts over the name's removal. In one memorandum LT's Publicity Officer wrote,

"Some time ago disquiet was expressed that the name 'Trafalgar Square' would disappear in the opening of the new line. It was decided that the station name should be Charing Cross, but that 'Trafalgar Square' should be attached to it wherever possible in printed material. This requirement raises some questions in practice. The Underground folder map (and the poster map, for that matter) are undoubtedly printed material but should the map identify stations by anything but the proper station name? I believe not, and that the passenger should find on the map exactly what he finds on the station platform (i.e. Charing Cross, simply). Elsewhere (in the index for instance) the words 'for Trafalgar Square' could be added, but not, I submit, on the map."<sup>80</sup>

In response another high-level LT employee suggested,

"I would have thought it quite a good solution to call the new station 'Charing Cross, Trafalgar Square' using this full name both on the station platforms and on the underground map etc. I presume this is not now possible without very considerable expense and I would therefore not want to press for it at this stage. But it still seems a pity that 'Trafalgar Square' will not appear on the map."<sup>81</sup>

Such concerns may have reflected a sense that London's pride would suffer from Trafalgar Square's removal from the diagram but also, possibly the fear that its disappearance might hinder visitation to the tourist attraction, which around that time attracted ninety-three per cent of all tourists visiting the city (Mead 1978). The common use of the toponym in relation to the Underground network persisted for at least another year, as testified by later press references (The Times 1980) and of course although the station's name changed the square's remained the same. Trafalgar Square's removal means that today the Underground network's only direct toponymic reference to the Napoleonic Wars is in its connection to the mainline station that, like the surrounding area, owes its name to the 1815 battle of Waterloo and the decision by Parliament to ordain Waterloo Bridge on the second anniversary of the battle, "in remembrance of great and glorious achievements" (quoted in Hilliam 2010, 134).

*Figure 5.13. Trafalgar Square station shortly before its official renaming. Source: Clifton (in Catford 2011a).* 

<sup>&</sup>lt;sup>80</sup>TFLHA: Memorandum from Publicity Officer to Chief Public Relations Officer, Underground Map 1979: Jubilee Line, 18/09/1978, LT000689/122.

<sup>&</sup>lt;sup>81</sup>TFLHA: Memorandum from Chief Operating Manager (Railways) to Chief Public Relations Officer Underground Map 1979: Jubilee Line, 27/09/1978, LT000689/122.

The continuity of the Underground's toponymy, however, still faces threats and most recently those related to the private sponsorship of public sector infrastructure and services involving naming rights. The pressure to pursue sponsorship for the Underground as a means to generate non-fare revenue has increased due to the current constraints on public sector budgets. TfL's weaknesses in this respect were revealed by a recent London Assembly (LA) report (2012), which judged the transport authority's past approach to sponsorship to be 'muddled' and inconsistent. The report recommended that TfL clarify which of its operational areas were suitable for sponsorship, judge appropriate sponsors, avoid sponsor endorsement, secure best value, and ensure greater transparency (Ibid). In response the GLA and TfL released a draft sponsorship policy in April 2013, which was then published in its final form in November 2013 (GLA & TfL 2013). The policy, however, failed to address the question of naming rights or the potential of including sponsorship on the Underground diagram. These omissions prompted Conservative Assembly Member Gareth Bacon to release a further report condemning TfL for missing what he believed was a great income-generating opportunity (Bacon 2013). In fact, however, TfL had been considering the sale of naming rights since 2011, when it entered into negotiations with an Australian wine company about a sponsorship deal that might have seen Oxford Circus Underground station renamed for ten years (Tobin 2011). These negotiations failed, but soon afterwards the first private sponsor to have their name feature on the diagram was announced, when the Dubai-based airline, Emirates, paid £36 million for the ten-year sponsorship of the Thames cable car that was being constructed to coincide with the London 2012 Olympics (BBC 2011). But no stations actually received Emirates' name. Instead the line itself became the Emirates Air Line.<sup>82</sup>

<sup>&</sup>lt;sup>82</sup>Herein lies an additional aspect of the Underground, U- and S-Bahn's toponymy, which sadly cannot be explored in any great depth due to limits of space. In brief, whereas the localised names of lines in Berlin (e.g. GN-Bahn) were rationalised alphabetically in 1928 and then numerically in 1966 (in West Berlin), the official names of the Underground's lines (and indeed network) arguably reflect greater degrees of popular sentiment and memory because they often originate from the colloquialisms and abbreviations applied to the competing railways of the Victorian and Edwardian eras by the press. For example the Bakerloo toponym was coined by *The Evening News* to refer to the Baker Street and Waterloo Railway (Day & Reed 2008) whereas the Tube nickname derives from *The Daily Mail*'s reference to the CLR as the 'Twopenny Tube' because of its flat fare of two pennies (Wolmar 2005). Since then Underground line naming decisions have occasionally reflected explicitly political and commemorative impulses. For example, a Conservative manifesto for the 1977 GLC election proposed changing the name of the planned Fleet Line to the Jubilee Line to celebrate the Queen's Silver Jubilee that year and to encourage greater government investment (Bownes et al 2012).

While an independent valuation procured by LA acknowledged that allowing thirdparty brands onto the Underground diagram would significantly influence the value of naming rights (LA 2012), the decision to grant Emirates this permission was inconsistent with TfL's informal policy, until that point, of not seeking sponsorship for station names because of the iconic nature of the diagram and the reluctance to inappropriately and excessively "clutter it up with other people's brands" (Ibid). The iconisation of the diagram's image, as discussed in the last chapter, also contributed, for a time at least, to the canonisation of its text. Meanwhile, when it came to selling the naming rights of existing stations TfL's Commercial Development Director, Graeme Craig stated that he was "instinctively uncomfortable" with the idea of altering "long cherished" toponyms (quoted in Bacon 2013, 3). These views echoed those of the critics of Kaczmarek's similar proposals for the Berlin U-Bahn in 2005 (p.160), and revealed how the Underground's toponyms are considered as part of the city's heritage, with layers of meaning and memory that their names have accumulated during the course of their history.

Bacon's report criticised these views and used the results of a survey of 531 Londoners to claim that TfL should use sponsorship and naming deals to freeze or cut fares. He claimed that nearly forty per cent of respondents would support the long-term, location specific renaming of existing Underground stations and drew attention to the precedent set when a station was renamed in 1989 after the newly built shopping centre, Surrey Quays.<sup>83</sup> Bacon claimed that sponsorship deals including naming rights for stations could be worth "tens, if not hundreds of millions of pounds" and therefore recommended that TfL "exploit existing brand and station, line associations" (2013, 9). To support his argument he produced doctored sections of the diagram, not dissimilar to the alternative versions considered in Chapter Four, to disprove that name sponsorships would clutter its design and emphasised similar schemes pursued in other cities like Dubai. He failed to acknowledge, however, that in Dubai the exhaustive pursuit of sponsorship for the city's Metro and the sale of naming rights related to recently constructed stations, so that the issues associated with the replacement of

<sup>&</sup>lt;sup>83</sup>In fact this is a spurious example as it was part of a wider process of place making that did not escape local criticism for eroding the 1911 toponym of Surrey Docks.

established toponyms with accumulated degrees of meaning and memory were avoided (see Rose-Redwood 2011).

Craig responded to the report by highlighting that the renaming of stations would erode valued station heritage, incur costs and confuse tourists, but he did acknowledge that naming rights were more appropriate for new projects where sponsorship covered construction cost, as was the case for the Thames cable car (Beard 2013). While such comments suggest that the existing mnemonic toponymy of the Underground will resist sponsorship pressures, the same might not be true of the new stations planned for the Northern Line extension or CrossRail development. Given that TfL's current rhetorical stance on the matter is not explicitly integrated into its sponsorship policy, it remains open whether the future will see the heritage of the Underground's established and consolidated toponymy joined by a conglomerate of multinational companies.

#### **5.6** Conclusion

With this chapter I have shown how the toponymies of Berlin's U- and S-Bahn have been used in the past as a means of both commemoration and de-commemoration. Beginning in the National Socialist period, Germany and Berlin's successive political regimes and leaders have used the city's transport networks to naturalise their conception of the past by embedding it within the everyday lives of those who use the transport system. The process of naming the network, as this chapter's empirical examples have shown, was not always a simple reflection of similar practices at street level. In fact, more recently station naming has had implications for street naming rather than the reverse. In part this has been caused by the increasing influence of economic discourses on station naming decisions in Berlin, which have partially obfuscated the role of commemorative motivations in such decisions. Although the Underground's toponymic landscape has displayed a greater degree of stability, and reflected fewer commemorative impulses in the twentieth century, it too has become the focus for similar debates, partly grounded in the economics of naming rights and sponsorship. The responses to sponsorship proposals in both cities have been broadly synonymous, namely, that today's station names represent part of the city's heritage which should be preserved. Such views elevate the accrued meaning of toponyms over the original motivations behind their introduction, which I have attempted to unearth in this chapter. An excavation of the mnemonic meanings buried in the names of the U- and S-Bahn and Underground also reveals how each network's toponymic landscapes and cartographies are palimpsestic in nature. This is truer of Berlin's current route-plan than of London's diagram. Here, and on the respective station signs within the U- and S-Bahn's landscapes, toponyms ordained by rejected political regimes can still be read, either because they have had their meanings reincorporated into contemporary framings of the official past or because old meanings have been obscured by new associations.

Historically LT has displayed greater reluctance to change its names, opting to do so only when it improves the efficiency of the network overall. Meanwhile Berlin's changing transport authorities have shown a greater preponderance to reflect wider political and ideological shifts in their toponymic landscapes, to the extent that the efficiency of their service has been disrupted most tangibly through delayed and contested cartographies. Both cities will likely experience further station and street name changes in the future, and not only those changes that reflect the further infrastructural development of their networks. In Berlin in particular there have been a number of recent and continuing grassroots initiatives to have stations renamed for commemorative reasons. One such initiative, as a component of a wider collection of tactics designed to produce memory, will be discussed in the next chapter; another seeks to address Mohrenstraße's colonialist connotations and hopes to see Nelson Mandela join the U-Bahn's pantheon (Schmalenbach & Bobileva 2014).

The exploitation of the U- and S-Bahn's text, and to a lesser extent that of the Underground, as an infrastructure for wider collective memories has complicated the production and communication of intergenerational remembrances. For example, Christiane Wilke who moved to Berlin after reunification has noted how her attempts to communicate her experiences of the city to her parents, who had previously lived in East Berlin, were made redundant by toponymic changes.

"When I talk about places, subway stops, and streets in Berlin, my mother often has no idea what I am talking about. Danziger Straße? Torstraße? Where would that be? My parents knew them and yet don't recognize them. Danziger Straße used to be called Dimitroffstraße when my mother roamed these quarters" (Wilke 2012, n.p.)

Perhaps, then, while collective memories can find expression in the U- and S-Bahn's text, individual autobiographical memories, given the recurrent revision of this text, have greater recourse to the visual representation of the network. This seems to be part

of the message behind the 2009 artwork of Berlin artist, Larissa Fassler, *Everywhere I remember having been* (Figure 5.14), which omits the network's toponymy altogether. It can be interpreted as appealing more to the spatial triggers and places of memory that will be the focus of the next two chapters, and which are encoded by the network's abstract cartographic representation. But then even the route-plan that Fassler uses as the basis for charting her own memories of travelling Berlin would be unrecognisable to anyone who, like Wilke's parents, left the city before reunification.

*Figure 5.14.* Everywhere I remember having been by Larrissa Fassler, 2009. Source: www.september-berlin.com/index.php/page/imagepopup\_artist/2745 [Last accessed 23 Jun 2014].

### **Chapter Six**

### Grassroots Remembrance at Samariterstraße and Stockwell Stations

#### 6.1 Introduction

On 21st November 2004 the U5 Samariterstraße station in the Berlin district of Friedrichshain was clandestinely and symbolically renamed 'Silvio-Meier-Bahnhof' (Figure 6.1). On the same day in 2009 the station was again covertly renamed 'Silvio-Meier-Straße'. These counter-namings served to commemorate and draw public attention to Silvio Meier, the victim of a far-right attack, who was killed at the station on 21<sup>st</sup> November 1992 and highlighted further the mnemonic potential of the U-Bahn's textual landscape (see Chapter Five). Beyond them, however, the station has become a key physical site for the remembrance of Meier as enacted and contested by a range of mnemonic communities in accordance with their diverse motivations. The actions of these communities and the memory of Meier's death more generally have taken on particular resonance at various moments during the last two decades. Not only did Meier's death exemplify wider societal issues and an erosion of the public's perception of safety in the U-Bahn in the years immediately following German reunification, but also more recently memory of it has regained resonance and reached a crescendo on its twentieth anniversary in 2012, thanks to the recent return of similar societal issues and concerns for public safety in the transport network.

In this chapter I contextualise and reconstruct the genealogy of Meier's grassroots remembrance at Samariterstraße U-Bahn station between these two periods of resonance in order to demonstrate how the station has become a contested *lieu de mémoire* (Nora 1989), in which changing mnemonic actors, processes and structures have contributed and connected to different discourses and have taken advantage of the ambiguous public status of the U-Bahn's space in order to emphasise Meier's memory. I chart how the memory of an individual death added to the U-Bahn's ability to reflect and symbolise wider societal unease, and more specifically how the unique space of the U-Bahn involved particular actors in the production of Meier's memory, and posed challenges to those who sought to maintain his memory at the grassroots level. In turn, I compare and contrast Meier's case with the campaign to memorialise Jean Charles De

Menezes at Stockwell Underground station in London, following his death in 2005, in order to yield a deeper appreciation of grassroots memorialisation processes in underground transport networks.

*Figure 6.1.* The 2004 counter-renaming of Samariterstraße U-Bahn station. Source: Indymedia (2004).

#### 6.2 Placing Meier's death

Meier was born in Quedlinburg in 1965 and moved to the East Berlin district of Friedrichshain in 1986. There he quickly became connected with the local alternative scene that had developed since the early 1980s. This comprised a number of groups that attempted to pursue cultural and social lives free from the constraints of the DDR regime. Besides common political views, these communities also shared a close connection to the built fabric of the area through the prevalent practice of house squatting, and Meier – like many others – lived in a squatted apartment. Although publically little is known of Meier's life in East Berlin, he did become associated with various evangelical church movements who used their ambiguous relationship with the SED to foster community work in the area through organising church days and distributing newsletters (JWM 2011).<sup>84</sup> Meier is also accredited with organising the

<sup>&</sup>lt;sup>84</sup>Even though the DDR's constitution proclaimed freedom of religious belief, the Protestant Church, with its sizable congregation and historical connections to the Nazi regime and German Empire, represented a potential threat that encouraged the DDR state's preference for secularisation. State pressure on East Berlin's Church of the Redeemer, which resulted in the cancellation of its 1987 peace workshop, led to the foundation of the alternative *Kirche von Unten* [Church from Below]. This was a democratic movement devoted to church reform which encouraged youth and young adults – including Meier – to achieve their goals through the pedagogical concept of *Offene Arbeit* [open work].

1987 Element of Crime concert in Berlin-Mitte, whose audience was attacked by neo-Nazis.<sup>85</sup> This attack led to some of the earliest efforts in East Berlin to create the local grassroots antifascist initiatives that are today collectively and colloquially known as Antifa, including the Anti-Nazi-Liga, whose first meeting Meier attended in 1987 (JWM 2011). The foundation and development of groups like these was further legitimised by the increase in far-right political and violent activity that has frequently been viewed as a consequence of reunification (Weissbrod 1994; Mcgowan 2006). The successes of far-right political parties during the late 1980s, most notably the Republikaner party, were followed by an increase in neo-Nazi organisational membership in the early 1990s (Westle & Niedermayer 1992) and a number of high profile, violent, far-right attacks, including murders in Mölln and Sölingen in November 1992 and May 1993. Official statistics reveal a rise in far-right violence across Germany during these years from 270 acts in 1990 to 1,483 in 1991, 2,584 in 1992 and 1,669 in 1993 (Weissbrod 1994). The spontaneity of many of these attacks, however, often occluded their political nature thereby resulting in an underestimation of the far-right's resurgence (Mcgowan 2006). These statistics, and recent projects to clarify the exact number of people killed by far-right violence since reunification, highlight that attacks peaked in 1992. For example, the Mut Gegen Rechte Gewalt [Courage Against Right Violence] project run by the Amadeu-Antonio-Stiftung and Stern newspaper has revealed that twenty-seven murders can be attributed to far-right violence in 1992.<sup>86</sup> Amongst them is Meier.

At around midnight on Friday 20<sup>th</sup> November 1992, the resurfacing threat of far-right violence was manifested within the physical underground of Samariterstraße U-Bahn station when Meier and two friends became embroiled in an argument with a group of five youths (Wolff 1992a). During this argument, Meier tore from one of the youth's jackets a far-right insignia (Wolff 1992b) – an act that has subsequently been widely interpreted by local communities as an act of courage (Stock 2012\*). In the ensuing confrontation Meier was stabbed, and subsequently died on Saturday 21<sup>st</sup> November. Although the press initially expressed doubt over the political nature of the murder, by the Monday morning a front page headline in the *Berliner Kurier* read "Left against

<sup>&</sup>lt;sup>85</sup>Such attacks in the DDR were often officially reported as non-political brawls, in line with the state's anti-fascist ideology and its corollary that "officially fascism did not exist in East Germany" (Brinks 1997, 210).

<sup>&</sup>lt;sup>86</sup>The officially recognised figure stands at only thirteen.

Right: The 1<sup>st</sup> Death" (Wolff 1992a; 1992b; Fein 1992). The next day Meier's murder occupied numerous newspaper front pages and featured alongside reports of a neo-Nazi arson attack that had killed three Turkish women in Mölln (Münter & Wollf 1992a). The two events remained connected in the press for the rest of the week and featured in recurrent articles that addressed the rise of extremism and violence in Berlin and across Germany (see for example Münter & Wollf 1992b). As such Meier's murder quickly became the Berlin example of a countrywide wave of far-right violence. A week after Meier's death the German government banned the first far-right group since 1989 and went on to ban a further six organisations that month (Wiessbrod 1994; Anderson 1995). Following criminal proceedings, three of the five youths involved in Meier's murder were sentenced to prison terms, of which the longest was four and a half years.

#### 6.2.1 The U-Bahn as a landscape of fear and conflict

Initially, Meier's murder and the earliest attempts to memorialise it resonated not just with wider social issues associated with the re-emergence of the far-right but also with a U-Bahn that due to growing levels of violence in the transport network was increasingly characterised as a landscape of fear and conflict. Occasionally these two discourses coalesced and found echoes in theatrical, cinematic, and literary representations that emphasised the cultural potential of the U-Bahn to serve symbolically as a setting for hidden far-right threats and neo-Nazi motifs.

Even before reunification, representations of the U-Bahn's cultural landscape were infused with the social fears and anxieties associated with the lingering threat of the National Socialist past embodied by far-right violence. For example, the *Grips Theatre* musical *Linie 1*, first performed in 1986 and adapted into a film in 1988 used the U-Bahn to allude to an unresolved past, and referenced the violence and fear that characterised the network at that time (Manicke 2010). In one of the musical's scenes the U-Bahn carriage is transformed into a site of political confrontation when four Wilhemsdorf widows of fallen WWII German soldiers extravagantly re-interpret Germany's Nazi past in a positive light, drawing the opposition of a solitary older female passenger who identifies with the alternative left. Similarly, a cult German comic book published in 1990 tells the story of two West Berlin anti-heroes who embark on a journey into the East to find creative inspiration. Their haphazard return to a freshly reunified Berlin involves them stumbling across a contingent of aging high-

rank Nazis hiding in the subterranean bowels of the city before they eventually escape via the connected U-Bahn network (Seyfried 1990).

These motifs and fears continue to be used to invoke the tense atmosphere of the city and its public transport networks during the immediate post-unification period, as illustrated by more recent cinematic and literary representations. Andreas Kleinart's 1999 film *Wege in die Nacht*, for example, revolves around the nightly patrols of its three main characters, who search out and punish injustices that occur in the U- and S-Bahn, including acts of racism and intolerance. Yadé Kara's 2003 book *Selam, Berlin* employs a vision of Hitler travelling on the U-Bahn to personify the threat of a resurgent far-right that suddenly makes the book's main character, Hasan Kazan (a Berliner of Turkish descent), and others like him, feel more foreign and threatened within the social upheaval of reunification. The same device – a protagonist's vision of Hitler travelling on the U-Bahn – is used by Chloe Aridjis in her 2009 novel, *Book of Clouds* (initially set in 1986) to hint at an inadequately addressed National Socialist past festering metaphorically, below the surface of German society (Manicke 2010).

The representation of the U-Bahn during this period as a landscape of fear and conflict reflected the increased public concern for safety within the transport network, which in turn lent further resonance to Meier's death. BVG statistics from between 1988 and 1993 show that an increase in the number of 'aggressions' registered against passengers and transport staff following reunification was more pronounced in the U-Bahn than in any other mode of public transport.<sup>87</sup> Such violence peaked in 1990 with 612 'aggressions' recorded against passengers.<sup>88</sup> While this can be partly explained by a peak in ridership following reunification,<sup>89</sup> it still had a negative impact on the public perception of security and safety within the U-Bahn network. This impact was heightened by the press' tendency, as is still the case today, to over-emphasise crime on public transport, with the result that a discrepancy developed between the public's perception and representative criminal statistics (Jeschke 1997; Otto 2012). A 1994 BVG telephone survey revealed the level of insecurity and fear aroused in its respondents whilst travelling within Berlin's public transport. The results showed that

<sup>&</sup>lt;sup>87</sup>TFLHA: LT000156/180/01. Chart showing 'Aggressions against passengers and staff in different operated by BVG', Source BO-KB 13.

<sup>&</sup>lt;sup>88</sup>The nature of these 'aggressions' is not clarified but they are distinguished from acts of vandalism.

<sup>&</sup>lt;sup>89</sup>Some journalists estimated this to be as high fifty per cent (Striegl 1992) while statistics show that the number of U-Bahn passenger journeys in fact increased from 454 million in 1989 to 576 million in 1991 (Zach & Evers, 2003).

security at night was the second most negatively rated factor about the network after ticket prices (Jeschke 1997). Forty-seven per cent of the women and nineteen per cent of the men surveyed said they did not use Berlin public transport at night, and only twenty-one per cent of respondents over sixty years old stated that they were not afraid to use public transport (Ibid).

These representations and statistics confirm that during the late 1980s and early 1990s the U-Bahn became a landscape of fear in ways that collaborate the paradoxical ability of underground space to serve as a site of both shelter and threat (Lesser 1987; Pike 2005; Williams 2008). This was not, however, unique to the U-Bahn during this period. In the 1980s the New York subway became a symbol for the city's urban crisis (Brooks 1997), while in London during this period the Underground reflected years of government underinvestment (p.75). As both a key metaphor and physical setting for social relations and interracial encounters, underground railways during and beyond this timeframe are commonly represented via motifs of fear and social confrontation, as Johan Andersson has demonstrated with respect to films set in the New York Subway and Paris Métro (2013). Reviewing similar phenomena in Berlin highlights how social tensions in this particular context were and continue to be filtered through the threat presented by Germany's National Socialist past and its echo in post-unification far-right violence. The fears that these cultural representations played on and reflected were borne out on the night of Meier's murder, when physical, political and cultural undergrounds briefly merged and threats associated with the Nazi past resurfaced. It fell primarily to BVG to mitigate these perceptions and improve safety and security within its network in order to reassure the public, ensure its ridership and maintain its reputation. It was partly for these reasons that BVG at first resisted the attempts to memorialise Meier's death at Samariterstraße station and later operationalised them.

#### 6.3 Meier's Memorialisation

Meier's memorialisation has taken numerous forms that interconnect on multiple levels with the space of Samariterstraße station and the landscape of the U-Bahn. Most of these forms represent a continuation of the community's original response to Meier's death, including the installation of a memorial plaque, the observance of an annual vigil and participation in an annual memorial demonstration. Besides these an *Initiative für ein aktives Gedenken* [Initiative for an Active Remembrance] (IAG) was officially

formed in 2010. While respecting the commingled nature of official and non-official forms of social memory (Confino 1997) each of these forms characterise most the grassroots memorialisation considered by Magry and Sánchez-Carretero (2011; see p.37). Each embodies degrees of political and social activism and resonance whilst connecting to a variety of fluctuating interests and intensities which the memory of Meier has been utilised to represent, and which have had the potential to spark conflicts between various actors.

#### 6.3.1 Meier's memorial plaque

Six days after his death, a group of Meier's friends installed a homemade memorial plaque in the western entrance hall of Samariterstraße station (Junge Welt 1992).<sup>90</sup> The plaque, a simple metal plate measuring roughly thirty centimetres by forty-two centimetres and reading 'Silvio Meier was murdered here by fascists on 21/11/1992', remained in place until October 1998, when it disappeared shortly before the sixth anniversary of Meier's death. Its disappearance sparked the interest of Ute Donner, a local artist. In response, for each day that the plaque was missing, Donner attached replacement artworks and laid flowers, even though the station's cleaning staff repeatedly removed them (Donner 2012\*). A local squatter named Mario also protested the plaque's disappearance by undertaking a vigil at the spot of Meier's death during the four days leading up to its anniversary (Figure 6.2). In this way he acted as a memorial guard, a role that has been observed at other grassroots memorials (Margry & Sánchez-Carretero 2011). Mario soon turned memorial sleuth and discovered the missing plaque in the station's control room, leading to its reinstallation the day before the anniversary (Herrmann 1998; Reinfried 1998). According to Donner, a BVG representative claimed it had been removed following a public disturbance, in order to protect it (Donner 2012\*). It is difficult to verify this claim but graffiti left at the station at the time of the plaque's disappearance, which included a red swastika on the floor of the entrance hall, demonstrated the contested nature of the surrounding space. The plaque, although in place for the anniversary, disappeared again just four days later. This time BVG assured those concerned that they had had nothing to do with its removal (Schmidl 1998). In response, Donner and Mario released the following statement:

<sup>&</sup>lt;sup>90</sup>Besides this plaque a memorial cross was quickly erected in Quedlinburg, Meier's hometown, and remained in place throughout Advent that year.

"Even if... our flowers and memorial plaque disappear every day, we will constantly renew them, because we will no longer tolerate the desecration of the memorial plaque ... Public pressure and the interest of citizens grow constantly. There are continuing inquiries about the state of affairs and the whereabouts of the plaque. We will keep at the matter, and so too will the media."<sup>91</sup>

The original plaque was never recovered and Donner speculated that its theft was a reaction by far-right groups to that year's Silvio Meier Demonstration, which had targeted a far-right café (Schmidl 1998). The negative media coverage generated by the first plaque's original removal and final disappearance, along with mounting public pressure, did not, however, change BVG's view of the plaque's legitimacy – even if they rarely stated it explicitly. The covert installation of a second plaque in January 1999 changed this.

#### Figure 6.2. Mario's four-day vigil in 1998. Source: UDPC.

Larger and more substantial than the first, the second plaque was embedded within the tiles of the station wall and was accompanied with the slogan '*Kein Vergeben Kein Vergessen*' [No Forgiving No Forgetting] (Figure 6.3). Its clandestine and unauthorised installation caused BVG to state that whilst they would temporarily tolerate the new plaque they would not officially endorse it, and to warn that it would be removed during

<sup>&</sup>lt;sup>91</sup>[U]te [D]onner [P]rivate [C]ollection: Statement by Ute Donner and Mario dated 24 November 1998.

the station's planned modernisation (Berliner Morgenpost 1999). In November 2000 Lorenz Postler, a SPD member of Friedrichshain's district assembly and a former acquaintance of Meier, requested that BVG officially acknowledge the plaque's reinstallation. BVG refused on the grounds that this would politicise the station and because they believed that the annual vigils had a negative impact on their passengers' perception of safety.<sup>92</sup> They emphasised that the congregation of people and the laying of tributes hindered and presented risks to their customers, and proposed either that the plaque should be placed at street level attached to the stairwell fencing or that another compromise be sought so that the 'illegal' plaque could be removed.<sup>93</sup>

## *Figure 6.3.* The second permanent plaque (January 1999 – November 2005). Source: UDPC.

BVG's threats to remove the plaque thereafter began a conflict between the transport authority and Friedrichshain's district assembly, in which the political pressure of Postler and the artistic strategies of Donner were employed to garner and reflect public support for the plaque's retention. Thus the memory of Meier became politically

<sup>&</sup>lt;sup>92</sup>UDPC: BVG Letter to Bezirksamt Friedrichshain von Berlin, 27 November 2000.

<sup>&</sup>lt;sup>93</sup>Ibid. BVG's concern for the risks associated with grassroots memorialisation in the station's subterranean entrance hall was further sharpened by the fire that occurred in the Deutschen Oper U-Bahn station in July 2000, in which twenty-one people suffered from smoke inhalation (see Falkner 2000).

legitimised, at least on the local level, before it was accepted by BVG. A member of the district assembly was quoted as saying, "The commemoration of the victims of far-right violence in public space is an indispensible sign of solidarity with the victims and their families" (cited by Falkner 2001). To many, including politicians, the station was public space and subject to calls for public memorialisation like any other space in Berlin. This conflict petered out with the delay to modernisation plans, but when these plans materialised five years later the second plaque disappeared, just as had been predicted by BVG – but not in the circumstances that they had initially imagined.

In fact, shortly before the station's modernisation in early November 2005, BVG gave assurances that the plaque would be returned afterwards. However, when this did not happen, Meier's memorial watchmen once more responded. Donner requested that the plaque be returned by the thirteenth anniversary and Postler emphasised that its return would demonstrate BVG's commitment against far-right violence.<sup>94</sup> BVG's response informed them that the plaque had been handed over to people purporting to be friends of Meier by a subcontracted building firm. On realising their mistake BVG agreed to supply a replacement by the time of the anniversary, in accordance with the wishes of Meier's circle of friends.<sup>95</sup> Postler later received an anonymous letter from a group who accused him of turning Meier into an antifascist martyr.<sup>96</sup> The group claimed to have confiscated the plaque in opposition to growing "everyday left-wing extremism" but agreed to return it if the plaque's reference to 'Fascists' was replaced by a non-political term. If these terms were not met then the plaque would be rededicated to a nationalist cause and remounted elsewhere, a threat that revealed the material significance attached to the plaque by its abductors. Yet as earlier contestations had proven, the plaque's rhetoric and location were more resilient than its materiality. The group's demands went unanswered. Instead the BVG installed a third plaque to complement the modernised station in time for the thirteenth anniversary of Meier's death (Figure 6.4).

<sup>&</sup>lt;sup>94</sup>UDPC: Letter to BVG from Ute Donner dated 9 November 2005; Letter to BVG from Lorenz Postler undated.

<sup>&</sup>lt;sup>95</sup>UDPC: Letter to Ute Donner from BVG dated 17 November 2005.

<sup>&</sup>lt;sup>96</sup>UDPC: Anonymous Letter to Lorenz Postler November 2005.

## *Figure 6.4.* The third permanent plaque (November 2005 – November 2006). Source: UDPC.

With these actions BVG finally endorsed the plaque and accepted the station's status as the focal point for Meier's memorialisation and as a place of personal and political remembrance. However, contestation surrounding the plaque continued, and on the morning of the fourteenth anniversary in 2006 the plaque once more disappeared. No letter claiming responsibility was forthcoming, but political graffiti did appear at the station at the time (Donner 2012\*). Again the plaque's most vocal advocates responded. Donner contacted the police and BVG, and Postler raised questions in the district assembly regarding the plaque's security and the political motivations behind its most recent disappearance. A temporary replacement plaque that read 'Silvio Meier Unvergessen' [Silvio Meier Not Forgotten] and a homemade poster displaying the plaque's original text were quickly installed in time for the vigil. Following consultation with Donner and Meier's circle of friends, BVG installed a fourth, more robust, plaque shortly before the anniversary in 2007 - but not before the replacement plaque had faced further vandalism and had eventually been stolen. The fourth plaque remains at the site today. It has been firmly anchored to the wall to prevent removal (Figure 6.5). It remains, however, a recurrent target for far-right vandals. In 2008 it was tagged with a swastika and 'SS' insignia, before being covered in black tar in 2010, and again being

tagged with a swastika in 2011. These acts of vandalism reveal the station's contested nature insofar as they represent signatures of violence related to peaks in far-right activity which embody a "desire to eradicate all traces of alterity" in an attempt to reclaim place (Linke 1995, 45). The tactics employed by Berlin's Antifa communities to re-appropriate the space of the station in order to utilise Meier's memory have been more effective, however, than the clandestine far-right incursion into the space, as evidenced by the annual Silvio Meier vigil and demonstration.

# *Figure 6.5.* The fourth and current permanent plaque being installed in 2007. Source: UDPC.

#### 6.3.2 Meier's vigil and demonstration

Soon after Meier's murder, in the early hours of Saturday 21st November 1992, 150 leftist youths congregated for a spontaneous demonstration on Frankfurter Allee, the main road above Samariterstraße station. Sixty participants remained in vigil at the station until four o'clock in the morning, and later that day around 2,000 people participated in what the media referred to as a *Trauermarsch* [funeral march] (Wolff 1992b; Rada 1992). Since then a vigil and demonstration have taken place every year in the vicinity of the station. The genealogies of these mnemonic performances are intimately tied to that of the plaque and are similarly punctuated by the memory flashpoint of the anniversary of Meier's death.

Today's vigil is an echo of the actions of the individuals who created the initial grassroots memorial in the days immediately following Meier's murder. Each year since then on the anniversary of Meier's death, the site has been mnemonically reactivated through the creation of a shrine in the station's western entrance -"a semi-permanent tangible focal point for the 'bereaved'" characterised by floral tributes and the ability to draw media attention (Stone 2006, 155). During the vigil the everyday space of the U-Bahn station reflects individual and private mourning through ritualistically laid flowers and candles, and often simultaneously communicates calls for political and social change. For example, photographs of the first vigil show banners reading, "convert anger and grief into resistance", and graffiti declaring "destroy Fascism" (Figure 6.6). Although in 1992 a BVG employee publically expressed the desire to evict the vigil's participants in line with the transit authority's rules, evidence of concerted BVG resistance against the vigil did not emerge until the late 1990s (Die Tageszeitung 1992). This resistance was again grounded on BVG's concern for passenger safety and its public image, and was heightened by the increasingly violent nature of the Silvio-Meier-Demo.

Figure 6.6. The initial grassroots memorial and vigil. Source: Lange (in Schulze 1992).

The first anniversary of Meier's death, however, passed in a largely peaceful manner. Antifa-Ostkreuz organised an overnight vigil that was followed by a demonstration that the press described again as a funeral procession, which attracted around 350 people and took place under the slogan that would later feature on the second memorial plaque: "We will not forgive! We will not forget!" (Berliner Zeitung 1993; Die Tageszeitung 1993) (Figure 6.7).

## *Figure 6.7. Flyer advertising the Silvio Meier demonstration in 1993. Source: www.antifa-berlin.info/silvio-meier-doku/*[*Last accessed 24 April 2012 later removed*].

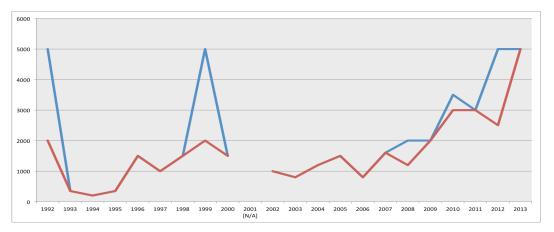
The 1994 anniversary, in contrast, was marked by signs of public disorder when in the apparent absence of an organised event, around 200 people from the vigil spontaneously demonstrated in the area for around an hour and threw stones at police officers, resulting in one arrest (Die Tageszeitung 1994). For the first time the press labelled the event a riot (Die Welt 1994). From 1995 onwards the demonstration became explicitly framed as an Antifa mobilization and was organised no longer to coincide with the actual anniversary but instead the closest weekend, in order to attract greater participation (Neues Deutschland 1995). In 1995 350 demonstrators became involved in a street battle with 300 police officers, resulting in nine arrests and injuries to seventeen police officers and sixteen demonstrators (Gundel 1995). From 1997 the demonstration became explicitly referred to as the 'Silvio-Meier-Demo'. Recently it has been recurrently characterised by violence, acts of criminal damage and arrests as it has

evolved into one of the main means by which the far-left attempt to target far-right shops, businesses and social spaces.

Despite their shared origins the vigil was quickly overshadowed by the demonstration in the press, as journalists invariably preferred to focus on stories of arrests, injuries and criminal damage. These press articles also provide some indication of how the demonstration has fluctuated in size over its first twenty years, even though ascertaining exact participation numbers is complicated by the fact that the police and the demonstration's organisers have often released different figures. Patterns in the changing number of demonstrators suggests that the initial wider public impact of Meier's murder faded quickly, and his remembrance was later observed by a smaller and more localised community, at first peacefully and then more aggressively between 1993 and 1995 (Figure 6.8). During these years Meier's memory was increasingly coopted and thereafter publicised by a wider Antifa community, which increasingly reappropriated Samariterstraße station as a key space of mobilisation. Increases in participation from 1995 onwards probably reflect Antifa publicity and recruitment strategies, including using posters and flyers, and were likely also caused by the demonstration's rescheduling. Meanwhile the demonstration's explicit renaming helped to remind its growing number of participants of exactly in whose memory they were demonstrating. The relatively stable numbers of participants between 1996 and 2008 reflect how the demonstration became a regular and significant date in the Antifa calendar, which was framed by annually changing slogans that connected it to resonant contemporary issues and the agendas of the grassroots Antifa groups that promoted it. Although police estimates placed participation during the twentieth anniversary demonstration of 2012 at 2,500, its organisers repeatedly declared, both during and after the demonstration, an attendance in excess of 5,000.<sup>97</sup> A year later, in 2013, participation was once again reported to have been in the region of 5,000, and Meier's mnemonic community appeared to be taking on an increasing transnational status as messages of support and solidarity were read during the demonstration on behalf of Antifa groups in Sweden, Greece and Italy.<sup>98</sup> The increase in participation since 2009 reveals the event's returning wider mnemonic resonance in Berlin and beyond, and is

<sup>&</sup>lt;sup>97</sup>[A]uthor's [F]ield [N]otes: 24 November 2012.
<sup>98</sup>AFN: 23 November 2013.

partly the result of the recent increase in far-right activity in Germany that is discussed further below.



*Figure 6.8.* Reported estimates of Silvio-Meier-Demo participation 1992-2013. Source: Compiled from Die Tageszeitung and Berliner Morgenpost.<sup>99</sup>

In 2012 and 2013 both the vigil and the demonstration, as in previous years, served to temporarily re-appropriate the space of Samariterstraße station and disrupt the daily operations of BVG and the journeys of its passengers.<sup>100</sup> On the twentieth anniversary of Meier's death this disruption was particularly marked when a crowd of around 200 people including journalists filled the small space of the station's sub-surface western entrance hall around the spot where Meier had been stabbed. Throughout the day the mnemonic significance of the site had been reactivated by those who attached posters to the station's walls and laid floral tributes, messages and candles beneath the plaque. The early evening vigil took place under the direct observation of seven police officers in stab-proof vests, others in plain clothes and around a dozen BVG and sub-contracted security staff. As a dense amphitheatre of people, mostly sporting the unofficial Antifa uniform of black hoodies and caps, formed around Meier's plaque the U-Bahn's everyday passengers found it increasingly hard to access and leave the platform level below. Eventually they stopped trying or, as seems more likely, were instructed by BVG employees to use the other entrance. The subterranean cafe in the station closed prematurely, and shortly thereafter a number of speeches were given using a portable

<sup>&</sup>lt;sup>99</sup>Figures for 1992-2003 and 2005-2013 come from *Die Tageszeitung* and the figure for 2004 from *Die Berliner Morgenpost*. In most years only one participation estimate was reported. These and the lower estimates of other years are plotted in red. On occasion both police and organiser participation estimates were reported. On all of these occasions the organisers' estimates exceeded those of the police. For these years the higher participant estimates are plotted in blue. Participation estimates sometimes varied between newspapers or were not published. *Die Tageszeitung* is an independent and politically leftleaning newspaper and generally reported the highest estimates across the twenty years.

<sup>&</sup>lt;sup>100</sup>The following paragraphs summarise observations made during ethnographic field research at the vigils and demonstrations in 2012 and 2013. AFN: 21-24 November 2012 and 21-23 November 2013.

public address system. A friend of Meier held back tears as he provided an account of his death, and then a representative of the IAG updated the crowd on their efforts to have Gabelsburgerstraße renamed after Meier. Finally, the demonstration's organisers issued an '*Anruf*' [a 'call'] to demonstrate the following Saturday, highlighting that although the demonstration often overshadows the vigil the two events remain linked in numerous ways. Visiting the station the next day it was apparent just how accustomed BVG staff were to the event. The flowers, candles and tributes remained but the space had been depoliticised. The political flyers, stickers, and posters distributed and displayed the evening before had all been removed, including those that predated the vigil, suggesting a deep clean.

On the day of the demonstration itself the station's entrance was far quieter than during the vigil, with most activity occurring at the street level above. From there both the sound of drum and bass music and the occasional group of demonstrators trickled down into the station where the latter left yet more tributes and candles. Others had their photographs taken in front of the plaque and one group posed for their friend's smartphone, kneeling in formation around two diagonally crossed Antifa flags. Soon afterwards the station's western entrances were closed, much to the frustration of those above who were seeking a quick escape from the demonstration and its disruption. They were greeted instead with closed lattices, behind which more security guards were occasionally visible. The demonstration finally moved off, turning immediately down Gabelsburgerstraße, where a roar of cheers greeted the unfurling from a first floor balcony of a banner reading 'Welcome to Silvio Meier Straße.' Quiet slowly returned to the area and the station's western entrance was soon re-opened.

Samariterstraße station retains significance as the authentic crime scene of Meier's murder in ways that encourage its annual mnemonic re-appropriation and its space becomes politicised around the anniversary of Meier's death in ways that inhibit its normal, everyday use. At these moments it becomes physically occupied by bodies and commemorative offerings to the degree that it must be policed and occasionally closed in order to mitigate risks associated with overcrowding. Therefore the police and BVG's strategies for dealing with the vigil and demonstration have become operationalised and standardised over the past twenty years. The recurrent and selective efforts of BVG cleaning staff to depoliticise the space during the interim period between the vigil and

demonstration, whilst simultaneously maintaining the opportunity for personal remembrance, testify to BVG's experience in handling the two events.

Today the vigil has been standardised and integrated into the rhythms of the city and transport network to the extent that its most recent impact on the operations of Samariterstraße station lasted less than an hour. In contrast, the demonstration has greater potential to impact the transport network and the city as a whole. For example, in 2006 the police ordered BVG to close a large section of the U5 between the Weberweise and Biesdorf-Süd stations (Litschko 2006). This measure was not well received by the public, and one commentator emphasised the vertical inconsistencies of such an approach by asking why it was necessary to close underground transport routes simply because a demonstration was taking place above them (Asmuth 2006). This strategy has not been repeated since but, as in 2012, certain entrances to the station can be closed at least temporarily during the demonstration.

During and leading up to the vigil the station witnessed a more personal form of remembrance. Friends and acquaintances remembered Meier in a resonant setting, the very site of his attack. In this instance Samariterstraße station is for the most part the destination of memorial efforts, whereas during the demonstration it functions more as a metaphorical and literal departure point for a far greater number of people, who arguably have a greater connection to what Meier has come to symbolise to the Antifa cause rather than to him as a person. It is difficult, however, to draw neat distinctions between those who remember Meier at Samariterstraße during the vigil and those who participate in the demonstration, partly because both events attract a similar and overlapping attendance. Many participants therefore observe multiple forms of remembrance, which include the more geographically and temporally authentic as well as personalised variant during the vigil, and the more politically strategic and anonymous form of remembrance associated with the demonstration. The vigil acts not only as a site of personal mourning but also a stage from which to widen knowledge and remembrance of Meier, advertise the demonstration, garner support for other memorial initiatives and recruit new members to the Antifa community. As Zerubavel states, "familiarizing new members with its past is an important part of a community's effort to incorporate them" (1996, 290), and press articles demonstrate that Meier has not always been so well known amongst all demonstrators, especially the youngest of them (Die Tageszeitung 1999).

Sebastian Stock. the local Jugend[Widerstands]Museum а curator at [Youth[Resistance]Museum] (JWM), which features a section dedicated to Meier's story, discussed how Samariterstraße station has predominantly become a mnemonic focal point for two broad categories of communities. The first interpret Meier's death more generally as a warning of the risks of a resurgent far-right, while the second intentionally and retrospectively frame Meier as an Antifa martyr by casting him as the modern day successor to Thalmänn (Stock 2012\*) (p.143). Amongst the wider Antifa community, to which the annual demonstration has become so important, Meier is portrayed as a martyr and connected with contemporary and resonant political structures in order to maintain his mnemonic vitality and relevance. This mnemonic status is today relatively stable but must still be actively maintained, especially given the youth of many of the Antifa community's members. Some of those closest to Meier support the annual demonstration at least in principle, including his former girlfriend and the mother of his son, who during the 2012 demonstration was quoted as saying, "When I look at the people here and the goals for which they fight I can say this demo is totally in Silvio's spirit" (quoted in Amberger 2012). But others who knew Meier when he was younger have recently argued that his identity has been co-opted since his death (Bürkner 2013). The increasing portrayal of Meier as an Antifa martyr diverges from the first-hand memories of some members of an older generation of the alternative left who knew him. For example, Meier's former friend, Dirk Moldt, recently wrote how he and a number of Meier's other friends felt uncomfortable when the IAG was founded with the intention to reemphasise Meier's memory. He noted that over the years Meier's name has developed a life of its own amongst a new generation of young antifascists searching for heroes, which fails to acknowledge the nuances of Meier's own history and political views:

"We need foundation myths for 1990!" one hears. No, I say, we need facts. We must explain the breaks, even our own. I wish that with the memory of my friend old and new ideological barriers are overcome. As long as we represent examples from only one side, they appear untrustworthy and so do we" (Moldt 2013).

#### 6.3.3 The Initiative for an Active Remembrance

The initiative to which Moldt was responding was officially formed in 2010 with the aim of using toponymic strategies to legitimise the remembrance of Meier in the local area. Its origins can be traced back, however, to the counter-naming of the station in

2009, which was amongst the first actions of a group that subsequently dedicated significant efforts to having a local street renamed in Meier's honour (Figure 6.9). These efforts were formalised through the creation of an initiative that connected various Berlin Antifa groups, associations, political parties, leftist groups and individuals. From 2010 the initiative used Internet campaigns and petitions along with interventions in public space, including the adaptation of local street signs and 'sticker actions', to raise public awareness of its aims.

# *Figure 6.9.* The 2009 counter-naming of Samariterstraße station. Source: Indymedia (2009).

These efforts led to a district assembly public participatory procedure to decide how best to memorialise Meier. It took place in April 2012 at the JWM and was attended by around 100 people. Following a series of presentations and talks the audience formed smaller discussion groups to consider the seven memorial proposals and suggest others. Eventually fifteen different proposals were considered (Figure 6.10). The public decision-making processes and discussions at this meeting demonstrated again the importance of Samariterstraße station as the authentic site of Meier's murder. For example, one participant suggested renaming the station "Silvio-Meier-U-Bahnhof" and emphasised the station's authenticity and visibility.

"... that would be a reason for this station to make the name change...and I think in any case, this is the most authentic place, because it happened there. And also it has the greatest public impact, simply because many people will pass by."<sup>101</sup>

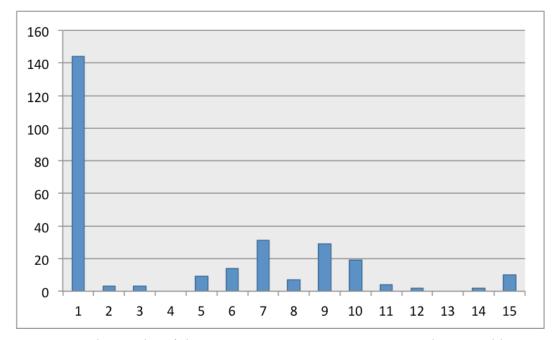
<sup>&</sup>lt;sup>101</sup>AFN: 26 April 2012.

- 1. The renaming of Gabelsbergerstraße after Silvio Meier.
- 2. The renaming of an access road leading to the district library after Silvio Meier.
- 3. The renaming of a lesser access road in the vicinity of the district library after Silvio Meier.
- 4. The renaming of the district library from the Pablo Neruda Library to the Silvio Meier Library.
- 5. Extending the name of Samariterstraße U-Bahn Station to become Samariterstraße-Silvio Meier U-Bahn Station.
- 6. The redesign of Samariterstraße U-Bahn Station's sub-level entrance as a memorial area.
- 7. An annual Silvio Meier prize for social engagement.
- 8. A Silvio Meier Resistance Museum.
- 9. The renaming of Samariterstraße U-Bahn Station as Silvio Meier U-Bahn Station.
- 10. An outdoor exhibition in addition to the renaming of Gabelsberger Straße.
- 11. An artwork to be displayed on Frankfurter Allee.
- 12. A combination of the renaming of Gabelsberger Straße and the creation of an annual prize.
- 13. A memorial house or room to be used as a museum of antifascism.
- 14. A memorial plaque at the place where Silvio Meier lived.
- 15. A 'Stumbling Stone' for Silvio Meier.

*Figure 6.10*. The 15 Silvio Meier memorial proposals. Source: Author's Field Notes 26 April 2012.

Throughout the discussion the potential hindrances of working with BVG were stressed. No BVG representative was present and it was often emphasised how BVG might not be receptive to the proposals that affected them due to the costs they were likely to incur. As such it was highlighted that memorial proposals involving BVG had less potential and were either unrealisable or would take longer to achieve. For example, in the context of the station renaming, the inhibitive cost of reprinting the network's route-plans was mentioned, as was the fear that BVG might try to transfer such costs to the district assembly. The attendees' vote on the proposals displayed a clear preference in favour of renaming Gabelsbergerstraße with 144 votes, while the proposal to create a memorial prize received thirty-one votes and the suggestion of completely renaming Samariterstraße station came third with twenty-nine votes (Figure 6.11).<sup>102</sup> Had a comprehensive proposal been offered that combined the three proposals related to the station (5, 6 and 9) it would have received fifty-two votes.

<sup>&</sup>lt;sup>102</sup>Each attendee had three votes.



*Figure 6.11*. The results of the participatory meeting. Source: Author's Field Notes 26 April 2012.

Thereafter a district assembly decision to rename Gabelsbergerstraße and create a Silvio Meier prize was supported by all but one of the represented parties.<sup>103</sup> Thus it seemed likely that Silvio-Meier-Straße would be unveiled in time for the twentieth anniversary of Meier's death, and indeed some online maps even displayed the new street name ahead of the renaming ceremony planned for the anniversary. However, a week before this took place a number of residents of the street spoke out in opposition to it. Although the district assembly rejected their objections one resident appealed to the administrative court, thus delaying plans to have the name changed by the anniversary. Residents who preferred to remain anonymous when quoted in the press suggested that the main reason for their objections was the cost incurred to trades and businessmen located on the street, although uncertainty regarding the suitability of Meier's role as a local patron was also raised (Puschner & Litschko 2012). Other challenges highlighted that the district assembly's decision contradicted its commitment to pursue toponymic gender balance (having previously agreed to only rename streets after women until they accounted for fifty per cent of all street names)(see Kensche 2013; Martenstein 2013). These were all eventually overturned and the renamed street was unveiled on 26<sup>th</sup> April 2013. Given that the street is located immediately next to one of Samariterstraße station's entrances, Meier's name has ultimately penetrated into the textual landscape of the U-Bahn without any objections being raised by BVG (Figure 6.12).

<sup>&</sup>lt;sup>103</sup>Only the Christian Democratic Union abstained from supporting the decision.

# *Figure 6.12.* Exit signs now integrate Silvio Meier into the U-Bahn's text. Source: Author 2013.

#### 6.4 Meier's returning mnemonic resonance

The activities of the initiative and the move towards the institutionalisation of Meier's memory in recent years demonstrates how Meier's death, just as it did in 1992, once again resonates with sectors of society in a country that is addressing the threat of a resurgent and violent far-right. This threat was foregrounded by the revelation in November 2011 that a far-right group originating from Zwickau in eastern Germany, calling themselves the Nationalsozialistischer Untergrund [the National Socialist Underground] (NSU), had murdered nine immigrants across Germany between 2000 and 2006. In turn greater scrutiny has been paid to the shortfall in government estimates of the number of deaths caused by far-right attacks since reunification,<sup>104</sup> and twenty years after Meier's friends erected a homemade plaque wider recognition is being given to the need to commemorate other victims of post-unification far-right violence. At the time of writing there are at least two additional grassroots initiatives pursuing the further memorialisation of two other post-unification far-right victims, which elevate the diversified tactics that maintain Meier's memory to a mode of best practice. More recently, in September 2012, Mehmet Kubasik, one of the NSU's victims, was honoured with a memorial stone in Dortmund. His portrait and those of the other NSU victims have accompanied the column of the Silvio-Meier-Demo in recent years, thereby highlighting the link between the recent re-emphasis of the memory of Meier

<sup>&</sup>lt;sup>104</sup>A pamphlet published by Antifaschistische Linke Berlin in November 2012 places the number of deaths caused by far-right violence since 1990 at 182 whereas official government statistics place them at just sixty-three. Research conducted by *Der Tagesspiegel* and *Die Zeit* newspapers placed the figure at 137.

and the returning political and social issue of far-right violence and the German public's awareness of it.

In addition to these wider social issues, Meier's memory also resonates with a U-Bahn that has once again become characterised by experiences of fear and conflict. From 2007 onwards instances of U-Bahn violence have gained greater media coverage, eroding the public's perception of the network in ways reminiscent of the immediate post-unification period. In 2007, of the 3,161 instances of attack resulting in injury reported across the public transport network, 1,619 occurred in the U-Bahn (Kröck 2008). The public release of these figures sparked political debates about whose responsibility it was to provide security within the network, which were reignited in April 2011 when closed-circuit television (CCTV) captured footage of a violent attack at Friedrichstraße station. The public impact of these CCTV images was long lasting and their "medial aftershocks shook" the whole country (Loy 2012) and confronted it "with the phenomenon of young violent offenders in public space" (Röbel 2011, 41). Not only did these debates highlight the widespread conception of the U-Bahn as a public space but they, along with the digital afterlives of CCTV footage of other attacks, rendered it a 'fear-space' and connected the causes of this status primarily to youth and alcohol issues (Der Spiegel 2011). The CCTV footage became subject to what Brown and Hoskins call the 'new memory ecology' - the mediation of memory "through frameworks of forms that are at once individual and collective, personal and cultural, informal and formal" (2010, 94). Subsequently the mediatisation and digital afterlives of this CCTV footage influenced public perceptions by spreading and maintaining social memories of violence that presented the U-Bahn once again as a landscape of fear and conflict.

The Underground, like the U-Bahn, has also recently been framed as a landscape of fear, primarily in response to the 7<sup>th</sup> July 2005 terrorist attacks. These attacks, which directly targeted the transport network and its passengers and ultimately claimed fifty-two innocent lives, were the result of a threat that was simultaneously external and internal in nature – an international terrorist attack carried out by four British-born terrorists. The media subsequently framed the bombers as an invisible 'other', hidden, ordinary and undetectable amongst the rest of British society, a buried threat not entirely dissimilar to that of neo-Nazism in Germany. At the same time it helped disseminate CCTV footage and stills, along with imagery taken during the attacks on personal

mobile devices, which contributed to the Underground's new threatening status (Reading 2011; Kroener 2013). It was here, after all, that the buried threats of society had had their greatest impact. The new fear associated with the Underground was indexed by a reduction in the network's ridership during the aftermath of the attacks (see Goodwin & Gaines 2009; Prager et al 2011) and by an emergent aesthetic of fear (Weber, C 2006) both of which connected to a wider politics of fear associated with the war on terror (O'Driscoll 2008). With the unsuccessful attempt to repeat the attacks two weeks later and the shooting of Jean Charles De Menezes the day after that, fear of the Underground was not only heightened but also became an indicator of increasing societal divide. The fear of becoming a victim of terrorism on the Underground was joined by that of being wrongly identified as a terrorist – fears that afflicted different sectors of British society to a greater or lesser extent. Within this atmosphere the memorial activities that surrounded De Menezes' death took on significant resonance.

#### 6.5 The death of Jean Charles De Menezes at Stockwell Underground station

At 10:05 am on Friday 22<sup>nd</sup> July 2005 Jean Charles De Menezes, a 27-year-old Brazilian electrician, was shot dead by the London Metropolitan Police in a train carriage standing at Stockwell Underground station. Like Meier in Berlin thirteen years earlier, De Menezes' death was quickly connected to wider political and social issues and resulted in a memorial campaign associated in this instance with demands for legal justice and changes to police policy.

Two weeks and a day before the shooting, at 8.50 am on Thursday 7<sup>th</sup> July 2005, three bombs were simultaneously detonated on the Underground network, the first on an eastbound Circle Line train travelling between Liverpool Street and Aldgate, the second on a westbound Circle Line train that had just left Edgware Road and was travelling towards Paddington, and the third on a Piccadilly Line train between King's Cross St. Pancras and Russell Square. Just under an hour later a bomb exploded on a doubledecker bus in Tavistock Square. The four bombings that have become collectively known as the 7/7 terrorist attacks claimed the lives of fifty-two victims, including seven at Aldgate, six at Edgware Road, twenty-six at King's Cross and thirteen at Tavistock Square.<sup>105</sup> Two weeks later an attempt to repeat the attack was unsuccessful when the explosives of four further would-be suicide bombers failed to detonate. The next day De

<sup>&</sup>lt;sup>105</sup>These figures do not include the four suicide bombers.

Menezes was shot in the belief that he was Hussain Osman, a suspect from this failed attempt, about to carry out a further suicide bombing.

#### 6.5.1 De Menezes: the final victim of the 7/7 bombings?

During the first twenty-four hours after his death a great deal of misinformation entered the public domain, including most insidiously that which reported De Menezes as a suicide bomber (McCulloch & Sentas 2006). When evidence proved otherwise his death was officially framed by discourses of mistaken identity and regrettable necessity in order, many claim, to reinforce and preserve the British government's new forms of border politics and hyper-militarism (Ibid; Vaughan-Williams 2007; O'Driscoll 2008) which were embodied by the Metropolitan Police's anti-terrorist shoot-to-kill policy. With the official and public acknowledgment of De Menezes' innocence the day after his shooting, these framing discourses subtly shifted to the extent that he was occasionally identified as the final innocent victim of the 7/7 bombings, although this did little to relieve the official construction of his killing as a form of collateral damage (McCulloch & Sentas 2006).

There were, however, key differences in the mnemonic response to De Menezes, an individual killed by those who were supposedly responsible for protecting him and the fifty-two victims of the 7/7 bombings, a collective killed by those representing a larger external threat to British society. Whilst the 7/7 victims became enmeshed within the discourse of London as a British community founded on the enduring rhetoric of the Blitz spirit that circulated widely after the attacks (Stephens 2007), the same terms could not be so easily applied to De Menezes. In this imagined community a Brazilian migrant, later revealed to be without a valid British visa, had in many ways more in common with the 7/7 bombers, who despite their British citizenship had necessarily been rendered as outsiders (Ibid). The multiculturalist ideas of London community that emerged after 7/7 (including most prominently the London Mayor's Office's '7 Million Londoners, 1 London' and 'We are Londoners, we are one' advertising and media campaigns which frequently adorned Underground station hoardings) could be applied to De Menezes, but not without complications. For example, the calls made by De Menezes' family for justice and changes in police shoot-to-kill policy, which gained wider support from the London Brazilian community, rendered the community in opposition to and outside the dominant political impulses that called for and oversaw a reduction of civil liberties in the face of terrorist threats. A side effect of De Menezes' death, then, was to briefly bring the London Brazilian community to the forefront in the media and expose "societal unease about the presence and activity of irregular immigrants" in Britain (Evans et al 2007, 4).

This unease, and specifically that surrounding De Menezes, was heightened by further allegations that posthumously continued De Menezes' criminalisation as a racialised 'other' (McCulloch & Sentas, 2006). Although these allegations were later cleared they contributed to his precarious position as a focal point of public sympathy and sentiment, especially given the widespread hostility toward illegal immigrants at that time (Ibid). De Menezes' status as a victim of the state, in combination with his ambiguous community membership, had consequences for his memorialisation at Stockwell station.

#### 6.5.2 The memorialisation of 7/7

Whereas the 7/7 victims were quickly memorialised at the state and municipal level, the campaign to have De Menezes permanently memorialised originated, as was the case for Meier, from the grassroots. Accordingly it displayed counter and vernacular characteristics, and due to his family and friends giving priority to clarifying the circumstances of his death and identifying those legally responsible for it, was subsequently far more prolonged. The first permanent memorial to the victims of 7/7, a London Memorial Garden, was unveiled in the Victoria Embankment Gardens just sixty-one days after the bombings (BBC 2005a). On the first anniversary of the attacks memorial plaques were unveiled in the ticket halls of the four most affected Underground stations<sup>106</sup> and in Tavistock Square. The plaques, engraved Welsh slate lozenges measuring roughly seventy centimetres by thirty-eight centimetres, feature a standardised text that reads, "London will not forget them and all those who suffered that day." This wording, along with the cultural diversity suggested by the list of victims claimed at each location, serves to reinforce the idea of London as a unified multicultural urban community. In addition the plaques reference the idea of re-growth by featuring a seedling that sprouts from a soil profile that mirrors the section of the Underground diagram affected by the attacks (Figure 6.13).

<sup>&</sup>lt;sup>106</sup>King's Cross, Russell Square, Edgware Road and Aldgate stations.

The event's national and international resonance was such that Mike Ashworth, TfL's Design and Heritage Manager conceded that the organisation could not claim sole rights over the decision-making process regarding its commemoration (Ashworth 2011\*). Instead they worked closely with relative groups and the government in reaching a coherent and coordinated mnemonic response that would be in place by the first anniversary. This process was simpler for the plaques located in the four Underground stations, because their status as TfL's private property meant planning permission was not required. The planning application for the Tavistock Square plaque was only registered a month before the anniversary and initially raised concerns related to the introduction of Welsh slate into a conservation area characterised by Portland stone. The request to change the material of the plaque was declined on the grounds that a replacement plaque would not be ready for the anniversary and because a change in material would not be in line with the uniform memorials at the other sites (Camden Council 2006). These minor complications demonstrate how in particular instances the private land ownership status of transport networks can result in rapid memorial decisions that can in turn influence similar decisions in more public spaces, provided they are supported by institutional actors.

In addition to these site-specific memorials a central 7/7 memorial was unveiled in Hyde Park on the fourth anniversary of the attacks. This memorial features fifty-two stainless steel steles, which symbolise individual and collective loss by representing each victim separately in four overlapping groups that refer to the bombings' locations (ARUP et al 2008). By using a typeface loosely based on the official TfL Johnston font, it connects the memory of the fifty-two victims of 7/7 directly to the transport network in which they died. Furthermore it illustrates TfL's willingness to engage in the production of social memory surrounding this event (Burgoyne 2009). There is no stele for De Menezes. Instead his mnemonic communities' attempts to have him memorialised became protracted, drawn out and connected to his family's wider calls for justice.

*Figure 6.13.* The 7/7 memorial plaque at Russell Square station and its reference to the sites of the attacks. Source: Author 2011 and TfL.

#### 6.5.3 The Justice4Jean campaign

Ten days after the first anniversary of the 7/7 attacks and five days before that of De Menezes' shooting, the Crown Prosecution Service (CPS) announced that they would not charge any police officer with any offence in relation to De Menezes' death. Instead the Office of the Commissioner of the Metropolis would be prosecuted for breaching the 1974 Health and Safety at Work Act by failing to provide for De Menezes' welfare. No official memorial was unveiled to mark the first anniversary of the shooting; instead De Menezes' friends and family conducted a short memorial service around a makeshift shrine outside Stockwell station, after which they descended to the platform where he had been shot. At the same time the family's spokesperson announced that the family had entered discussions with TfL about erecting a permanent memorial at the station (Sunday Express 2006; Coysh 2006). By then the station and shrine had already become

key sites for the Justice4Jean campaign, which had been started by De Menezes' friends and family in October 2005, with the support of justice and civil rights campaigners. It was against the background of this campaign's legal agenda that calls to replace the shrine with a permanent memorial slowly emerged (Figure 6.14).

# *Figure 6.14.* De Menezes' shrine outside Stockwell station in 2007. Source: Diamond Geezer (2007).

De Menezes' friends' and family's desire for a permanent memorial were related in part to their ambiguous position within the local community. Many of them, like De Menezes himself, were not permanent British citizens or residents.<sup>107</sup> This situation, along with the perceived shortfall in commemorative attention given to De Menezes in comparison to the 7/7 victims, is highlighted succinctly by a quote displayed on the Justice4Jean website. An anonymous local community member who helped maintained the shrine, over a period that would ultimately last more than four years, said:

"We are committed to keeping the space alive until such time as a permanent memorial has been erected in his honour, albeit if justice is never achieved. For the friends and families of the people who died on the 7th and 22nd July, there is no getting away from their loss and the least we can do is to ensure that Jean Charles is given the honour too of commemoration that the other victims have been given. We want his family to know this. Even if or when they return to Brazil, they should know that we here in London will remember and will honour this. Perhaps this will make it easier for them to let go, and return home, should they need or want to."<sup>108</sup>

<sup>&</sup>lt;sup>107</sup>De Menezes did not live in that part of London and on the day of his shooting had travelled for thirty minutes to Stockwell from his home in the Tulse Hill neighbourhood.

<sup>&</sup>lt;sup>108</sup>www.justice4jean.org/support.html [Last accessed 4 Dec 2013].

The Justice4Jean campaign aimed to find out the truth about the shooting, to bring those responsible for it to justice, and to end the 'shoot to kill' policy in order to prevent any further tragedies. It therefore called for the rapid conclusion of the Independent Police Complaints Commission (IPCC) investigation, appropriate criminal charges to be brought against those responsible, and a full judicial public inquiry to investigate the police operation that led to De Menezes' death, the actions of the police following his death, and the shoot-to-kill policy more generally. Following the two internal inquiries by the IPCC,<sup>109</sup> in December 2006 the Justice4Jean campaign sought a judicial review to overturn the CPS decision not to prosecute any individual police officers. Their claim was rejected and the health and safety trial took place in late 2007. It found the Metropolitan police guilty of failing in its duty of care and fined them £175,000 plus costs of £385,000 (Dodd 2009). Amidst these legal procedures a small group of local volunteers continued to maintain the shrine at Stockwell station, which De Menezes' friends and family regularly visited and where on the second and third anniversaries of his death they again held short memorial services and vigils. The concluding inquest into De Menezes' death took place in late 2008. During it the coroner controversially forbade the jury from returning an unlawful killing verdict and asked them instead to respond to three questions of fact and nine possible contributory factors. The jury returned an open verdict and their answers exonerated De Menezes from claims that he had acted suspiciously on the day of his shooting, thereby contributing to his own death. Whilst the inquest confirmed De Menezes' innocence it failed to deliver the individual forms of justice originally sought by the Justice4Jean campaign.

On the fourth anniversary of his death the family unveiled a mosaic picture of De Menezes that they hoped would be permanently installed at Stockwell station, despite prolonged negotiations with TfL, which were at that point still unresolved (Figure 6.15). A family spokesperson told the press that the memorial was "not only to the memory of Jean but a testament to the struggle of an ordinary family in London, a struggle for truth and justice" (quoted in Cocker 2009). The mosaic, which was designed and created by local artist Mary Edwards with the help of De Menezes' family members, stands in aesthetic juxtaposition to the standardised plaques marking the 7/7 locations. Its homemade style has a lot in common with Meier's plaque in Berlin and reflects its

<sup>&</sup>lt;sup>109</sup>The first, known as Stockwell One, investigated the shooting and was completed by January 2006. The second, Stockwell Two, investigated the Metropolitan Police Services' handling of public statements following the shooting and was completed later the same year.

counter and vernacular roots. Its design echoes the colours of the Brazilian flag and its message is explicitly political with the word 'innocent' featuring prominently in capitalised form. Overall its style contrasts strongly with TfL's standardised approach to design whilst simultaneously appropriating for its own ends the use of tile work that is traditionally associated with the station architecture of the Underground.

#### Figure 6.15. The unveiling of the mosaic in 2009. Source: Smallman (2009).

At the mosaic's unveiling the family launched an online petition calling for a permanent memorial in order to put pressure on TfL and called for the support of the public and of London Mayor Boris Johnson. These actions signalled a shift in the campaign's objectives from those that hoped to secure legal justice for De Menezes to those that settled for the consolation of securing representation for him within the social memory of the network and the city. As if acknowledging this, De Menezes' cousin and one of the campaign's most prominent representatives, Vivian Figueirdo, stated, "we think there should be something permanent because it has to be cared for. We want something to stay forever...It is unbelievable that it is four years since this happened. We have been through all the steps we can to try and fight for justice" (quoted in Cocker 2009). Her comments reflected the need to ensure the long-term survival of De Menezes' memory through permanence and by extension TfL's acceptance of responsibility for its maintenance. Figueirdo's sentiments were confirmed when in late November 2009 the family accepted an undisclosed compensation package (thought to be in the region of £100,000 plus associated legal costs) from the Metropolitan Police, thereby ending all

litigation between the two parties (Dodd 2009). Soon after, on 10<sup>th</sup> December 2009, International Human Rights Day, and after over three years of campaigning, TfL gave permission for the mosaic to be installed on the exterior of the station (Roberts 2009).

TfL's delayed decision to grant permission was the result of an initial knee-jerk reaction "that the station was not somewhere that should become a point of remembrance" (Ashworth 2011\*) and can be traced back to distinctions between how the transport authority and the Justice4Jean campaign viewed the incident and its location. Ashworth noted that the shooting was a contentious issue for TfL, who were uncertain how to handle its remembrance because many in the organisation felt that it was happenstance that it had occurred on their tracks and found it difficult to acknowledge its relevance to the Underground (Ibid). Meanwhile, for Justice4Jean, the authentic location of De Menezes' death held not just personal mnemonic significance but was also somehow implicated in the cause of his death. Such connections were reflected by the investigations as to whether the recent terrorist targeting of the Underground had been a causal factor in De Menezes' shooting.<sup>110</sup> The Justice4Jean campaign's belief that it had was echoed in the symbolism of its logo, which appropriated the TfL's iconic roundel, replacing the word 'UNDERGROUND' with the campaign name and introducing a vertical red line that anchored the date of De Menezes' birth and death. This created an overall design that was provocatively reminiscent of a rifle crosshair. Such strategies went some distance towards suggesting that TfL was complicit in De Menezes' shooting and were likely to have only hindered the campaign's call for a permanent memorial. Ultimately TfL acknowledged the role it and its stations played in their surrounding communities and, in Ashworth's words, came up with a "considered response" that enabled the creation of a permanent communal memorial without hindering the station's day-to-day operational use (Ibid). In this respect the exterior facade of the station was utilised in order to ensure crowds did not congregate within the actual station. These strategies echoed the BVG's concerns regarding the location of Meier's memorial plaque, which at times motivated them to suggest new potential locations for it outside the station. In addition, the use of the station's exterior walls reflected spatial hierarchies given that the plaques to the 7/7 victims were installed in the interiors of their station's ticket halls. While Ashworth's comments outlined how TfL came round to accepting the memorial claims of De Menezes' friends and family,

<sup>&</sup>lt;sup>110</sup>On this question the inquiry's jury were unable to reach a decision.

they did not acknowledge the influence that the resolution of the legal proceedings surrounding the case are likely to have had in TfL's decision. The prevalent sentiment of the local community, as embodied by its maintenance of De Menezes' shrine, was doubtless a contributing factor behind TfL's decision to permit the memorial, but the limited number of online petition signatures collected, which amounted to 840, and the timing of TfL's announcement suggest that the settling of legal proceedings was also a significant factor in allowing the memorial to be installed.

In response to gaining TfL's permission Figueiredo stated, "The pain of never achieving justice for Jean's killing continues to haunt us every day, but knowing his memory will be kept alive in the local community through this memorial is a tribute we could not have dreamed of. We thank all the members of the public who have supported us from the bottom of our hearts" (Roberts 2009). During the unveiling of the permanently installed mosaic on 7<sup>th</sup> January 2010, which would have been De Menezes' thirty-second birthday, Figueiredo reiterated that the memorial's installation symbolised the end of the campaign and its activities.<sup>111</sup> The family's failed attempts to gain legal justice had been replaced by the successful inauguration of De Menezes into the memory of the local community, the Underground and arguably the city as a whole.

#### 6.6 Conclusion

In this chapter I have demonstrated how stations within underground railway networks can become the foci of social memories connected with individual instances of loss of life. As the authentic locations of traumatic events, the Samariterstraße and Stockwell stations have both become places of memory and central sites for multiple mnemonic communities that have formed around the remembrance of Meier and De Menezes. These communities, like the textual communities that "form around a particular reading of the landscape and attempt to make it a dominant focused reading" have formed around particular memories and the pasts to which they relate (Duncan & Duncan 1988, 121). They vary in their scale and range from those that are real to those that are imagined (Anderson 1991): from Meier's and De Menezes' immediate family and friends, to each station's local community, through to their cities and nations and arguably to wider cultural and transnational Antifa and Brazilian communities beyond.

<sup>&</sup>lt;sup>111</sup>Onionbagblog, 2010, Justice for Jean [Online] Available from:

http://onionbagblog.com/2010/01/07/justice-for-jean/ [Last accessed 4 December 2013].

But whereas Meier's memorialisation continues to act as a vehicle for the shifting demands for social and political change that radiate from his mnemonic communities, De Menezes' became an end in itself and a consolation for a community of family and friends forced to give up their pursuit of individual justice and changes to police policy. Unlike De Menezes', Meier's memory is currently witnessing particular social resonance and its mnemonic community is growing. He is being increasingly integrated into the pantheon of a wider transnational Antifa subculture and continues to be invoked to support the changing agendas that are annually displayed at Samariterstraße station by the local Antifa community. De Menezes' mnemonic community, in contrast, can now be seen to be shrinking and disbanding. His family's geographical isolation in Brazil and the end of their judicial campaign, coupled with the consolatory permanence of his new memorial, have arguably facilitated the absorption of his memory into the background of daily life in and around Stockwell station. It remains to be seen whether future events will return resonance to his memory and encourage its reactivation.

The actions of each of the mnemonic communities that surround Meier and De Menezes at each station have represented varying degrees of disruption to the operation of their respective transport networks. Each has taken advantage of the ambiguous public status of the U-Bahn and Underground's landscapes through tactics of re-appropriation and acts of contestation, in order to legitimise and strengthen their grassroots memory to the extent that in some instances it has taken on the characteristics of permanence that are traditionally associated with official memory. In both instances, London's and Berlin's respective transport authorities have acted as intermediaries in this transformation process from the bottom up. But while the BVG accepted Meier's memorial plaque at Samariterstraße before his memory obtained wider political legitimisation, TfL only did the same for De Menezes at Stockwell once legal disputes between his mnemonic community and the city's police force had been settled. Ultimately neither BVG nor TfL were directly accountable for Meier's and De Menezes' deaths. The next chapter turns to incidents where each city's transport authorities and their subterranean landscapes can be deemed to have been more accountable and complicit in the loss of human life. As will become apparent, these incidents and the negative pasts to which they relate have been accounted for in different ways and to different extents in the railways under London and Berlin.

#### **Chapter Seven**

Accounting for the Underground, U- and S-Bahn's Negative Pasts

#### 7.1 Introduction

At roughly the same time as TfL permitted the installation of De Menezes' memorial mosaic at Stockwell station, a reinvigorated grassroots memorial campaign emerged surrounding the forty-three victims of the 1975 Moorgate Tube crash. Unlike De Menezes', the causes of these deaths could not be easily attributed to happenstance. Instead the landscape of the Underground and those responsible for its management and operation could be recognised as more complicit in them. Yet this complicity was not without both precedent and repetition. Besides being discernable in the 7/7 terrorist attacks considered briefly in the previous chapter, it was also evident in several wartime events that led to fatalities within the Underground's subterranean landscape and also in the 1987 King's Cross Underground station fire that killed thirty-one people. In London at least, this complicity, coupled with the pressure to respect dominant municipal and national cultural and mnemonic tropes and narratives, has at times encouraged the city's transport authority to account for and negotiate the negative pasts represented by these events through the installation of memorials. These memorials, unlike those discussed in the previous chapter, have involved greater impetus from within the transport authority (albeit occasionally in response to an array of external mnemonic demands) and hence can be considered under the rhetoric of official memory.

Therefore in this chapter I explore how TfL and its predecessors have negotiated and accounted, through practices akin to official memorialisation, for the negative pasts associated with traumatic events that have taken place within the Underground. By addressing the recent involvement of TfL in memorialising the WWII bombing of London, I argue that the transport authority acts as an intermediary for Britain's dominant mnemonic discourses and cultural tropes in ways that influence the production of social memory in the Underground. Meanwhile, in examining the memorialisation of accidents that have occurred within the network, I highlight how London's transport authorities' memorial responses have reflected the significance of their perceived and actual levels of legal accountability amongst other factors. Further, I

205

discuss how in the Berlin U- and S-Bahn, meanwhile, comparatively few negative events have been officially memorialised. In part this is due to the transport network's lack of comparable operational accidents. Yet there are a number of events – most notably a 1930s construction accident and the bombing and flooding of the system during WWII – that the city's authorities have failed to address mnemonically, despite Berlin's renowned record of coming to terms with its difficult past. These mnemonic gaps, I argue, are also the result of dominant social memory discourses – albeit ones that result in memorial absences rather than presences.

#### 7.2 Remembering the Underground of WWII

As highlighted in Chapter Three, the landscape of the Underground was reformulated in both organisational and physical ways during WWII. The use of some of its stations and tunnels as civilian air-raid shelters during the Blitz, which at a peak in late September 1940 provided protection for 177,000 people in a single evening (Field 2002), led in turn to the subterranean landscape's cultural reformulation. The shelter of the Underground, however, was not impervious. The Commonwealth War Graves Commission records at least fifteen incidents involving loss of human life at Underground stations during bombing raids, totalling 230 civilian deaths, almost 200 of which actually occurred in Tube station shelters (Cooper 2010, Ashford 2013). The most serious of these incidents were the direct bombing hits that killed around 120 people in total on three consecutive nights in October 1940 at the Bounds Green, Balham, and Sloane Square stations and a further fifty-six at Bank station in January 1941 (Cooper 2010) (Figure 7.1).<sup>112</sup> Besides the threat of direct hits, shelterers were also exposed to poor sanitary conditions and the risk of acute health issues including emotional stress, anxiety attacks, extreme fatigue and eating disorders (Ashford 2013, Field 2002). Nevertheless the Underground continued to provide shelter for numerous people after the Blitz and especially during the V1 and V2 flying rocket raids between June 1944 and March 1945. On their last operational evening, 6th May 1945, the Underground's shelters provided refuge for 260 people despite the threat of aerial attack being virtually non-existent (Gregg 2001).

<sup>&</sup>lt;sup>112</sup>These figures do not include the 173 civilians crushed to death during the Bethnal Green Tube shelter disaster of March 1943. I researched the memorialisation of this event but decided not to include an extended discussion of it here in the interests of the thesis' overall coherency and length (see p.322).

# *Figure 7.1.* The October 1940 bombing of Balham Underground station. Source: LTM.*7.2.1 Memorialising the Blitz beneath the city*

The Blitz has come to represent one of the strongest focal points for the remembrance of London's experience of WWII and has given birth to new forms of national identity founded on notions of civilian unity, solidarity and resilience, encompassed in the 'Blitz spirit'. Within these wider mnemonic impulses the Underground has become a typical setting for the Blitz spirit as immortalised most famously by the sketches of Henry Moore and the photography of Bill Brandt. Ashford succinctly summarises the new cultural status of the Underground as:

"A showcase for the morale of civilians under fire. A crucible for a new collective spirit. The bombs of 1940 were to transform the Tube into the very centrepiece of what Angus Calder has labelled the myth of the Blitz" (2013, 116).

Calder's revision of positive historical readings of the Blitz and their subsequent reframing as part of a collective mythology fostered and promulgated by the government in order to protect and reward the people is supported by certain wartime experiences of the Underground (Calder 1991; Bell, 2008). For example, the bombing raids that resulted in the loss of life in the Underground sit uncomfortably with the popular collective memory that positions the transport network during WWII as a place

of shelter and security (Ashford 2013). Despite this, and potentially in reflection of the earliest manifestations of the myth of the Blitz, the public's confidence in the Underground's shelter was not shaken by these deaths thereby allowing the myth and its constituent "legend of the Tube dwellers" to endure (Gregg 2001, 19). This myth has proved remarkably resilient, partly because of its ability to assimilate counterfactual and negative accounts within its fundamental narrative (Ashford 2013). In addition it has endured because for the most part, and until relatively recently, "problematic and painful memories have [had] little space in the public field of representation of the war", and when they have been present they have often been marginalised and sanitised (Noakes 1998, 32). Thus in London the public memorialisation of civilian deaths caused by the Blitz "remains partial, fragmented and dispersed", with a post-war commemorative focus on bombed churches having been displaced by an unassuming memorial to the victims of the Blitz unveiled in 1999, and various smaller mnemonic references to the bombing raids located throughout the city and occasionally subsumed within different commemorative agendas (Moshenska 2010, 6).

In the Underground the commemoration of the Blitz's victims is also fragmented: just two of the most serious direct bombing hits mentioned above have gained explicit memorialisation. The Memorial plaques installed at Bounds Green and Balham stations in 1994 and 1996 respectively were symptomatic of the widespread mnemonic activities and 'commemorative excess' that occurred in Britain during the fiftieth anniversary of WWII's duration (see Eley 2001). The Bounds Green plaque was installed by LUL at the platform level of the station on the 54<sup>th</sup> anniversary of the bombing. The Balham plaque, meanwhile, was installed during modernisation, after the duty station manager researched the bombing and contacted survivors and the victims' friends and relatives, including LT staff (The New Northern Line News 1996; On the Move 1996). This plaque, however, proved to be inaccurate in the number of victims it commemorated and was recently replaced by TfL, demonstrating how the memorial strategies pursued by the transport authority can contribute to the processes of assimilation, marginalisation and sanitisation associated more broadly with the maintenance of the myth of the Blitz.

The first Balham plaque read, 'In memory of the 64 people killed at this station by a wartime bomb 14th October 1940' but, as there was no consensus on the exact number of lives lost, TfL took the decision to replace the plaque in 2010, on the event's 70<sup>th</sup>

anniversary (Ashworth 2011\*). Ashworth noted how seriously TfL take the design and wording of their memorials, and the extent to which they seek to ensure that they not only are historically accurate but also convey the significance of the memorialised event without dramatising it or eroding the public's perception of the Underground as a managed environment characterised by high levels of design continuity (Ibid). TfL's replacement of the Balham plaque illustrates these intentions and their potentially problematic consequences. The carefully worded replacement avoids direct reference to the scale of losses in the incident (Figure 7.2). In addition the new plaque serves to rhetorically assimilate the event within the narrative of the Blitz, thus drawing on the narrative's mnemonic currency and privileged position within Britain's collective memory and national identity. Furthermore, through the new plaque's introduction of two categories of victims (civilians and LT staff), along with its use of the TfL typeface and logo, it also functions to reinforce the transport authority's corporate identity and. translates the social memory of the event into its brand language by using the same 'tombstone' shaped sign that TfL have used since 2007 to commemorate the network's architectural heritage (Ashworth 2008) – albeit in this instance coated in grey enamel in order to convey greater degrees of sombre remembrance (Ashworth 2011\*).

Besides helping to assimilate the memory of Balham within the Blitz myth, and in line with TfL's developing design strategy and management of its negative pasts, the plaque also sanitises and marginalises the memory of the bombing. By adopting a standardised mnemonic medium chosen because of its minimal impact on the everyday operations of the railway network, TfL aimed to mitigate any potential disruption caused by the historical inaccuracy of the first plaque and simultaneously sanitise the memory of the wartime bombing. In recent years the plaque has, however, gained increasing attention and been mnemonically activated by recurring memory 'flashpoints' including Britain's annual Remembrance Day (Figure 7.1). Yet even this activation, as demonstrated by the laying of paper poppies, exemplifies Noakes' claim that an additional way that painful memories of WWII are marginalised is through their confinement to specific commemorative events and "official sites of mourning that invest the dead with a valour, dignity and worth" (Noakes 1998, 42).

TfL's increasingly coordinated approach to memorialisation, represented by the Balham plaque, makes it distinctive in being perceived to be publically responsible alongside and in addition to established national plaque schemes for commemorative processes

across its landscape (Ashworth 2011\*). Some in the organisation have found these emerging responsibilities frustrating, but ultimately TfL has engaged with them by conferring responsibility for negotiations and decisions related to public requests for memorialisation, in the first instance, to its Heritage and Design Officer and Public Relations Officer, whose recommendations are subsequently presided over by the board of directors. Ashworth, TfL's current Heritage and Design Officer, who was involved in the memorial decisions surrounding the 7/7 attacks and De Menezes's death (Chapter Six), explained that three factors guide whether TfL allows the memorialisation of a negative event within its network. These are: the scale of the event, most often measured by the loss of life; the event's significance to the history of either TfL or the nation; and the elapsing of twenty-five to thirty years since the event to allow it "to settle into historical context" (Ashworth 2011\*).

#### Figure 7.2. The New Balham Plaque on Remembrance Day 2013. Source: Jones (2013).

An LUL response to a separate request to memorialise the bombing at Sloane Square station suggests that it was accustomed to such appeals and at least briefly considered marking each of the serious WWII bombings of their network.

"It is true that we have some commemorative plaques at Balham and Bounds Green stations that were also bombed during World War 2. We will certainly look at the possibility of installing a plaque, alongside similar requests we have had relating to other stations."<sup>113</sup>

The (re)memorialisation of the Balham bombing was likely to have been a relatively straightforward decision for TfL to make, given increasing public demand, the numerical inaccuracies of the previous plaque, and the event's compatibility with the seventieth anniversary commemorations of the Blitz and its encompassing and durable myth. Other memorial requests, however, have resulted in more testing deliberations – in particular those related to a number of operational accidents that claimed lives in the Underground.

#### 7.3 Accounting for the Underground's accidental deaths

For events such as the 1987 King's Cross fire and the 1975 Moorgate Tube crash the question of memorialisation has been intricately connected to questions of TfL's and its predecessor's legal accountability for the loss of lives that these accidents caused. Historically, and until recently, the organisation's mnemonic treatment of these two events has contrasted starkly, as illustrated by the coverage each has received in written histories of the Underground. For example, the most recent official history addresses the Moorgate crash in just two paragraphs, but dedicates seven pages to the King's Cross fire (Bownes et al 2012). In the last year, however, TfL have been forced to amend the imbalance in their memorial response to the two events.

#### 7.3.1. Memorial compensation for The King's Cross fire

At around 7.25 pm on 18<sup>th</sup> November 1987 a fire started on one of King's Cross Underground station's escalators when a lit match, discarded by a passenger, ignited grease and detritus that had collected beneath the escalator's wooden treads (DoT 1988). The fire spread beneath the treads, igniting other parts of the escalator and resulting in a 'flashover', which caused flames and thick black smoke to erupt into the ticket hall (Ibid). Although arriving moments before it, the first London Fire Brigade personnel on the scene could do little to prevent the flashover or the loss of thirty-one lives, including one of their crew. It took thirty fire engines six hours to bring the fire under control (Ibid) and many of its survivors later displayed the symptoms of post-traumatic stress (see Rosser et al 1991, 4).

<sup>&</sup>lt;sup>113</sup>Quoted by Steve Hunnisett. [Online] Available online at:

www.flickr.com/groups/londonatwar/discuss/72157623591580501/ [Last accessed 30 Apr 2014].

An official investigation into the fire, presided over by QC Desmond Fennell, found numerous shortcomings in LRT and LUL's safety regulations. It resulted in 157 separate recommendations that addressed safety procedures and policy, amongst other factors, and suggested physical changes to the station environment (Ibid). The fire has subsequently been framed as the nadir of the chronic under-investment and economy drives that the Underground experienced from the mid 1970s onwards and a watershed moment in the system's management which "brought a pace and depth of organisational change inconceivable without the impetus of the disaster" (Bownes et al 2012, 223; Day & Reed 2010). As such the event, to an extent, served as a new origin myth, the flames from which the phoenix of the Underground's modern management structures and organisational concern for public safety emerged. Strangleman has described how Britain's mainline railway companies negative interpretation of their past during the 1980s encouraged their uptake of a business-led culture (1999). The King's Cross fire led similarly to LRT's and LUL's uptake of a new business unit model (Bownes et al 2012). In other words it served as a crisis that illustrated a negative past and could subsequently be drawn upon ideologically in order to legitimise present and future changes to the Underground's management structure. Amongst the changes brought about by the fire was LUL's appointment of a new managing director, Denis Tunnicliffe. Tunnicliffe acknowledged that the fire legitimised internal changes to the organisation and recently summarised the organisation's response to media scrutiny in its aftermath:

"We got across contrition, we got across commitment to change, we got across apology and that we will pay compensation as if we were liable" (quoted in Bownes et al 2012, 225).

Tunnicliffe's comments, which were made in 2011, demonstrate the ambiguity surrounding LRT's liability for the fire and its victims. In 1996 it was reported that the organisation had admitted liability for the purposes of an individual compensation claim, but later press coverage of further claims noted that the transport authority had never formally accepted responsibility for the fire (Jones 1996; The Times 2004). By early 1996, eighty-four compensation claims had been settled, costing LRT over £4 million (Jones 1996). At that point three cases were still outstanding and later another compensation claim was mooted in the press following the identification of the final unknown victim (The Times 2004).

During these compensation claims LRT also communicated its contrition and apology through memorial strategies. On the seventh anniversary of the fire LUL representatives, joined by some of the relatives of the fire's victims and the Mayor of Camden, unveiled two memorial plaques in the subsurface ticket hall of the station where the fire occurred (Figure 7.3). The names of the victims were read aloud during an unveiling presided over by a priest from the local church that had hosted an annual memorial service to the disaster since its occurrence (U-Magazine 1994). The plaques, one set above the other, were paid for by the King's Cross Disaster Fund (KCDF), which in the first month following the fire received around £628,000 in public donations (Eyre 2010).

# *Figure 7.3.* The unveiling of the King's Cross fire memorial plaques. Source: U-Magazine (1994).

In the years immediately following the fire the trustees of KCDF debated the need to memorialise the event. On the first anniversary, a week after the KCDF had overseen the burial of the fire's two unclaimed – and at that time unknown – victims in the cemetery of St Pancras church on Armistice Day, the KCDF unveiled a small memorial stone to the fire's victims in the entrance of the same church (Associated Press 1988). However, many of the victims' relatives, as represented by the King's Cross Families

Action Group (KCFAG) led by Sophie Tarassenko,<sup>114</sup> were dissatisfied with this decision and believed that the station itself was a more fitting place for a plaque, where their members could meet annually in remembrance and lay flowers. KCFAG also wanted a memorial that listed the names of the fire's victims. After the first anniversary, and against the wishes of the KCDF, the KCFAG approached LRT and requested that a temporary memorial be placed in the ticket hall until a more permanent memorial could be agreed upon. Against the background of the recently published investigation and its damning verdict, the necessary permissions for the temporary memorial were granted without hesitation. However, the KCFAG' requests that the KCDF release money for and, in consultation with LRT, organise a permanent memorial featuring the names of the victims went repeatedly unheeded. As the relationship between the KCDF and KCFAG deteriorated further, the plans for the permanent memorial in the station stalled. The KCFAG's wishes were only fully addressed when the KCDF was dissolved and its unspent finances handed over to Camden council. At this point the KCFAG contacted the council and plans were made to consult the bereaved relatives and LRT. Subsequently the council commissioned and installed two plaques before the fire's seventh anniversary, including one that listed the victims' names.<sup>115</sup> Today the station is a palimpsest of different and amended memorial responses. Besides the two permanent plaques installed in 1994, the temporary plaque also remains on display beyond the ticket gates, under a memorial clock donated by LUL staff at a later date. This plaque and clock, like the plaque at Bounds Green Underground station, are rare, insofar as they are actually within the transport network, beyond the ticket barriers, in places visible to paying passengers.

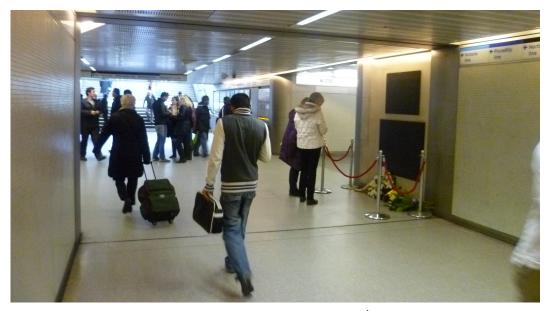
For the majority of the time the plaques command little public attention and are merely background noise in passengers' daily commutes. At times announcement boards mask the memorial clock and, whilst occasionally a passerby might display more than a cursory interest in the plaques, it is usually those who had a personal connection to the victims who tend to acknowledge their full significance during the course of everyday life. For example, a former fire fighter who had attended the fire commented whilst visiting the station on a normal day that the station "is like a church to me" and

<sup>114</sup>Tarassenko, who lost her brother in the fire, later became trustee and co-chair of Disaster Action, a British charity formed in 1991 to offer guidance and support to disaster survivors and the bereaved.

<sup>&</sup>lt;sup>115</sup>This summary is drawn from the account of the memorial's history provided by Eyre (2010). The plaque was amended in 2004 to include the name of a previously unknown victim.

"whenever I am passing through I take a moment to remember Colin."<sup>116</sup> These comments like the religious ceremony carried out during the plaques' unveiling demonstrated that in this instance the subterranean space of the Underground was clearly not immune to the sanctification of space that is often brought about by traumatic memory (see Jacobs 2004).

It is, however, on the fire's anniversaries that the plaques receive most attention, due to the station's mnemonic reactivation as a primary location for remembrance. On these anniversaries, TfL, and in particular the station staff at what is now King's Cross St Pancras, demonstrate how they have become adept at operationalising the remembrance of the fire, much as BVG handles the memory of Meier (Chapter Six) Each year, on the anniversary of the fire, a space around the main plaques in the subterranean concourse that links the different Underground and mainline stations is cordoned off with silver posts linked by red ropes, in order to provide a place where tributes can be laid without presenting a risk to passengers going about their daily activities (Figure 7.4).



*Figure 7.4.* The King's Cross memorial plaque on the 24<sup>th</sup> anniversary. Source: Author 2011.

The cordon was in place on the twenty-fourth anniversary of the fire in 2011, although on occasions commuters risked bumping into it as they hurried around the corner from the subway leading beneath Euston road (to the immediate left of the plaques in Figure 7.3). For the most part, however, the cordon and tributes drew people's attention. In a

<sup>&</sup>lt;sup>116</sup>AFN: 27 September 2008. This individual was referring to the fire fighter who was amongst the victims.

single ten-minute period eleven individuals stopped to read the plaque and were reminded of the fire and its consequences. Numerous others slowed their walking pace and rotated their heads as they passed it, almost as if showing respect, whilst those who knew the victims observed their own forms of personal remembrance. One woman, for example, arrived, ducked beneath the rope and attentively placed a bouquet of flowers at the base of the plaques before retreating to take photographs of the flowers and the memorial from various perspectives. Moments later she returned to her flowers touched them and then traced her hand along one of the names on the list of victims in an act that established contact between the living and the dead through the name written on the flowers' card and etched into the plaque. The same woman, however, seemed somehow uncomfortable communing in a place so heavily characterised by speed, movement and hurry, and briefly interrupted her quiet observance by withdrawing money from one of the bank machines opposite before returning to silently observe the memorial. Her private moment of remembrance, which was open to observation and arguably intrusion by anyone caring to watch (including myself and the station's CCTV operators) somehow transgressed the common behaviours of the place and yet simultaneously gave rise to emotive connections founded upon a shared knowledge of the event and the significance of the day.<sup>117</sup>

The potential for intrusion upon acts of private remembrance during the fire's anniversary was explicitly illustrated again in 2012. To mark the twenty-fifth anniversary of the fire the National Union of Rail, Maritime and Transport Workers, along with the Southern and Eastern Trade Union Congress and the Fire Brigades Union, organised a protest demanding that proposed staffing cuts be shelved because of their potential impact on passenger safety. Union representatives along with a London Assembly member and a member of parliament, dodged claims that they had politicised the remembrance of the thirty-one victims and after laying wreaths beneath the plaques gave public speeches outside the station that condemned the proposed cuts by suggesting that they would undo all of the important lessons in public safety that had been learned from the fire, and could therefore result in its repeat (BBC 2012; Woodman 2012). The fact that government underinvestment was widely believed to have contributed to the fire in the first place served to emphasise the influence of its political recollection on this occasion.

<sup>&</sup>lt;sup>117</sup>AFN: 18 November 2011.

If the King's Cross fire can be recognised as the nadir of the public's confidence in the Underground, brought about by a period of government underinvestment and the neglect and mismanagement it gave birth to, then it was another fatal underground accident that represented the onset of this period of erosion, namely, the Moorgate Tube crash of 1975. Yet it is only in the last year and a half that this event has gained memorial expression in London, despite predating and claiming more lives than the King's Cross fire.

## 7.3.2 The delayed and duplicated remembrance of the Moorgate Tube crash

During the rush hour on Friday 28<sup>th</sup> February 1975 an Underground train traveling between 30 and 40 mph overran the platform at Moorgate station and impacted the wall at the tunnel-end of the terminal station (DoE 1976). It did so with such force that the first 125 ft of the train was crushed into a 66 ft tunnel (Darton 1978). The resulting emergency and recovery effort lasted over six days and involved 1,324 firemen, eighty paramedics, 240 police officers and sixteen doctors (Holloway 1989). The last survivors were pulled from the wreckage twelve hours after the incident. In the following days firemen toiled in high temperatures and with low oxygen levels to recover the bodies remaining in the front three crushed carriages, which in some instances had been fused together by the force of impact (Holloway 1989) (Figure 7.5). On Tuesday 4<sup>th</sup> March, the last body removed from the scene was that of the driver, Leslie Newson, around whom controversy regarding the cause of the accident would soon be centred. In total the crash left forty-three dead and eighty-two injured (Darton 1978), the greatest loss of life in a single peacetime incident that the Underground has ever witnessed.

The evidence presented at the subsequent Coroner's Inquest and by a Department of the Environment [DoE] report into the accident demonstrated that there was no fault in the train that would have prevented the driver from making a controlled approach to the platform. As such, the corollary that the accident was caused by human error could not be discounted, and the DoE report concluded that the cause of the crash lay entirely with Newson's actions in the moments before the accident (1976). The specifics of the evidence, and the inconclusiveness of any potential hypothesis regarding the reasons for Newson's failure to stop the train, meant that a verdict of 'accidental death' was returned for all those killed, including Newson himself. This verdict meant that LT was not liable for compensation. With medical and alcohol related causes for Newson's lack

of response discounted, the possibility that the accident was the driver's means of suicide could not be ruled out, but simultaneously the lack of positive supporting evidence for this claim was noted (DoE 1976). The suicide hypothesis has continued to command public attention. One of its most prominent advocates is journalist and scriptwriter, Laurence Marks, whose father died in the crash. Marks wrote an account of the crash for *The Sunday Times* that was published close to the crash's first anniversary (1976) and thirty years later featured in a television documentary dedicated to his memories of it. In these and more recent press reportage (see 2010) Marks has argued that Newson used the accident to commit suicide and continues to question the findings of the inquiry while being increasingly vocal in his criticisms of TfL's memorial response to the crash (see Gruner 2013).

#### Figure 7.5. The wreckage of the Moorgate Tube crash. Source. LTM.

Until 2013 the Moorgate Tube crash remained without a memorial, either within the Underground or in London more generally, despite the efforts of some of its victims' relatives over the previous ten to fifteen years (Dean 2013). These efforts only started to yield tangible results when the granddaughter of one of the victims started using Facebook<sup>©</sup> in January 2010 to connect with other people affected by the disaster and generate public awareness of the event. From the earliest comments exchanged on the

campaign's Facebook<sup>©</sup> webpage onwards, the lack of memorialisation was repeatedly contrasted with events such the King's Cross fire and the 7/7 terrorist attacks, which had been physically commemorated in the Underground's landscape. The delay in the Moorgate crash's memorialisation can partly be attributed to the fact that it occurred at a time when public memorialisation and grieving was less commonplace, prior to the onset of both the memory boom and the widespread emergence of grassroots memorials (Magry & Sánchez-Carretero 2011). Yet this does little to explain why it has failed to find mnemonic expression since the onset of these new commemorative impulses, suggesting that the ambiguity surrounding the cause of the crash and the transport authority's accountability also played a role in delaying Moorgate's memorialisation. This changed when, thanks to the online platform provided by Facebook<sup> $\circ$ </sup>, a more consolidated campaign group emerged and significantly caught the attention of Richard Jones, an amateur historian with previous experience in gaining planning permission and raising funds for public memorials.<sup>118</sup> Thereafter Jones became a key driving force in a campaign that used online and print media to increase publicity of the event and the wishes of its victim's relatives for a memorial (Jones 2012\*).

Jones' earliest attempts to have TfL place a memorial plaque on the platform met the same official response that had accompanied the earlier, intermittent requests made by other leading members of the campaign: TfL's unwillingness to memorialise the event without the full consent of all the victims' relatives, and on the grounds that memorialisation in the network should only be permitted in exceptional circumstances. As Jones recalled, TfL's reluctance to memorialise the event was due to the fact that "if they had to put up a memorial to Moorgate they would have to put one up for everyone who died on the Underground" (Ibid). This sentiment was echoed by London Mayor, Boris Johnson's response to Jones' written request for support in October 2010. Johnson wrote,

"I do appreciate why this is so important to the families of the people involved in this terrible accident, but also understand why London Underground has previously turned down their requests. As you will know the installation of plaques to commemorate loss of life on the transport network is the exception rather than the rule."<sup>119</sup>

<sup>&</sup>lt;sup>118</sup>In April 2014 the 'Moorgate Tube Disaster Family and Friends Campaign for a Memorial' Facebook<sup>©</sup> group had 409 members.

<sup>&</sup>lt;sup>119</sup>[R]ichard [J]ones [P]rivate [C]ollection. Letter from Boris Johnson to Richard Jones Re: Proposal for Moorgate train crash memorial, 5/11/2010.

TfL's initial reluctance to consider the memorialisation of the Moorgate deaths can be also linked to the inconclusive findings of the inquiry insofar as it was neither found responsible for nor fully cleared of causing the event. Ashworth subsequently noted that "within the company there is still a slight sense of guilt almost of hostility because there is a perception somehow that London Transport was...totally to blame" (Ashworth 2011\*). Yet this reluctance stood partially at odds with the factors that guide TfL's memorial decisions considered earlier. As the single greatest example of peacetime loss of life in a single location, the Moorgate Tube crash fulfils TfL's criteria related to scale and arguably, by extension, those related to national historic significance. Likewise, given the role it played in the introduction of the automatic braking system at terminal stations (today known as the Moorgate Control), it can be argued that it was also significant to the history of TfL itself and by 2010 it had certainly settled into historical context.

Given the hurdles presented by TfL's lack of cooperation the group, aided by Jones' previous experience of the official planning process, decided instead to erect a memorial in a park on Finsbury Square, close to Moorgate Underground station. Following Islington Council's decision to grant planning permission and a successful fundraising campaign to raise the £6,000 needed for its construction, the group unveiled a simple headstone-style memorial in the park on 28<sup>th</sup> July 2013 (Figure 7.6). The simple black granite memorial, which included Newson's name within an alphabetically ordered list of the victims, reflected the campaign's objective of gaining recognition for the victims rather than attribute blame or guilt. While the memorial's text acknowledges the emergency services and survivors, LT is not mentioned. Over 100 people attended the unveiling of the memorial, which commanded local and national media coverage that at times used the delay in the event's memorialisation to frame its status as a forgotten disaster (BBC 2013b).

A week after the unveiling of the memorial TfL and LUL released a press statement, which announced their revised decision to memorialise the accident. It stated,

"The Moorgate train disaster was one of the darkest days in our history and the customers and the train driver who lost their lives on the day will never be forgotten" (quoted in Gruner 2013).

The impetus for TfL's sudden decision to memorialise the crash were due partly to the efforts from early 2013 onwards of one of the organisation's employees, who had lost

his sister in the crash. However, it was arguably more a reaction to the success of the Facebook<sup>©</sup> friends and family campaign. The announcement was met with renewed scorn from the victims' relatives including, most vocally, Marks, who like others claimed that TfL had been shamed into action. He deplored the fact that the first memorial was located a six minute walk from the station and argued that the failure of both TfL and LUL to instigate its creation, along with the delay in announcing their own plans to memorialise the event, were indicative of the organisations' attitudes towards the disaster and its victims. This attitude, he claimed, was reminiscent of the lack of assistance offered to him by LT when he researched the event in its immediate aftermath (Gruner 2013). He wrote,

"...the inaction of London Underground toward the 43 that lost their lives on one of their trains, in the bowels of one of their stations, has remained with me for nearly four decades...The last organisation I spoke to as I was concluding the definitive feature on this terrible tragedy was London Transport...Their response in 1976 was what it had been throughout my investigation: "No comment." Why, I wonder, are they commenting now?" (quoted in Ibid).

Late in 2013 LUL contacted Jones to request the contact details for those relatives involved in the campaign, in order to discuss the installation of a memorial at the station. The comments made on the campaign's Facebook<sup>©</sup> webpage in response to this request highlighted the divided attitudes of the campaign members towards TfL's new interest in memorialising the event. Some saw the planned memorial as a necessary, albeit token, gesture that, regardless of circumstances, needed to be installed at Moorgate station in order to demonstrate official acknowledgment of the crash. Others were more scathing. One commentator wrote:

"I think everyone should boycott this plaque from London Underground. It seems to me LT have been shamed into doing this. They never wanted to get involved in the memorial that has been erected. Also if they ever thought of marking the loss of the 43 victims it should have been done years ago and not now one has finally been laid. Sorry LT 38 years too late!!!!!"<sup>120</sup>

Further criticisms were raised by those associated with the campaign once it became apparent that the TfL memorial would be installed on an exterior wall of the station near a minor entrance. Many were disappointed that, for example, it would not be placed at the authentic location of the crash at the deep-level platform. Some, however, accepted

<sup>&</sup>lt;sup>120</sup>Comment posted on the Moorgate Tube Disaster Family and Friends. Campaign for a Memorial Facebook<sup>©</sup> group, 17 October 2013, [Online] Available from: www.facebook.com/groups/268167592246/, [Last accessed 17 Apr 2014].

TfL's justification for this decision, namely that a plaque at this location could cause disruption, while others contextualised these concerns by noting how TfL now regretted allowing the King's Cross fire to be memorialised within the subterranean circulatory because of the congestion it caused during anniversaries. Others still, like one of the campaign's main instigators, noted that they "personally wouldn't want to go to the platform to remember."<sup>121</sup> Eventually the second memorial plaque was unveiled on the exterior of the station on the thirty-ninth anniversary of the event in February 2014. Its location, like that of De Menezes', reflected the organisation's developing approach to how best to accommodate memorialisation processes connected to the Underground's landscape. Engraved in black slate, like the that used for the memorials to the King's Cross fire and 7/7 attacks, its wording reinforces the crash's accidental causes, and in an impersonal manner excludes the victims' names (Figure 7.7).

The duplication of memorials to the crash has resulted in many of the members of the campaign Facebook<sup>©</sup> group expressing their preference for observing forms of remembrance at the Finsbury Square memorial rather than outside the station beneath TfL's plaque, either because the former symbolised the outcomes of their personal efforts or because it represented the most well-suited and respectful location to remember, in the absence of a memorial at the deep-level platform. Therefore, TfL's delayed memorial response can be recognised to have helped the organisation to displace certain forms of remembrance from the station, thus mitigating their potential to disrupt its operations. At the same time the memorial represents an official acknowledgment of the significance of the event and communicates this to a wider public beyond those directly affected by the crash. Whether the installation of either of the Moorgate memorials has provided healing to the victims' relatives and friends or has in fact opened old wounds is less clear.

<sup>&</sup>lt;sup>121</sup>Comment posted on the Moorgate Tube Disaster Family and Friends. Campaign for a Memorial Facebook© group, 19 January 2014, [Online] Available from: www.facebook.com/groups/268167592246/, [Last accessed 17 Apr 2014].

Figure 7.6. The Moorgate memorial at Finsbury Square. Source: RJPC 2013.

# Figure 7.7. The Moorgate memorial plaque. Source: RJPC 2014.

While the campaign sought only to gain memorial recognition for the crash, its success has been used by some relatives of the deceased as an indication that it is time to call for the crash to be reinvestigated in order to clarify its causes beyond doubt. These renewed demands for justice, which have been enhanced by the precedent set by the government's recent reinvestigation of the 1989 Hillsborough stadium disaster and the public disclosure of its related documents, have split the online mnemonic community surrounding the accident into those who see the campaign's work as completed and those that believe it is only now truly beginning. It remains to be seen, then, if the memorials to Moorgate will ultimately have a consolatory function or whether they will form a platform for making wider social demands: in other words, whether their fates will most closely resemble those of De Menezes' mosaic or Meier's plaque (Chapter Six).

More evident is the extent to which in recent years TfL has been more willing to engage with its negative pasts. While the Underground's landscape increasingly references instances of collective loss of life, reflected through wider cultural tropes and mnemonic discourses or filtered through questions of its transport authority's accountability, similar references are few and far between in the railways beneath Berlin. In part this is due to the U- and S-Bahn's stronger safety record and a relative lack of operational accidents resulting in a significant loss of life.<sup>122</sup> Yet there are two events in particular whose current lack of memorialisation in the subterranean landscape of the U- and S-Bahn provide interesting counterpoints to the memorialisation of negative pasts in the Underground.

## 7.4 The memorial absences of the U- and S-Bahn

Numerous wartime events and an earlier construction accident that led to the death of many individuals in the subterranean sections of the U- and S-Bahn are today primarily characterised by absence within the transport network and Berlin's collective memory. These events, therefore, contribute a rarely commented-on chapter to the story of a city Huyssen has acknowledged to be "saturated with invisible history" (2003, 58). This is particularly peculiar given that Berliners are renowned for effectively working through and memorialising the city's negative past with a propensity towards critical memorywork (Ladd 1997). The two following examples may well have commanded greater historical interest and commemorative attention had they unfolded on the surface and in a context other than the largely taken-for-granted and 'ordinary' transport network. But

<sup>&</sup>lt;sup>122</sup>A rare and early exception was the 1908 crash at the elevated Gleisdreieck station that claimed eighteen lives (Gläser 1999).

at the same time their contemporary mnemonic underrepresentation is likely to be the result of the nature of the victims they claimed and the influence of changing mnemonic discourses on their respective commemorative afterlives.

#### 7.4.1 The North-South S-Bahn tunnel collapse

The North-South S-Bahn tunnel was constructed between 1934 and 1939 to link various terminals in the north and south beneath the ground and create six centrally located subterranean S-Bahn stations. It contributed to the National Socialist regime's propagandistic machine (Braun 2008a), and in fact the propagandistic power of the technological and construction spectacle was enough to encompass and incorporate in its myth events involving the significant loss of human life. Around midday on Wednesday 20<sup>th</sup> August 1935, 8,000 m<sup>3</sup> of the sand that Berlin is famously built upon shifted uncontrollably. The sand, along with forty-five tonnes of construction machinery, buried sixty-four metres of the tunnel construction site at the foot of the Brandenburg gate, on the street that had only recently been renamed Hermann-Göring-Straße (Figure 7.8). A group of twenty-three men had been in the trench at the time of the collapse. Only four were able to escape. Despite immediate and prolonged efforts to rescue the other nineteen workers, none of them survived, and their bodies were gradually recovered from the site over a period of eleven days.<sup>123</sup> During the recovery effort both Hitler and Joseph Goebbels visited the site (Germania 1935a; Berliner Tageblatt 1935a). Their visits were motivated by concern not solely for the victims but also for the construction project, given the intention that it be completed in time for the 1936 Berlin Olympics.

This time pressure, heightened by earlier planning delays, contributed to the cause of the accident: the failure to correct changing construction plans, causing excavation crews to drive too deeply into the city's subsoil. The families of the deceased collectively received 50,000 Reichsmarks in compensation, supplemented by an additional 30,000 Reichsmarks gifted personally by Hitler (Berliner Tageblatt 1935b), thereby equating each life lost to roughly 4,200 Reichsmarks.<sup>124</sup> Meanwhile the Deutsche Reichsbahn (DR) quickly replaced the subcontracted construction company,

<sup>&</sup>lt;sup>123</sup>For a fuller historical account of the accident and its consequences see Braun (2008a; 2008b).

<sup>&</sup>lt;sup>124</sup>A construction worker on such a project would have earned around fifty Reichspfennigs per hour (Braun 2008b). Thus the compensation paid per person was the equivalent of 8,400 hours of work, which given a modest estimate of a working week equates roughly to about four years' paid employment.

Berlinischen Baugesellschaft, which had been responsible for the site. Thereafter, whilst the first stretch of the tunnel was opened three days before the Olympics started, the section affected by the accident was not opened on schedule and the whole stretch of the route was only opened in the autumn of 1939. In October 1935 an SS newspaper reported that Jews had been responsible for the disaster, based on the non-Aryan origin of Berlinischen Baugesellschaft's management (Das Schwarze Korps 1935). Such claims, however, were not borne out by the official criminal cases brought against two Berlinischen Baugesellschaft employees and three DR employees between April and late October 1936. Of these, both of the former and one of the latter were found guilty and initially sentenced to prison terms, which following individual appeals were suspended to probation.

#### Figure 7.8. The North-South S-Bahn Tunnel Collapse. Source: DTB.

On the morning of Friday 30<sup>th</sup> August, ten days after the accident and a day before the last two victims were recovered from the site, a military and state-like funeral procession and service took place to honour the victims. Seventeen coffins, each in an individual hearse, were drawn in procession through the central streets of Berlin, greeted by the one-armed salutes of onlookers. Their destination was the Lustgarten that had been redesigned in 1934 for use as a site of mass rallies including the annual National Labour Day and latter the opening ceremony of the 1936 Olympics and which

now lay waiting, freshly adorned in laurels, greenery and black ribbon (Der Angriff 1935). Accompanying each of the coffins draped in the Swastika were wreaths presented in the Führer's name, that conferred the victims with the collective title of 'The Heroes of Work' (Berliner Tageblatt 1935c) (Figure 7.9 & 7.10). Thousands of citizens and functionaries attended in order to honour the Nazi regime's new heroes, including representatives of the organisations which had participated in the rescue effort: the Hitler Youth, the German Labour Front and BVG (Ibid). The DR's general director, Julius Dorpmüller, the head of the German Labour Front, Robert Ley and Berlin's regional party leader and Reichs Minister for Propaganda, Goebbels, all gave speeches to the amassed crowd. Each was infused with propagandistic posturing but the words of Dorpmüller, as quoted in various newspapers afterwards, revealed that he believed that the DR was responsible for the long-term memorialisation of the accident's victims in one way or another.

"The names of those that have fallen in the fields of work should never be forgotten and once the trains roar through these chambers, one will remember every worker that inscribed their names with iron letters in the history of this railway" (quoted in Deutsche Allgemeine Zeitung 1935).

"if later, after the completion of the work... hundreds of thousands travel the new route to hasten to their places of work, home and recreation then to these ordinary people the names of the dead should be illuminated by iron letters on a granite wall and illuminated still in a time when our names are long forgotten" (quoted in Germania 1935b).

*Figure 7.9. & 7.10.* The S-Bahn tunnel collapse victims on public display. Source: Bundesarchiv.

Dorpmüller believed that the tunnel and the metaphoric 'iron letters' of the railway's tracks were sufficient memorials to the lives lost during their construction in themselves, but also suggested that there were plans for more literal letters to be inscribed on a more explicit memorial that would accompany the implicit memory embodied in the successful completion of the technological and architectural project. Surviving sketches of two different memorial plaques dating to 1935 support this (Figure 7.11 & 7.12). The notes accompanying the sketches suggest that DR had planned to install a plaque on the western platform of the subterranean Potsdamer Platz S-Bahn station (Braun 2008a; 2008b). The designs combine the swastika and eagle with the winged wheel and logo of the S-Bahn, thus connecting the iconographies of the network with those of the state before such strategies became more commonplace, when the DR was placed under direct government control in 1937. This iconographical language, along with their use of the heroic realist style, further reinforced the utilisation of the nineteen victims within the Nazi regime's propagandistic hero myths.

Initially at least, DR's plans to memorialise the victims of the tunnel collapse accompanied the rapid compensation of those directly affected and the legal procedures that attributed accountability. The potential for negative publicity was mitigated by a national propaganda strategy that framed the nineteen dead not as victims but as heroes - heroes of work who died doing their duty in a construction project of national importance. This distinction is significant when considering later instances of accidental loss of life in the Underground, where the dead were framed to a far greater extent as victims of organisational mismanagement and negligence. But whilst DR was found at least to be partly accountable for the collapse, albeit in ways that were occasionally occluded by the dominant ideological scapegoating of the period, there is no evidence to suggest that they ever fulfilled their early intentions to memorialise the dead. Furthermore the heroic sacrifice made by the nineteen dead was not mentioned at the official opening of the first stretch of the line, probably because of the bad international publicity it might have generated so close to the start of the Olympics (Braun 2008b). The last public – and by that time diluted – reference to the dead came in a speech given by Dorpmüller, by then Reichs Minister of Transport, at the inauguration of the whole route in 1939 (Ibid).

*Figure 7.11. & 7.12.* The planned memorials to the S-Bahn tunnel collapse victims. Source: LAB.

Transport historian Michael Braun claims that the memory of the event and its victims persists more strongly than that of other accidents that occurred in the construction of the tunnel (2008a & 2008b). Whilst this may be true the event has, until recently, been characterised by its limited historical acknowledgement.<sup>125</sup> For example, written histories of the S-Bahn rarely mention the event and in fact sometimes fail to pay any significant attention to the National Socialist period of the network's history (see Bley 2003). Braun's claims relate more to the potential memory embodied in available research materials, namely, the large archive holdings related to the accident's court proceedings held in the Berlin state archives, the numerous photographs of the accident taken by DR photographer Max Kralewski (currently held by DTB), and the extensive press coverage of the accident (2008a; 2008b). Braun's account of the event, along with the less publicised work of a few others, has, however, recently served to strengthen the mnemonic status of the accident (Berliner S-Bahn-Museum 1999; Kiebert 2010). Despite this, a commemorative absence pertaining to the accident's nineteen victims continues today.

The causes for the mnemonic absence surrounding the tunnel collapse lay partly in the fact that the event and the subsequent remembrance of its victims were contaminated by its immediate use as a vehicle for Nazi propaganda. Even if a plaque had been installed as initially planned it might not have remained in place today due to subsequent changes in Germany's memory politics. In other words, it would have represented a legitimate target for the revisions in Berlin's collective memory brought about by the national process of de-Nazification. Wider memory discourses connected to Berlin's – and indeed Germany's – handling of their National Socialist past have also influenced the memorialisation of the flooding of the S- and U-Bahn networks that occurred in the last days of WWII, in early May 1945. These events also played out primarily in the North-South tunnel of the S-Bahn, a site that has consequently come to command additional myths that stand in contrast to those of heroic sacrifice and national determination that were promulgated by the Nazis in response to the tunnel collapse.

<sup>&</sup>lt;sup>125</sup>An exception is Urban-Halle's account (1984).

#### 7.4.2 The flooding of the U- and S-Bahn

The end of WWII saw the subterranean stations of the U- and S-Bahn, like other underground spaces where the civilian population sought shelter in the city, turn into "the deadliest of sanctuaries" (Evans 2010, 15) to such an extent that they contrasted strongly with the post-war framing of the Underground during WWII as a secure and safe landscape of refuge (Merrill forthcoming). The protective inadequacies of U- and S-Bahn stations were revealed by the heavy bombing raids on the city, particularly in February 1945 when direct hits on numerous stations claimed significant numbers of lives, including 108 at what is today Weberwiese U-Bahn station (Rohrlach 2014).<sup>126</sup> With the subsequent ground battle between the advancing Soviet army and the city's incumbent German forces in the last weeks of April 1945, the subterranean landscapes of the S- and U-Bahn became strategic networks in an urban battleground (Le Tissier 1999). Once the U-Bahn network became totally inoperable, armed skirmishes began to take place between German and Russian troops in its tunnels (Read & Fisher 1992). Thereafter the same tunnels provided a means of escape for large numbers of troops and civilians, who in some cases walked great distances beneath the battleground to evade capture by Soviet forces (Le Tissier 1999).

These negative WWII civilian experiences of the U- and S-Bahn, however, rarely gain explicit memorial expression within the transport network today. One recent exception is the bombing of Weberwiese U-Bahn station, which was marked with a memorial plaque in February 2014 (Frey 2014). The plaque was installed following the collaboration of BVG with a local citizens group and as part of the renovation of the U5 line. Whilst the citizen group had initially hoped to install a memorial stele on the platform, eventually a small bilingual plaque was installed instead due to BVG's concerns that the stele might present a possible obstruction to the station's use (Ibid). In contrast, the flooding of the U- and S-Bahn during the final days of WWII remains unmemorialised despite recurring popular interest in and cultural representations of the event.

Although the flood is recorded by numerous eyewitness accounts and mentioned in a number of historical reconstructions, a lack of consensus on its exact causes and consequences remains. Many of these accounts and reconstructions diverge in their

<sup>&</sup>lt;sup>126</sup>Named Memler Straße until 1950.

depiction of the flood, its extent, timing, nature, number of victims and those responsible for it. Some eyewitness accounts suffer from technical and geographical inaccuracies and others display signs that they have been consciously or subconsciously placed within frameworks of other events, occurrences and connections in order to legitimise themselves (Meyer 1992). The most complete historical reconstruction and analysis of the event to date is that which was carried out by Karen Meyer following the Kreuzberg district assembly's attempt to memorialise the flood's victims in the autumn of 1989 (Meyer 1992).

Meyer's account established that the flood was caused by the professional detonation of explosives in the North-South S-Bahn tunnel beneath the Landwehr canal no earlier than the morning of 2<sup>nd</sup> May 1945, resulting in the estimated death of between 100 and 200 people (1992). Meyer failed, however, to establish beyond doubt the exact number of deaths and those responsible for them. Most historical accounts attribute the flood to an official order that emanated from the Führer's bunker. No proof of a written order has, however, been found and accounts are again inconsistent in who might have issued such an order and its exact nature. Wehrmacht officer Gerhard Boldt claims that Hitler personally issued the order in a meeting on the evening of 25<sup>th</sup> April in order to prevent a subterranean Soviet advance (1947). Anthony Beevor, meanwhile, suggests SS brigade leaders Mohnke and Krukenberg issued the order for the same reason after Hitler's death (2002). Mohnke, however, denies that any such order was issued and attributed belief in its existence to rumours started by the earlier enquiries of Martin Bormann into the potential benefits and possibility of flooding the U-Bahn (O'Donnell 1978). Each of these claims is undermined by the fact that by the time of the explosion the S-and U-Bahn, tunnels represented the SS and Wehrmacht forces' last foothold in the city, a fact that has led some to speculate that charges may have been prepared in advance and later spontaneously detonated by SS officers without orders in accordance with a scorched earth policy, or by Soviet troops wanting to flush out remaining pockets of German resistance (Meyer 1992).

The difficulty of reconstructing a definitive account of events and establishing an exact number of deaths led the Kreuzberg district assembly to abandon its plans to physically memorialise the flood victims, and instead the publication of Meyer's research became the only manifestation of its original memorial intent. At that time Meyer believed that the story of the flood was "known to nearly all Berliners in some form or another" (1992, 7) and whilst its current status in the city's collective memory has probably weakened and is mostly limited to specialist audiences<sup>127</sup> it has continued to command wider public imagination at various moments since then, just as it did in early periods. Meyer connects the flood's power to spark this collective imagination to its subterranean setting.

"It seems that there is a macabre satisfaction to be found in the sinister darkness and its associated gruesome feelings are responsible for an enormous interest in the events of the 'Underworld'... Not surprisingly, the flooding of the North-South S-Bahn tunnel and its consequences have given rise to various legends, which have been disseminated over time by a wide variety of commentators" (1992, 43).

Such legends include those that surround the number of victims that the flood claimed. A month passed after the war ended before the process of pumping the water out of the U-Bahn began, and longer still before pumping commenced for the S-Bahn's North-South tunnel.<sup>128</sup> By the end of August 1945 the city authorities were still preparing crematoria for an influx of 10,000 corpses that the receding waters were expected to reveal.<sup>129</sup> In fact records show that the district assemblies of Mitte and Kreuzberg officially recorded the retrieval of only forty-three and fourteen bodies respectively.<sup>130</sup> These unexpectedly low figures were not withheld from the public. Journalist Gerhard Slupski, who took part in a press trip through the flooded tunnel, described how the SS had transformed an instrument of service into the Styx<sup>131</sup> – the uncanny river of the underworld – yet he also noted how even the most optimistic death toll estimates seemed at that point exaggerated (1945) (Figure 7.13). During his visit, in early October 1945, the group encountered just five bodies, including one which seemed to have died from injuries sustained prior to the flooding, bringing the total number of bodies recovered as of that time to twenty-two (Ibid). Despite this, as the memory of the flood

<sup>&</sup>lt;sup>127</sup>The event is probably better known amongst transport enthusiasts and features in some of specialist books.

<sup>&</sup>lt;sup>128</sup>LAB: C.Rep.109/169-4, Report on the subject of the removal of corpses in the area of the S-Bahn tunnel between Stettiner- and Anhalterbahnhof, Main Office of Green Planning, 31/08/1945. <sup>129</sup>Ibid.

<sup>&</sup>lt;sup>130</sup>LAB: C.Rep. 109/169-20, Letter from District Mayor of Mitte to the Berlin Magistrate's Department for Construction and Housing, 26/10/1945. LAB: C.Rep. 109/169-21, Letter from Berlin District Office of Kreuzberg to the Berlin Magistrate, 1/11/1945. Meyer records fifty-three bodies recovered from Mitte and thirty-four from Kreuzberg but it is unclear how she arrived at these figures (see 1992, 39). The true number of flood victims is likely to have stood close to Meyer's estimate of between 100 and 200. The pursuit of a definitive figure is complicated by the fact that many bodies may have been swept into the canal and never recovered and because of the problems faced when trying to ascertain cause of death, especially as hospital trains occupied the tunnels at the time of their flooding.

<sup>&</sup>lt;sup>131</sup>For more on the relationship of the underground and the Styx see Pike (2007).

has intermittently resurfaced, so too has the myth that the flooding caused the death of thousands.

## Figure 7.13. The press trip at Anhalter S-Bahn station. Source Slupski (1945).

Monica Black has highlighted how this myth has recurrently withstood contradictory evidence and persists today (2010). Buoyed by popular fictional and other inaccurate journalistic accounts that shaped the flood's narrative in the city's collective memory during the immediate post-war years, the authors of the 1952 Heim und Welt magazine article that revealed the true extent of the loss of life felt it necessary to sensationalise their account and provide theories to explain the shortfall in recovered bodies so as to fit the public's perception of what had happened (Black 2010). As Black shows, the flood's post-war remembrance corresponded to the categories that Berliners and Germans used to interpret their recent Nazi past. In other words the myth of the flood helped make the recent past more comprehensible and remote for the city's post-war population, by supporting the meta-categories of good and evil that in the same period helped frame the wider German civilian population as the innocent victims and survivors of Nazism, in order to allow the construction of a functioning civil society (Black 2010; see also Herf 1997; Till 2005; Moeller 2005). In addition Black notes how the flood served as an origin myth for the new democratic Berlin – a cleansing deluge that offered the possibility of fresh beginnings and redemption following the depravity of the National Socialist regime (2010).

Beyond Black's analysis the flood and its myths have featured in a number of films and also a television documentary since the 1950s. In the Russian film series, Liberation, directed by Yuri Ozerov between 1970 and 1971, the cleansing deluge coalesces with a heroic Soviet liberation. A spurious reconstruction involves Soviet soldiers rescuing innocent German women and children from an overcrowded and rapidly submerging U-Bahn station and, by metaphorical extension, from their evil Nazi captors (Figure 7.14). The 1973 British made Hitler: The Last Ten Days directed by Ennio De Concini explicitly reinforced the myth of thousands drowned when General Krebs protests Hitler's flood order - "but my Führer the tunnels of the subways are now our field hospitals. There are thousands of wounded soldiers down there, thousands of women, children and old people, they would all be drowned." The hysterical and demented portrayal of Hitler by Alec Guinness is then briefly interrupted by five authentic sepia stills of the devastation and death caused by the flooding. Later in the film it is announced, "the Russians are less than three hundred metres away, not even flooding the underground has held them up" thereby consolidating the perceived motivations behind the supposed order.

Figure 7.14. Black and white still of the flood scene from Liberation V: The Last Assault, 1971.

In March 2003 a German-Swiss documentary titled *Bunker: Die Letzten Tage* that was shown on German television dedicated significant attention to the flood. The documentary was researched by and featured prominent members of the Berliner Unterwelten Eingetragener Verein [Berlin Underworlds Association] that is discussed more in Chapter Eight (p.270-274). Like the *Heim und Welt* articles fifty years earlier, this documentary sensationalised the flood in a manner that did not contradict the myth that thousands had drowned. For example the documentary was interlaced with the sensationalist scenes of the flooding taken from *Liberation* and at no point was a realistic estimate of the number of deaths caused by the flood revealed to the viewer. Thus the myth remained undisputed and arguably increased in power through a practice of omission. Such omissions even characterised the critically acclaimed German film *Downfall*, released in 2004, which tellingly does not feature any reference to the flood.

The flood's representational and mnemonic treatment continues to reflect wider discourses related to Germany's handling of its Nazi past. The Kreuzberg district assembly's attempt to memorialise the victims was a reflection of the deeper and more critical questioning of the Nazi past started by Germany's so-called '68 generation' and characterised by grassroots participation, sensitivity to local and social history and a particular concern for uncovering structures of responsibility (see Till 2005; Wüstenberg 2009). Meanwhile the flood's more recent treatment in the television documentary resonated with a period of Germany memory politics in which German suffering during WWII gained a more prominent position in debates about the past (see Moeller 2005; Nolan 2005). In some ways this has witnessed a return of the narrative of the flood promulgated in the 1950s, thereby supporting Moeller's claims that a mnemonic silence pertaining to German civilian suffering has never really existed (2005). The returning prominence of the 'Germans as victims' discourse, and the critique of its earlier manifestations that it has given rise to, emphasise the need to suspend the dichotomies of perpetrator/victim and guilt/suffering along with the notion of a single authentic German experience of WWII in favour of approaches that pursue, in Mary Nolan's words, "a multiplicity of diverse, often contradictory experiences and reactions of different Germans as well as non-Germans" within an expansive chronological, causal and comparative context (2005, 31). Unfortunately, Bunker Die letzten Tage failed to achieve this approach. Instead it presented the flood as a one-sided

story of German suffering and, through its failure to refute the myth of the thousands drowned, contributed to its promulgation.

The flood's memorial absence does not represent the silencing of memories that are incompatible today due to their previous contamination by the Nazi regime, as is the case for the tunnel collapse. Rather this absence illustrates a lack of historical consensus about the flood's perpetrators and the number of its victims along with its ambiguous status as an example of German civilian suffering. These factors compounded by the changing wider discourses of German memory politics means that the flood continues to resists historical and mnemonic closure. In the absence of this closure its disproved myths can still be used as evidence of German mass victimhood and without memorial refutation they continue to circulate widely along with the risk that they are used to support alternative unverified, un-contextualised, or manipulated versions of the past.

## 7.5 Conclusion

In conclusion this chapter has demonstrated how the landscapes of the Underground, Uand S-Bahn have come to reflect their negative pasts to differing degrees and the extent to which these pasts have become part of each transport network's official memory. Both landscapes have come to reflect wider cultural tropes and mnemonic discourses. In London the dominance of the myth of the Blitz and its use as an interpretative lens through which to remember the Underground's wartime dead has trickled down to accrue beneath the city. In Berlin, meanwhile, the influence of memory discourses surrounding the identification of the German civilian population as victims as opposed to perpetrators of WWII can be interpreted as one of the main reasons behind the failure so far to memorialise the wartime flooding of the U- and S-Bahn network.

The question of accountability, particularly when established for each network's responsible transport authorities, has also been shown to play a determining role in when and how operational accidents that have claimed multiple human lives gain memorialisation in underground transport networks. In the case of the Underground, as illustrated by the response to the King's Cross fire and the Moorgate Tube crash, TfL has become adept at installing official memorials as determined by an increasingly co-ordinated approach that has developed over the last twenty years. This approach reflects a spatial hierarchy related to the function and 'publicness' of the network and its stations, so that today station exteriors are the preferred site of memorialisation. In other

words, negative subterranean pasts only find expression on the margins of the Underground's landscape above the ground, where their potential to cause physiological and physical disruptions to the network's operation are minimised.

At the same time the Underground's memorials do not only represent potential forms of disruption such as those discussed in Chapter Six. They also provide a means by which to relieve and reduce the disruption to the transport authority's operations and its associated bad publicity that are caused not only by the accidents themselves but also the campaigns to have them memorialised. As my consideration of the S-Bahn tunnel collapse has shown, in certain instances the subterranean memorialisation of negative pasts can be harnessed in order to positively pursue national propaganda agendas. Here mnemonic accountability was quickly emphasised rather than avoided, even as legal accountability was still being established, and through propagandistic strategies the memory of the dead was used to reinforce the ideological order of National Socialism rather than provide a basis from which to question it. Although the collapse was ultimately not memorialised it remains difficult to answer why. It may have been the result of inertial processes heightened by the onset of WWII or alternatively may have been caused by more specific reasons associated with, for example, the risk of attracting bad international press in the run up to the Olympics.

Given that DR's successor, Deustche Bahn (DB), the parent company of today's S-Bahn, has previously engaged with its negative Nazi past,<sup>132</sup> and BVG has recently demonstrated the first signs of following suit,<sup>133</sup> there is a strong argument that the memorial absences related to both the S-Bahn tunnel collapse and both networks' flooding should be addressed more thoroughly in the future through processes of memorialisation. The potential decontamination of the memory of the nineteen construction workers would need to be handled in a critical and sensitive manner, and whilst such a process would be complicated it may well not be without precedent in a city characterised by extensive experience of memory work. The memorialisation of the flooding, meanwhile, could benefit from the use of transparent interpretative methods to demonstrate the limits of historical knowledge about the event whilst refuting the myths that have continued to command fascination.

<sup>&</sup>lt;sup>132</sup>In 1998 DB erected the Gleis 17 memorial at Grunewald S-Bahn station to mark its predecessors' involvement in the deportation of Berlin's Jews.

<sup>&</sup>lt;sup>133</sup>During the second half of 2013 BVG also hosted an exhibition focused on the Nazification of the transport authority after 1933 (BVG 2013b).

Therefore, Berlin's transport authorities might attempt to emulate what, for all its pitfalls, represents TfL's greater willingness to engage with its negative pasts through the practice of memorialisation. At the same time the divergent significance and reach of the pasts that each transport authority is increasingly expected to negotiate and account for cannot be ignored. However, given Berlin's record for critically handling its negative pasts through its urban fabric, these distinctions cannot necessarily be used to legitimise inaction. Berlin's transport authorities remain, however, far from establishing a coherent and co-ordinated approach to the memorialisation of traumatic events that have occurred within its network, as is more the case in London. BVG's recent decision to install a memorial plaque at platform level at the Weberwiese station (which is just two stations away from Samariterstraße station where, as discussed in the last chapter, Meier's plaque annually causes widespread disruption) demonstrates this. To some extent the differences between the transport authorities' approaches to this type of memorialisation in London and Berlin are symptomatic of the operational differences of the two networks and reflect again the extent to which each represents a regulated and managed environment and their differing degrees of public access. In Berlin the precedent set by the Weberwiese plaque, along with the continuing use of U-Bahn stations as places of memory related to the eviction and extermination of their local Jewish communities during WWII,<sup>134</sup> coupled with increasing congestion on the system, suggest that BVG may find it fruitful to develop guidelines and co-ordinated approaches towards memorialisation in the future. Sadly, however, this might be accompanied by the kind of standardised approach to memory production that can be identified in London, which in many ways can be criticised for sanitising and de-personalising the memory of the events in question. It is in distinction to these standardised approaches that I turn to, in the next chapters, the possibilities for alternative forms of memory production presented by the Underground, U- and S-Bahn's subterranean ruins and vestiges. Places that although not immune to dominant mnemonic tropes, narratives and discourses provide unique opportunities for social remembering thanks to their ambiguous geographies and temporalities.

<sup>&</sup>lt;sup>134</sup>In 2000 the steps of Hausvoigteiplatz U-Bahn station were utilised as part of a memorial to the area's former Jewish occupants and their fashion industry. In 2013 a further local citizen group encouraged BVG to install a glass screen listing the names of the 1,030 Jews deported from the local area at Hansaplatz U-Bahn station.

## **Chapter Eight**

Networked Memories: Accessing and (Re)membering London and Berlin's Subterranean Ghost-stations

## 8.1 Introduction

In September 2010 a living history experience called *Under London* was organised by the LTM in the disused Aldwych Underground station, to mark the seventieth anniversary of the London Blitz. Over three days, around 2,400 members of the public had the rare opportunity to visit the station, which had first opened in 1907 but had not received paying passengers since its closure in 1994. Costumed actors recreated scenes from WWII London and greeted visitors in a station that like many others had been used as an air-raid shelter (Figure 8.1). The experience ended with a reconstructed air-raid and a sombre announcement detailing the numbers of people killed, injured and left homeless by the German bombing campaign (Mole 2010). Thus the master narrative of the Blitz was once more manifested underground (see Chapter Seven).

#### Figure 8.1. The Under London event. Source: Spectrum Drama (2014).

The speed with which the event sold out demonstrated the public's appetite for accessing novel forms of social remembrance in London's disused Underground. It was, however, illustrative of the kind of commodified heritage practices that are fraught with

problems associated with attempting to recreate authentic past experiences and emotions (Fowler 1992). In this sense it failed to realise – or, more specifically, ignored – the potential of places in the process of ruination to act as sites where "alternative memories might emerge" (Edensor 2005a; 2005b; 2008, 123).

It is this tension and the potential of the past and present disused subterranean stations of the Underground, U- and S-Bahn to offer alternative forms of mnemonic experience that are the concerns of this chapter. However, rather than the content of these experiences, I am primarily interested in the politics of access that allows such experiences to occur in the first place. I argue that the opportunity for these experiences depends greatly on access to these stations, whose networked status is a particular hindrance. In addition, and besides charting the overall changing status of these places in the social memory of their respective cities, I also suggest that the potential for truly alternative and subjective mnemonic experiences, made possible by the ruin-like characteristics of these places, is eroded by the power of dominant and preconceived historical narratives.

To achieve these aims I probe primarily the recent 'rediscovery' of the Underground's disused stations, and the limits on access and memory production in these places that are currently being competed in ways that resonate with current discourses about the wider securitisation, regulation and heritagisation of urban space (see Edensor 2005a; 2005b; Garrett 2011a). First I describe the abandonment and rediscovery of London's disused stations, with particular reference to Aldwych station and within a theoretical register that appreciates the processual nature of ruination and dereliction. Then I introduce two sets of actors who have influenced these places' mnemonic status during the last five years. Thereafter I discuss these actors' activities within a continuum of engagements with London's disused stations, and then consider the consequences for their securitisation, preservation and heritagisation. This is then complemented by a consideration of similar processes that occurred in post-reunification Berlin and the current status of that city's abandoned subterranean railway vestiges.

## 8.2 The abandonment and (re)discovery of London's disused stations

There is a lack of consensus about the exact number of subterranean disused stations in London because of differences in definition related to vertical inconsistencies, shifting administrative boundaries and responsibilities, station relocations and changing services (Connor 2008). But an informed survey suggests they number around sixteen (see Appendix C). The oldest is King William Street Underground station, which was made redundant when the network was extended and closed in 1900 after just ten years' service (Ibid). Its abandonment, like that of Aldwych station and many others, confirms "capitalist development and the relentless search for profit" as the main cause of industrial ruination (Edensor 2005a, 5). These stations share the material, aesthetic, experiential and mnemonic characteristics of industrial ruins more generally (see Gibas 2008; 2013). They can act as counterpoints to the increasingly regulated spaces of the city and the reified pasts embodied by the heritage industry because of their ability to stimulate involuntary embodied memories and a multiplicity of subjective narratives based on multi-sensory experiences and interactions with the material world (Edensor 2005a). Thus they provide spatial cues that encourage a subjective freedom over the production of counter-memories in their truest and most creative sense. Edensor argues,

"the necessity to supplement commodified, official and expert memories and interrogate the principles which underpin their construction, and to imagine beyond these limits backwards and forwards, is not merely accomplished through the fabrication of subaltern accounts which rely on similar principles of 'historical truth' and evidence; it also requires that we 'make things up in the interstices of the factual and the fabulous, the place where the shadow and the act converge'; in places like ruins" (2005a, 164 quoting Gordon 1997, 196-197).

However, the wider public appreciation of the disused Underground's mnemonic potential has only become evident during roughly the last twenty-five years, and in the early 1990s mainstream press references to the city's disused stations appeared only rarely (see Rendell, 1991; Kennedy 1992). The Underground's disused landscape, however, was not ignored by or unknown to everyone. In fact certain enthusiast groups have long been drawn to it. Members of Subterranea Britannica (Sub-Brit), a society interested in underground structures, have visited the Underground's disused places intermittently since the society was formed in 1974, as attested by accounts and photographs that appear on their websites.<sup>135</sup> Some of Sub-Brit's 1,000 members are particularly dedicated to researching and visiting abandoned Underground stations, including its membership secretary, Nick Catford, who first accessed the now mostly demolished Wood Lane station in 1980 by taking advantage of nearby construction works (Catford 2013\*) (Figure 8.2). Today his website features a disclaimer that

<sup>&</sup>lt;sup>135</sup>See www.abandonedstations.org.uk; www.disused-stations.org.uk; www.subbrit.org.uk [Last accessed 15 Jun 2013]

increased security has rendered public visits to the stations extremely unlikely. Paradoxically, this physical inaccessibility has contributed to a wider contemporary fascination with these places, which in the first instance can be traced back to the publicity and controversy surrounding the closure of Aldwych Underground station in the mid 1990s.

## Figure 8.2. The disused Wood Lane Station in 1980. Source: Catford (2011b).

### 8.2.1 The closure and abandonment of Aldwych

Aldwych's closure, which was a protracted affair spanning many decades and involving numerous changes in service, alternative plans and temporary closures, empirically supports the processual approach to ruination embodied in Edensor's concern for the varying durations of ruins "between abandonment and future redevelopment" (2005a, 8) and Mah's acknowledgement that ruins "are never static objects, but are in a constant state of change across time and space" (2012, 3). These perspectives problematise the very subject of their analysis – the ruin – in ways that suggest that a new vocabulary may be needed for such phenomena. Qviström's concept of the 'network ruin', which he introduces with respect to abandoned railway infrastructures in order to highlight an

"intermediate phase, where the importance of incomplete dismantling, delays and the inertia of habits and materiality is acknowledged" is a case in point (2012, 259-260). His approach emphasises that a railway network does not merely fall into ruin but is actively dismantled and reinterpreted (Ibid) in a process that involves the gradual removal or redundancy of what Edensor calls 'phantom networks' – the assemblage of other connections that surround a ruin (2005a). Thus railway networks are framed as "too messy to be deleted at once" (Qviström 2012, 259). The following discussion builds on these terminological developments by considering the unique particularities of disused underground stations which remain embedded in networks that are anything but spectral and, as such, are better referred to as network*ed* rather than network ruins.

Aldwych's closure was delayed by public objection following the January 1993 announcement that services to the station would stop because of its economic underperformance, government funding cuts, and the prohibitive costs of replacing the out-dated lifts (Badesy-Ellis & Horne 2009). The press coverage of these objections and the station's final closure on 30<sup>th</sup> September 1994 provided a catalyst for the remembrance of London's other disused stations and initially popularised the desire to visit such places. During the appeal period, the London Underground Railway Society (LURS) undertook two visits to the station. The disused eastern platform, which had been closed in 1917, was considered the experiential highlight in ways that not only indicated the station's protracted duration of dereliction but also reaffirmed the ruin-like affordances it offered even before its full closure. Rail enthusiast Eric Felton later wrote of the first visit:

"I did not expect it to look quite so eerie in the dim lighting, with bits and pieces of abandoned building materials used for trials of sorts all over the place...There remained, unobliterated by any subsequent dabbling, only the 'ND' of the original Yerkes brown tiled 'STRAND'" (Felton 1993, 372).

Felton's material sensitivity reveals the value he attached to the station's authentic fabric. But he was well aware that what he was witnessing were the remnants of the Underground's possible futures and alternatives. Since the 1960s the platform had also functioned as a place to experiment with new mock-up station designs and colour schemes (Badsey-Ellis & Horne 2009), thus complicating further the temporal distinctions that it displayed.

Aldwych's processual dereliction was also evident on its last day of service. Although, due to government underinvestment, signs of decay were not uncommon in the Underground during the early 1990s, they were particularly marked at Aldwych by the time of its closure. Paint was peeling from its walls, puddles of water lay on its platform and the pre-emptive removal of its public address system and clock indicated the station's dislocation from its surrounding sonic and temporal networks, its active dismantling, an intermediate phase of ruination and the erosion of its past rhythmic 'taskscape' (Ellingham 1994; Qviström 2012; Ingold 1993). At the same time, former toponymic landscapes (see Chapter Four) – valued by enthusiasts like Felton – were resurrected. The removal of the station's enamel signs a week before closure caused staff to carefully remove recent layers of paint, which uncannily revealed the station's former identity: the 'STRAND' sign incorporated into the original tiling (Figure 8.3) (Ellingham 1994).

*Figure 8.3.* The cover image of LURS' November 1994's periodical shows Aldwych the day before its closure and indexes enthusiast interest in the event. Source: Underground News.

Thus the last train departed from the same station that in 1907 had received the first. Visiting the station that day, another LURS member believed that with its closure "a tangible connection with the earliest days of the tube railways" was severed and the opportunity to experience the Edwardian Underground lost forever (Ellingham 1994, 497). This may have been true, but in passing it was replaced with opportunities for new forms of mnemonic experience.<sup>136</sup>

#### 8.2.2 A conduit of remembrance

Soon after the station's closure an article in LT's staff magazine highlighted its freshly attained mnemonic significance and illustrated how its closure acted as a conduit for the public remembrance of other disused stations - in particular those connected to dominant WWII historical narratives (Elliot 1994). Aldwych "joined the ranks of London's disused Tube stations with no working place in the modern network but thousands of fascinating stories to tell" (Ibid, 8). The eerie sensations that exploring such stations conjures up, and the emptiness and stillness that conspire to make the visitor feel uneasy and isolated, the author claimed, helped demonstrate that the stations were "still alive, if not with travellers, then with history" (Ibid). Yet only a handful of stations and stories were mentioned, and most emphasis was placed on those associated with WWII, including Down Street's use as a meeting place for Winston Churchill's War Cabinet and Aldwych's use as a shelter for civilians and national treasures. These narratives persist today, feature prominently in popular books and are often referred to in semi-mythical ways despite their historical veracity. They are the dominant few that drown out numerous other fascinating stories and compete with the subjective inarticulacy and involuntariness of the types of mnemonic production that Edensor claims come to the fore during human engagement with ruins (2005a).

These subjective modes of memory production, however, depend on the opportunity to access London's disused subterranean stations, which, for those who are not members of a society such as Sub-Brit or LURS, has until recently only been possible on infrequent official open days. In the past, station supervisors of nearby operational stations were able to initiate such open days including those at Aldwych in 1995 and 2000, which were facilitated through London's annual Open House weekend (Badsey-Ellis & Horne 2009), and in 1997 as part of National Museums Week (Collins 1997).

<sup>&</sup>lt;sup>136</sup>The Edwardian ticket-hall was in fact heavily restored in the late 1980s.

Of the latter, attended by over 200 visitors, Mike Ashworth (at that time an LTM curator) noted the uncanny nature of the experience and spoke of the public's fascination with "places where people aren't normally allowed to go" (quoted in Ibid, 7). These tours proved highly popular amongst the public because of the experiential affordances that they offered (Underground News 1999). After visiting Aldwych in 2000, enthusiast Hywel Williams wrote of a "strong feeling of melancholy" (2000a, np).

"It was an eerie feeling since not only was the only lighting provided by our wildly swinging torches but also there was a ghostly echo coming down the tunnel ahead of us not only of our own voices but also occasionally the rumbling of a train" (Ibid, np).

His account of a later visit to Down Street station was equally vivid, but the station's atmosphere was, he claimed, enhanced by its role during WWII. On this visit a preconceived history heightened his experience, or at least his later representation of it.

"It was exhilarating to know that I was standing in a place now almost forgotten, that had been so important in history...A thick layer of dust now covered all the surfaces and switching relays and the operator's desk was falling apart. I wondered what important and historic phone calls were passed through these now decaying circuits" (Williams 2000b, np).

Growing press coverage of the stations increased both public knowledge of their existence and the popularity of their open-days. In 1999, for example, the free *Metro* newspaper distributed at Underground stations (daily readership: around 1 million) ran a series of articles on the disused stations, which revealed the unusual and hidden parts of the network (see Last 1999). These articles were also some of the earliest publications to both popularise and sensationalise the use of the term 'ghost-stations' (Figure 8.4).<sup>137</sup> In the same year, Aldwych's platforms hosted an interactive and hybrid artistic experience (see Chapter Nine). In the early 2000s the press more frequently referred to the stations, their wartime narratives and their status as a "reservoir of urban myths", buoyed by the interest caused by the 2003 closure of the city's subterranean Post Office Railway (Morrison 2003, 3). In 2007 Aldwych was hailed as the best known of what were, by then, commonly referred to as ghost-stations (Time Out London 2007), reflecting how in just thirteen years it had attained a special status in London's collective memory and imagination. At the same time, however, during most of the 2000s the opportunity for the general public to visit the station's subterranean sections,

<sup>&</sup>lt;sup>137</sup>There are earlier press references to these stations' spectral characteristics (Rendell 1991; Kennedy 1992).

or any other disused station for that matter, became increasingly restricted due to security, health and safety concerns.<sup>138</sup> This situation has only changed in the last five years and the status of the disused Underground has once again been enhanced in the city's collective consciousness with the emergence of a number of new actors who have – intentionally or otherwise – improved their physical and virtual access and emphasised their mnemonic potential.



*Figure 8.4.* One of the articles from the Metro's ghost-station series. Source: Author 2013.

## **8.3 The Old London Underground Company**

In 2009 Ajit Chambers formed The Old London Underground Company (OLUC) as a means to develop profitable re-use strategies for twenty-six of the city's disused subterranean spaces, including a number of abandoned Underground stations (Chambers 2012\*). His entrepreneurial plans initially focused on the Brompton Road and Down Street stations, then owned by the Ministry of Defence (MoD). His economic venture draws inspiration from international heritage attractions, forecasts a turnover of £200 million, and hopes to be a model to demonstrate the financial potential of "adding health and safety to any underground space" (Ibid). His plans, however, have been complicated by his desire to secure leases on all of the spaces he claims are suitable for

<sup>&</sup>lt;sup>138</sup>At the same time TfL encouraged the alternative use of Aldwych's street-level building (Malvern 2003).

re-use. To Chambers, each is "just another asset" whose access rights he must gather in order to create a legacy project (Ibid). His monopolistic strategy has necessitated ongoing negotiations with TfL, but the transport authority has continually shown reluctance to enter into any official collaboration. Given this, Chambers has instead pursued a media and social network publicity campaign to try to garner public support for his scheme. While journalists have labelled him a 'mad visionary' (see Morrison 2011; 2013), public opinion of his plans has been split between excited enthusiasm for the tourist experiences they would provide and sceptical criticism of the business model on which they are based (Hill 2010). Meanwhile Chambers also procured the political support of London Mayor, Boris Johnson (Hill 2010). Johnson initially, and rather hastily, backed the plan with the proviso that it should not use any public money, even when others reiterated TfL's reluctance to open the stations due to the cost of adding health and safety provisions (Ibid). This support fostered further negotiation with TfL and in June 2013 Chambers announced that he was signing leasing agreements for Down Street station, and that a similar agreement for Brompton Road would follow (commutingexpert.com 2013).

For Brompton Road, Chambers proposed a triple income model based on the station's unique history and experiential potential, involving a number of uses for its different levels. The deep-level platforms would provide tourist experiences; the old War Office spaces would become a themed conference centre and the rooftop would be converted into a restaurant (Chambers 2012\*). In July 2013, however, the MoD put Brompton Road station's surface-level building up for sale (independent of the TfL-owned platforms below it), recognising that its prime location and redevelopment potential could generate significant funds (Farmer 2013). Chambers claimed to have made a £25 million bid on the station prior to this, but presumably this proved financially unviable for OLUC, despite purporting to have a consortium of foreign and domestic private funders (Chambers 2012\*).<sup>139</sup> In November 2013 the station was sold for £50 million to a Ukrainian investor who plans to redevelop it as luxury flats (Watson 2013). In response Chambers invoked OLUC's economic and preservationist motivations, reframed the company's involvement as a contributor rather than a competitor to the sale and criticised the outcome as an example of 'selling the family silverware.'

<sup>&</sup>lt;sup>139</sup>The financial viability of Chamber's plans is questionably, since by late 2012 he had been forced to dissolve two former incarnations of OLUC.

"I have worked hard for four years to ensure that these heritage sites are kept for the public, bringing in revenue as tourism sites. In one sense this is great news as our promotion of the station has secured £50 million for the public purse. On the other hand we have lost a big piece of our heritage to foreign investors who will turn this into a luxury home" (quoted in Primeresi.com 2013).

Despite this setback Chambers claims he will soon open his first ghost-station tourist experience and his proposals continue to receive press attention (White 2014). Although their outcome remains uncertain, these plans still illustrate how access to the Underground's disused landscape and its mnemonic potential might look in the future. Chambers acknowledges the potential security risks associated with increasing access to the stations and he plans to require every visitor to register their personal details in a database that would be directly available to the police (Chambers 2012\*). As far as the physical fabric of the stations is concerned, Chambers' approach is contradictory. At times he recognises that it is crucial to retain their state of decay as far as possible in order to maintain their public appeal and potential economic return – "the whole point is to keep that historic part" of what he considers to be an "asset that is a world monument" (Ibid). At the same time he frequently refers to his plans to renovate, restore and enhance the stations, which include, for example, a Churchill waxwork or projection in Down Street station's war rooms (White 2014). Likewise, while Chambers welcomed English Heritage's 2011 listings for helping him to clarify the most significant historic fabric to be retained during any remedial works (Chambers 2012\*) the few visualisations of his plans that he has released showed, at least above ground, little sensitivity to this fabric (Figure 8.5).<sup>140</sup>

Overall it seems that Chambers intends to emphasise the officially sanctioned aspects of these stations' historic significance in his re-use strategies, whether exemplified by architectural features or WWII narratives. At the same time, however, his earlier proposal to host the London Fire Brigade Museum in the platform levels of Brompton Road station demonstrates that, to him, site histories and heritages and visitor experiences are arbitrary, substitutable and dependent on material artefacts (Ibid). Talking of his plans for Brompton Road he said, "a real life history of the fire brigade" anchored to "some real stuff" will create an experience that "the kids will remember literally for the rest of their lives" (Ibid). Thus his plans exemplify a highly regulated

<sup>&</sup>lt;sup>140</sup> Chambers also claimed TfL had supported the listings only to inhibit his plans even though they did not affect either of OLUC's key sites. Aldwych was the only disused station added to the national heritage list at this time (see Keate 2013).

and commercialised venture in which the aesthetic of decay, rather than representing resistance to preservation, if anything, is itself actively commodified and heritagised by the resultant tourist product. These impulses reflect the ongoing revaluation of ruination at heritage sites that connects to wider paradigm shifts within conservation policy: from aiming to inhibit or manage change to recognising an increasing need to tolerate it (Aroaz 2011). This shift has led to the development of conservation techniques that recognise the concepts of observed and evocative decay, even if such concepts are difficult to operationalise at most heritage sites (DeSilvey 2006; Schmidt 2008). These plans can be recognised as the antithesis to the approach fostered by a group of urban explorers who were also recently drawn to London's disused stations.

# *Figure 8.5.* OLUC's plans for the Clapham North air-raid shelter. Source: OLUC (2012).

## 8.4. The London Consolidation Crew

Urban exploration (urbex) is the "practice of researching, discovering and physically exploring temporary, obsolete, abandoned, derelict and infrastructural areas" (Garrett 2011a, ix), which has recently received extensive academic and popular attention. In London between 2008 and 2011 geographer Bradley Garrett conducted visual (auto)ethnographic research with a group of urban explorers called the London

Consolidation Crew (LCC).<sup>141</sup> Garrett posited that the LCC were reacting to the "increased surveillance and control over urban space by undertaking embodied urban interventions in the city that undermine clean spatio/temporal narratives" (Ibid). He contextualised their pursuits within a libertarian philosophy and via the notion of 'place hacking' – the ability to access and temporarily appropriate closed places – and the concept of the 'meld' – an uncanny "fusion of the physical and the virtual, the seen and unseen, the can and can't" (Ibid, 13).

Garrett's work records how during these three years the LCC pursued the systematic illegal access of all the city's disused Underground stations and how their visits entailed forms of memory production that corresponded to the flexible, unregulated and subjective mnemonic possibilities of the ruins discussed by Edensor (2005a). The LCC, Garrett claims, were seeking alternative mnemonic experiences to those offered by codified, commercialised and regulated heritage sites through practices that created spatial memories that complimented or even undermined official histories (Garrett 2011a). As such they became "actors in the constellation of myths about places", even if such myths were not historically verifiable in an empirical sense, and, like others, demonstrated an attachment to the mutable and changing materiality and aesthetic of ruinous places (Ibid, 93). At the same time, according to Garrett, urban explorers like the LCC do not "normally invoke a material preservation instinct" but instead maintain a progressive approach to site significance and preservation, which legitimises their (sometimes destructive) contemporary activities as a contribution to a place's biography (Ibid, 72-73). The LCC's activities can be considered akin to other practices that involve the body as a mnemonic medium and thus their investigation is problematic because "the subjective authenticity of emotional memory rests on psychophysical experience that can neither be verified externally nor revised internally" (Assmann 2011, 242). But while the subjective and fleeting characteristics of these mnemonic experiences are near ungraspable and incommunicable, the same is not true of their later representation, which can be identified as having clear implications for the production of collective memory.

The online photographic and textual representations of explorations of the disused Underground found in LCC members' blogs quickly reverberated across wider urbex

<sup>&</sup>lt;sup>141</sup>Garrett's research represents both a primary and secondary source of information for the following discussion.

communities and soon started to command greater public attention and media interest. <sup>142</sup> These representations, along with Garrett's academic output (see 2010; 2011a; 2011b; 2011c; 2013a), widened the public appeal and awareness of not just urbex but also the mnemonic, experiential and aesthetic potential of the places they explored, including London's ghost-stations. But whilst the dissemination of these representations created new forms of virtual access accompanied by new opportunities for mnemonic production, as will be discussed, they also led to increased regulation of physical access to the stations, and thereby eroded their potential to host alternative social memories.

While Garrett claims that these online representations communicate "almost nothing about the content and experience of the embodied activity" (Garrett 2011b) they still provide clues as to how urbex can influence wider forms of social memory. Prescott has demonstrated how urbex photographs of abandoned maternity wards constitute memory objects that provide a cue for mothers to "retrieve and share memories of their birthing experience" and help them to re-spatialise births by filling "narrative and historical gaps" (2009, 106; 2011, 122). While the long duration of most of the Underground's disused stations' dereliction inhibits their ability to stimulate similar personal recollections, a LCC blog-post relating to London's subterranean Post Office Railway, which only closed in 2003, did prompt digital examples of communicative memory: a former Post Office employee commented, "some great photos on here but it brings a lot of memories some good some bad."<sup>143</sup>

The LCC's online textual accounts of their experiences in the disused Underground, meanwhile, rarely referred to the subjective counter-memories produced during their visits and instead mostly returned to, if not, 'official' histories, then at least well-established 'myths'. For example, many of the LCC's blog posts contextualise photographs and accounts of the author's first hand experiences within each station's architectural and social history. Likewise, one of the LCC's members echoed Williams' sentiments (p.248) by rating Down Street station amongst his best explorations – "it's [sic] position as Winston Churchill's War HQ gives it a little more mystique."<sup>144</sup> In other words the experience of visiting these places is influenced and arguably

<sup>&</sup>lt;sup>142</sup>The largest British online forum dedicated to urbex is www.28dayslater.co.uk with around 15,000 registered members. The most popular LCC blogs are www.placehacking.co.uk, www.thewinch.net and www.silentuk.com [the latter is now www.thebeardedotter.com].

<sup>&</sup>lt;sup>143</sup>See comments on www.thebeardedotter.com/4.0/?p=2792 [Last accessed 30 Jun 2014].

<sup>&</sup>lt;sup>144</sup>See www.thewinch.net/?p=3588#more-3588 [Last accessed 25 Jul 2014].

heightened by a preconceived and researched history, even for those who profess to seek an engagement with the past outside of established historical narratives. In many ways urban explorers often return to the prefigured memories surrounding their destinations, and what Crang and Travlou call 'memories in absentia' – "the memories a person has for a place and time where he or she has never been" – the histories and mythologies that they carry within themselves and which trap them in a place already anticipated in their mind (2001, 167).

Whilst the LCC's online representations opened up the imaginative and mnemonic potential of London's disused stations to those who could not actually visit them (Garrett & Hawkins 2013), they also reflected wider forms of exclusionary practice. While urban explorers may be happy to share photographs of their spatial conquests (Figure 8.6), their attitude toward sharing access details has always been ambiguous. They act as "gatekeepers to an intimate spatial knowledge" (Garrett 2011a, 175) who 'protect' "the fragile derelict materiality of sites by not disclosing their location" (Garrett 2011c, 1064). They too, then, control access to these places, just as TfL currently does and Chambers proposes to. Meanwhile, Mott and Roberts have highlighted how urbex is exclusionary for other reasons tied to privileging a particular body and explorer-subject (2014). They argue, "urban space, perhaps most especially the type of space favored by urban explorers, simply is not open or accessible in the same ways to all" and emphasise that urbex can exclude racialised groups, women and disabled people (2014, 236). As such they call for research on urbex that asks "what are the conditions of possibility for these liberatory experiences?" (2013). Such conditions are not only reliant on the characteristics of broader social categories. They are also tied to the physical and administrational particularities of the places explored. In the case of the Underground these particularities encouraged and allowed TfL to pursue strategies to reduce physical access to disused stations after becoming aware of the LCC's activities, so that in fact urbex practices, whilst illustrating competing conceptions of private and public space, also indirectly served to reduce these places' publicness and potential to act as a setting for alternative mnemonic experiences.

# *Figure 8.6.* A typical urbex photograph taken at the disused City Road Underground station. Source: Otter (2014).

In April 2011 four LCC members were arrested at Russell Square station whilst trying to access the disused British Museum station (Garrett 2011). Their arrest, which occurred amidst a city-wide increase in security ahead of a royal wedding and in preparation for the 2012 summer Olympics, and at one of the stations targeted by the 7<sup>th</sup> July 2005 terrorist attacks, was widely reported to have triggered a terror alert (see Davenport 2011) and served to consolidate the connections made by the British authorities between urbex and potential security and terrorism risks. The four explorers received police cautions before TfL later applied for them to be issued with anti-social behaviour orders (ASBOs) (Craddock 2012). A TfL spokesman stated: "trespassing on the tube network is illegal and extremely dangerous not just for the safety of the trespasser but also for the security of the railway" (quoted in Ibid). Thus, the official punishment of urbex in the Underground was couched in concerns for the network's security, the safety of its users and the possible operational disruption that it could cause. The proposed ASBOs' terms dictated that the four recipients would not be permitted to speak to each other or anyone else about urbex (including blogging), undertake urbex, or carry any urbex equipment after dark for a period of ten years.<sup>145</sup> In essence ASBOs were used not only to restrict specific individuals but also the wider public from

<sup>&</sup>lt;sup>145</sup>After negotiation at least one of the explorers accepted an ASBO under these terms for a period of two years (Garrett 2011a).

accessing (physically or virtually) these places. They provided a tool by which to ensure that the specific means to access and experience London's disused stations would be more rapidly and actively forgotten and eroded in the city's collective memory. TfL's pursuit of such draconian measures continued in May 2014 when, in conjunction with the British Transport Police, they brought legal cases against twelve members of the LCC, including Garrett, on charges of conspiring to commit criminal damage (Self 2014). These charges could have carried prison terms, presumably to deter copycat offences, but the group were eventually released with a conditional discharge (Booth 2014).

#### 8.5 The continuums and consequences of OLUC and the LCC

OLUC's pursuit of monopolistic commodification and the LCC's libertarian exploration of the Underground's disused stations are best considered to sit within a continuum of engagements with these places (Cragg et al 2013), previously and since, by a number of actors including Sub-Brit and the LTM. A number of commonalities are discernable within the motivations and practices of these four groups, and all must, to varying extents, broker access to London's disused stations through TfL and in some cases other civic or national authorities. Many of these groups are interconnected. For example, some of the information required by the LCC ahead of their explorations and much of the historical context provided by their later blog postings are attributable to Sub-Brit research.<sup>146</sup> At the same time the distinctions between these groups should not be ignored. To conflate the members of groups such as Sub-Brit and the LCC as, for example, Bennett has done (2011) has been proven problematic (Garrett 2011b), despite their frequent self-identification as 'urban explorers' and shared interests, methods, motivations and even ethics. The relationship between these two groups at least, then is more ambiguous with blog postings revealing their hostility towards one another.<sup>147</sup> The commonalities and particularities of these groups' approach to London's disused stations are revealed by considering the consequences that OLUC's and LCC's actions have had for physical and virtual access to these places and their subsequent securitisation, preservation and heritagisation.

<sup>&</sup>lt;sup>146</sup>One LCC member commented, "all the access info was online via Sub-Brit and all it involved was a little bit of climbing" (quoted in Garrett 2011a, 294).

<sup>&</sup>lt;sup>147</sup>See www.thebeardedotter.com/4.0/?p=3115 [Last accessed 6 May 2014].

#### 8.5.1 Securitisation

One of the main ruptures within the continuum between urbex as practiced by the LCC and Sub-Brit is the legal status of their incursions into places. Catford recalled how he "found out the right way of going about" accessing disused Underground stations when he joined Sub-Brit, and was able to visit them legally thanks to the society's contacts in LT's Public Relations Office (2013\*). However, from the early 2000s until recently TfL have been less willing to facilitate specialist and public tours, given heightened concerns for not just health and safety but also security (Ibid). The latter were heightened by the terrorist attack on the network in 2005 and were behind TfL's decision in 2008 to employ consultants to identify vulnerable access points and how to improve the resilience of eleven of its operational stations in central London (The Clancy Group 2008). This increase in security meant few public tours took place before 2010, and although Chambers was able to negotiate intermittent access to a number of disused stations owned by the MoD shortly before then, he faced greater opposition when trying to access those managed solely by TfL (Chambers 2012\*). The revelation of the LCC's activities contributed to intensified security at the Underground's disused stations and greater scrutiny of visitors.

Thus, in Catford's view, Sub-Brit's chances of organising specialist and individual group tours to the disused landscape of the Underground were eroded by the actions of the LCC:

"we are very aware that they [the LCC] are causing us a lot of harm and all the people who want to do things legitimately a lot of harm by going about it in the way they do. I can understand that they want to get in and if they were actually interested in the places it might be slightly ... well it wouldn't be acceptable but it might be slightly better but they're just there for the sake of doing it" (Catford 2013\*).

These differing conceptions of access to London's disused subterranean stations contributes to Stuart Elden's provocation to think in a volumetric way about security in the city and his contention that "security goes up and down" (2013, 49). In response, Adey has emphasised the need to attend to other social and cultural registers in order to understand how the inhabited spaces beneath the city are secured and regulated (2013). Such registers include those connected to the production of social memory and in particular discourses of preservation and heritagisation.

#### 8.5.2. Preservation and Heritagisation

Catford believes that urban explorers such as the LCC "are not interested in the history" of sites and are more concerned with the experience of trespass and exploration (2013\*). These claims might be more justified for the illegal access of disused underground stations than for other industrial ruins due to the risks associated with the former's continued connection to a working transport network. But to claim that groups like the LCC have no appreciation of history is oversimplified, just as it is to suggest, as Bennett has, the reverse, namely, that the motivations behind Sub-Brit members' explorations are purely preservationist (Bennett 2011, 432). On the question of preservation Catford echoed, more than opposed, the sentiments of the LCC.

"We don't campaign. If you start campaigning not to demolish places you start finding that doors are closed to you. You don't get access any more. So we want to get in. We want to see these places. We want to record them. If they can be saved that's nice, that's good, but we wouldn't actively campaign to actually save anything" (2013\*).

In fact, of all of London's disused stations, only Aldwych has received national heritage protection (in 2011) thanks to the remarkably intact interior design and architecture that has survived in part because of the station's closure in 1994. However, the lack of protection afforded to other disused stations that display similarly significant architectural and historic features reflects a bias in TfL's and EH's attention towards only the most visible and publicly accessible parts of the network.<sup>148</sup>

The preservation of Aldwych can also be connected to recent speculation surrounding the station and its potential longer-term role as a heritage attraction. This speculation, which extends to other disused stations besides Aldwych, has been triggered by Chambers' proposals and public interest surrounding LCC's activities. TfL have recently begun to acknowledge the potential of its disused Underground. Its Commercial Director declared, "We are sitting on the best assets in the world. We need to shamelessly work with the best delivery partners available" (quoted in White 2014).<sup>149</sup> Thus TfL has begun to review its management of the Underground's disused landscape and with regard to the longer-term provision of heritage experiences and

<sup>&</sup>lt;sup>148</sup>This bias is reflected in the fact that the network's nineteenth-century sub-surface brickwork has not received heritage protection (Ashworth 2008).

<sup>&</sup>lt;sup>149</sup>In this respect, TfL's recently leased part of the Clapham deep-level bunker to a company specialising in the hydrophonic cultivation of salad in subterranean spaces (Smedley 2014).

attractions, and is debating exactly which delivery options to pursue. While OLUC might still become their chosen partner a more likely prospect is that TfL will instead call on the LTM, who have provided more frequent public tours of Aldwych since 2010. There are acknowledged risks to the alternative and unregulated forms of memory production previously enjoyed by groups like Sub-Brit and LCC associated with the heritigisation of these places and experiences. When asked about this Catford offered:

"to actually do some of these stations up to allow the public in would not only spoil the atmosphere but it would change them out of all recognition...I would prefer to see them left as they were but with occasional visits to some of them being allowed...I don't enjoy visiting them with crowds. I went to the one at Aldwych when they had the shelter wardens down there and it was just a tourist attraction... I would like to see it without all of that...I like the atmosphere of dereliction" (Ibid).

Catford was referring to the *Under London* event mentioned at the start of this chapter. No further living history experiences have been repeated at Aldwych since then but the LTM has subsequently run public tours to the station over two consecutive weekends during the winters of 2011 to 2013, and in 2014 it ran a greatly increased schedule of around 120, tours spread across twenty days and five weekends during May and June. These tours sold out quickly, and, as each had space for forty participants paying between £20 – £25, were expected to raise between £16,000 and £20,000 for the LTM.<sup>150</sup>

During the first of these tours in 2011, a small booklet recounted Aldwych's established historical narratives as part of an experience that was punctuated by talks from four museum volunteers, who provided information on the station's architecture, design, history and contemporary use (Figure 8.7).<sup>151</sup> At times the disused platforms were allowed to speak for themselves, as visitors were given free time to wander (within sight of LTM staff) and photograph their surroundings.<sup>152</sup> The opportunity to enjoy the atmosphere of the disused station and participate in the subjective production of memory, however, was hindered by the number of visitors. Two staggered groups of around thirty-five visitors every hour and the tight scheduling of tours over the course of the day meant that one often felt rushed through the station by the numerous LTM

<sup>&</sup>lt;sup>150</sup>In June 2014 the LTM also offered a multi-media virtual tour of Aldwych in British Sign Language in order to cater for a public with mobility or hearing issues.

<sup>&</sup>lt;sup>151</sup>AFN: 27 November 2011.

<sup>&</sup>lt;sup>152</sup>Ibid.

employees and volunteers.<sup>153</sup> This restricted the possibility to take unpopulated photographs that recreated the popular aesthetic conventions associated with urbex – a key motivation behind some people's visits.<sup>154</sup>



*Figure 8.7.* Visitors on an Aldwych open day crowd one of the LTM guides. Source: Author 2011.

The photographic objectives of the visiting public were also complicated by the LTM's experimentation with how best to facilitate and regulate visitation to Aldwych during the 2011 tours, which in turn, influenced public forms of memory production. The possibility for the wider public to produce photographic images rendering the station an imaginative and mnemonic space (Garrett & Hawkins 2013) was, for example, hindered by the LTM's contentious decision to restrict the use of digital single-lens reflex cameras (DSLR). Photography is central to urbex practice, and DSLRs in particular are critical in capturing a desired aesthetic or moment, and also for augmenting experiences as a 'digital prosthetic' (Garrett 2011a). These restrictions were stated in the tour's terms and conditions (LTM n.d.) but only became evident to most visitors when they encountered signs at the tour's starting point. An Australian couple in the queue who

<sup>&</sup>lt;sup>153</sup>Ibid.

<sup>&</sup>lt;sup>154</sup>See comments at www.28dayslater.co.uk/forums/underground-sites/85649-aldwych-underground-station-november-2013-a.html, [Last accessed 12 May 2014].

had purchased a DSLR especially for the event argued with a LTM representative, who informed them that the decision had been made out of the fear that the use of such equipment could delay the tours and have health and safety implications.<sup>155</sup> This explanation was undermined by a sign which stated that DSLRs were not permitted because of "their combination of high-quality sensor and high resolution" (Figure 8.8). Although the ban was dropped for subsequent tours it can be interpreted as an early attempt to counteract perceived security risks and also to protect from erosion the very thing that the tours commoditised: the aesthetic properties of the disused station. Tripods remain banned on the tours and each attendee is reminded that the photographs they take are for personal use only and must not be reproduced online or anywhere else without TfL's permission.<sup>156</sup>

# *Figure 8.8.* A sign outside Aldwych station before its 2011 open day. Source: Allen (in Zhang 2011).

While London's disused stations are currently enjoying a strengthened position in the collective memory and imagination of the city's population, their increasing securitisation and the heritagisation of tourist experiences at Aldwych demonstrate that the possibility of creating alternative memories around these places whether by experiencing them directly or by producing photographs that widen their imaginative

<sup>&</sup>lt;sup>155</sup> AFN: 27 November 2011.

<sup>&</sup>lt;sup>156</sup> AFN: 27 November 2011 & 15 June 2013.

and mnemonic appeal, is becoming more and more restricted. The paradoxical consequences of the activities of OLUC and the LCC have been to both facilitate and inhibit continued and wider physical and virtual access to these stations and the potential forms of alternative memory production associated with them. LTM's provision of tours at Aldwych is partly a response to the level of public interest sparked, or at least illustrated, by the LCC's illegal exploration of the disused stations, and is also linked to the competition for their touristic development posed by the plans of Chambers' OLUC. Physical and virtual access to Aldwych station is being increasingly limited. Its particular characteristics, located unlike most of the other disused Underground stations on a terminus of a disused line, make its temporary adaptation as a heritage attraction less disruptive to the overall operation of the transport network, while satisfying public appetite for such experiences and providing economic returns to the LTM. Otherwise TfL have met OLUC's proposals and the LCC's activities with a rhetoric that has relied heavily on health and safety and security concerns, factors that have been identified in other areas of memory production in the railways under London and Berlin (see Chapters Four, Six and Seven). These factors remain one of TfL's main priorities ahead of the desire to develop the touristic potential of such stations, as potentially fostered by the LTM.

Similar concerns are traceable in Berlin in connection to its contemporary disused stations. At the same time consideration of the German capital's Cold War ghost-stations reinforces further the peculiarities of the durations of dereliction experienced in these contexts. Here, as is discussed below, the ruins of the U- and S-Bahn were briefly explored and imaginatively (re)membered before they were physically (re)collected, returned to service and eventually themselves positioned as foci of collective memory – whose virtual access is complicated by time as opposed to space.

### 8.6 Berlin's buried ghost-stations

The construction of the Wall in 1961 forced the closure of sixteen separate subterranean stations on the North-South S-Bahn tunnel and along the U6 and U8 Lines (see Appendix C; Merrill 2014b). As these – and the few surface-level stations that shared a similar fate – became cut off from the wider transport system and fell into a semiderelict state, they became known as *Geisterbahnhöfe* [ghost-stations]. Unlike in London, where the term 'ghost-station' has only recently become prevalent, in Berlin the same designation triggers particular connotations and resonances associated with the Cold War division of the city that led to its coining and today connects to the prevalent reading of Berlin as a city inhabited by spectral traces of a negative past (see Ladd 1997; Till 2005).<sup>157</sup>

For twenty-eight years, until the fall of the Wall, the city's ghost-stations came to represent examples of the truncated, consolidated and bypassed space that Timothy Moss has discussed with respect to energy and water infrastructures of Cold War Berlin (2009). In other words, the U- and S-Bahn came to represent infrastructural intersections that could create tensions between two political regimes, and which, at least from the eastern perspective, therefore required active policing. In turn, various security measures such as watch-posts were added to the stations' subterranean platforms and obstructions to sightlines were removed. Otherwise the stations' architectural fabric, dating from August 1961, was left to slowly slip into decay and ruination. Until late 1989 their platforms were populated only by the DDR border guards and transport police, who were observed as ghostly figures by the West Berlin passengers through the windows of trains that were required to travel through the stations at top speed (Hardy 1996). While the trans-sector U- and S-Bahn lines became the focus of a number of escape attempts by East German citizens (Sälter & Schaller, 2013), above ground access to the stations was blocked off and signs removed so that it was almost impossible for any member of the public to reach the tunnels (Hardy 1996). Collective amnesia of the stations was facilitated by their removal from East German maps (Chapter Four) and in time it became difficult for those without prior knowledge and memory of their existence to locate all of the stations and their entrances (Ibid; Arnold 2013\*).

#### 8.6.1 (Re)membering Berlin's ghost-stations

Heinz Knobloch, a popular East German writer and columnist was responsible for one of the earliest explicit public recollections of the ghost-stations when he wrote an essay entitled *Stadtmitte Umsteigen* [Change at Stadtmitte]. The essay focused on the interchange that had previously connected the two Stadtmitte stations, only to become

<sup>&</sup>lt;sup>157</sup>In Germany the ghost-station designation is part of a wider popular vocabulary that also often refers to the abated breath [Angehaltener] and prolonged fairy-tale-esque sleep [Dornröschenschlaf] of such places.

truncated with the construction of the Wall (1982).<sup>158</sup> There is a subtle ambiguity in how it re-imagines the station rather than forcefully recollects it, which may explain how it escaped censorship. The station's literary rediscovery is couched in the language of an archaeology of knowledge – a silent mental excavation inspired by the historical unearthing of Tutankhamen's tomb.

"If we put ourselves in the role of Howard Carter, the archaeologist, if we make his persistence our own... and look hard at the ground we look right through it....We can do this without a sound. We need no pneumatic drill, no pickaxe, no digging crew. We do not even need to ask permission. The concrete ceiling dissolves and disperses like smoke – not in a flash but gradually as we reflect. Now the steel beams below the concrete are yielding to memory, and move aside" (1997, 247).

With its detailed account of the spatial relationship of the Stadtmitte ghost-station to its still functioning namesake, the essay no doubt encouraged East Berliners and West Berliners alike to at least cognitively explore the hidden infrastructural connections of the divided city and its transport network. This was easier for the West Berliners, who were able to glimpse the ghost-stations as they passed temporarily under East Berlin. For example, Ingmar Arnold used to compete with his brother, Dietmar, in counting as many station guards as possible in one trip (Arnold 2013\*). While in East Berlin the stations' existence was common knowledge to those that had lived in city prior to 1961 (Kohl 2014\*), those that moved to the city later sometimes struggled to explain the sounds that emanated from the rumbling trains travelling beneath them (Arnold 2013\*). To some extent East Berliners probably emulated the enforced amnesia surrounding the ghost-stations. To remember them was to remember the Wall and the city's division, whereas for West Berliners they arguably served more as a symbol of the city's deeper interconnection and unity.

Following the fall of the Wall these earlier imaginative explorations were matched by an intense period of physical exploration conducted by East and West Berliners who were eager to (re)discover the parts of their city that were previously out of bounds (Book 1995). Measures were quickly taken to reintegrate the transport network, of which the U- and S-Bahn route-plan of January 1990 was an early and symbolic manifestation (Ibid; see Chapter Four). The (re)membering of the city's U-and S-Bahn

<sup>&</sup>lt;sup>158</sup>This essay was reprinted five times, published in West Berlin in 1984 and translated into English in 1997.

network mirrored the reunification of the city and country (Merrill 2014b). The first station to reopen, Jannowitzbrücke, did so just two days after the Wall fell. On that day thousands of East Germans queued for hours outside the station, eager to use the U8 Line to reach parts of the city that had been denied to them since 1961 (Reuters 1989; Kohl 2014\*) (Figure 8.9). At first they passed through a makeshift ticket counter and border checkpoint, but after just half an hour overwhelmed officials gave up scrutinising identity papers and taking payment for tickets (Reuters 1989). On 1<sup>st</sup> July 1990, the same day that the German Economic, Monetary and Social Union came into effect (the first of four accords that brought about German unification), the last eight U6 and U8 stations reopened. At Alexanderplatz station large crowds congregated for an official reopening (Figure 8.10) that was attended by the West Berlin Senator for Work, Transport and Services and the Mayor of East Berlin. By 1991 all of the disused stations on the North-South S-Bahn had also returned to service, with the exception of Potsdamer Platz station, which remained closed until 1<sup>st</sup> March 1992 (Neubacher 1992).

*Figure 8.9.* The Reopening of Jannowitzbrücke on 11<sup>th</sup> August 1989. Source: Joe001, Wiki Commons.

# *Figure 8.10.* The official reopening of Alexanderplatz U-Bahn station on 1<sup>st</sup> July 1990. Source: LAB.

#### 8.6.2 Accessing and photographing Berlin's ghost-Stations

In the period between the fall of the Wall and the ghost-stations' returning to service their derelict state and previously restricted status drew the attention of numerous actors in ways comparable to the contemporary interest surrounding London's disused stations. Such actors included transport enthusiasts and photographers from both East and West Berlin. Amongst them were those who wrote for the western Berliner Verkehrsblätter, a monthly gazette and its eastern bi-monthly counterpart Verkehrsgeschichtliche Blätter. In August 1990 the former featured six black and white photographs of the ruinous subterranean Potsdamer Platz S-Bahn station (Bohrer 1990). The latter, also provided accounts of underground discoveries and explorations along the north-south S-Bahn tunnel (Reimer 1991a; 1991b). These articles showed the same interest in these places' ephemeral materiality and historic traces as the likes of Sub-Brit and LCC. They included photographs that are strikingly similar to the contemporary photography practised by urban explorers in London. In the early 1990s these photographs became more commonplace, even as they became less representative in a period that was witnessing the frequent reopening of stations and the system's long-term future being prioritised over its recent past. Given the speed with which the ghost-stations were

reintegrated into the functioning transport network, these photographs of their moment of accessible dereliction have become, today, one of the few means by which to recall the mnemonic affordances that they briefly offered.

Numerous photographers took advantage of the aesthetic properties of ghost-stations during the small window of opportunity afforded by reunification.<sup>159</sup> For example, Michael Richter took numerous photographs which were first published as a book in 1992, accompanied by texts by Knobloch and a series of interviews (Knobloch et al 1992). Their continuing popularity is evidenced by the publication of a seventh edition of the book in 2012. There were others besides Richter, including Rolf Zöllner and Christian Halbrock. East German born Zöllner accessed many of the stations unofficially, entering them when they stood open as building sites (Zöllner 2013\*). Halbrock's account of his illegal visit to the subterranean Nordbahnhof S-Bahn station reads like a LCC blog posting:

"...for good reason it was not permitted to enter the S-Bahn's grounds. A prudent train driver could easily trigger the alarm if he noticed me. All this required an increased level of attention. After several attempts I finally reached the underground station" (2013a, 115).

Both men took advantage of the particularities associated with the moment of reunification that offered easier access to places previously – and now once more – out of bounds, a moment that provided great opportunities for photographers (Ibid) (Figure 8.11).

Zöllner arrived in Berlin in 1978 with no earlier memory of an undivided transport network. He felt the pain of division but thought of the ghost-stations only as forgotten, insofar as they had to be actively and imaginatively remembered rather than experienced (Ibid). When he heard the sounds of the trains he wished he could have travelled on them (Ibid). Zöllner's photographs, like others, embody the search for traces of the past [Spurensuche] (see Till 2005). They feature dilapidated architectural elements, eroded station mosaics and, notably, decaying historic posters (Figure 8.12). These posters acted as verifiable indicators of the past, clearly displaying their age through their redundant cultural and political references and explicit dates of production. Similar traces remain popular during the public tours to Aldwych, although the

<sup>&</sup>lt;sup>159</sup>LAB holds photographs of ghost-stations during this period by more than half a dozen photographers.

veneration that visitors show towards its posters is often misplaced given that for the most part they are reproductions installed for filming purposes.<sup>160</sup>

*Figure 8.11.* A photographer explores Nordbahnhof S-Bahn station in 1989. Source: Halbrock (2013b).

# *Figure 8.12. Historic posters at one of the ghost-stations in 1990. Source: Rolf Zöllner Private Collection.*

Halbrock's photographs, and others like them, are now displayed in the transport network itself as part of an exhibition at the former ghost-station of Nordbahnhof about

<sup>&</sup>lt;sup>160</sup>AFN: 27 November 2011

the Cold War's impact on Berlin's railway network. The exhibition has been in place since October 2009 and is an outcome of the Berlin Senate's *Master Plan for the Remembrance of the Berlin Wall*, which was prepared for the twentieth anniversary of its fall and the fiftieth anniversary of its construction (Flierl 2006). The plan stipulated that the Wall's historical impact on the station, U- and S-Bahn network "must be explained to present and future visitors and passers-by" (Ibid, 24). The exhibition, along with its associated publications, dedicate significant space to photographs that show the ghost-stations in their 1989/1990 ruinous state, highlighting how these stations at this particular juncture have become a focus of social memory production today, even though it is no longer possible to experience them first-hand (see Halbrock 2013b; Conrad 2013).

The places that offer perhaps the closest approximations to such experiences in Berlin today are the subterranean 'ruins in reverse' (DeSilvey & Edensor 2013) or 'investment ruins' (Seefeldt & Günter 1994) associated with the never completed U10 Line that will be discussed more in the next chapter. But besides these and the city's ghost-stations the network can boast yet another buried 'island of time' (Assmann & Czaplicka 1995): the partially complete Dresdener Straße U-Bahn station, which received public visitors until roughly two years ago, thanks to the emergence of an association dedicated to widening access to Berlin's underworld.

#### 8.6.2 Brokering access with the Berlin Underworlds Association

The Berliner Unterwelten Eingetragener Verein [Berlin Underworlds Association] (BUe.V.) was formed in 1997 by the two brothers who, as children had, counted the border guards patrolling the ghost-stations: Ingmar and Dietmar Arnold. In the early 1990s Dietmar and his business partner were subcontracted by a German automobile company to survey Berlin's unused, derelict and abandoned underground transport facilities (Arnold & Körner 1996). This research became the foundation of a popular book that Dietmar and his brother published in 1997 (Arnold et al), which contributed to a growing literature addressing the city's buried architectural and transport heritage (which included Knobloch et al 1992; Seefeldt & Günther 1994a; 1994b; 1994c; 1994d; 1995). This literature gained increasing relevance during the late 1990s given the plans then emerging to embark on a series of tunnelling projects, which would reveal but also potentially destroy Berlin's hidden under-city (see Peters 2010). Subsequently in 1997

the critical mass of popular interest necessary to warrant the formation of BUe.V emerged, in recognition of the opportunities and threats associated with the large scale developments linked to reunification which faced the city's buried heritage (Arnold 2013\*).

BUe.V.'s activities resonated with the continued temporal (as well as geographical) explorations of the underground by Berliners at that time, which had first commenced with the greater problematisation of the Nazi past in West Germany during the 1980s (see Ladd 1997; Till 2005; Jordan 2006). Till notes how critical memory work during this time emphasised the archaeological approaches of 'Spurensuche': digging and excavation – processes mirrored by the growing construction work that was taking place throughout the city, and which increasingly revealed more and more forgotten subterranean constructions dating to the Nazi period (Till 2005). BUe.V. argued that rather than once more cover up Berlin's buried Nazi past it should be excavated and preserved, and focused their lobbying efforts in particular on the city's disused civilian air-raid bunkers. Government fears that sites such as these could encourage far-right pilgrimage were countered by arguments which claimed that critical reflection on the Nazi past should not be limited to the losses associated with the Holocaust and military campaigns but should also address the contentious issue of the suffering experienced by German civilians (see p.237). While BUe.V. can be critiqued in some instances for its handling of these issues, it has successfully contributed to carving out a space in the city's wider memorial and conservational landscape for such debates.

In 1999 BUe.V. started running regular public tours in order to fund its activities, a necessity given that it has never received any direct government funding and must maintain commercial leases for all of its tour venues. Today it is the established custodian of Berlin's underground heritage and offers five separate tours, which together run around fifty times a day (Arnold 2013\*). It has over 350 active members and receives approximately 270,000 visitors annually (Ibid). Although BUe.V. receives no direct financial support from the either the federal or regional government it did gain the symbolic backing of the German National Committee for Monument Protection when it received the 'Silver Hemisphere' award in 2006. In this respect the society differs quite significantly from Sub-Brit in favouring preservation and wider public access over exclusivity of experience, an objective illustrated by BUe.V's success in

lobbying to have the civilian air-raid bunker attached to Gesundbrunnen U-Bahn station heritage listed, before converting much of it into its headquarters and a museum.

Today some of BUe.V.'s tours take place actually in the U-Bahn network. Tourists can still visit the Cold War bunker built at Pankstraße U-Bahn station, and unitl recently one of the society's first tours, entitled "On the Traces of U-Bahn Line D", still visited the abandoned Dresdener Straße U-Bahn station. Although abandoned in a state of partial completion in 1927, the station was used as a civil air-raid shelter during WWII and thereafter served as a transformer station for West Berlin's electricity provider until November 1988, when its was deemed surplus to requirements following technological developments (Meyer-Kronthaler 1989). As early as May 1987, the West Berlin Senator for Cultural Affairs raised the possibility of the site's cultural reuse given its structural integrity, and thereafter speculation surrounded its potential cultural and touristic reuse (Ibid). BUe.V. realised this potential twelve years later with tours which more closely resembled the alternative engagements with subterranean places sought by urbex groups such as the LCC than the standardised heritage experiences currently being refined by the likes of the LTM.

In 2008 the tour consisted of around thirty people accompanied by two BUe.V. guides. After signing health and safety disclaimers the group descended into the station from the square above via a concealed staircase. Each visitor was issued with wellington boots before the tour continued into the roughly built station and the bunker, which was in places flooded shin-deep (Figure 8.13).<sup>161</sup> The guides provided historical information but regularly allowed visitors their own time and space to explore the station's materiality armed with their own torches, cameras and tripods.

<sup>&</sup>lt;sup>161</sup> AFN: 14 December 2008



*Figure 8.13*. The flooded WWII air-raid shelter adjoining Dresdener Straße U-Bahn station. Source: Author 2008.

Unfortunately the station's continued ruination and dereliction meant that in April 2012 the tour was cancelled with immediate affect when the Berlin Senate retracted BUe.V.'s lease because of safety concerns. A BUe.V. statement appeared briefly on its website quoting the Senate representative's letter:

"On my assessment of the available evidence of the building fabric, I must declare that the structural safety of the building is compromised. It cannot be excluded that it poses threat to the visitors of the tunnel site. [...] As a further measure to prevent danger all types of events at the site are to be terminated immediately because a danger to the public exists" (quoted in BUe.V. 2012).

As in London, health and safety concerns inhibit the potential for human experiences of Berlin's remaining ruinous and incomplete buried stations and in turn the opportunity to produce memory within and about them. To counter the Senate's claims, BUe.V. enrolled 3D laser surveyors to assess the structural safety of Dresdener Straße U-Bahn station (Assig 2013). Whether these measures will convince the Berlin Senate to renew BUe.V.'s lease and allow them once more to run tours in the station will only become apparent with time, but some believe this is unlikely and have suggested that the Senate will fill in the station in the near future (Poncé 2014\*).

BUe.V. can be placed somewhere between Sub-Brit and the LCC on the urbex continuum, and the association has in fact been recognised as one of a number of groups

who represent an earlier generation of the tradition of urbex (Garrett 2013). Its success can be partly attributed to timing. Firstly, it was able to taken advantage of a critical mass of public interest in the city's buried heritage, triggered by the window of opportunity presented by the earliest stages of reunification, and a period of excavation and exploration. Disused buried stations (amongst other buried architecture) were opened up for human experiences and varying forms and durations of remembering and reimagining, fostered by photographers and enthusiasts. Secondly, and significantly in Ingmar Arnold's view, the association was able to establish itself before the increase in urban security brought on by the 9/11 and 7/7 terrorist attacks in New York and London (Arnold 2013\*). In turn, BUe.V.'s origins and its recognised position have arguably allowed it to provide wider tourist experiences that more closely resemble those initial explorations of Berlin's underworld of the early 1990s, without eroding the aesthetic and mnemonic qualities of the places they visit.

### 8.7 Conclusion

In this chapter I have outlined some of the different durations of dereliction associated with the disused stations of London and Berlin. I have also provided accounts of the active dismantling of these places and the processes that distance or isolate, without fully severing, them from the larger transport systems that they formerly served. The discussion of the varying durations and degrees of dereliction at disused subterranean stations complicate the very terminology of ruination. Historical perspectives reveal periods of dormancy, which punctuate a station's fall from use and later potential reclamation. Nowhere is this better illustrated than in Berlin. Here geopolitical and ideological conflict caused the division of wider networks leading to the creation of disused voids connected to but not served by new network permutations. The restoration of the city's Cold War ghost-stations after reunification means that they only experienced temporary neglect. As such, the dereliction of stations, which in London has mostly been caused by economic concerns, cannot be presumed to be final. All this problematises whether such places can be conceived as ruins at all.

Perhaps they are better characterised as dormant places, maintained at their lowest ebb waiting for a reawakening, but to return to the dominant vocabulary of ruination it is certainly useful to conceive of these places as network*ed* ruins. These stations are 'islands of time' (Assmann & Czaplicka 1995) – places of different temporalities

detached from the time of their wider landscape and network. But rather than lying within 'phantom networks' they represent voids within working networks whose wider operation often relies on them remaining 'forgotten'. The transport authorities responsible for these places primarily view them with respect to their potential to influence the continuing and future operation of the transport system either positively or negatively. Ultimately, it is the networked nature of these mnemonic islands and operational voids that influences the extent to which they are made accessible to whom, at what times and under what terms.

This chapter also demonstrated how London and Berlin's disused stations have, at various times, attracted the attention of different mnemonic actors who have changed the status of these places in each city's respective collective memory and imagination. While currently some of these actors are commanding significant academic and popular attention, particularly in London, their activities should be seen within a wider continuum and a long genealogy of interest in and fascination with such disused places. These places have not been discovered recently and have arguably never been publically forgotten, even though it might suit the authorities and transport providers if they were. The widening public appeal of London's disused stations has instead encouraged TfL to regulate and standardise physical access in ways that have also fixed the historical narratives and interpretations attached to them. While these strategies curtail the possibility to engage in alternative modes of memory production it should be acknowledged that many of these alternative modes, in particular those emphasised by urban explorers, rely on many of the same historical narratives and interpretations - if not necessarily in subjective experiences of the place then at least in the later representation of such experiences. These representations, which are increasingly digitalised, become a key avenue of imaginative access and may ultimately outlive the ruins themselves. This is the case in Berlin, where photographs taken during the transitional moment of reunification now provide a primary means by which to imaginatively access the divided city's ghost-stations following their reintegration into the working system. The photographers working in this moment arguably engaged in the kind of mnemonic experiences that are today sought by urban explorers across the world.

More generally, alternative individual mnemonic experiences in these places are increasingly limited by a politics of access and the dominance of established historical narratives. As this chapter's empirical examples have demonstrated, the opportunities for alternative forms of visiting and, by extension, counter-mnemonic experiences in these places are being further restricted, regulated and standardised in line with societal security, health and safety concerns and the commercial imperatives of the heritage industry. As such these places are not just embedded within physical networks: they are also influenced by an assemblage of discourses including those associated with the securitisation, preservation and heritagisation of the city. These discourses can conspire to restrict or promote particular processes of memory production, advantaging some mnemonic actors and disadvantaging others, while all the time reflecting wider societal structures and concerns related to property ownership, liability, health and safety, and security.

The latter concern has played a particularly marked role in determining memory production in the disused stations beneath London, but in Berlin transport authorities are yet to invoke explicitly the rhetoric of security in relation to its underground and disused transport infrastructure. In part, this is no doubt because Berlin, unlike London, has not witnessed, first-hand, a terrorist attack on its transport infrastructure. In addition the German capital's particular geo-political status, while causing both the creation and subsequent loss of its ghost-stations in the first instance also allowed the BUe.V to emerge and become consolidated around these places and, until recently, provide greater opportunities for the kind of alternative mnemonic engagements sought by, for example, urban explorers in London. With the restriction on this society's activities, however, the memory of Berlin's ghost-stations has now become firmly rooted in the city's official remembrance of the Cold War. In London, dominant historical narratives associated primarily with WWII are also evident, and they can be seen to have filtered through to the retrospective accounts of the supposedly alternative mnemonic experiences of urban explorers.

So while the kind of alternative memory production that urban explorers like to pursue is already arguably influenced by pre-existing dominant historical narratives (as demonstrated by their later textual and visual representation) it seems likely that the dominance of these narratives will become more pronounced in the future with, in London, the plans of groups such as OLUC and the LTM, and, in Berlin, the greater regulation of BUe.V. As I will highlight in the next chapter, art organisations and their associated artists and projects have arguably enjoyed better success in unlocking the potential of some of these disused and incomplete stations to act as places of alternative memory production. As will be discussed, they have taken advantage of these places' ambiguous nature in order to provide truly creative forms of counter and alternative memory production.

## **Chapter Nine**

Art from Below: Creating Mnemonic Imaginaries in the U-Bahn and Underground's Hidden Vestiges

### 9.1 Introduction

While the possibility of releasing the mnemonic potential of Berlin's buried ghoststations through theatrical and artistic interventions has now passed, due to these places' return to active passenger service, other abandoned transport vestiges beneath the city continue to provide opportunities to create alternative mnemonic experiences that take advantage of their subterranean settings. This is most true of vestiges of the U10 Line that share some of the ruin-like characteristics of the ghost-stations discussed in the last chapter. Commonly referred to as investment ruins (Seefeldt & Günther 1994a; 1994b; 1994c; 1994d) they can be framed as "memory traces of an abandoned set of futures" under the rubric of Robert Smithson's 'ruins in reverse' (1967, 55; DeSilvey & Edensor 2013).

In this chapter I focus on recent artistic interventions that have sought to unlock the mnemonic potential of subterranean architectural vestiges of transport networks. I do this in order to demonstrate how artists can facilitate the truly alternative mnemonic experiences that are associated with ruinous places (Edensor 2005a; 2005b) and which can be heightened by underground settings. In Berlin I focus my attention on a series of artistic projects recently overseen by the grassroots art organisation, Neue Gesellschaft für Bildende Kunst [The New Society for Visual Arts] (NGBK) that took the abandoned U10 Line as their explicit subject of interest. Although supported by the Senate and often working in partnership with BVG, NGBK are ultimately an independent art organisation whose long engagement in the spaces of the U-Bahn means they aim to provide art from below in its twofold meaning. I start by briefly acknowledging the role of artistic production in the U-Bahn. Thereafter I recount NGBK's recent engagement with the spaces of the U10 and the role of memory within the wider project concept and more specifically in relation to two particular contributory artworks. For comparison I

then return to London's disused Aldwych station and discuss a hybrid artistic-theatrical intervention that revolved around questions of memory, which was hosted there in 1999.

#### 9.2 Memory art in the U-Bahn

Aleide Assmann views art as an "outstanding and ultimate medium for memory" and believes that the artistic fascination with memory that began in the 1970s and became dominant in the 1980s may still be to reach its peak (2011, 344). For Assmann 'memory art' is that which is less concerned with "memory in the sense of biographical reminiscence" than with the "mysteries of cultural memory" and hence for her "the role of the imagination in the artistic act of constructing the past anew" opens up social memory through artistic reflection (Ibid, 353 & 356). These artistic 'memory simulations' play on and reiterate the long acknowledged intimate collusion and significant similarities between imagining and remembering (see Casey 1977; 2000). Others, and most notably in Berlin, Till, have considered the role of artists as individual actors who produce memory through site-specific or place-based artworks, ranging from traditional sculptural interventions in the landscape to more ephemeral performance and conceptual works (2005; 2008; see also Cook & van Riemsdijk 2014). Till acknowledges how artists can "animate the multiple spacetimes of memory through their work" and often "explore the understudied relationships between embodied and shared memory" (2008; 103 & 105).

One of the examples Till uses to demonstrate such themes, Renate Stih and Frieder Schnock's entry to the 1994 public completion for a central Berlin Holocaust memorial, *Bus Stop!* (2005) also highlights how memory artists could utilise contemporary transportation networks as part of their argument. In this case, the artists planned to create a new bus network to transport visitors from the centre of the city to authentic historical sites associated with the Holocaust in order to communicate that "all places in Germany are haunted by the National Socialist past" – not only the buses' destinations but also the Berlin streets and German motorways that they travelled along (Ibid, 181). This sentiment is yet to be fully appreciated of the U- and S-Bahn network as their respective transport authorities' delayed and partial handling of their negative WWII and Nazi past demonstrates (see Chapter Seven). *Bus Stop!* was never fully realised but with the support of NGBK the artists were able to publish a hypothetical bus timetable – a "portable memorial you carry around in your pocket" (Schnock quoted in Ibid, 184).

Stih and Schnock continued to work with NGBK to explore how "memory functions in the social sphere and how it is reflected symbolically in urban spaces" (Colomb 2012, 301). Their 1998 project, *Einladung* [Invitation], was displayed at the Alexanderplatz U2 station, one of the main locations of NGBK's public art activities and again, although more tangentially, referred to issues of social memory as one of the city's multitude of hidden social problems (Ibid). Alexanderplatz station had acted as a venue for public art since the late 1950s and the end of its use in this respect would lead directly to the development of an NGBK project called *U10 – Von hier aus ins Imaginäre und wieder zurück* [U10 – From here to the imaginary and back again] (hereafter referred to as the U10 project).

In 1982 as Alexanderplatz station's U8 platforms stood derelict and guarded by the ghostly figures of the DDR transport police approximately 100 metres to their east, the station's U2 platforms became a temporary exhibition space for a number of artistic poster works created under the theme of *Frieden der Welt* [World Peace] (Musterer 2006). While the lineage of NGBK's continuing provision of art in the U-Bahn can be traced to this exhibition it was itself an echo of two earlier poster exhibitions that took place at the station under the same theme in 1958 and 1959 organised by the Verbandes Bildender Künstler der DDR [Association of Visual Artists of the DDR] (VBK). Of the works associated with these exhibitions at least one invoked the role of social memory for ensuring future peace (Figure 9.1).

*Figure 9.1.* Do not forget what was! Campaign for peace! by Almaru Lipa, 1958. Source: Musterer (2006).

The 1982 exhibition, which was initiated by students of the Berlin Weißensee art school and members of the FDJ was repeated annually until 1985 and then formalised as the regular competition of a newly formed VBK working group called *Stadtbild* [Cityscape]. The group was supported by the East Berlin Magistrate and the DDR's state advertising company and office for architectural art (NGBK 2006a). *Stadtbild*'s open competition format allowed submissions from those artists interested in the growing East German opposition movement and the last planned competition in 1989 entitled *Denken an Revolution* [Thoughts of Revolution], which officials hoped would invoke a reflection on the 200<sup>th</sup> anniversary of the French Revolution during the fortieth anniversary of the DDR, in fact elicited responses that were more concerned with contemporary events in Eastern Europe (Putbrese 2009). All of the seventy-odd proposals were rejected for public display on the grounds that their collective political statement would create added friction, which the Magistrate wanted to avoid (Musterer 2006). Eventually a selection of these proposals did go on public display but only after the fall of the Wall (Ibid).

German reunification led to the dissolution of VBK and left *Stadtbild* needing to convince the newly unified Senate to continue to fund art at Alexanderplatz station, persuade BVB to continue to forego advertising revenue at the station and find a new host association (Putbrese 2009). In 1991 *Stadtbild* briefly found a home at the Berufsverband Bildener Künstler [Federal Association of Visual Artists] and changed its name to *Kunst Statt Werbung* [Art not Advertising] (Musterer 2006). In 1992 the group moved again this time to NGBK, which had itself formed in 1969 as an outcome of the wider West German student movements of the late 1960s that saw the organisation replace the Deutsche Gesellschaft für Bildende Kunst [German Society for Visual Arts] (Below 2009). Since then and as part of its wider activities NGBK has continued to facilitate democratic public art projects in the U-Bahn in conjunction with multiple partners including BVG but not always without controversy and restrictions imposed by the transport authority.<sup>162</sup>

In general, however, such restrictions were rare and the nature of artistic activity in the U-Bahn widened, particularly between 2001 and 2007 under the new title of *Berlin Alexanderplatz U2* with the artworks becoming more installation-like and involving

<sup>&</sup>lt;sup>162</sup>For example in the early 1990s an artwork about a high-profile fare-dodging case by Cornelia Schleime was vetoed by the BVG (see Bannat 2006; Putbrese 2009).

sound, video projections, sculpture, performance and participatory work. In this period memory acted as a central theme or motivation for a number of artworks displayed at Alexanderplatz. For example, Daniela Comani's 2007, *Ich war's. In zweiunddreisig Tagen um den Alexanderplatz. 1805-2007* [It was me. In thirty-two days around Alexanderplatz 1805-2007] blurred the boundaries between autobiographical and collective memory and their associated temporalities (Comani 2007). Meanwhile in 2006 Thomas Hirschhorn's *Ingeborg Bachmann Alter* [Ingeborg Bachmann Shrine] created a grassroots memorial to the deceased Austrian author and poet that unintentionally mimicked the annual shrine to Silvio Meier at Samariterstraße (see Chapter Six) (Steinweg 2006). Prior to both these Aage Lamghelle's 2003 artwork which rendered the letters 'ddr' as various types of commercial logos reflected discourses about city design, advertising and marketing strategies in public space<sup>163</sup> while referencing the prevalence of nostalgic remembrances of former East Germany commonly known as *Ostalgie* (Langhelle 2003).

Langhelle's work in some ways prophesised the fate of the NGBK's activities at Alexanderplatz station when the privatisation of BVG's advertising subsidiary in 2006 led the art organisation to became increasingly embroiled in debates surrounding the commercialisation of urban space (Rebbert 2012\*). The planned 2008 project was forced to yield to economic pressures when the new owners of the advertising space at U2 Alexanderplatz introduced a station-branding scheme (Ibid; Rebbert 2011).<sup>164</sup> To many in the organisation these events represented the victory of commerce over art, the redundancy of NGBK's earlier rallying call for art instead of advertising and a political and economic decision by the Senate which curtailed artistic activity at Alexanderplatz despite a continued commitment to funding NGBK's activities elsewhere (Rebbert 2012\*). It also highlighted the weaknesses of perceiving the U-Bahn to be public space. As Karin Rebbert, NGBK's managing director stated, "it became clear that the underground has desirable and highly competitive public spaces, but that it definitely cannot be regarded as an ideal of typical public spaces or public sphere" (2011). Given the loss of Alexanderplatz as the pivotal location of NGBK's underground activities in 2008 and 2009 the project continued under a new name and on a less centralised basis by utilising disused advertising hoardings at three U8 stations. In returning to the sole

<sup>&</sup>lt;sup>163</sup>On these topics in Berlin see Colomb (2012).

<sup>&</sup>lt;sup>164</sup>Station-branding grants one client all the advertising space at the station for any given duration.

use of poster artworks, however, these projects were viewed by many as a step backwards in the effort to realise the full artistic potential of the U-Bahn – a situation the U10 project explicitly tried to reverse (Page 2012\*).

### 9.2.1. The U10 project

The artistic scope of the U10 project represented a significant expansion on NGBK's previous underground activities and followed a truly decentralised approach to the provision of public art in the U-Bahn. For Leonie Baumann, a former managing director of the NGBK and the current head of the Berlin-Weißensee art school, the U10 project explicitly aimed to contribute to wider changes and debates related to art in public spaces including those centred on the conflict between artists and the public that revealed the need to safeguard artistic autonomy whilst allowing wider forms of democratic participation (2011). The U10 project also engaged with paradigm shifts that resisted idealised notions of a single homogenous public and acknowledged public space to be not just physically but also socially and politically constructed as much through moments of conflict and antagonism as artificially generated durations of participation (Bempeza 2011).

These aspirations were served by the project leaders' return to the notion that the public transport should function according to democratic principles and in the public's interest, as embodied by their adopted slogan 'U-Bahn for all, culture for all' (Hertzsch & Page 2011). Three strategies ensured that no particular place or person, including the artists themselves, was privileged. The first was to involve passengers and BVG staff in all the artistic ideas selected from the competition. The second was to develop and strengthen working relationships with the BVG in an attempt to broaden the transport authority's understanding of the U-Bahn's role as public space, and the third was to generate an audience for the project that would actively visit the U-Bahn for its artistic potential and beyond its use as a means of transport (Ibid).

These strategies were pursued in many ways. For example, the project's initiators attended numerous BVG and rail enthusiast events and created a U10 friends group that soon comprised of, amongst others, artists, hobby historians, transport enthusiasts, model builders, transport technicians and BVG employees. Project leaders dedicated significant time to negotiating with BVG and influenced the organisation internally through a 'bottom-up' approach predicated on direct staff participation in the projects.

In this way they were able to secure extensive publicity within the network via the BVG's passenger magazine and the in-carriage television system. They also obtained the use of empty billboards and eased regulations that might have affected the project's installation, presentation and duration (Ibid). These benefits meant that the project maintained continual public presence, which ensured large public audiences beyond project participants and including intentional visitors – and not only serendipitous passers-by, even if the actual exhibition time of many of the artworks was limited to a few days, weeks or only a single evening (Ibid).

Beyond the effectiveness of these strategies the project's success can also be partly attributed to the choice of its overall theme, which gained particular public popularity. The U10 was chosen as the focus for the project specifically for its mnemonic and imaginative potential, as suggested by two of the project's main organisers, Eva Hertzsch and Adam Page:

"We assumed that [the U10] would serve as an inspiration for the collective memories and for the future hopes and wishes of a large Berlin public. We also worked with another hypothesis: in view of the passengers' interest in an additional line and their fascination in its fictitious existence, the U10 can be a platform to discuss the city's history, its politics and its future" (Ibid, 46).

The U10 Line's history was intimately linked to that of Cold War Berlin. From the early 1950s the West Berlin Senate resurrected older plans that proposed the construction of the F Line, which had been pre-emptively constructed in certain places to link all other U-Bahn lines and connect the city's suburbs in the southwest with those in the northeast as part of its 200-km-Plan (Gallico 2011) (Figure 9.2). After the construction of the Wall and the West Berlin boycott of the DDR-owned S-Bahn, further sections of the U10, that ran parallel to one of the few sections of the S-Bahn that continued to run in West Berlin throughout the Cold War, were built during the 1970s (Ibid). Thus when the Senate and Magistrate negotiated the handover of the West Berlin S-Bahn to BVG-West in 1984, the plans to build the U10 were shelved and the rehabilitation of the West Berlin S-Bahn prioritised in the transport budget (Ibid). Reunification sealed the U10's fate, leaving its incomplete vestiges to remain as technological relics that indexed "Berlin's geopolitical division and resulting cycles of politically driven investment in the city's infrastructural networks" (Jasper 2011, 153).

# *Figure 9.2.* The West Berlin Senate's 200 km-Plan in 1977 including the U10. Source: *LAB.*

The project's organisers thus acknowledged that the 'phantom limbs' of the U10, as spaces that were "invisible in different ways" (Ibid, 156), could attract public imaginaries relating to not only the history of the city but also to the individual mnemonic and corporeal experiences that these vestiges could accommodate: vestiges that for much of the city's population were removed but not forgotten – amputated but still felt. In addition, the U10, whose fate was intimately tied to the history of the divided Berlin, was well placed to take advantage of the bookended commemorations associated with the twentieth anniversary of the fall of the Wall in November 2009 and the fortieth anniversary of its construction in August 2011. As such the U10's story was seen to "provide an alternative insight into the complex details of the divided Berlin" (Hertzsch & Page 2011, 46). These factors meant that the unfinished U10 Line and the vestiges of its partially built stations presented multiple sources of artistic inspiration and also provided a focus for mythological and uncanny metaphors. The project's call for the second round of competition stated,

"the first competition...used the partially built but never completed Underground line 'U10' to explore the past and present of Berlin's Underground network, as a real place and as an imaginary world closely entwined with the city's history ...The parallel existence and non-existence of this building complex in the Underground symbolises the competition's understanding that art works can contribute to making the invisible visible and bring previously hidden material to the surface" (NGBK 2010, n.p.).

The U10 project primarily revealed these places to the public by artistic works that sparked temporary forms of imaginative access as opposed to the longer lasting forms of physical access pursued by the range of actors considered in the previous chapter. Organisers were able to use their positive standing to convince BVG to grant access to some of the U10 vestiges that are normally closed to the public, including those at the Innsbrucker Platz, Potsdamer Platz and Schloßstraße stations (for a list of further U10 vestiges see Appendix C). In general, however, these visits were exceptions granted on a one-off basis. Of all of the U10 project's individual artworks, two in particular stood out for their engagement with the mnemonic and imaginative potential of the line's built vestiges and illustrated how the project produced alternative, spatial collective memories and imaginations in the city.

### 9.2.2. The Kronos Project

A faded and damaged monochrome photograph shows six men surrounding a converted U-Bahn carriage standing in the partially constructed U10 tunnel close to the Rathaus Steglitz station (Figure. 9.3). A man in the foreground, his hat and gloves in hand, looks directly at the photographer, the half smile on his face revealing his anticipation and excitement. Others inspect the hermetically sealed train carriage, which has had its running-wheels replaced by four rotating pairs of wheels joined by axes that give them a leg-like appearance. One stares into the vehicle, another glances at it as he passes, a third shadowy figure seems to stand guard in the background. One of the final two men, who stands with his hands in his pocket and seems to have just ended a conversation, has recently been identified as Dr. Ernst Koepplbleek.

This image is the only surviving photographic record of a long forgotten experimental train journey conducted in the earliest sections of the U10 in 1926. It is amongst the few remaining documents related to the Kronos-Projekt and its efforts to develop what was internally known as the Steglitz Entschleunigungsbahn [Steglitz Deceleration Railway] that have been uncovered by artist Roland Boden. Boden's research in the recently

accessible private archive of Dr. Koepplbleek, one of a number of scientists on a team headed by physicist Dr. Erwin Freundlich at the Kaiser-Wilhelm-Instituts für Physik in Dahlem, Berlin, and in the institute's own piecemeal archive, revealed an event lost to public memory due to its original secretive nature and the destruction of archive material during WWII.

#### Figure 9.3. Kronos-Projekt Trial Launch April 1926. Source: Boden (2011).

Whether or not the trial was successful remains open to doubt. Designed in the context of Albert Einstein's recently proven theory of relativity, the Kronos Project attempted to manipulate the curvature of space in order to affect journey times. Following smallscale experiments a full-scale trial with eight human participants was launched in which due to cost restrictions a converted U-Bahn carriage was used. Eight adult male volunteers below the age of forty were chosen to take part, paid 200 Reichmarks and asked to sign legal disclaimers. For the participants inside the carriage the trial was expected to last one hour. But those outside the carriage would be required to monitor the participants for a period of ten years. However, the project was scaled back due to budget cuts associated with the financial crisis of the late 1920s and then curtailed altogether in 1933 when the Nazi Party came to power and began their ideological discrimination against research connected to Jewish scientists. A small group of committed researchers was, however, able to connect the Kronos machine to the U-Bahn's power supply through equipment disguised as station architecture in order to allow it to continue its journey and ensure the safety of its occupants. A brief moment of Soviet interest in the project after WWII came to little, and after the death of the few surviving scientist originally involved, the project and its eight participants were forgotten until Boden's research uncovered them.

Boden's discovery of technical schematics allowed him to reconstruct a scale model of the Kronos machine and to create a computer animation to show how it would have functioned had its trial been successfully completed. Significantly, his research suggests the trial journey might still be underway even though audio contact with the participants was lost shortly after it began. Given that the Kronos machine moves at a velocity of around 10.4 mm per day Boden has calculated that it will have travelled around 317 m along the now sealed tunnel section and that for those inside the carriage around six and half hours will have passed since the trial began. In 2009, Boden estimated that the Kronos machine was around 150 m south of Schloßstraße station but that its exact location was extremely hard to determine given that its slow-moving time travel renders it invisible. According to Boden the only indicators of the Kronos machine's location and existence are the blue auroras similar but smaller in scale to the Aurora Borealis that recurrently appear in the vicinity of the U10 tunnel and the occasional undiagnosed power outages caused on the nearby U9 Line.

Boden's Kronos project is an artistic imagination. It is communicated through the theories (theory of relativity), methods (archival research) and dissemination techniques (technical scientific language, photo-documentaries and interpretation panels) of historical and scientific scholarship to increase its perceived authenticity. It intentionally plays on society's contemporary sensitisation to issues of social memory in order to remember an alternative, inauthentic and fantastic past that matches and even exceeds the public's expectation of forgotten places such as the U10 to deliver spectacular lost narratives. The project's description, in places intentionally vague, attempted to use the same scholarly language in order to extend the artist's intention to appeal to objective veracity that is evidenced by his decision to surround his fictional narrative with non-fictional historical events, persons, and architectural realities. And why shouldn't it? The imagined social memory that Boden created is arguably still a form of memory even if, ultimately, of spurious historical validity. Boden's work creates an urban myth that is anchored in the mnemonic and imaginative space of the vestiges of the U10. As such it exemplifies Edensor's recognition that ruin-like places offer the potential to

create fabricated and fantastic counter or alternative memories, (2005a; 2005b). While these opportunities are opened up to those who visit these places illegally, such as urban explorers, the earlier discussion regarding their tendency to rely on established historical narratives combined with the examination at hand suggest that artists might be better positioned to create and disseminate the truly fabricated collective memories that such places can give rise to.

Although Boden's faux historical documentation is only fully available on his website,165 its dissemination and perceived authenticity relied partly on the use of physical locations in the U-Bahn network, including the partially constructed U10 station at Innsbruckerplatz. Here in November 2009 the artist projected a computer animation of the Kronos machine onto the rough concrete walls and installed monitors that showed interviews with scientists discussing the theories associated with the project, and information panels containing much of the information present on Boden's website. During this event, thanks to the perspective qualities of the partially built station, visitors were exposed to a visual reconstruction of the Kronos machine moving through the station and tunnel which, according to Boden's narrative, it was still invisibly travelling through eighty-three years after its departure, as emphasised at the event by an attempt to acoustically contact its passengers (Figure 9.4). In addition, aspects of the narrative featured on the U-Bahn passenger television system, fragmented to increase its apparent authenticity. From December 2009 until February 2010 Boden's scale model and the interpretation panels were temporarily exhibited at Potsdamer Platz station, before the model was permanently loaned to the U-Bahn Museum. Consequently, an artefact relating to a fabricated history is now in the custodianship of and on public display at an institution whose remit is to safeguard and present the U-Bahn network's official history.

<sup>&</sup>lt;sup>165</sup>See http://www.kronos-projekt.de [Last accessed 26 May 2014]

### *Figure 9.4.* The projected computer animation of the Kronos Machine at Innsbruckerplatz station in 2009. Source: Queimadela in (Corcilius 2010).

As of August 2014 Boden's computer animations and interviews had been viewed online over 17,000 times.<sup>166</sup> Online responses to them speculate about the fates of the trial's eight participants and debate the historical or artistic status of Boden's work. Many of those who have left comments choose, it seems, to believe the narrative and resist the idea that it is an art project. One wrote, "it is...it was...it is real." Others chose to embellish Boden's alternative history in ways that reveal their desire to suspend reality and believe the narrative, thus vindicating the artist's aim of questioning the principles of historical truth and how it is arrived at. In many ways these commentators are not wrong. The Kronos Project is now a real memory, even if the historical fact to which it refers is fabricated. It has been produced and disseminated and has attached itself to a place that arguably has yet to acquire any specific historical capital and wider public appeal besides its status as a mirror for the general tribulations that faced the city's planning during the Cold War. The unfinished vestiges of the U10 represent places whose narration returns primarily to the abstract technical and planning details of its partial and interrupted construction, as opposed to the everyday social and cultural histories which have been accrued in stations that have seen active service and which the wider public might more easily identify with. This became evident during a limited

<sup>&</sup>lt;sup>166</sup>See http://www.youtube.com/watch?v=-DKUblwvky4; http://www.youtube.com/watch?v=prVX-Y\_nl3k. [Last accessed 1 Aug 2014].

number of public tours to parts of the U10 that took place independently of and since the NGBK project.

The Arbeitsgemeinschaft Berliner U-Bahn Eingetragener Verein [Berlin U-Bahn Working Group Association] (ABUe.V) that is responsible for running the Berlin U-Bahn Museum was able to negotiate physical access to various sections of the U10 during the summer of 2013. They hosted public excursions to the U10 vestiges at Innsbrucker Platz, Rathaus Steglitz and Schloßstraße stations.<sup>167</sup> Some ABUe.V. members have also been associated with BUe.V. (see Chapter Eight) in the past and although the former's stated motivation for these tours was to raise money to fund the publication of a children's museum guide, others have speculated that the U-Bahn Museum may want to emulate the touristic model pursued by BUe.V. (Heilein 2013\*). In some ways these excursions probably resembled BUe.V.'s first public tours in the early 1990s. They were narrated exclusively in German and were attended primarily by specialist audiences – transport enthusiasts rather than general tourists. Their content meanwhile contrasted strongly with the imaginative narratives of Boden's artistic project.

The tour of the incomplete Innsbrucker Platz station commenced with a brief historical and political account of how the U10 came to be (or, more appropriately, not to be). Thereafter and on entering the incomplete station I and around fifteen other individuals were exposed to a spacious cubic cavern, a naked concrete skeleton without the everyday components of tracks and polished architectural elements usually expected of a functioning underground station, but equally without the dereliction of a disused one. The deep track trenches, over-hanging platform edges and interstitial concrete pillars all hinted at the site's planned function but otherwise our imaginations were expected to fill the void (Figure 9.5). Besides relating a rather dry history of Berlin's Cold War transport planning, the guide directed our attention towards obscure and abstract technical details, relying heavily on specialist terminology. Most of the group listened intently, transfixed by the discussion of track gauges, electrical circuits, and building regulations. Few took an interest as I did in the graffiti that testified to previous human visits of a group calling themselves the U10 Ghetto Kids. Fewer still, if any, inspected the archaeological traces of the space's alternative and temporary uses – the discarded

<sup>&</sup>lt;sup>167</sup>AFN: 7 July 2013; 11 August 2013.

bottle of sparkling wine, the scattered beer caps, yellow roses, red serviettes and candles that littered the track bed. These details prompted the construction of the imaginative alternative memories and micro-narratives that contrasted with the official account provided by the tour and a space that otherwise lacked a collective life story. The unfinished Innsbrucker Platz U10 station is more a blank canvas ready for imagination than a palimpsest reflecting the past. Ingmar Arnold suggested as much when he acknowledged that BUe.V. were not interested in furthering access to the vestiges of the U10 because they lacked the specific historical significance or hauntings of other places beneath Berlin (Arnold 2013\*). The station could not be a ghost if it had not lived, and so the memories that it could give rise to related primarily to a future unrealised and subsequently lost.



Figure 9.5. The incomplete U10 Innsbrucker Platz station. Source: Author 2013.

During another excursion to the incomplete U10 Rathaus Steglitz and Schloßstraße stations and their adjoining unused tunnel, the interpretive content offered by the guide was largely the same as that offered on the previous tour, and the space, although different, was in many ways indistinguishable from the incomplete U10 Innsbrucker station. At the same time the guide also informed us of a rare historical marker in the space's sparse biography – its temporary use as a storage space for the Senate's rolling three-month reserve of medicine and canned food that was deemed necessary after the Berlin blockade. As the tour continued I clung to this historical feature and tried to

supplement my experience by returning to the narrative of Boden's eight time travellers. But my loyalty to historical fact stifled the full potential of his imagined past as I resorted to identifying the historical inaccuracies in his account. Nothing of the U10 had been built by 1926, and the architectural design elements that concealed the power supply to the Kronos machine were built forty-two years after Boden's fictional scientists supposedly secured the connection.<sup>168</sup> As the tour proceeded along the tunnel, through a door and into the gravelled tracks of the active network the present took over. Walking over and alongside the U9 Line brought a danger and excitement that for me disrupted both historical reflection and artistic imagination (Figure 9.6). Distracted by the close vicinity of fast moving trains, and by the confused looks of passengers waiting at the Schloßstraße platform, I failed to notice when we passed the area where Boden's Kronos machine lingered invisibly.



Figure 9.6. A passing U9 train draws the group's attention. Source: Author 2013.

<sup>&</sup>lt;sup>168</sup>These elements are due to be removed with Rathaus Steglitz station's planned renovation – what will become of the Kronos machine and its passengers then?

The well maintained, never used and publically visible Schloßstraße U10 platform, where this excursion ended, also featured in the programme of public events associated with the U10 project. But rather than functioning as a space in which to narrate alternative pasts, as in Boden's work, it instead provided an atmospheric and authentic place in which to view three-dimensional landscape representations of the U10's imagined and subsequently lost future. The work which the platform briefly hosted was the collaborative result of Katharina Heilein's *Construction Time Again* project, which primarily sought to strengthen public memory of the U10 through a medium common to both transport enthusiasts and artists alike; model building.

#### 9.2.3 Construction Time Again

Heilein acknowledged that Berliners' collective memory of the U10 had practically been erased, and therefore she set about putting in motion a "poly-logical memory process" that would reveal the history and spaces of the U10 using two main phases of activity (Heilein 2011, 132). In the first phase Heilein searched for traces of the U10 with the help of witnesses (Heilein 2013\*). She conducted archive research and interviewed former U10 building engineers, Senate transport planners and transport policy experts. This phase culminated in December 2009 in a public discussion event that took place in the incomplete tunnel section beneath Potsdamer Platz, which had been constructed in 2006 in order to serve potential future transport plans, whether the return of the U10 Line or, more likely, the extension of the U3.

The round table discussion involved NGBK representatives, journalists, former East and West Berlin city planners, and a number of S-Bahn specialists. It focused critically on the politics of transport planning, and in particular U-Bahn construction in former West Berlin. Debates were anchored to the moment when BVG-West gained control of the western sections of the S-Bahn on 9<sup>th</sup> January 1984, which subsequently led to the abandonment of the U10 Line, and the event made a number of references to the handing over ceremonies that accompanied this moment. Five of the discussants, witnesses whom Heilein had previously interviewed, were each invited to lay a wreath, in a gesture that echoed the celebratory traditions long used to mark inaugural and final train journeys, that the former West Berlin passenger union had observed following the last East Berlin operated S-Bahn services in West Berlin in 1984. These wreaths were laid throughout the event on ribbons printed with extracts of Heilein's interviews. One

extract, a quote from a former West Berlin Senate transport planner, emphasised the temporal vulnerability of infrastructural projects like the U10.

"Construction periods are relatively long. We once calculated that it takes approximately 13 years from the first stroke on the paper to the finished construction. Naturally a lot can happen in that time."<sup>169</sup>

During the wreath laying this quote and others were integrated into a looped audio installation so that accounts of failed investments in the U10 echoed throughout a space that might some day suffer the same fate.

The round table discussion in turn fostered a critical re-questioning of U-Bahn construction in Berlin, whilst simultaneously considering the unforeseen potential of the U10's half built vestiges. As the U10 project demonstrates, pre-emptively constructed underground infrastructures provide attractive opportunities and venues in which artists and the public more generally can engage with creative and cultural practices. The city continues to pre-emptively build U-Bahn infrastructure as evidenced by the round table's venue and the plans for an additional set of platforms and some tunnelling at the new Berlin Rathaus station on the U5 Line's current extension. Whilst in the long term this may be argued to make sense economically, in the short term it leaves subterranean voids with unrealised potential and, as the U10 testifies, the risk remains that the plans will never be realised. However, although the U10 has now mostly been removed from the city's planning documents (Gallico 2011), and despite the fact that its future reintegration would require significant upgrading work, the possibility remains that the U10 may eventually return, as Berlin's Cold War ghost-stations have. In the meantime, however, its vestiges sit as investment ruins, dormant voids within a wider network.

Heilein's first phase of research and interviews and the subsequent public discussion with its ritualistic resurrection and audio installation served to rediscover the U10's history and spaces and anchor them in a grander Cold War narrative. As such, meaning was re-ascribed to the U10. Phase one of Heilein's project emphasised the entwined fates of the U10 and the West Berlin S-Bahn, and the latter's political significance in the divided city. As such the U10 was presented as a mnemonic absence against the presence of the S-Bahn – the forgotten sibling, deserving of attention. Connecting the two through the transport politics and conflicts of the Cold War served to provide a

<sup>&</sup>lt;sup>169</sup>See http://www.u10-berlin.de/projekte/d-proj5-heilein.htm [Last accessed 27 May 2014].

wider historical and mnemonic framework within which to position the planned but never lived cavernous spaces of the remnant U10 in the absence of any of the specific and everyday meanings that they would arguably have accrued had they entered into use. At least for this phase of the project, then, it is possible to discern how established and dominant historical narratives influenced artistic mnemonic production beneath the ground.

But whilst the first phase of Heilein's project revealed the macro historical and political context of the U10's construction and abandonment, the second phase explicitly aimed to engage a wider public more directly in the places of its lost future through both physical exploration and specific modes of representation. Phase two started with a search for the physical traces of the U10.<sup>170</sup> A visit to the U10 sections of Rathaus Steglitz and above-ground walking tours of the line's planned route were advertised in the press and were well attended by the public. Of these attendees, fourteen volunteered to continue their involvement with the project by building models of the U10 stations that would have served individual Berlin neighbourhoods. Over six months Heilein and the model builders continued making field trips to the U10's vestiges and along its planned route, while an open heritage day in September 2010 gave them a chance to display their work in progress to a wider public at the incomplete U10 Innsbrucker Platz station.

Each of the volunteers chose stations to model which they had some sort of personal connection to (Kohl 2014\*). Stefan Kohl, for example, chose Alexanderplatz station because his father had formerly lived near to the station and would tell of previously using its U8 platforms while they remained out of reach during the city's division (Ibid). The physical complexity of Alexanderplatz station, where three working U-Bahn lines and an elevated S-Bahn interchanged, which might have increased with the planned U10 echoed its historical complexity for Kohl, where narratives of the divided city met his inherited memories and personal imagination of the U8 line to which he was denied access. This, he claimed was a place that he had always wanted to visualise as a model, and in many ways his decision to do so represented the delayed continuation of a process of discovering the city's western U-Bahn network that he had begun twenty

<sup>&</sup>lt;sup>170</sup>A practice widely referred to in German as 'Spurensuche' (see p.268 & 271).

years earlier, queuing for hours to board a train at Jannowitzbrücke U-Bahn station two days after the fall of the Wall (Ibid) (see Chapter Eight).

Early in December 2010 a total of fifteen models were brought together to form a 100 metre long installation on the disused platform of Schloßstraße U-Bahn station. The stations were connected by tunnels (not to scale) and punctuated by empty gaps representing those stations that had not been modelled (Figure 9.7). The individual models each mirrored the concerns and skills of their builders, and hence jointly created an installation that represented a collective endeavour and imagination of the U10 (Heilein 2011). They represented a mix of historical faithfulness and playful imagination. Whilst some of the builders, like Kohl, had chosen to painstakingly recreate perfectly scaled models of partially or never completed stations based on site visits, archive material and architectural plans, others took the opportunity to build stations that creatively communicated connections to their local surroundings (Ibid).

Built on a scale to accommodate commercially produced model trains and fixtures, the models often made implicit and explicit material references to the neighbourhoods to which they belonged, which triggered personal memories of and associations with former West and East Berlin (Heilein 2013\*). For example, they used common household materials including sections of the plastic flagpoles from miniature DDR flags, and East German stationery for the Weißensee station in reference to the nearby former Magistrate administrative buildings (Ibid). Another volunteer integrated widely recognisable yellow window stoppers into his model as tunnel arches in order to act as a mnemonic reference to the DDR-built prefabricated apartment blocks [Plattenbauten] in that area (Figure 9.8) (Ibid; Kohl 2014\*). The modellers of the West Berlin stations made similar material references to the stations' planned locality, sometimes hidden within models that corresponded more closely to existing plans (Heilein 2013\*). In the absence of such plans some used the stations' planned names as inspiration. For example, the builder of Kaisereiche<sup>171</sup> U-Bahn station made the platform out of wood and capped his model with a crowned-shaped panorama of photographs of the surrounding area.

Together the models reflected what Heilein's research had already revealed, namely that less information remained in the archives about the stations planned for East Berlin.

<sup>&</sup>lt;sup>171</sup>Which translates directly into English as Emperor Oak.

This in turn necessitated more imagination, not only during research phases when participants 'planned' and identified potential sites for the stations amidst the persisting 'wastelands' or planning relics of the contemporary land-use pattern, but also in the construction of the station models themselves (Ibid). While similar imaginative opportunities presented themselves for those stations in the West lacking adequate plans, and whilst certain stations in the East, notably Alexanderplatz, could faithfully be modelled, the general result was that most of the models of stations that would have served former East Berlin became realms of imagination while those of the stations that would have served former West Berlin more closely resembled realms of fact. Although not explicitly planned by Heilein, and whilst to an extent this outcome merely reflected the realities of Cold War transport planning and provision across the divided city, the installation's imaginative remembrance of a future that never came to pass had its greatest expression in East Berlin. Thus, a U-Bahn line whose connection to all others might have stood symbolically for the concept of unification was modelled, remembered and reconstructed as a unified whole only to the extent that deeper divisions and absences could be read in its fabric.

*Figure 9.7. The exhibition of Construction Time Again at Schloßstraße U-Bahn station. Source: Kirchhain (n.d.).* 

## *Figure 9.8.* DDR material memories embedded in the model of the planned U10 Greiswalder Straße station. Source: Kirchhain (n.d).

Each of these models is in itself a landscape representation, which in turn contributes to a larger assemblage that connects and mixes spatial memories and imaginaries. The model as landscape can be connected to landscape art's historical relationship with Renaissance theatre stage set design, the nineteenth-century development of dioramas and, through its reliance on three-dimensional representation, arguably to garden design and Land Art (Corsgrove 1998; Andrews 1999). Modelling, like cartography, is traditionally perceived as the language of planners and architects, the creators of an abstract Cartesian space. In using the medium of model building, a common pastime amongst many transport enthusiasts and one which many of the participants had already undertaken, Heilein's volunteers effectively reclaimed and personalised a formerly abstract spatial landscape.

The models of the unrealised and incomplete vestiges of the U10 are deeply personal to their creators, but more than this they symbolise a democratisation of spatial and mnemonic production. Abandoned and unfulfilled transport plans were resurrected and artistically co-opted. The public became not just artists but also imaginary architects and

planners. Kohl, for example, expressed how much he enjoyed the opportunity to follow in the footsteps of the U-Bahn's most famous architect, Alfred Grenander, while constructing Alexanderplatz U-Bahn station (Kohl 2014\*). Other model builders concretised and added meaning to abstract planning spaces in ways that questioned their perceived lack of meaning. As Heilein noted, the artistic process she initiated "revealed the 'lost' U10 as a space for memories and visions of urban policy and the unplanned opportunities within the discontinuous development of urban space" (2011). In turn, by revealing these new spatial knowledges, memories, and imaginaries and the creative possibilities they presented, *Construction Time Again* also revived the memory of a publically forgotten space by once again integrating it into the city's wider collective memory of the U-Bahn's landscape.

While Boden had fabricated an alternative past in the U10's vestiges and Heilein and her volunteers had both imaginatively and faithfully reconstructed its lost future, a further artistic endeavour pursued beneath London in the disused Aldwych station, introduced in the previous chapter, demonstrates an additional means by which subterranean places can act as a setting for the production of alternative and countermemories. Here Aldwych's underground location provided the setting for a piece of performance art that jumbled and connected disparate pasts whilst questioning the unidirectional representation of history. However, the history of the station itself played a relatively minor role in the performance. Although site-specific and place-based artistic practices are different (Till 2005), the distinctions between the two are far from clear cut, and while Heilein and Boden's projects can be described as place-based they can also be recognised as having entailed greater degrees of site-specificity than the artwork about to be discussed. As will be established, the art installation at Aldwych took less advantage of the creative mnemonic possibilities presented by the specific site of the Underground than of the underground in general.

#### 9.3 Mixing memory at Aldwych

The patronage of art in the Underground is today facilitated by TfL's specialist art programme, *Art on the Underground*, which until 2007 was known as *Platform for Art* (PfA) – itself established in 2000. This programme has used various TfL assets, including above-ground disused platforms, as the canvases for artworks commissioned from high profile artists (Dillon 2007). It boasts a community-focused approach and

provides art in the public realm, but by favouring selective high-profile commissions over artistic competitions and by prioritising TfL's brand over artistic freedom it contrasts strongly with the processes of artistic production fostered by the NGBK. Its art may appear underground but it does not necessarily come from below. In the immediate years surrounding PfA's creation, however, other art bodies outside of TfL's organisational structure took an interest in the artistic potential of the Underground, and in particular the disused Aldwych station. While most of these straightforwardly utilised the station's surface buildings as a traditional commercial exhibition and theatre space (BBC 2001; Clapp, 2001; Malvern 2003), one organisation, the London-based Artangel, differed in its attempt to unlock the artistic potential of the station's hidden places.

### 9.3.1. The Vertical Line

Artangel was founded in 1985 to facilitate, "commission and support new public art works in unusual locations" (van Noord 2003, 220). Since then, particularly after 1991, Artangel's projects have applied site-specific and place-based artistic approaches to offlimits spaces in which "the choice of location is never secondary" but instead "contributes actively to the meaning of the work" (Lingwood quoted in Ibid, 11). For Artangel projects, "the journey to and the discovery of the spaces" that they animate becomes "in itself an event or an experience" (Morris quoted in Ibid). Given the nature of Artangel's selected locations and the restrictions placed on artists who seek permanence for their works in public space, the artistic interventions that the organisation facilitates are often temporary in nature (Ibid). These visions and maintaining the creative freedom of its artists stand at the heart of Artangel's remit. Whilst the organisation maintains a balance of commitment to the public and its commissioned artists, the creative process lies firmly with the artists, who for the most part are selected (Ibid) and in this the organisation differs from NGBK.<sup>172</sup> Furthermore Artangel accepts that the multi-scaled, plural and overlapping public audiences to which it is answerable are mostly generated by the individual works and "often determined by where they take place" (Morris quoted in Ibid, 14).

In 1998, the Artangel directors took the art critic, novelist, painter and poet, John Berger, and actor, writer and director, Simon McBurney, to the disused Aldwych station and invited them to co-develop a temporary artistic concept for it as part of the *Inner City* 

<sup>&</sup>lt;sup>172</sup>In addition to its selective commissions Artangel irregularly runs open competitions.

series, which "encouraged writers and artists to excavate a range of urban environments and to contemplate the changing nature of the city and the counterpoint between narrative and place, between language and location"<sup>173</sup> (Figure 9.9). What Berger and McBurney came up with in response was a hybrid art-theatrical piece entitled *The Vertical Line*.

#### Figure 9.9. Berger and McBurney's first visit to Aldwych. Source: Artangel Archive.

Developed by Berger and McBurney in collaboration with the latter's theatre group, *Théàtre de Complicité* (now known and hereafter referred to as *Complicité*) and performed over the course of four evenings in early February 1999, *The Vertical Line* saw the pair along with the actress, Sandra Voe, guide groups of around thirty visitors on a journey of imagination through the disused station and a complex and at times idiosyncratic patchwork of historical events and geographic locations spanning 32,000 years and 3,500 kilometres from the present day to the Upper Palaeolithic and from London to Fayum in Egypt. The result for the attendees was a mnemonic experience

<sup>&</sup>lt;sup>173</sup> Artangel Archive, Inner City Series Flyer, 1999, 1.

communicated through archaeological and geological metaphors, which appealed to their consciousness of time, memory and loss. The experience occasionally drew inspiration from the station's own history, but mostly used the ambiguity of its subterranean setting to consider three further assemblages of times, places and events. These assemblages focused on the 1994 discovery of the Chauvet cave paintings in France; Egypt's first-century BC Fayum portraits; and the prehistoric Cauria menhirs of Corsica. Overall the performance involved five scenes, each of which was associated with particular spatial transitions and parts of Aldwych station. These assemblages and scenes were interwoven with representations of autobiographical memory, poetry, popular culture and historical radio broadcasts that were communicated through an array of performance and participatory acts and audio and visual projections.

In all the *Vertical Line*'s eclectic collage of fragmentally experienced mediated memories left many reviewers at a loss to explain an experience (see Taylor 1999) that, as will be established, relied so heavily on the notion of depth but at times felt dangerously shallow in its willingness to shift conceptual registers, times and places. One reviewer wrote,

"inconsistency makes *The Vertical Line* a tantalizing, unsatisfactory experience. At times, the audience is left to wander in the maze of its own associations...At others, the beautiful glimpses of this excursion are too overlaid by too many vatic words, and too much instruction is delivered in the language of an educational broadcast" (Clapp 1999, 10).

However, many of the reviewers failed to acknowledge the extent to which the true mnemonic meaning and intentions of *The Vertical Line* were only revealed by taking into account Berger and McBurney's other creative handlings of individual and social memory.

The experience started at ground level. On arrival the audience was greeted by a stack of television monitors in the ticket office screening clips from Berger's 1972 four-part television series, *Ways of Seeing* (Lawrence 2013\*). This series and its subsequent book publication (Berger 1972) represent major outcomes of Berger's long-term interest in the human reception and creation of images, as influenced by the works of Benjamin (2002 [1936]). However, this opening inter-textual reference was not always recognised by the audience and another reviewer stated, "We are confronted by a bombardment of banal images from satellite screens" and, thus, failed to grasp, or alternatively, perfectly

illustrated, the self-reflective argument of the work's first statement (Billington 1999, 14). In fact, beyond inter-textual references *The Vertical Line*, as its own "mediation about seeing and creating images" (Clapp 1999, 10), explicitly used the mnemonic power that Berger attributed to images and in particular, photographs. In his essay, *Uses of Photography* (1980), Berger positions a photograph not only as "a rendering, an imitation or an interpretation of its subject but actually a trace of it" (Ibid, 50) and in this mnemonic function distinguished photography from painting.

"All photographs are there to remind us of what we forget. In this – as in other ways – they are the opposite of paintings. Paintings record what the painter remembers. Because each one of us forgets different things, a photo more than a painting may change its meaning according to who is looking at it" (Berger 1991, 185).

Berger's sensitivity to the changing mnemonic meanings of photographs that are based on their context of consumption, and in turn their inherent ambiguity (see McQuire 2000), found expression in later elements of *The Vertical Line* that matched the mnemonic ambiguity of photographs to that of subterranean space.

From the station's entrance hall guides led the audience in silence by torchlight down to the subterranean platform-level, where their experience began in earnest (Clapp 1999). McBurney asks "Where are you?" and Berger answers "in a vertical line, we are thirty metres below London, in the abandoned Aldwych Underground station."<sup>174</sup> The audience is 'located' vertically. Voe refers to BBC's Bush House directly above and a montage of World Service transmissions begins, flowing backwards in time.<sup>175</sup> First, reports of the discovery of the Chauvet cave two and half months after Aldwych's closure; then Margaret Thatcher in Paris shortly before her resignation as Prime Minister; still in Paris the 1981 French presidential victory speech of Pierre Mauroy declaring the hour of socialism. Berger interrupts, "in a horizontal line, we are 734 yards from Holborn Underground station." The audience is 'located' horizontally. The news broadcasts continue with coverage of the Soviet Union's 1968 invasion of the Czechoslovak Socialist Republic, the 1956 Suez Crisis, Mahatma Ghandi's post-war Indian independence struggle and the German annexation of Poland prior to WWII. Berger again: "we are taking a vertical line through time." Then Corsican singing replaces the news broadcasts before the audience is told they have passed the Middle

<sup>&</sup>lt;sup>174</sup>Unless stated otherwise the quotations in this section come from Berger & McBurney (1999).

<sup>&</sup>lt;sup>175</sup>The BBC's World Service was transmitted from here between1941 and 2012.

Ages and are arriving in Egypt at the time of the New Testament. Thus *The Vertical Line*'s opening scene used audio techniques to 'locate' the audience both geographically and temporally within a universal and timeless underground space.

The audience is then directed to "look up" and lights illuminate the station's empty lift shafts. Here screens show Berger, McBurney, and Voe offering reflections on the temporal distortions of underground space and its connection to humanity and death. "We are among the human and among the dead." Their images give way to those of funerary portraits of first-century B.C. Fayum citizens funerary, whom Voe identifies as the Egyptian middle class and Berger humanises by recounting their names. The narrative surrounding the portraits is disrupted by an emotional personal account of a missing lover delivered by McBurney, itself interrupted by a subtext of mundane everyday details from Berger and the narration of Voe. The absent lover of McBurney's character is connected to Fayum's dead. The former's abandoned pot of honey echoing in the bees wax used in the pigments of the latter's portraits. McBurney's character has a copy of a Fayum portrait in his pocket, and the agelessness of the portraits of the dead and the memory of his lost lover become equated and their spatial and temporal absence questioned by their actual and cognitive representation. "She could walk through the kitchen door at any moment, a smear of honey on her upper lip."

Here Berger's views on the mnemonic ambiguity of photography that arises from its failure to preserve narration and meaning and the distinction between private and public photographs are discernible (1980; McQuire 2000). According to Berger the meaning of a private photograph can be interpreted within a context that is "continuous with that from which the camera removed it" and hence contributes to living memory (Berger 1980, 51-52). Public photographs, like those of the painted Fayum portraits, however, are severed "from all lived experience" so that if they "contribute to a memory, it is to the memory of an unknowable and total stranger" (Ibid). In other words, the latter "becomes a dead object which...lends itself to any arbitrary use" (Ibid, 56). Berger argues that the death of the photograph, its loss of meaning and the temporal discontinuity it represents can only be overcome by providing a new context for its interpretation – "a context of experience: a *narrative* context made through a variety of means which might include text, other images design and layout" – rather than attempting to reconstruct the context of its creation (McQuire 2000, 133-134).

The aesthetics and atmosphere of Aldwych, which echoed the contextual ambiguity and multiplicity of the imagery used in The Vertical Line, imagery that was mostly photographic in nature, albeit photographs of paintings twice or more removed from the context of their creation, provided an ideal setting in which to create a new context of experience. Thus The Vertical Line emphasised the photographic timelessness of the Fayum portraits, and in a later scene, the Chauvet cave paintings, while subtly playing on the fact that what the audience saw was photographic renderings of the artworks rather than the artworks themselves. In turn both are provided with a new context of experience that locates them ambiguously between private and public. This was achieved partly thanks to McBurney's autobiographical account of loss, which provided a new narrative context for the remembrance of the total strangers represented by the Fayum portraits. This new narrative, which, as will be highlighted, connected directly to another of McBurney and Complicité's theatrical projects, contributed to Berger's pursuit of an alternative photographic practice that incorporated "photography into social and political memory, instead of using it as a substitute which encourages the atrophy of any such memory" (Berger 1980, 58). The Vertical Line, thus provided a context for photographic images that respected what Berger views as the crucial laws of memory insofar as while photographs are usually used in uni-linear ways, memory functions radially, with multiple associations leading to and emerging from a single event (Ibid). The Vertical Line in turn created a new 'living context' that not only transcended the distinctions between private and public photography but also relocated the photographs it used in their 'narrated time' (Ibid, 57) so that dead objects were revived in a redemptive fashion at the centre of multiple memories.

"Memory implies a certain act of redemption. What is remembered has been saved from nothingness. What is forgotten has been abandoned. If all events are seen simultaneously, outside time, by a supernatural eye, the distinction between remembering and forgetting is transformed into an act of judgment, into a rendering of justice, whereby recognition is close to *being remembered* and condemnation is close to *being forgotten*" (Ibid, 54).

From the lift shafts of Fayum the audience is directed to the eastern platform, and moves toward the tunnel mouth in the direction of Holborn. They venture into the tunnel along the empty track bed. The tunnel's perspectival quality provides the opportunity for Berger to question the notion that perspective is a pictorial technique developed in the Renaissance – "it isn't…it comes from being thrown into open space at birth". The tunnel and its walls become womb-like and at the tunnel's end the audience

is aurally transported to the time when the station sheltered babies and adults alike. The sound of trains gently overlaps with and then gives way to a recording of the Entertainments National Service Association's (ENSA) live broadcast from the station in 1940 (Figure 9.10). The music of George Formby can be heard and the voice of ENSA's founder, Basil Dean's booms out:

"This is ENSA, underground, broadcasting its unfailing message of song and laughter to all those who are fighting the battle of freedom on sea and land in the air and yes especially to those who by their cheerful fortitude underground do their fair share..."

This was one of the few instances when *The Vertical Line* used a site-specific memory, and again the dominant mnemonic influence of the Blitz narrative and its associated 'spirit' was highlighted (see Chapter Seven & Eight). Yet *The Vertical Line*'s meditation on this moment quickly gave way to a consideration of the more abstract material memory associated with deep geological time. McBurney recounts the life-cycle of a stone given to him by a friend which is now 450 million years old and Voe references the subjective nature of temporal distinctions – "after a couple of millennia, five hundred years is the mere difference between yesterday and the day before."

# **Figure 9.10.** The ENSA concert given at Aldwych 0n 9<sup>th</sup> October 1940. Source: The Telegraph (2010).

The audience returns to the platform and the fourth scene begins. They are instructed to lie on the mattresses that cover the platform, their heads close to or overhanging the

platform edge. This final reference to the Blitz encourages in the audience embodied memories of wartime sheltering. They look up at the curved tunnel wall and ceiling to watch projections of changing cloud formations. Berger introduces the anthropomorphic prehistoric menhirs of Corsica, thus reconciling geological and human forms of time and memory. First stones, like the gift McBurney received from his friend, become human through the actions of the menhir's carvers, and then humans become stone when the audience is instructed to stand and imagine themselves as menhirs buffeted by the wind and waiting to be touched. As with the whole experience more generally, this activity facilitates further reflection on human mortality – "the dead in the menhir stand in front of the living to keep them company."

The Vertical Line's use of the human body as a mnemonic medium in this scene reflected the influence of physical theatre on McBurney's work along with a series of nascent ideas that the producer would realise more fully with *Complicité* in the play, Mnemonic, which premiered in London six months later to much critical acclaim (Reinelt 2000). Like most of Complicité's other productions, it placed emphasis on physical as well as visual techniques and used modern technologies and audience complicity to integrate text, music, image and action (Reinelt 2001). Like the Vertical Line, it used intervoven narratives that played out across each other's spaces (Ibid). McBurney described these narratives in terms of collision "between the living and the dead", whereby "one tiny fragment will set off another" and "one element of one story will collide with its opposite. In much the same way as we might reassemble a memory from the past or fashion a hope for the future" (1999, iix). Mnemonic's main narratives, the 1991 discovery of a perfectly preserved 5,000 year-old Iceman in the Austrian Alps, and a young woman's journey across Europe while her boyfriend remains in London recounting his memories of their last meeting, echo those of The Vertical Line. The discovery of the Iceman replaces that of the Chauvet caves, which formed the centrepiece of *The Vertical Line*'s final scene while the deserted boyfriend's dialogue of loss continues directly across both performances with his character almost certainly being played by McBurney during the Fayum portraits scene (p.305).

Both *the Vertical Line* and *Mnemonic* demonstrated the centrality of the human body and the idea of common human connections. For the latter, McBurney's body and objects including a chair, link the play's narrative through various shifting roles that contribute to the instantaneous dissolution and reformation of place and times (Reinelt 2001). This contributes to one of the central ideas of the piece, namely that "humans carry pasts" within their bodies, in their brains, postures, and nakedness (Ibid, 375). These ideas can be traced in *The Vertical Line* when the audience is encouraged to mimic the actions of prehistoric menhirs and WWII shelterers, thereby reviving the embodied memories of the recent and distant past. In this particular scene *The Vertical Line* represented a hybrid artistic experience that came from below, not just in a spatial sense but also in corporeal terms, thanks to McBurney and *Complicité's* theatrical imagination, which "seems to spring from the ground up, or – perhaps more accurately – up from the grounded body" (Rehm quoted in Ibid, 374).

*The Vertical Line*'s final scene took place in the incomplete and never used exit passageway, which is usually off-limits even during public tours.<sup>176</sup> Its roughly hewn and restricted nature made it the perfect location to ask the audience to imagine their presence at the discovery of the Chauvet cave paintings in 1994. "We are not underground any more, we are inside, inside a body of limestone whose innards glisten." Like the Fayum portraits, the cave paintings are framed as timeless. McBurney quotes one of the speleologists who discovered the paintings:

"It was as if time had been abolished, as if the tens of thousands of years of separation no longer existed, and we were not alone, the painters were here too. We could feel their presence. We were disturbing them."

In a last treatise Berger turns the audience's attention to the paintings themselves, the animals that "emerge through the rock to be with the painting hand" and frames the earliest memories of man in proximity to an animalistic experience and appreciation of time that replaced the notion of memories of the past with a consistent unchanging present associated with a lack of consciousness. Thereafter the audience's mnemonic experience is ended abruptly, in keeping with the pattern established by the fragmentary shifts between its five scenes, and the recurrent cross references to their individual times and places. Berger closes the performance with a quote from the seventeenth-century French philosopher, Blaise Pascal.

"We never keep to the present. We recall the past; we anticipate the future as if we found it too slow in coming and were trying to hurry it up, or we recall the past as if to stay its too rapid flight. We are so unwise that we wander about in times that are not ours and blindly flee the only one that is. The fact is that the present usually hurts..."

<sup>&</sup>lt;sup>176</sup>AFN: 27 November 2011.

Although *The Vertical Line* featured multiple space-times, Berger placed most emphasis on the subject of its final scene when he summarised his and McBurney's intentions as an attempt to "connect two places – the Aldwych and the Chauvet caves. Both of them are inaccessible, and we use one place to evoke the other, and create a track between the two using sound and light" (quoted in Gardner 1999, 13). McBurney meanwhile, as he later did for *Mnemonic*, stressed *The Vertical Line*'s crude and unfinished nature (Ibid). At the same time both pieces were heavily influenced by McBurney's personal memories of his father's career as an archaeologist (1999; 2003).

"...when I hear of new archaeological discoveries...they not only exert the shock of the new, but also a feeling of recognition. They stimulate my sense of memory. But not merely a personal memory of my father whose stories are embedded in my childhood. Rather a sense of strange familiarity with the very ancient" (McBurney 1999, iix).

Thus, overall, *The Vertical Line* used Aldwych's ambiguous underground to present events, linked through their connection to buried archaeological and geological space and time as well as to the human processes that subsequently brought them to light, outside time. Events that were presented to and seen near-instantaneously by the supernatural eye of the audience predicated upon Berger and McBurney's visual and corporeal judgements of memory, which encouraged the audience to experience a wide spectrum of remembrances.

### 9.4 Conclusion

In this chapter I have used three examples where the disused subterranean vestiges and places of the U-Bahn and Underground's landscapes have been recruited as inspirations and settings for the provision of alternative artistic forms of social memory. The excavation of these examples has shown how public art organisations and their artists are uniquely positioned in being able to both negotiate physical access to these sites and in having the creative skills to unlock these sites' potential as locations that can host mnemonic experiences which influence or disrupt established historical narratives in imaginative ways.

Boden, Heilein and her volunteers, Berger and McBurney can all be cast as 'memory artists' (Assmann 2011). Their works have used the ambiguous 'forgotten' places of the U-Bahn and Underground to create experiences of truly counter, imaginative and fictional memories, to connect memory of unrealised futures to established historical and political narratives, and to present a collage of different pasts and places. The possibility of achieving these creative goals I argue is intimately linked to these artists' chosen settings. Subterranean unfinished and derelict places provide ambiguous geographical and chronological settings replete with uncanny affordances. The timelessness and spacelessness of underground places allows mnemonic artists to create productions that can benefit from place-based narratives, and at the same time use their subterranean settings as windows into the abstract underworlds of any moment and place.

While touristic and heritage uses of these places in both London and Berlin have come to rely predominantly on the prescriptive narratives provided by established historical events (e.g. WWII, the Blitz and divided Berlin) their use as the setting for artistic mnemonic experiences provides a means to downplay, divert or subvert such narratives. The subjective counter-memories of urban explorers, photographers and enthusiasts who seek an engagement with these places outside the confines of the tourism and heritage industry, remain partially ungraspable and collective only insofar as they face common regulation. Artistic interventions like *The Kronos Project, Construction Time Again*, and *The Vertical Line* meanwhile provide a means to observe alternative, imaginative and creative forms of social memory production. Whilst these artworks must also respond to limitations and regulations associated with the networked nature of the places that they engage with, they still arguably allow for far greater degrees of audience complicity in the production of creative counter-memories, interpretations and experiences than many of their alternatives.

Whether these imaginative cultural events will be as achievable in the future as they have been in the past, however, is questionable in both Berlin and London. In Berlin, NGBK's activities have returned once again to the poster-art format that uses the network's disused advertising hoardings rather than its disused spaces, and which many believe do not fully unlock the artistic potential of the U-Bahn. In addition some of the U10's vestiges will become even less accessible when BVG's renovation of the U9 Line commences in 2015, although this might arguably lead to the construction of new disused underground places and vestiges. In London, Aldwych was used as recently as May 2013 by the Contemporary London Orchestra to provide an immersive performance as part of its *Imagined Occasions* programme, but not without practical restrictions that included all visitors being accompanied and directed around the station

at all times (Clements 2013). A few months later an immersive historical experience planned by the LTM "to re-imagine the 150-year history of the London Underground" at Aldwych as part of the Underground's sesquicentennial celebrations was cancelled because of unforeseen technical restrictions (London Evening Standard 2013). Thus the U-Bahn and Underground's hidden vestiges are not just embedded physically in their surrounding networks but are also subject to the increasingly strict regulatory networks provided by legislative and policy structures, which might ultimately also hinder future possibilities to unlock these places' mnemonic potential in imaginative ways through artistic projects.

### **Chapter Ten**

# Conclusions: Excavating Buried Memories beneath London, Berlin and Beyond

This thesis set out to explore mnemonic production in the railways under London and Berlin through a comparative landscape approach. In turn it aimed to identify the actors, processes and structures involved in the production of social memory in the Underground, U- and S-Bahn in order to understand the discourses that shape mnemonic production and its particularities within their subterranean transport landscapes. These aims and objectives have been achieved through a series of empirical excavations, focused on various networked and buried memories, carried out during the six preceding empirical chapters.

These chapters explored the production of social memory across and between the representational, material and experiential layers of the Underground, U- and S-Bahn's subterranean landscapes. Chapters Four and Five revealed how social memories have come to be encoded in each network's dominant representations, namely the images and texts of the Underground diagram and U- and S-Bahn route-plan. Chapters Six and Seven addressed each network's negative and traumatic pasts and the extent to which they have or have not been memorialised, and Chapters Eight and Nine highlighted how mnemonic experiences of each transport network's ruins and vestiges have been restricted and facilitated in various ways. Collectively these chapters have chronicled a range of mnemonic actors, processes and structures, both historic and contemporary, whose interplay over the last eighty years has influenced the production of social memory in the Underground, U- and S-Bahn. In this way they addressed the thesis' main research questions, which were:

- What actors, processes and structures are involved in the production of social memory in the Underground and U- and S-Bahn?
- What discourses influence mnemonic production in the Underground and U- and S-Bahn, which are shared singular processes that are contextually mediated and which can be considered contextually unique?

• What is the significance and influence of these landscapes' subterranean transport contexts for the production of social memory?

The specific cases I have analysed have each demonstrated that in many ways the production of memory in these subterranean transport landscapes echoes the more general issues and concerns of mnemonic production, thereby reflecting the memory politics and discourses of their wider municipal and national contexts, and in turn being influenced by many of the factors that shape the production of memory at each city's surface. At the same time, however, they have revealed the influence of a number of actors, processes, structures and discourses that are distinctive to, or, that have specific consequences for memory production in the railways beneath London and Berlin. The consideration of these particularities represents this thesis' main empirical contribution, which can, in turn, be acknowledged to have wider implications for the field of memory studies and the socio-cultural investigation of underground infrastructural space.

Traditionally, social memory research has tended to foreground state-led memory production and the power of political actors (Hoelscher & Alderman 2004). In reaction to this bias, recent memory work has often turned to focus instead on the role of nonstate actors, including grassroots activists and artists (see Cook & van Riemsdijk 2014). Indeed, each of these groups of actors, which are commonly perceived to come into recurrent conflict over issues of social memory, has also been influential in the production of memory in the Underground, U- and S-Bahn (Chapters Four, Six and Nine). In addition, my research has revealed the mnemonic influence of a further category of non-state actor: enthusiasts, and in particular those concerned with railways and underground space, in ways that connect to the growing research agendas of the 'geographies of enthusiasm' (see Craggs et al 2013; Geoghegan 2013). Whether represented by the members of BUe.V. or ABUe.V. in Berlin (Chapters Seven, Eight and Nine), Sub-Brit and LURS in London (Chapter Nine) or individuals without affiliations like Geoff Marshall (Chapter Four) or Stefan Kohl (Chapter Nine), this thesis has shown how enthusiasts have intentionally and non-intentionally contributed to the production of social memory in the Underground, U- and S-Bahn. It is, however, the mnemonic influence of the seemingly mundane actors lying between the perceived dichotomy of state and non-state actors that has been most foregrounded in my empirical excavations.

The transport authorities of both cities have juggled and deliberated mnemonic demands projected from both above and below so as to act as intermediaries between the governments and the publics to whom they are answerable in different ways. Throughout the last eighty years they have responded to the contextually unique and prevalent politics of the past witnessed in Britain and Germany, to the extent that 'official' social memories have flowed down through state apparatuses and institutions to accrue underground. At the same time London and Berlin's transport authorities have been forced to respond to a varied array of more localised 'counter' and 'alternative' memories attached to parts of their networks by a diverse range of non-state actors, including those discussed above. In emphasising the influence of these 'mundane intermediaries', this thesis reflects a growing academic sensitivity to the role of 'middling' actors (see Larner & Laurie 2010).

This thesis has shown that the production of social memory in the Underground, U- and S-Bahn, regardless of its official status and irrespective of whether it is pursued by state or non-state actors, is perceived by each transport authority to primarily represent a potential disruption to their primary functional and commercial remits. Thus, in the past and until relatively recently, London and Berlin's transport authorities have, for the most part, approached their buried memories in ways that, if not intentionally then at least implicitly, served to keep them just that: buried. However, a growing general public sensitivity to the issues surrounding social memory has changed this and the transport authorities in both cities have found it increasingly necessary to operationalise some of the memories that they previously avoided. In general and to date, TfL and LUL have engaged more in the operationalisation of social memory than their counterparts in Berlin. This is illustrated by the formers' institutionalised heritage management provisions and recent 150<sup>th</sup> anniversary celebrations, and is most prominently evidenced with respect to their previously buried memories of traumatic WWII pasts (Chapter Seven). This is not to say that Berlin's transport authorities have not also been sporadically involved in processes of memory production or in the uncovering of buried memories, and recently BVG, in particular, has been increasingly called upon to act as a mnemonic intermediary by both municipal governments and grassroots actors (Chapters Six and Seven).

In fact, during the last four years, it became increasingly evident that I was not the only individual excavating the Underground, U- and S-Bahn's buried memories. During the

course of my research numerous individual and grassroots actors with diverse characteristics and motivations have maintained and uncovered buried memories in ways that have disrupted each transport network's operation. These processes of disruption have necessitated that transport authorities pursue greater efforts to operationalise certain social memories, with the result that some of those that might have been considered 'buried' when the research for this thesis commenced are no longer so today. In London, for example, the memory of the Moorgate Tube crash has undergone a complete reversal in mnemonic fortunes, from remaining un-memorialised for nearly forty years to receiving two separate memorials in rapid succession in late 2013 and early 2014 (Chapter Seven). Within a more popular cultural register, in recent years there has also been an explosion of interest surrounding the Underground's disused stations and their mnemonic potential (Chapter Eight). These places have never before enjoyed such a position in the city's collective memory and are now slowly being integrated into London's official heritages and memories, just as Berlin's Cold War ghost-stations were during the late 2000s (Chapter Eight). Meanwhile in Berlin, the signs of BVG's increasing willingness to engage with its negative Nazi past testifies to the likelihood that future processes may well bring additional buried memories to the surface (Chapter Seven).

Mnemonic processes involving disruption and operationalisation therefore connect with wider societal procedures of remembering and forgetting, in ways that provide more nuanced insights as to how transitions in the status of social memories are brought about, partly by implicit and mundane processes. Based on the examples provided by London and Berlin it becomes evident that transport authorities lend expediency to those social memories and approaches to the past that neither physically nor psychologically hinder their transport networks' principal function to convey passengers quickly and safely across the city nor erode their public profile or limit their commercial imperatives by causing negative publicity. As such they have tried to restrict, control or minimise those forms of social memory that might potentially hinder their operations. Countermappings and counter-namings have been controlled (Chapters Four and Five); the memorialisation of traumatic events resisted, spatially displaced, sanitised, or omitted altogether (Chapters Six and Seven); and the physical and imaginative access of 'forgotten' spaces restricted or standardised (Chapters Eight and Nine). The operationalisation of social memory in such ways has thus both contributed to and

reflected the recent mnemonic transition of particular events, places and performances within these landscapes that further validate the attention that this thesis has paid to memory production in Underground, U- and S-Bahn.

The contestation over memory in these landscapes as indexed by the processes of disruption and operationalisation has been structured by each transport network's changing broader political and cultural contexts, and more specifically by the bureaucratic and physical characteristics of subterranean railway networks. The revelation of buried memories and the production of social memory is, in this context, literally and metaphorically networked – determined and enabled or restricted by a web of tangible and intangible structures. This is perhaps most clear in reference to what I have called 'networked ruins' - derelict places whose mnemonic potential is heavily determined by the fact that they lie within still functioning transport systems (Chapters Eight and Nine). In turn, the railways under London and Berlin have reflected wider changes in the memory politics and the individual political and cultural frameworks for understanding the pasts of their respective cities. Beyond these wider structuring factors, the preceding chapters have also collectively highlighted the influence of the ambiguity of the Underground, U- and S-Bahn's status as both public and private space for mnemonic production. For many of those who use them these infrastructural landscapes represent public space and a legitimate realm in which to pursue practices and processes of mnemonic production. The transport authorities that are officially responsible for them, however, often approach the same spaces as private when it comes to them asserting their control over questions of social memory. This thesis' investigation of memory production in what some have called "a unique public space" (Ocejo & Tonnelat 2013, 2) therefore has inadvertently provided an additional route of inquiry into underground railways' blurred public-private status that moves beyond observing or reconstructing passenger behaviour and interaction in the space of the train carriage (see Dennis 2008; Bissell 2010; Tonnelat 2010; Ocejo & Tonnelat 2013).

The depth of the misconceptions that surround subterranean railways' blurred private and public status differs between London and Berlin and is, in part, no doubt caused by each network's differing degree of accessibility and, in turn, publicness. At the root of this, in many ways, are the two networks' differing degrees of verticality, both physical and social. From a security and safety perspective control of access is far more pressing in London's deep-level network than in Berlin's shallower system, which may partly explain why the time-based ticketing system of the latter allows greater degrees of physical access than the former's gated network. In London, some of the practices that have attempted to claim public ownership over the landscape of the Underground and reframe it as a place for the production of memory are considered illegal, with, for example, map hacking representing an infringement of TfL's copyright (Chapter Four) and urban exploration outlawed as trespassing (Chapter Eight). Meanwhile requests for memorials in the Underground are regularly deflected to the more public parts of the network - in other words parts that are spatially isolated from the depths of the platforms such as the exteriors of street level buildings or occasionally sub-surface ticket halls, but rarely within the threshold of the ticket barriers (Chapter Seven). In Berlin, meanwhile, the system's greater degree of publicness, as reflected by the homeless people who shelter on the platforms during winter, has provided a basis from which to mount successful mnemonic claims to the landscape. The network continues to have its stations temporarily renamed for mnemonic objectives (Chapter Five). A group of activists doggedly pursued annual memorial vigils and installed successive 'illegal' memorial plaques until their claims were accepted by BVG and operationalised (Chapter Six). An enthusiast society took advantage of the indeterminacy of reunification to successfully lay claim to the network's ruins and vestiges (Chapter Eight).

Social memory in the Underground, U- and S-Bahn has been shaped by contextually unique cultural discourses connected most obviously to each city's differing experience of WWII and the Cold War. Thus in London the Underground's previous use as a place of wartime sheltering acts as a dominant mnemonic lens, whereas in Berlin the WWII period of the U- and S-Bahn's history is occluded by a focus on the network's Cold War division. Although historically unique to each city these discourses can still be recognised as resonating with the wider cultural tropes that have dichotomously framed subterranean space in general, as a space of either shelter or threat (Pike 2005; Williams 2008[1990], Welsh 2010). These tropes also resonate with the additional discourses that relate to the regularisation and securitisation of urban environments, and specifically subterranean spaces (Elden 2013a; 2013b; Adey 2013; Bridge 2013), which have also been shown to influence the production of memory in the railways under London and Berlin. The responsibility of transport authorities like TfL and BVG for their passengers' safety and security have seen these discourses repeatedly mobilised within the confines

of land use and ownership structures, in opposition to the tactics employed by actors hoping to bring about mnemonic transitions within their landscapes. This thesis' discussion of the impact of such discourses on questions of social memory provides one response to the recent call to pay attention to different "social and cultural registers" in order to illuminate new narratives about the securitisation of urban underground infrastructural spaces, and how such spaces are inhabited (Adey 2013).

These discourses reveal the transport authorities' fears related to the grassroots construction of place beneath the city's surface, and emphasise the implications of their networks' subterranean status for processes of social memory production. There is a perceived necessity to regulate, rationalise and domesticate underground space in order to banish its threatening connotations and to ensure passenger safety and security. Unauthorised or alternative pasts in such a context present potential threats and disruptions to these concerns. They and their constituent social memories abrade with the state-of-the art network necessary to ensure optimal levels of security and safety. The fact that in the past even official heritage procedures have faced restrictions because of such concerns, as was the case in London following the King's Cross fire (Chapters Three and Seven), demonstrates the influence of these discourses. Such discourses have been more explicitly mobilised in London, where a greater number of historical instances of operational accidents and terrorist attacks reinforce their significance. Memorials have been resisted or operationalised in line with safety concerns, and in recognition that they might disrupt passenger flows or cause unnecessary psychological unease (Chapter Seven). Access to disused stations has been regularised and restricted out of fears of further security breaches (Chapter Eight). Even the Underground diagram's production and distribution has been controlled – if not due to a direct concern for safety and security, then at least in order to ensure the efficient and regulated flow of passengers (Chapter Four; see Hornsey 2012) in order to minimise potential threats to safety such as overcrowding or congestion. In Berlin such discourses are perhaps less evident but they have still influenced the production of memory underground, as evidenced by the BVG's fear that annual memorial vigils held in one of their subterranean stations presented a significant fire risk along with the recent decision not to renew a lease to allow tourist visits to one of its ruinous ghoststations (Chapters Six and Eight).

Overall my attention to these mnemonic actors (e.g. enthusiasts and transport authorities), processes (e.g. disruption and operationalisation), structures (e.g. prevalent memory politics and the ambiguous public status of the spaces of underground railways) and discourses (e.g. the cultural dichotomies of subterranean space and securitisation, health and safety), amongst others, has yielded empirical contributions that have extended the cultural historical and geographical study of urban underground railways by conveying how the Underground, U- and S-Bahn's subterranean transport context has influenced the production of social memory.

In addition, this thesis has contributed to two main theoretical agendas. Firstly, by attending to the social memories of and not just in landscape, it has endeavoured to add to the ongoing regeographicalisation of memory (Till 2005; Legg 2007) in ways that emphasise the potential to identify exceptional social memories in the representational, material and experiential landscapes of the everyday. In turn I have demonstrated that these quotidian contexts are credible fields in which to study the production of memory, and that they have the capability of yielding not only new empirical material but also theoretical and methodological perspectives that can have implications beyond London and Berlin - for the study of not just social memory but also underground and infrastructural space. For example, an academic attention to the mundane intermediaries whose responsibilities as quasi-public organisations influence the production of social memory should arguably be applied more consistently by those researching social memory. This would help mitigate, in a nuanced way, an overemphasis on purely stateled processes of mnemonic production, and would avoid a repercussive overemphasis on civil society by making analytical space for those actors positioned in between. Such a focus could help to foreground other mundane and commonly under-analysed mnemonic actors, including, for example, the multi-national companies, who are increasingly being called upon or judging it necessary to engage publically with their organisational histories.

Secondly, by applying these perspectives to underground railways this, thesis has contributed to the continued re-conceptualisation of the nexus between infrastructure and landscape (see Gandy 2011) by emphasising how these spaces are inhabited on a day-to-day basis, beyond their straightforward use as a means of travel. Issues of social memory are yet to be fully explored in infrastructural settings, including those subterranean examples that are currently experiencing a cultural renaissance and being

foregrounded afresh by new research agendas dedicated to volumetric and vertical geographies (see Elden 2013a; 2013b; Adey 2013; Bridge; 2013b; Graham & Hewitt 2013; Harris 2011; forthcoming). This thesis therefore indicates that social memory research can take further advantage of these new academic impulses in the future by providing new cultural lenses through which to attend to the "everyday worlds of urban verticality" (Harris forthcoming, n.p.). In turn it provides a starting point from which to explore some of the wider questions associated with geographical memory studies within the city's taken-for-granted landscapes, and in particular those beneath its surface.

However, the application of these perspectives beyond London and Berlin will not necessarily always yield results and insights consistent with those presented here. Therefore the empirical research offered by this thesis is limited in its specificity, both in terms of its general focus on London and Berlin and its particular attention to subterranean railways. A comparative approach served to minimise these weaknesses by holding two case studies in tension with one another in order to explore their individuality, and to emphasise the unique factors at play when social memory is produced in the railways under London and Berlin, but did not seek to present a generalised theory for mnemonic production in these landscapes. While this thesis' specificity can be recognised as an unavoidable by-product of the Underground, U- and S-Bahn's distinct social, economic and cultural histories, whose full appreciation necessarily acts as a cornerstone of successful social memory studies, the research presented here has simultaneously revealed common discourses and concerns that have been contextually mediated in both cities, such as the influence of security and safety regimes. The investigation of these factors would benefit from the analysis of a broader range of case studies, which might have been possible had it not been for the imposed timeframe of doctoral research. Time constraints also meant it was not possible to study all the forms of social memory evident in the Underground, U- and S-Bahn that might have supplemented this thesis' overall analysis. For example, the plan to explore forms of habitual memory and cultural behaviour mediated by each transport networks' technological and regulatory regimes had to be abandoned when partly investigated, when it became evident that sufficient consideration would not be possible within the expected duration of the doctoral research and within the associated resources. Other scholars have subsequently vindicated the academic value of this particular area of research (see Hornsey 2013) and it remains one of my ongoing research interests (see Merrill 2014c). In addition, particular sub-cases were omitted from this thesis' analysis because of a lack of space and because they were felt to weaken its overall cohesiveness. Most notably, in this respect, was the removal of an extended discussion of the renewed campaign to memorialise the 1943 WWII Bethnal Green Tube shelter disaster, in which 173 people died. Material relating to this sub-case was, however presented at two international conferences and will contribute to a future book contribution (Merrill 2011b; 2012b; forthcoming).

As the omissions necessitated by a lack of space and time suggest, there are significant opportunities for future research in areas directly related to this thesis. In addition to the continued analysis of new case studies and ongoing mnemonic work related to each of this thesis' empirical chapters, there is a wide array of urban infrastructural networks, subterranean or otherwise, across the globe whose further cultural understanding may benefit from the application of the social memories of landscape approach. The increasing contemporary interest in the reuse and reimaging of underground urban places and landscapes as sites of cultural and heritage experiences, as alluded to in Chapters Eight and Nine, represents one particularly fertile area for further research. It would, for example, be interesting to continue to investigate how these sites' ongoing and increasing exposure to the realities and practicalities of the tourist and heritage industries, as well as urban planning policies and schemes, affect the very qualities that initially ignited their popular appeal, namely their mnemonic, experiential and imaginative potential. Another productive line of enquiry would be to consider in a more concerted manner how an analysis of the production of social memory in these contexts might shed further light on the degree to which the infrastructure of public transport constitutes public or private space as framed, for example, by the hybrid, blurred and fluid notions of the public-private dichotomy that are promulgated by certain scholars in mobility studies (see Sheller & Urry 2003; Sheller 2004). I have resisted the temptation to engage explicitly with this theoretical literature in this thesis in order not to obfuscate the already wide array of disciplinary approaches that my research connects with, but this established area of study, like those emerging agendas mentioned above, provides further and continuing debates to which my empirical investigations might usefully be reapplied. The pursuit of these lines of investigation and others, along with, no doubt, the efforts of a range of future mnemonic actors, the

processes that they set in motion, the structures within which they operate and the discourses to which they respond, will all likely result in the greater exposure of additional buried memories and stronger understandings of mnemonic production in the railways and infrastructural landscapes beneath London, Berlin and beyond. I hope that I am able to contribute personally to these future research agendas, and that this thesis provides useful methodological approaches, theoretical insights, empirical examples and critical analyses that will contribute to their ongoing investigation.

Signed newspaper articles are referenced by author's name and unsigned articles by the title of the periodical. Interviews (\*) are listed separately beneath the main bibliography.

### A

Abrams, F.S., 1990, International Public Transport Aesthetics, *Public Transport International*, 2, pp. 188-199.

Abramsohn, J. and Bowen, K., 2011, "You only notice design when it's bad," typeface guru Spiekermann says, *Deutsche Welle*, [Online] Available from: http://www.dw.de/you-only-notice-design-when-its-bad-typeface-guru-spiekermann-says/a-15061408-1 [Last accessed 3 Jun 2014].

ABUe.V. (= Arbeitsgemeinschaft Berliner U-Bahn Eingetragener Verein), 2014, *Vereinsgeschichte*, [Online] Available from: http://www.ag-berliner-u-bahn.de/index.php/verein/geschichte [Last accessed 26 Feb 2014].

Adey, P., 2013, Securing the volume/volumen: Comments on Stuart Elden's Plenary paper 'Secure the volume', *Political Geography*, 34, pp. 52-54.

Adorno, T.W., 1998[1959], The Meaning of Working Through the Past, in Adorno, T.W., *Critical Models: Interventions and Catchwords*, New York: Columbia University Press [Trans. Pickford, H.W.].

Alarcon-Diaz, X., 2007. An Interactive Sonic Environment Derived from Commuters' Memories of the Soundscape: A Case Study of the London Underground, [Unpublished Doctoral Thesis], Leicester: De Montfort University.

Allen, G., 1993, Map on show after years underground, *Barnet Advertiser*, Thursday 14 October 1993, p.5.

Amberger, J., 2012, Bloß kein stilles Gedenken, *Die Tageszeitung*, TAZ Berlin Lokal, Monday 24 April 2012, p.22.

Amin, A. and Thrift, N., 2007, Cultural-economy and cities, *Progress in Human Geography*, 31(2), pp.143-161.

Anderson, B., 1991, Imagined Communities [Revised Edition], London: Verso.

Anderson, E., 2009, Introduction [to a special double issue entitled Urban Ethnography: Its Traditions And Its Future], *Ethnography*, 10(4), pp.371-374.

Anderson, J. H., 1995, The Neo-Nazi Menace in Germany, *Studies in Conflict and Terrorism*, 18(1), pp. 39-46.

Andersson J., 2013, Variations of an archetypal scene: the Paris Métro confrontation in Michael Haneke's Code Unknown, *Environment and Planning D: Society and Space*, 31(4), pp. 693-707.

Anderson, K., and Smith, S., 2001, Editorial: emotional geographies, *Transactions of the Institute of British Geographers*, 26, pp.7-10.

Anderson, L., 2006, Analytic Autoethnography, *Journal of Contemporary Ethnography*, 35(4), pp. 373-395.

Andrews, M., 1999, Landscape and Western Art, Oxford: Oxford University Press.

[Der] Angriff, 1935, Der Führer ehrt die Toten, Friday 30 August 1935, p.1.

Ansley, J., 2004, Pioneers of Modern Graphic Design, Hong Kong: Octopus Publishing.

Antliff, M., 2002, Fascism, Modernism, and Modernity, *The Art Bulletin*, 84(1), pp. 148-169.

Araoz, G., 2011. Preserving heritage places under a new paradigm, *Journal of Cultural Heritage Management and Sustainable Development* 1(1), pp. 55-60.

Aridjis, C., 2009, Book of Clouds, New York: Black Cat.

Arnold, D. and Körner, A., 1996, *Die "Blinden Tunnel" Berlins: Erfassung bedingt genutzter, brachliegender oder aufgegebener unterirdischer Verkehrsanlagen in Berlin (1984-1996). Ergebnisbericht.* [Unpublished Report for BMW-AG Berlin], Berlin: Arnold and Körner GbR.

Arnold, D., Arnold, I. and Salm, F., 1997, *Dunkle Welten: Bunker, Tunnel und Gewölb unter Berlin*, Berlin: Ch. Links Verlag.

ARUP, Carmody Groarke, Colving and Moggridge Landscape Architects and Rider Levett Bucknall, 2008, *7th July Memorial, Hyde Park, London Design Statement*, Ref No. 08/06655/FULL, [Online] Available from http://idoxpa.westminster.gov.uk/online-applications/ [Last accessed 22 Aug 2011].

Ashford, D., 2007, Children Asleep in the Underground: The Tube Shelters of Brandt and Moore, *The Cambridge Quarterly*, 36(4), pp.295-316.

Ashford, D., 2008, The Ghost in the Machine, *The Literary London Journal*, 6 (2), [Online] Available from: http://www.literarylondon.org/london-journal/september2008/ashford.html [Last accessed 1 Oct 2010].

Ashford, D., 2010, Blueprints for Babylon: Modernist Mapping of the London Underground 1913-1939, *Modernism/modernity*, 17(4), pp.735-764.

Ashford, D., 2013, *London Underground: A Cultural Geography*, Liverpool: Liverpool University Press.

Ashworth, M., 2008, Design and Heritage Management in London Underground, in Haspel, J., Petzet, M., and Schmückle-Mollard, C., (eds.), *World Heritage Sites of the 20<sup>th</sup> Century: Gaps and Risk from a European Point of View*, Petersberg: Michael Imhof Verlag, pp. 117-121.

Asmuth, G., 2006, Gefährlich unsensibel, *Die Tageszeitung*, TAZ Berlin Lokal, Monday 27 November 2006, p.21.

Assig, M., 2013, Nachweis von Bauwerksbewegungen: U-Bahnofrohbau Oranienplatz/ Dresdener Straße, *Schattenwelt – Magazin des Berliner Unterwelten e.V.*, 2013(4), pp.3-9.

Assmann, A., 2011, *Cultural Memory and Western Civilization: Functions, Media, Archives*, Cambridge: Cambridge University Press.

Assmann, J., 2006, *Religion and Cultural Memory: Ten Studies*, [Trans. Livingstone, R.], Stanford: Stanford University Press.

Assmann, J. and Czaplicka, J., 1995, Collective Memory and Cultural Identity, *New German Critique*, 102(5), pp.1386-1403.

Associated Press, 1988, Two Victims Buried Nearly A Year After Subway Fire, 11 November 1988, [Online] Available from: www.apnewsarchive.com/1988/Two-Victims-Buried-Nearly-A-Year-After-Subway-Fire/id-0b87e126bb4a4c58d79986ffa6337fde [Last accessed 14 Apr 2014].

Association of Social Anthropologists of the UK and Commonwealth, 2011, *Ethical Guidelines for Good Research Practice*, [Online] Available from: http://www.theasa.org/ethics.shtml, [Last accessed 13 November 2014].

Augé, M., 2002, *In the Metro*, [Trans. Conley, T.], Minneapolis: University of Minnesota Press.

Augé, M., 2008, *Non-Places: An Introduction to Supermodernity*, [Second Edition], London: Verso.

Augé, M., 2011, Art as Rite of Passage, in Gallico, J., and Rekade, C., (eds.), *U10 von hier aus ins Imaginäre und wieder zurück*, Berlin: NGBK, pp. 18-25.

Aynsley, J., 2004, Pioneers of Modern Graphic Design, London: Octopus

Azaryahu, M., 1986, Street Names and Political Identity: The Case of East Berlin, *Journal of Contemporary History*, 21 (4), pp.581-604.

Azaryahu, M., 1990, Renaming the Past: Changes in "City Text" in Germany and Austria, 1945-1947, *History and Memory*, 2, pp.32-53.

Azaryahu, M., 1996, The power of commemorative street names, *Environment and Planning D: Society and Space* 14(3), 311 – 330.

Azaryahu, M., 1997, German reunification and the politics of street names: the case of East Berlin, *Political Geography*, 16(6), pp.479-493.

Azaryahu, M., 2011a, The politics of commemorative street renaming: Berlin 1945-1948, *Journal of Historical Geography*, 37(4), pp.483-492.

Azaryahu, M., 2011b, The Critical Turn and Beyond: The Case of Commemorative Street Naming, *ACME: An International E-Journal for Critical Geographies*, 10(1), pp.28-33.

Azaryahu, M., 2012, Renaming the past in post-Nazi Germany: insights into the politics of street naming in Mannheim and Potsdam, *Cultural Geographies*, 19(3), pp.385-400.

### B

Bacon, G., 2013, *Untapped Resource: Bearing Down on Fares Through Sponsorship*, London: Greater London Authority Conservatives, [Online] Available from: http://glaconservatives.co.uk/wp-content/uploads/2013/05/Untapped-Resource.pdf [Last accessed 19 June 2014].

Badesy-Ellis, A. and Horne, M., 2009, The Aldwych Branch, Harrow: Capital Transport.

Ballinger, P., 1998, The Culture of Survivors: Post-Traumatic Stress Disorder and Traumatic Memory, *History and Memory*, 10(1), pp.99-132.

Banks, T., Underground movement, Living Marxism, No. 19, May 1990, p. 46.

Bannat, C., 2006, *Aktionen auf dem U-Bahnhof Alexanderplatz 1990-2005: Interview mit Cornelia Schleime*, NGBK, [Online] Available from:

http://ngbk.de/alexanderplatz/1990-2005/cornelia\_schleime.html [Last accessed 26 May 2014].

Barclay, D. E., 2010, Benno Ohnesorg, Rudi Dutschke, and the Student Movement in West Berlin, in Broadbent, P. and Hake, S., (eds), *Berlin: Divided City, 1945-1989*, New York & Oxford: Berghahn Books, pp.125-134.

Barker, T.C. and Robbins, M., 1963. *History of London Transport Volume One: The Nineteenth Century*, London: George Allen & Unwin.

Barker, T.C. and Robbins, M., 1974. *History of London Transport Volume Two: The Twentieth Century to 1970*, London: George Allen & Unwin.

Barton, B.F. and Barton, M.S., 2004, Ideology and the Map: Toward a Postmodern Visual Design Practice, in Johnson-Eilola, J. and Selber, S.A., (eds.), *Central works in technical communication*, New York: Oxford University Press, pp.232-252.

Basu, P., 2013, Memoryscapes and Multi-Sited Methods: Researching Cultural Memory in Sierra Leone, in Keightley, E., Pickering, M., (eds.), *Research Methods for Memory Studies*, Edinburgh: Edinburgh University Press, pp.115-131

Baumann, L., 2011, Stand Back? No More, in Gallico, J. and Rekade, C., (eds.), *U10 – von hier aus ins Imaginäre und wieder zurück*, Berlin: NGBK, pp.26-35.

Bayman, B., 2008. *Underground Official Handbook* (6<sup>th</sup> Edition), Harrow: Capital Transport.

BBC (= British Broadcasting Company), 2001, *Art goes Underground*, 4 October 2001, [Online] Available from: http://news.bbc.co.uk/2/hi/uk\_news/england/1577790.stm, [Last accessed 29 May 2014].

BBC, 2005a. *First bombing memorial unveiled*, 27 August 2005, [Online] Available from: http://news.bbc.co.uk/1/hi/england/london/4188336.stm, [Last accessed 22 Aug 2011].

BBC, 2011, *Emirates sponsors Thames cable car*, 7 October 2011, [Online] Available from: http://www.bbc.co.uk/news/uk-england-london-15217173, [Last accessed 19 Jun 2014].

BBC, 2012, *King's Cross fire 25<sup>th</sup> Anniversary Marked*, 19 November 2012, [Online] Available from: www.bbc.co.uk/news/uk-20383221, [Last accessed 11 Dec 2013].

BBC, 2013a, *London's Tube map creator Harry Beck gets blue plaque*. 25 March 2013, [Online] Available from: www.bbc.com/news/uk-england-london-21918399, [Last accessed 3 Jun 2014].

BBC, 2013b, *Moorgate Tube crash memorial unveiled in Finsbury Square*, 28 July 2013, [Online] Available from: http://www.bbc.co.uk/news/uk-england-london-23481882, [Last accessed 13 Dec 2013].

Beanland, C., 2011, Rethinking the Tube map: A design for strife, *Independent*, 15 August 2011, [Online] Available from: http://www.independent.co.uk/news/uk/thisbritain/rethinking-the-tube-map-a-design-for-strife-2337609.html, [Last accessed 29 Jun 2014].

Beard, M., 2013, Letting sponsors name Tube stops would be 'worth millions', *The London Evening Standard*, Monday 3 June 2013, [Online] Available from: http://www.standard.co.uk/news/transport/letting-sponsors-name-tube-stops-would-be-worth-millions-8642262.html, [Last accessed 19 June 2013].

Beevor, A., 2002, Berlin: The Downfall 1945, London: Penguin Books.

Bélanger, P., 2007, Underground landscape: The urbanism and infrastructure of Toronto's downtown pedestrian network, *Tunneling and Underground Space Technology*, 22, pp.272-292.

Bélanger, P., 2009, Landscape As Infrastructure. Landscape Journal, 28(1), pp.79-95.

Bell, A.H., 2008, *London Was Ours: Diaries and Memoirs of the London Blitz*, London: I.B.Tauris.

Below, I., 2009, How everything began, in Baumann, L. and & Ebert, H., (eds.), *Neue Gesellschaft für Bildende Kunst 40 Years*, Berlin: NGBK, pp.22-38.

Bempeza, S., 2011, Paradigm Shift: Participation and Relational Practices, in Gallico, J. and Rekade, C., (eds.), *U10 von hier aus ins Imaginäre und wieder zurück*, Berlin: NGBK, pp.36-43.

Bendikat, E., 1999, *Öffentliche Nahverkehrspolitik in Berlin und Paris 1890-1914*, Berlin: Walter de Gruyter.

Benjamin, W., 1999 [1932], Berlin Chronicle, in Jennings, M.W., Eiland, H. and Smith, G., (eds.), *Walter Benjamin: Selected Writings, Volume Two, Part Two, 1931-1934*. Cambridge MA: Harvard University Press, pp. 595-637.

Benjamin, W., 1999 [1932b], Excavation and Memory, M.W., Eiland, H. and Smith, G., (eds.), *Walter Benjamin: Selected Writings, Volume Two, Part Two, 1931-1934*. Cambridge MA: Harvard University Press, p.576.

Benjamin, W., 2002 [1936], The Work of Art in the Age of its Technological Reproducibility Second Version, in Jennings, M.W., Eiland, H. and Smith, G., (eds.), *Walter Benjamin: Selected Writings, Volume Three, 1935-1938.* Cambridge MA: Harvard University Press, pp. 101-133.

Bennett, D., 2004, *Architecture of the Jubilee Line Extension*, London: Institution of Civil Engineers.

Bennett, K, 2002, Participant Observation, in Shurmer-Smith, P., (ed.), *Doing Cultural Geography*, London: Sage, pp.139-150.

Bennett, L., 2011, Bunkerology – a case study in the theory and practice of urban exploration, *Environment and Planning D: Society and Space*, 2011, 29(3), pp.421-434.

Berger, J., 1972, Ways of Seeing, London: Penguin Books.

Berger, J., 1980, About Looking, New York: Pantheon Books.

Berger, J., 1991, Keeping a rendezvous, New York: Pantheon Books.

Berger, J. and McBurney, S. with Voe, S., 1999, *The Vertical Line*, [CD], Artangel and Theatre de Complicite.

Berger, R., 1948, Die Wiederingangsetzung der U-Bahn im Jahre 1945, *Straßen- und Tiefbau*, 11, pp.308-314.

Bergt, S., 2009, Mit Mohrrüben gegen die Nation, *Die Tageszeitung*, TAZ Berlin Lokal, Friday 13 February 2009, p.23.

Berliner, D., 2005, The Abuses of Memory: Reflections on the Memory Boom in Anthropology, *Anthropology Quarterly*, 78(1), pp.197-211.

Berliner Morgenpost, 1999, Gedenktafel kann vorerst hängenblieben, Tuesday 26 January 1999, p.43.

Berliner S-Bahn-Museum, 1999, Nord-Süd-Bahn. Vom Geistertunnel zur City-S-Bahn. Berlin: Verlag GVE.

Berliner S-Bahn-Museum, 2014, *Berliner S-Bahn-Museum: Wir über uns*, [Online] Available from: http://www.s-bahn-museum.de/wir\_ueber\_uns.html, [Last accessed 26 Feb 2014].

Berliner Tageblatt, 1935a, Der Führer im Unglücksschacht, Monday 26 August 1935, n.p.

Berliner Tageblatt, 1935b, Ruhr-Helfer in Berlin eingetroffen, Thursday 22 August 1935, p.1.

Berliner Tageblatt, 1935c, Vor den 17 Särgen: Tausende bei der Feier im Lustgarten, Friday 30 August, p.4.

Berliner Verkehrsblätter, 1996, Kursmeldungen U-Bahn, 1996(6), p.120.

Berliner Zeitung, 1945a, Umbenennung von Straßen mit unzeitgemäßen Namen, Tuesday 11 September 1945, p.2.

Berliner Zeitung, 1945b, Groß-Reinemachen im Straßenregister Etwa 1400 Berliner Straßen werden neubennant, Tuesday 11 December 1945, p.2.

Berliner Zeitung, 1949, Ehrung Ernst Thälmanns, Tuesday 19 August 1949, p.6.

Berliner Zeitung, 1950a, U-Bahnhof in rotem Marmor, Friday 12 May 1950, p.6.

Berliner Zeitung, 1950b, Schönster Bahnhof: "Thälmannplatz", Saturday 19 August 1950, Nr. 192, p.6.

Berliner Zeitung, 1950c, Ehrung Dimitroffs, Sunday 26 February 1950, p.8.

Berliner Zeitung, 1950d, Kleine Beliner Chronik, Wednesday 3 May 1950, p.6.

Berliner Zeitung, 1950e, Clara-Zetkin-Straße fehlt, Saturday 11 March 1950, p.2.

Berliner Zeitung, 1951a, Warum noch "Kaiserhof", Wednesday 22 August 1951, p.4.

Berliner Zeitung, 1951b, Darum noch "Kaiserhof", Sunday 26 August 1951, p.8.

Berliner Zeitung, 1993, Mahnwache zum Todestag Silvio Meiers, Friday 19 November 1993, n.p.

Bernt, M., Grell, B. and Holm, A., 2013, Introduction, in Bernt, M., Grell, B. and Holm, A., (eds.), *The Berlin Reader: A Compendium on Urban Change and Activism*, Leck: Transcript, pp.11-21.

Billington, M., 1999, Tunnel visions, The Guardian, Saturday 6 February 1999, p.14.

Bissell, D., 2010, Passenger mobilities: affective atmospheres and the sociality of public transport, *Environment and Planning D: Society and Space*, 28(2), pp.270-289.

Black, M., 2010, *Death in Berlin from Weimar to divided Germany*, New York: Cambridge University Press

Bley, P., 2003. Berliner S-Bahn (8th Edition), Düsseldorf: Alba.

Bobrick, B., 1982, *Labyrinths of Iron: A History of the World's Subways*, New York: Newsweek Books.

Bock, P., 1997, Westen-Jungfernheide: Langsam schließt sich der Ring, *Verkehrsgeschichtliche Blätter*, 1997(3), p.75.

Bock, P., 2000, Dem "Vollring" ein Stück näher, Verkehrsgeschichtliche Blätter, 2000(1), p.21.

Bock, P., 2001, Letzter S-Bahn-Lückenschluß in Berlin, *Verkehrsgeschichtliche Blätter*, 2001(5), pp.154-155.

Bock, P., 2006, Regierungsbahnhöfe in der (Reichs-)Hauptstadt Berlin, *Verkehrsgeschichtliche Blätter*, 2006(5), pp.114-126.

Boden, R., 2011, *Kronos-Projekt*, [Online] Available from: www.kronos-projekt.de, [Last accessed 1 Aug 2014].

Bodnar, J., 1992, *Remaking America: Public Memory, Commemoration and Patriotism in the Twentieth Century*, Princeton: Princeton University Press.

Bohle-Heintzenberg, S., 1980, Architektur der Berliner Hoch- und Untergrundbahn: Plannungen – Entwürfe – Bauten bis 1930, Berlin: Verlag Willmuth Arenhövel.

Bohrer, D., 1990, Impressionen vom S-Bf. Potsdamer Platz, *Berliner Verkehrsblätter*, 1990(8), p.177.

Boldt, G., 1947, *Die letzten Tage der Reichskanzlei*, Hamburg and Stuttgart: Rowahlt Verlag.

Bollwann, B., 1997, Teures Politikum um U-Bahn-Station, *Die Tageszeitung*, TAZ Berlin Lokal, Wednesday 6 August 1997, p.24.

Bongiorno, B, 2007, *Die Bahnhöfe der Berliner Hoch- und Untergrundbahn*, Petersberg: Michael Imhof Verlag.

Book, T., 1995, The Urban Field of Berlin: Expansion – Isolation – Reconstruction, *Geografiska Annaler Series B, Human Geography*, 77 (3), pp.177-196.

Booth, R., 2014, Oxford University academic who scaled Shard is spared jail sentence, *The Guardian*, 22 May 2014, [Online] Available from: http://www.theguardian.com/education/2014/may/22/oxford-university-academic-shard-jail-place-hacker-garrett?CMP=twt\_gu, [Last accessed 2 June 2014].

Bownes. D., Green, O., and Mullins, S., 2012, *Underground: How the Tube Shaped London*, London: Allen Lane.

Boyer, M.C., 1996, *The City of Collective Memory: Its Historical Imagery and Architectural Entertainments*, Cambridge MA: MIT Press.

Boym, S., 2001, The Future of Nostalgia, New York: Basic Books.

Braun, M., 2008a, Nordsüd-S-Bahn Berlin: 75 Jahre Eisenbahn im Untergrund, Berlin: Verlag GVE.

Braun, M., 2008b, Ein tragischer Baugrubeneinsturz beim Baum der Berliner Nordsüd-S-Bahn, *Bautechnik*, 85(6), pp.407-416.

Bridge, G., 2013, Territory, now in 3D! Political Geography, 34, pp.55-57.

Brinks, J.H., 1997, Political Anti-Fascism in the German Democratic Republic, *Journal of Contemporary History*, 32(2), pp.207-217.

Brooks, M.W., 1997, *Subway city: riding the trains, reading New York*, New Jersey: Rutgers University Press.

Brown, S.D. and Hoskins, A., 2010, Terrorism in the new memory ecology: mediating and remembering the 2005 London bombings, *Behavioral Sciences of Terrorism and Political Aggression*, 2(2), pp.87-107.

Bryson, B., 1995, Notes From a Small Island, London: Doubleday.

BUe.V. (= Berliner Unterwelten Eingetragener Verein), 2012, *Tour D findet nicht mehr statt! Kündigung der Nutzungsvereinbarung für die Tunnelanlagen Dresdener Straße*, [Online] http://berliner-unterwelten.de/tour-d-findet-nicht-mehr-statt.1459.0.html, [Last accessed 15th Apr 2012, no longer available].

Burgoyne, P., 2009, London's 7/7 memorial, *Creative Review Blog*, [Online] Available from: http://www.creativereview.co.uk/cr-blog/2009/july1/london-77-memorial, [Last accessed 22 Aug 2011].

Burgoyne, P., 2013, Buying the Brand, Creative Review, 33(3), pp.50-55.

Burke, P., History as Social Memory, in Butler, T., (ed.), History, Culture, and the Mind, New York: Basil Blackwell, pp. 97-113.

Bürkner, A., 2013, Gedenken an Silvio Meier Der sinnlose Tod eines Quedlinburgers, *Mitteldeutsch Zeitnung*, Wednesday 20 November 2013, [Online] Available from: http://www.mz-web.de/quedlinburg/gedenken-an-silvio-meier-der-sinnlose-tod-eines-quedlinburgers,20641064,25096138.html, [Last accessed 26 Jun 2014].

Büro des Reichstags, 1934, *Reichstagshandbuch IX Wahlperiode 1933*, Berlin: Büro des Reichstags, [Online] Available from:

http://www.reichstagsprotokolle.de/Band4\_h1\_bsb00000009.html, [Last accessed 10 Jun 2014].

BVG (= Berliner Verkehrsbetriebe), 2013a, *Zahlenspiegel 2013*, [Online] Available from: www.bvg.de/index.php/de/binaries/asset/download/1168490/file/1-1, [Last accessed 21 Feb 2014].

BVG, 2013b, *From Red to Brown the BVG after1933*, [Pamphlet], Exhibition at Alexanderplatz underground station (mezzanine level), 16 May – 31 December 2013.

Byrne, W, R., 1979, Memory for Urban Geography, *Quarterly Journal for Experimental Psychology*, 31, pp.147-154.

#### С

Calder, A., 1969, The people's war: Britain 1939-1945, London: Jonathan Cape.

Calder, A., 1991, The Myth of the Blitz, London: Jonathan Cape.

Camden Council, 2006, *Delegated Report: Town Planning Application, Ref No: 2006/2469/P*, 27 July 2006, [Online] Available from: http://planningrecords.camden.gov.uk/Northgate/PlanningExplorer17/GeneralSearch.as px, [Last accessed 22 Aug 2011].

Campkin, D., 2012, Buried by Stephen Gill and Hackney Wick: an excavation, in Powell, H. and Marrero-Guillamón, I., (eds.), *The Art of Dissent: Adventures in London's Olympic State*, London: Marshgate Press, pp. 112-123.

Campkin, B., 2013, *Remaking London: Decline and Regeneration in Urban Culture*, London: I.B. Tauris.

Carter, R., 2006, Of Things Said and Unsaid: Power, Archival Silences, and Power in Silence, *Archivaria*, 61, pp.215-233.

Casey, E.S., 1977, Imagining and Remembering, *The Review of Metaphysics*, 31(2), pp.187-209.

Casey, E.S., 2000, *Remembering: A Phenomenological Study* (2<sup>nd</sup> Edition), Indianapolis: Indiana University Press.

Catford, N., 2011a, *Site Name: Trafalgar Square (Bakerloo Line) Station – disused lower lift landing*, [Online], Available from: http://www.subbrit.org.uk/sb-sites/sites/t/trafalgar\_square/index.shtml, [Last accessed 27 Jul 2014].

Catford, N., 2011b, *Site Name: Wood Lane Station (Central Line)*, [Online], Available from: http://www.subbrit.org.uk/sb-sites/sites/w/wood\_lane/index1a.shtml, [Last accessed 24 Jul 2014].

Chivers, T., 2009, The best London Underground Tube map pastiches, *The Telegraph*, 23 September 2009, [Online] Available from:

www.telegraph.co.uk/travel/travelnews/6219582/The-best-London-Underground-Tube-map-pastiches.html, [Last accessed 3 Jun 2014].

Christie's, 2012, *Posters with a Purpose: The London Transport Museum Sale*, [Catalogue], London: Christie's.

[The] Clancy Group, 2008, *Metronet Security Resistance LUL Shafts*, [Online] Available from: http://web-archive-uk.com/page/292428/2012-09-09/http://www.theclancygroup.co.uk/casestudies/52/ [Last accessed 5 May 2014].

Clapp, S., 1999, Don't speak in the subway, *The Observer*, Sunday 7 February 1999. p.10.

Clapp, S., 2001, Down the Tubes, The Observer, Sunday 30 September 2001, p.93.

Clement, A., 2013, London Contemporary Orchestra – review, *The Guardian*, [Online] Available from: http://www.theguardian.com/music/2013/may/27/london-contemporary-orchestra-review [Last accessed 31 May 2014].

Clewell, T., 2004, Mourning Beyond Melancholia: Freud's Psychoanalysis of Loss, *The Journal of the American Psychoanalytic Association*, 52(1), pp.43-67.

Cochrane, A., 2006a, Making up meaning in a capital city: power, memory and monuments in Berlin, *European Urban and Regional Studies*, 13(1), pp.5-24.

Cochrane, A., 2006b, Euro-commentary: (Anglo)phoning Home from Berlin: A Response to Alan Latham, *European Urban and Regional Studies* 13(4), pp.371–376.

Cocker, L., 2009, Mosaic presented to remember victim, *Morning Star*, Thursday 23 July 2009, p.5.

Collins, J., 1997, Seeking Hidden Treasures, On The Move, June 1997, p.7.

Colomb, C., 2012, *Staging the New Berlin: Place Marketing and the Politics of Urban Reinvention Post 1989.* London: Routledge.

Comani, D., 2007, Ich war's. In zweiunddreisig Tagen um den Alexanderplatz. 1805-2007, in Jonas, U., Neumann, T., and Schumacher, B.A., (eds.), *U2 Alexanderplatz 07*, Berlin: NGBK, pp.56 and 74-79.

Commutingexpert.com, 2013, *Resurrecting ghosts: the return of London Underground's abandoned stations*, 28 May 2014, [Online] Available from: http://commutingexpert.com/resurrecting-ghosts-the-return-of-london-undergroundsabandoned-stations/, [Last accessed 27 Jun 2014].

Confino, A., 1997, Collective Memory and Cultural History: Problems of Method, *The American Historical Review*, 102(5), pp.1386-1403.

Connerton, P., 1989, *How Societies Remember*, Cambridge: Cambridge University Press.

Connerton, P., 2008, Seven Types of Forgetting, *Memory Studies*, 1(1), pp.59-71.

Connerton, P., 2009, How Modernity Forgets, Cambridge: Cambridge University Press.

Connor, J.E., 2008, *London's Disused Underground Stations*, Harrow: Capital Transport.

Conrad, R., 2013. Nordbahnhof, Bilder 1989/90, in Sälter, G. and Schaller, T., (eds.), *Grenz- und Geisterbahnhöfe im geteilten Berlin*, Berlin: Ch. Links Verlag, pp.122-127.

Cook, M. and van Riemsdijk, M., 2014, Agents of memorialization: Gunter Demnig's Stolpersteine and the individual (re-)creation of a Holocaust landscape in Berlin, *Journal of Historical Geography*, 43, pp.138-147.

Coombes, A.E., 2003, *History after Apartheid: Visual Culture and Public Memory in a Democratic South Africa*, Durham and London: Duke University Press.

Cooper, N., 2010, *Analysis of Casualty and Fatality Figures*, [Online] Available from: www.nickcooper.org.uk/subterra/lu/tuawcafa.htm, [Last accessed 10 Dec 2013].

Corcilius, A., 2010, *Roland Boden, Das Kronos Projekt*, [Online] Available from: www.aniacorcilius.de/u10-rolandboden.html, [Last accessed 1 Aug 2014].

Coser, L.A., 1992, Introduction: Maurice Halbwachs 1877-1945, in Coser, L.A., (ed.), *Halbwachs: On Collective Memory*, Chicago: University of Chicago Press, pp.1-34.

Cosgrove, D., 1998, *Social formation and symbolic landscape*, (2<sup>nd</sup> Edition), Wisconsin: University of Wisconsin Press.

Cosgrove, D. and Daniels, S., 1989, *The Iconography of Landscape: Essays on the Symbolic Representation, Design and Use of Past Environments*, Cambridge: Cambridge University Press.

Coysh, D., 2006, De Menezes Family pay tribute to Jean, *Morning Star*, Monday 24 July 2006, p.6.

Craddock, A., 2012, Underground ghost station explorers spook the security services, *The Guardian*, Saturday 25 February 2012, p.15.

Craggs, R., Geoghegan, H. and Neate, H., 2013, Architectural enthusiasm: visiting buildings with the Twentieth Century Society, *Environment and Planning D: Society and Space*, 31 (5), pp.879-896.

Crampton, J.W. and Krygier, J., 2006, An Introduction to Critical Cartography, *ACME: An International E-Journal for Critical Geographies*, 4 (1), pp. 11-33.

Crane, E., 2004, From under the surface to the London Underground: The stories behind four more British maps, *Geographical Magazine*, 76(11), pp.66-73.

Crang, M. and Travlou, S., 2001, The city and topologies of memory, *Environment and Planning D: Society and Space*, 19(2), pp.161-177.

Crawford, M., 1999, Blurring the Boundaries: Public Space and Private Life, in Chase, J., Crawford, M. and Kaliska, J., (eds.), *Everyday Urbanism*, New York: The Monacelli Press, pp. 22-35.

Creswell, T., 2002, Introduction: Theorizing Place, in Verstraete, G. and Cresswell, T., (eds.), *Mobilizing Place, Placing Mobility: The Politics of Representation in a Globalized World*, Amsterdam: Colophon, pp.11-32.

### D

Daniels, S., 1993, *Fields of Vision: Landscape Imagery and National Identity in England and the United States*, Oxford: Polity Press.

Daniels, S. and Cosgrove, D., 1988, Introduction: iconography and landscape, in Daniels, S. and Cosgrove, D., (eds.), *The Iconography of Landscape*, Cambridge: Cambridge University Press, pp. 1-10.

Darton, P.A., 1978, An illustrative reconstruction of the Moorgate tube train disaster, *The Journal of Audiovisual Media in Medicine*, 1(2), pp.91-93.

Davenport, J., 2011, Terror alert at 7/7 Tube station blamed on four urban explorers, *The Evening Standard*, 3 May 2011, [Online] Available from: http://www.standard.co.uk/news/terror-alert-at-77-tube-station-blamed-on-four-urban-explorers-6397538.html, [Last accessed 5 May 2014].

Day, J.R. and Reed, J., 2008, *The Story of London's Underground* (10<sup>th</sup> Edition), Harrow: Capital Transport.

DCMS (= Department of Culture, Media and Sport), 2011, *Sixteen London Tube station become listed buildings*, 26 July 2011, [Online] Available from: http://www.culture.gov.uk/news/media\_releases/8345.aspx, [Last accessed 30 Jun 2014].

de Certeau, M, 1984, *The Practice of Everyday Life*, [Trans. Rendell, S.], Berkeley: University of California Press.

De Cesari. C., and Rigney, A., (eds.), 2014, *Transnational Memory: Circulation, Articulation, Scales*, Berlin: De Gruyter.

Dean, J., 2013, Moorgate disaster victims remembered with memorial in Finsbury Square 40 years on, *Islington Gazette*, 14 June 2013, [Online] Available from: http://www.islingtongazette.co.uk/news/crime-

courts/moorgate\_disaster\_victims\_remembered\_with\_memorial\_in\_finsbury\_square\_40 \_years\_on\_1\_2234770, [Last accessed 30 Jun 2014].

Del Casino, V.J. and Hanna, S.P., 2006, Beyond The 'Binaries': A Methodological Intervention for Interrogating Maps as Representational Practices, *ACME: An International E-Journal for Critical Geographies* 4(1), pp.34-56.

Deleuze, G. and Guattari, F., 2004, *A thousand plateaus: Capitalism and schizophrenia*, London: Continuum.

Demps, R., 2002, Der Ring ist wieder geschlossen! *Verkehrsgeschichtliche Blätter*, 2002(3), pp.71-73.

Demuth, T., 2003, The Spread of London's Underground, Harrow: Capital Transport.

Dennis, R., 2008, *Cities in Modernity: Representations and Productions of Metropolitan Space, 1840-1930*, Cambridge: Cambridge University Press.

Dennis, R., 2013a, Underground anxieties, in Galviz, C. L. and Merrill, S., (eds.), *Going Underground: New Perspectives*, London: London Transport Museum, pp.11-19.

Dennis, R., 2013b, Making the underground underground, *The London Journal*, 38(3), pp.203-225.

Dennis, R., 2013c, Gower Street to Euston Square: a local history of the Underground, *Camden History Review*, 37, pp.8-14.

Des Chene, M., 1997, Locating the Past, in Gupta, A. and Ferguson, J., (eds.), *Anthropological Locations: Boundaries and Grounds of a Field Science*, Berkeley: University of California Press, pp.66-85.

DeSilvey, C., 2006, Observed Decay: Telling Stories with Mutable Things, *Journal of Material Culture*, 11(3), pp.318-338.

DeSilvey, C. and Edensor, T., 2013, Reckoning with ruins, *Progress in Human Geography*, 37(4), pp. 465-485.

Deutsche Allgemeine Zeitung, 1935, Abschied von den toten Arbeitskameraden, Friday 30 August 1935, p.1.

Diamond Geezer, 2007, *Menezes memorial*, [Online] Available from: http://www.flickr.com/photos/dgeezer/357582575/, [Last accessed 22 Jul 2014].

Dillon, T., (ed.), 2007, Platform for Art. Art on the Underground, London: Black Dog.

Dobbin, C., 2012, *London Underground Maps: Art, Design and Cartography*, Farnham: Lund Humphries.

Dobraszczyk, P., 2010, Petrified ruin: Chernobyl, Pripyat and the death of the city, *City: analysis of urban trends, culture, theory, policy, action*, 14(4), pp.370-389.

Dodd, V., 2009, Jean Charles de Menezes' family settles for £100,000 Met payout, *The Guardian*, 24 November 2009, p.5.

DoE (= Department of the Environment), 1976, *Report on the Accident that occurred* on 28<sup>th</sup> February 1975 at Moorgate Station, London: Her Majesty's Stationary Office.

Domosh, M., 1989, A Method for Interpreting Landscape: A Case Study of the New York World Building, *Area*, 21(4), pp.347-355.

Domosh, M., 1998, *Invented Cities: The Creation of Landscape in Nineteenth-Century New York and Boston*, Honk Kong: Yale University Press.

DoT (= Department of Transport), 1988, *Investigation into the King's Cross Underground Fire*, London: Her Majesty's Stationary Office.

Doyle, B., 1978, Underground maps: it's hard to improve on Beck, *DESIGN*, 349, January 1978, p.31.

Driver, F. and Gilbert, D., 1999, Imperial cities: overlapping territories, intertwined histories, in Driver, F. and Gilbert, D., (eds.), *Imperial Cities*, Manchester: Manchester University Press, pp. 1-17.

Dubow, J., 2009, Representation, in Gregory, D., Johnston, R., Watts, M. and Whatmore, S., (eds.), *The Dictionary of Human Geography* (5<sup>th</sup> Edition), Padstow: Wiley-Blackwell, pp.645-646.

Duncan, J. and Duncan, N., 1988, (Re)reading the landscape, *Environment and Planning D: Society and Space*, 6(2), pp.117-126.

Dwyer, O.J. and Alderman, D.H., 2008, Memorial landscapes: analytical questions and metaphors, *GeoJournal*, 73(3), pp.165-178.

### E

Edensor, T., 2005a, Industrial ruins: spaces, aesthetics and materiality, Oxford: Berg.

Edensor, T., 2005b, The ghosts of industrial ruins: ordering and disordering memory in excessive space, *Environment and Planning D: Society and Space*, 23(6), pp.829-849.

Edensor, T., 2008, Walking Through Ruins, in Ingold, T. and Vergunst, J.L., (eds.), *Ways of Walking: Ethnography and Practice on Foot*, Aldershot: Ashgate, pp.123-141.

Edensor, T., 2010, Walking in rhythms: place, regulation, style and the flow of experience, *Visual Studies*, 25(1), pp.69-79.

Eichenbaum, H., Dudchenko, P., Wood, E., Shapiro, M. and Tanila, H., 1999, The Hippocampus, Memory and Place Cells: Is it Spatial Memory or a Memory Space?, *Neuron*, 23, pp.209-226.

Elden, S., 2013a, Secure the volume: Vertical geopolitics and the depth of power, *Political Geography*, 34, pp.35-51.

Elden, S., 2013b, Bodies, books, beneath: A reply to Adey and Bridge, *Political Geography*, 34, pp.58-59.

Eley, G., 2001, Finding the people's War: Film, British Collective Memory, and World War II, *The American Historical Review*, 106(3), pp.818-838.

Eley, G., 2014, Memory and the historians: Ordinary life, eventfulness and the instinctual past, in Noakes, L. and Pattinson, J., (eds.), *British Cultural Memory and the Second World War*, New Delhi: Bloomsbury, pp.xi-xxi.

Ellingham, S., 1994, The End of the Aldwych Branch, 30.9.1994, *Underground News*, Number 396, December 1994, pp.495-497.

Elliot, J., 1994, Abandoned Tunnels Echo With Memories of the Past, *London Transport News*, Thursday 24 November 1994, pp. 8-9.

English Heritage, 2011, *Advice Report. Case Name: Aldwych Underground Station. Case Number: 463989*, 21 June 2011, London: English Heritage.

Evans. J.V., 2010, Life Among the Ruins: Sex, Space, and Subculture in Zero Hour Berlin, in Broadbent, P. and Hake, S., (eds.), *Berlin: Divided City*, *1945-1989*, New York: Berghahn, pp.11-22.

Evans, Y., Wills, J., Datta, K., Herbert, J., McIlwaine, C., May, J., de Araújo, J. O., França, A.C. and França, A.P., 2007, *Brazilians in London a report for the Strangers* 

*into Citizens Campaign*. London: Queen Mary University of London, Department of Geography.

Eyre, A., 2010, *Disaster Funds: Lessons and Guidance on the Management and Distribution of Disaster funds*, London: Disaster Action.

### $\mathbf{F}$

[Die] Fahrt, 1933, Zu Ehren des Reichskanzlers Adolf Hitler wurde der bisherige Reichskanzlerplatz in Adolf-Hitler-Platz umbenannt, 15 May 1933, p.91.

[Die] Fahrt, 1936, U-Bahnhof Reichssportfeld, 15 July 1936, pp.211-212.

Falkner, M., 2000, Mahnendes Gedenken auf dem Abstellgleis, *Berliner Morgenpost*, Thursday 30 November 2000, p.40.

Falkner, M., 2001, Erinnerung an rechte Gewalt unerwünscht? *Berliner Morgenpost* Tuesday 30 January 2001, p.37.

Farias, I., 2011, Tourist Maps as Diagrams of Destination Space, *Space and Culture*, 14(4), pp.398-414.

Farmer,B., 2013, MoD to sell WWII Tube station command bunker, *The Telegraph*, Monday 29 July 2013, [Online] Available from: www.telegraph.co.uk/news/uknews/defence/10209470/MoD-to-sell-WWII-Tube-

station-command-bunker.html, [Last accessed 31 Jul 2013].

Farrell, T., 2010, *Shaping London: The patterns and forms that make the metropolis*, Chichester: Wiley.

Faulenbach, B., 2009. Die Erinnerungskultur Deutschland. In Birle, P., Gryglewski, E., and Schindel, E. (eds.), *Urbane Erinnerungskulturen im Dialog: Berlin und Buenos Aires*, Berlin: Metropol, pp.37-46.

Feather, J., 1994, *Publishing, Piracy and Politics: An Historical Study of Copyright in Britain*, London: Mansell.

Fein, S., 1992, Links gegen Rechts: Der 1. Tote, *Berliner Kurier*, Monday 23 November 1992, p.1.

Felton, E., 1993, LURS Visit to Aldwych Station, *Underground News*, Number 381, September 1993, pp.371-372.

Field, G., 2002, Nights Underground in Darkest London: The Blitz, 1940-1941, *International Labor and Working-Class History*, 62, pp.11-49.

Flierl, T., 2006. *Gesamtkonzept zur Erinnerung an die Berliner Mauer: Dokumentation, Information und Gedenken*, [Online] Available from: www.berlin.de/sen/kultur/kulturpolitik/mauer/gesamtkonzept.html, [Last accessed 18 Jul 2013].

Flinn, A., 2011, Archival Activism: Independent and Community-led Archives, Radical Public History and the Heritage Professions, *InterActions*, 7(2), pp.1-19.

Forest, B., Johnson, J., and Till, K., 2004, Post-totalitarian national identity: public memory in Germany and Russia, *Social and Cultural Geography*, 5(3), pp.357-380.

Forty, A., 1986, *Objects of Desire: Design and Society since 1750*, New York: Pantheon Books.

Foucault. M., 1972, *The Archaeology of Knowledge and the Discourse on Language*, [Trans. Sheridan Smith, A.M.], New York: Pantheon.

Foucault. M., 1977, Language, Counter-Memory, Practice – Selected Essays and Interviews, New York: Cornell University Press.

Fowler, P.J., 1992, The Past in Contemporary Society: Then, Now, London: Routledge.

Frank, S., 2009, Der Mauer um die Wette Gendenken: Die Formation einer Heritag-Industrie am Berliner Checkpoint Charlie, Frankfurt/Main: Campus Verlag.

Frankfurter Allgemeine Zeitung, 2002, Exklusive: Hier ist der U-Bahn-Plan für das neue Berlin, Saturday 16 February 2002, Berlin supplement, p.1.

Freud, S., 2005, S. The Unconscious, [Trans. Frankland, G.], St Ives: Penguin Books.

Freud, S., 2003[1919], *The Uncanny*, [Trans. McLintock, D.], Chippenham: Penguin Books, p. 148.

Freud, S., 2001[1917{1915}], Mourning and Melancholia, in Strachey, J., (ed.) with Freud, A., The *Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume XIV (1914-1916)*, Viborg: Vintage, pp. 237-258.

Frey, T., 2014, Erinnerung im U-Bahnhof: Gedenktafel Für Bombentote von 1945 enthüllt, *Berliner Woche*, 27 February 2014. [Online] Available from: www.berlinerwoche.de/nachrichten/bezirk-friedrichshain-kreuzberg/friedrichshain/artikel/36732gedenktafel-fuer-bombentote-von-1945-enthuellt/, [Last accessed 22 April 2014].

Fulbrook, M., 1999, *German National Identity after the Holocaust*, Cornwall: Polity Press.

# G

Gallico, J., 2011, The Story of the U10, in Gallico, J. and Rekade, C., (eds.), *U10 von hier aus ins Imaginäre und wieder zurück*, Berlin: NGBK, pp.192-198.

Galviz, C. L., 2009a, The polities of a new technology: Electricity and the city railway, London and Paris c.1880-1910, *Métropoles*, 6, pp.140-70.

Galviz, C.L., 2009b, *Polis of the Metro: The Introduction of the City Railway in Nineteenth-Century London and Paris*, [Unpublished Doctoral Thesis], The Institute of Historical Research, School of Advanced Study, University of London.

Galviz, C. L., 2013, Mapping circulation in London and Paris, in Galviz, C. L. and Merrill, S., (eds.), *Going Underground: New Perspectives*, London: London Transport Museum, pp.32-39.

Gandy, M., 1999. The Paris Sewers and the Rationalization of Urban Space, *Transactions of the Institute of British Geographers*, 24(1), pp.23-44.

Gandy, M., 2003, *Concrete and Clay: Reworking Nature in New York City*, Cambridge MA: MIT Press.

Gandy, M., 2005, Cyborg Urbanization: Complexity and Monstrosity in the Contemporary City, *International Journal of Urban and Regional Research*, 29(1), pp.26-49. Gandy, M., 2011, Landscape and Infrastructure in the Late-Modern Metropolis, in Bridge, G. and Watson, S., (eds.), *The New Blackwell Companion to the City*, Oxford: Wiley-Blackwell, pp.57-65.

Garde-Hansen, J., Hoskins, A. and Reading, A., (eds.), 2009, *Save As...Digital Memories*, Basingstoke: Palgrave Macmillan.

Gardner, L., 1999, The rhino now standing on platform two, *The Guardian*, Wednesday February 3 1999, p.13.

Garland, K., 1969, The design of the London Underground diagram, *The Penrose Annual*, 62, pp.68-82.

Garland, K., 1994, Mr Beck's Underground Map, Harrow: Capital Transport.

Garrett, B.L., 2010, Urban Explorers: Quest for Myth, mystery and Meaning, *Geography Compass*, 4(10), pp. 1448-1461.

Garrett, B.L., 2011a, *Place Hacking: Tales of Urban Exploration*, [Unpublished Doctoral Thesis], Royal Holloway University London.

Garrett, B.L., 2011b, Shallow excavation, a response to Bunkerology, [Online] Available from: http://societyandspace.com/2011/06/10/shallow-excavation-a-responseto-bunkerology-by-bradley-l-garrett/, [Last accessed 29 Jul 2013].

Garrett, B.L., 2011c, Assaying history: creating temporal junctions through urban exploration, *Environment and Planning D: Society and Space*, 29, pp.1048-1064.

Garrett, B.L., 2013, Explore Everything: Place-Hacking the City, London: Verso.

Garrett, B.L. and Hawkins, H., 2013, And Now For Something Completely Different... Thinking Through Explorer Subject-Bodies: A Response to Mott and Roberts, *Antipode*, [Online] Available from http://radicalantipode.files.wordpress.com/2013/11/garrett-andhawkins-response.pdf, [Last accessed 6 May 2014].

Garton Ash, T., 1997, Vier Wege zur Wahrheit Machen wir es richtig? Wie machen es die anderen? Eine Zwischenbilanz, *Die Zeit*, Thursday 2 October 1997, [Online] Available from: http://www.zeit.de/1997/41/Vier\_Wege\_zur\_Wahrheit, [Last accessed 16 Jul 2014].

Gehl, R., 2009, YouTube as archive: Who will curate this digital Wunderkammer? *International Journal of Cultural Studies*, 12(1), pp.43-60.

Geohegan, H., 2013, Emotional geographies of enthusiasm: belonging to the Telecommunications Heritage Group, *Area*, 45(1), pp.40-46.

Germania, 1935a, Der Führer an der Unglücksstätte, Monday 26 August 1935, n.p.

Germania, 1935b, Berlin ehrt die Toten der Arbeit, Saturday 31 August 1935, n.p.

Gibas, P., 2008, *Mapping the Prague Metro: The Hidden and the Visible in a Post*socialist Landscape. [Unpublished Master Dissertation], University College London.

Gibas, P., 2013, Uncanny underground: absences, ghosts and the rhythmed everyday of the Prague metro, *Cultural Geographies*, 20(4), pp.485-500.

GLA & TfL (=Greater London Authority and Transport for London), 2013, Greater London Authority and Transport for London Sponsorship Policy, [Online] Available from: http://www.tfl.gov.uk/cdn/static/cms/documents/gla-and-tfl-sponsorship-policy.pdf, [Last accessed 19 Jun 2014].

Glancey, J., 2007, A new London underground, *The Guardian*, Monday 17 September 2007, p.23.

Gläser, H., 1999, Gefährliches Gleisdreieck, Berliner Monatsschrift, 8(9), pp. 98-101.

Gleyzon, F.X., 2010, *Shakespeare's Spiral: Tracing the Snail in King Lear and Renaissance Painting*, Maryland: University Press of America.

Glover, J., 2010, London's Underground (11th Edition), Surrey: Ian Allan Publishing.

Godwin, R., 2012, On a mission with London's urban explorers, *The Evening Standard*, 15 June 2012, [Online] Available from:

http://www.standard.co.uk/lifestyle/esmagazine/on-a-mission-with-londons-urban-explorers-7851504.html, [Last accessed 5 May 2014].

Goodwin, R. and Gaines Jr, S., 2009, Terrorism Perception and its consequences following the 7 July 2005 London Bombings, *Behavioral Sciences of Terrorism and Political Aggression*, 1(1), pp. 50-65.

Gordon, A, F., 1997, *Ghostly matters: Haunting and the Sociological Imagination*, London: University of Minnesota Press.

Gottwaldt, A.B., 2007, *Das Berliner U- and S-Bahnnetz: Eine Geschichte in Streckenplänen von 1888 bis heute*, Stuttgart: Transpress Verlag.

Graham, S. and Marvin, S., 2001. Splintering Urbanism, London: Routledge.

Graham, S. and Hewitt, L., 2013, Getting off the ground: On the politics of urban verticality, *Progress in Human Geography*, 37, pp.72-92.

Greenberg, S, 1994, The Word According to Simon Patterson, *Tate: The Art Magazine*, 4, pp.44-47.

Greene, K, 2002, Archaeology: An Introduction (Fourth Edition), London: Routledge.

Greetham, D., 1999, Who's In, Who's Out: The Cultural Politics of Archival Exclusion, *Studies in the Literary Imagination*, 32(1), pp.1–28.

Gregg, J., 2001, The Shelter of the Tubes. Harrow: Capital Transport.

Gross, D., 1990, Critical synthesis on urban knowledge: Remembering and forgetting in the modern city, *Social Epistemology: A Journal of Knowledge, Culture and Policy*, 4(1), pp.3-22.

Groth, P., 1997, Bibliography: Basic Works in Cultural Landscape Studies, in Groth, P. and Bressi, T.W., (eds.), *Understanding Ordinary Landscapes*, New Haven: Yale University Press, pp.243-260.

Groth, P. and Bressi, T.W., (eds.), 1997, *Understanding Ordinary Landscapes*, New Haven: Yale University Press.

Gruner, P., 2013, Tube chiefs 'shamed' into plaque, says TV writer who lost his dad in disaster – Laurence Marks speaks out after unveiling of first memorial, paid for by public donations, *The Islington Tribune*, 9 August 2013, [Online] Available from: www.islingtontribune.com/news/2013/aug/tube-chiefs-

%E2%80%98shamed%E2%80%99-plaque-says-tv-writer-who-lost-his-dad-disasterlaurence-marks-sp, [Last accessed 13 December 2013].

Gundel, E., 1995, Straßenkampf nach Trauer-Demo, *Die Tageszeitung*, TAZ Berlin Lokal, Monday 27 November 1995, p.21.

Guo, J.Z., 2011, Mind the Map! The Impact of Transit Maps on Path Choice in Public Transport, *Transportation Research Part A: Policy and Practice*, 45(7), pp.625-639.

Gupta, A. and Ferguson, J., (eds.), 1997. *Anthropological Locations: Boundaries and Grounds of a Field Science*, Berkeley: University of California Press.

### Η

Hadlaw, J., 2003, The London Underground Map: Imagining Modern Time and Space, *Design Issues*, 19 (1), pp.25-35.

Haigh, G., Take a bow, Harry Beck, *The Age*, 28 April 1990, [incomplete photocopied version of this article available from the LTM: 2004/14296 Box G23].

Hainge, G, 2008, Three Non-Places of Supermodernity in the history of French Cinema: 1967, 1985, 2000. Playtime, Subway and Stand-by, *Australian Journal of French Studies*, 45(3), pp.197-211.

Halbrock, C., 2013a, Abstieg in den Nordbahnhof oder: Die Wiederentdeckung der gemeinsamen Stadt, in G. Sälter, G. and Schaller, T., (eds.), *Grenz- und Geisterbahnhöfe im geteilten Berlin*, Berlin: Ch. Links Verlag, pp.114-115.

Halbrock, C., 2013b. Nordbahnhof, Bilder 1989/90, in G. Sälter, G. and Schaller, T., (eds.), *Grenz- und Geisterbahnhöfe im geteilten Berlin*, Berlin: Ch. Links Verlag, pp.116-121.

Halbwachs, M., 1992[1925], *On Collective Memory*, [Trans. Coser, L.A.], Chicago: University of Chicago Press.

Hamilton, S. and Whitehouse, R., 2006, Phenomenology in Practice: Towards a Methodology for a 'Subjective' Approach, *European Journal of Archaeology*, 9(1), pp31-71.

Han, J.H.J., 2010, Neither Friends nor Foes: Thoughts on ethnographic distance, *Geoforum*, 41(1), pp.11-14.

Hardy, B., 1996, The Berlin U-Bahn, Harrow: Capital Transport.

Harjes, K., 2005, Stumbling Stones: Holocaust Memorials, National Identity, and Democratic Inclusion in Berlin, *German Politics and Society*, 23(1), pp. 138-151.

Harley, J.B., 1988, Maps, knowledge and power, in Cosgrove, D. and Daniels, S., (eds.), *The Iconography of Landscape*, Cambridge: Cambridge University Press, pp.277-312.

Harley, J.B., 1989, Historical geography and cartographic illusion, *Journal of Historical Geography*, 15(1), pp. 80-91.

Harris, A., 2011, Vertical urbanism: flyovers and skywalks in Mumbai, in Gandy, M., (ed.), *Urban Constellations*, Berlin: Jovis, pp. 118-123.

Harris, A., forthcoming, Vertical Urbanisms: Opening Up Geographies of the Three-Dimensional City, *Progress in Human Geography*.

Harris, C.M., 2001, *What's in a Name? Origins of station names on the London Underground*, Harrow: Capital Transport.

Harrison, R., 2011, Surface assemblages. Towards an archaeology *in* and *of* the present, *Archaeological Dialogues*, 18(2), pp.141-161.

Harrison, R. and Schofield, J., 2010, *After Modernity: Archaeological Approaches to the Contemporary Past*, Oxford: Oxford University Press.

Harvey, D.C., 2001, Heritage Pasts and Heritage Presents: temporality, meaning and the scope of heritage studies, *International Journal of Heritage Studies*, 7(4), pp.319-338.

Havers, H.C.P., 1966, *Underground Railways of the World: Their History and Development*, London: Temple Press Books.

Hayden, D., 1997. *The Power of Place: Urban Landscapes as Public History*, Cambridge MA: MIT Press.

Heilein, K., 2011, Construction Time Again, in Gallico, J. and Rekade, C., (eds.), *U10 von hier aus ins Imaginäre und wieder zurück*, Berlin: NGBK, pp. 131-140.

Heinickel, G., 2013, Berlin: After the growth: planning mobility culture in an environment of dynamic stagnation, in Institute for Mobility Research, (ed.), *Megacity Mobility Culture: how cities move on in a diverse world*, Hiedelberg: Springer, pp.185-206.

Henrion, Ludlow and Schmidt, 1984, Underground Railway Signing Study for London Transport, London: HLS.

Herf, J., 1984, *Reactionary Modernism: Technology, culture, and politics in Weimar* and the Third Reich, Cambridge: Cambridge University Press

Herf, J., 1997, Divided Memory: the Nazi past in the two Germanys, London, Cambridge MA: Harvard University Press.

Herrmann, K.J., 1998, Gedenktafel ist wieder da – Heute Silvio Meier-Demo zum Lichtenberger Rathaus, *Neues Deutschland*, Saturday 21 November 1998, n.p.

Hertzsch, E. and Page, A., 2011, Strategic, Collective Trainspotting, in Gallico, J. and Rekade, C., (eds.), *U10 von hier aus ins Imaginäre und wieder zurück*, Berlin: NGBK, pp.44-51.

Hewison, R., 1987, *The Heritage Industry: Britain in a Climate of Decline*, Chichester: Methuen.

Hill, D., 2010, The Old London Underground Company haunts City Hall, theguardian.com, [Online] Available from:

http://www.theguardian.com/uk/davehillblog/2010/jun/15/boris-johnosn-old-londonunderground-company-ajit-chambers-rash-promises, [Last accessed 5 May 2014].

Hill, L.J., 2014, Human geography and archaeology: Strange bedfellows? *Progress in Human Geography*, [published online before print], pp.1-20.

Hilliam, D., 2010, *Why Do Shepherds Need A Bush? London's Underground History of Tube Station Names*, Stroud: The History Press.

Hobsbawm, E. and Ranger, T., 1983, (eds.), *The Invention of Tradition*, Cambridge: Cambridge University Press.

Hoelscher, S. and Alderman, D.H., 2004, Memory and place: geographies of a critical relationship, *Social and Cultural Geography*, 5(3), pp.347-355.

Holloway, J. and Kneale, J., 2008, Locating haunting: a ghost-hunter's guide, *Cultural Geographies*, 15(3), pp.297-312.

Holloway, S., 1989, *Moorgate: Anatomy of a Railway Disaster*, Newton Abbey: David & Charles.

Holtorf, C., and Williams, H.M.R., 2006, Landscape and Memories, in Hicks, D. and Beaudray, M., (eds), *Cambridge Companion to Historical Archaeology*, Cambridge: Cambridge University Press, pp.235-254.

Hornsey, R., 2012, Listening to the Tube Map: rhythm and historiography of urban map use, *Environment and Planning D: Society and Space*, 30(4), pp.675-693.

Hornsey, R., 2013, Training up the escalated body, paper presented at *Going Underground: Travel Beneath the Metropolis 1863-2013*, January 17-18, 2013, School of Advanced Study, London, UK.

Hoskins, W.G., 1955, *The Making of the English Landscape*, London: Hodder & Stoughton.

Hoskins, A., 2011, Media, Memory, Metaphor: Remembering and the Connective Turn, *Parallax*, 17(4), pp.19-31.

Hughes-Stanton, C., 1965, Design Management – Pioneering Policies, *DESIGN*, 197, May 1965, pp.37-47.

Hunt, B., 2014, *London Street name changes*, [Online] Available from: http://www.maps.thehunthouse.com/Streets/Street\_Name\_Changes.htm, [Last accessed 10 Jun 2014].

Huyssen, A., 2003, *Present Pasts: Urban Palimpsests and the Politics of Memory*, Stanford: Stanford University Press.

Hwang, H., 2013, *London's Underground Spaces*, Edinburgh: Edinburgh University Press.

# I

Ihl, J.M., 2008, BVG verbietet iPhone-Programm, *Die Tageseitung*, Friday 31 October 2008, [Online], Available from: http://www.taz.de/!25184/, [Last accessed: 3 Jun 2014].

Indymedia, 2004, *Bilder: Silvio-Meier-Demo & Mahnwache*, [Online] Available from: http://de.indymedia.org/2004/11/99926.shtml, [Last accessed 22 Jul 2014].

Indymedia, 2009, *Straßenumbenennung für Silvio Meier*, [Online] Available from: http://de.indymedia.org/2009/11/266233.shtml, [Last accessed 22 Jul 2014].

Ingold, T., 1993. The Temporality of the Landscape, *World Archaeology*, 25(2), pp.152-174.

Ingold, T. and Vergunst, J.L., (eds.), 2008, *Ways of Walking: Ethnography and Practice on Foot*, Aldershot: Ashgate.

# J

Jackson, A.A. and Croome, D.F., 1964, *Rails Through the Clay: A History of London's Tube Railways* (2<sup>nd</sup> Edition), London: George Allen & Unwin.

Jackson, J.B., 1979, The order of a landscape, in Meinig, D., (ed.), *The Interpretation of Ordinary Landscapes*, New York: Oxford University Press, pp.153-163.

Jackson, J.B., 1984, *Discovering the Vernacular Landscape*, New Haven: Yale University Press.

Jackson, P., 1989, *Maps of Meanings: An Introduction to Cultural Geography*, London: Unwin Hyman.

Jacob, M., 2002, Vollring, Berliner Verkehrsblätter, 2002(6), pp. 111-113.

Jacobs, J., 2004, From the Profane to the Sacred: Ritual and Mourning at Sites of Terror and Violence, *Journal for the Scientific Study of Religion*, 43(3), pp. 311–315.

Jasper, S., 2011, Phantom Limbs: Encountering The Hidden Spaces of West Berlin, in Gandy, M., (ed.), *Urban Constellations*, Berlin: Jovis, pp. 153-157.

Jenks, A., 2000, A Metro on the Mount: The Underground as a Church of Soviet Civilization, *Technology and Culture*, 41(4), pp.697-724.

Jeschke, C., 1997, Angstraüme in Stadten Öffentlicher Nahverkehr und Sicherheitsbedürfnisse, in Giese, E., (ed.), *Verkehr ohne (W)ENDE? Psychologische und sozialwissenschftliche Beiträge*, Tübingen: Deutsche Gesellschaft für Verhaltenstherapie, pp. 165-172.

Johnson, M., 1999, Archaeological Theory: An Introduction, Cornwall: Blackwell.

Johnson, N. and Pratt, G., 2009, Memory, in Gregory, D., Johnston, R., Watts, M. and Whatmore, S., (eds.), *The Dictionary of Human Geography* (5<sup>th</sup> Edition), Cornwall: Wiley-Blackwell, pp. 453-455.

Jones, I., 2013, *150 Great things about the Underground: 141 – The memorial plaque at Balham*, [Online] Available from:

http://150greatthingsabouttheunderground.com/2013/11/11/141-the-memorial-plaqueat-balham/, [Last accessed 13 Jul 2014].

Jones, T., 1996, Kings' Cross fire victim bitter at £650,000 award, *The Times*, Tuesday 30 January 1996, p.6.

Jordan, J., 2005, A Matter of Time: Examining Collective Memory in Historical Perspective in Postwar Berlin, *Journal of Historical Sociology*, 18(1/2), pp.37-71.

Jordan, J., 2006, *Structures of Memory: Understanding Urban Change in Berlin and Beyond*, Stanford: Stanford University Press.

Junge Welt, 1992, Mut zur Zivilicourage ist nicht gestorben – Gedenktafel für ermordeten Silvio Meier am Berliner U-Bahnhof Samariterstraße befestigt, Saturday 28 November 1992, n.p.

Jury, L., Concorde beats Tube map to become Britain's favorite design, *The Independent*, Friday 17 March 2006, [Online] Available from: http://www.independent.co.uk/news/uk/this-britain/concorde-beats-tube-map-tobecome-britains-favourite-design-470247.html, [Last accessed 3 Jun 2014].

JWM (= Jugend[Widerstands]Museum), 2011, *Ausstellungs-Katalog*, Berlin: Hedwig-Wachenheim-Gesellschafte e.V.



Kaika, M. and Swyngedouw, E., 2000, Fetishizing the modern city: the phantasmagoria of urban technological networks, *International Journal of Urban and Regional Research*, 24(1), pp.120-138.

Kansteiner, W., 2002, Finding Meaning in Memory: A Methodological Critique of Collective Memory Studies, *History and Theory*, 41(2), pp.179-197.

Kantor, P., and Savitch, H.V., 2005, How to Study Comparative Urban Development Politics: A Research Note, *International Journal of Urban and Regional Research*, 29(1), pp.135-51.

Kara, Y., 2003, Selam Berlin, Zurich: Diogenes.

Katzur, K., 1982, Berlins Straßen-Namen, Berlin: Haude und Spener.

Keate, D., 2013, Celebrating the Underground's Architectural Legacy, *The London Journal*, 38(3), pp. 265-273.

Kennedy, M., 1992, Phantoms of Underground's dead stations come to life, *The Guardian*, Thursday 27 August 1992, p.4.

Kensche, C., 2013, Farce um Frauenquote für Straßennamen in Berlin, *Die Welt*, Wednesday 24 April 2013, [Online] Available from: http://www.welt.de/vermischtes/kurioses/article115541901/Farce-um-Frauenquote-fuer-Straßennamen-in-Berlin.html, [Last accessed 11 Jul 2014].

Kiebert, W., 2010, Vor 75 Jahren: Einsturz beim Bau der Nordsüd-S-Bahn, *Verkehrsgeschichtliche Blätter*, 2010(4), pp.90-97.

Kinross, R., 1993, Conversation with Erik Spiekermann, *Information Design Journal*, 7(1), pp.29-40.

Kirchhain, J., n.d., *U10 – Die Unvollendete II*, [Online] Available from: https://www.flickr.com/photos/thr-berlin/galleries/7215762728016048/, [Last accessed 1 Aug 2014].

Kitchin, R.M. and Hubbard, P.J., 1999, Research, action, and 'critical' geographies, *Area*, 31(3), pp.195-198.

Klein, K.L., 2000, On the Emergence of Memory in Historical Discourse, *Representations*, 69, pp.127-150.

Knobloch, H., 1982, *Stadmitte Umsteigen: Berliner Phantsien*, Berlin, Hauptstadt der DDR: Buchverlag Der Morgen.

Knobloch, H., 1984, *Angehaltener Bahnhof: Fantasiestücke, Spaziergänge in Berlin*, Berlin: Das Arsenal.

Knobloch, H., 1997, Change at City Centre, in Hörnigk, T. and Stephan, A., (eds.), *The New Sufferings of Young W and Other Stories from the German Democratic Republic*, New York: Continuum, pp. 246–263.

Knobloch, H., Richter, M. and Wenzel, T., 1992, *Geisterbahnhöfe: Westlinien unter Ost Berlin*, Berlin: Ch. Links.

Kocka, J., 2003, Comparison and Beyond, History and Theory, 42(1), pp.39-44.

Kröck, S., 2008, Die Angst Fährt immer mit, *Berliner Kurier*, Monday 3 March 2008, [Online] Available from: http://www.berliner-kurier.de/archiv/ist-diese-gewalt-noch-zustoppen--bvg-will-ihre-fahrer-besser-schuetzen--fahrgaeste-fordern-mehr-personal-anbahnhoefen-die-angst-faehrt-immer-mit,8259702,3949700.html, [Last accessed 11 Jul 2014].

Kroener, I., 2013, Caught on Camera: The Media Representation of Video Surveillance in Relation to the 2005 London Underground Bombings, *Surveillance and Society*, 11(1/2), pp. 121-133.

Krüger, L., 2011, Die Berliner Verkehrsbetriebe im Wandel der Zeit, *TypoJournal*, 3, pp.54-62.

Kurpjuweit, K., 2009, U55: Schmuckstücke unter der Erde, *Der Tagesspiegel*, 8 August 2009, [Online] Available from: http://www.tagesspiegel.de/berlin/verkehr/kanzlerbahn-u55-schmuckstuecke-unter-der-erde/1574464.html, [Last accessed 15 Jul 2014].

Kurpjuweit, K. and Meyer-Kronthaler, J., 2009, *Berliner U-Bahn: In Fahrt seit über 100 Jahren*, Berlin: be.bra verlag.

Kutscher, U, 2008, Sanierung historischer U-Bahnanlagen in Berlin – vom Konflikt zum Konsens, in Haspel, J., Petzet, M. and Schmückle-Mollard, C., (eds.), *World Heritage Sites of the 20<sup>th</sup> Century: Gaps and Risk from a European Point of View*, Petersberg: Michael Imhof Verlag, pp.135-138.

# L

LA (= London Assembly), 2012, Whose brand is it anyway? An Examination of TfL's Sponsorship Policy, [Online] Available from:

http://www.london.gov.uk/sites/default/files/London%20Assembly%20Report%20TfL%20Sponsorship%20Policy%20170212.pdf, [Last accessed 19 Jun 2014].

Ladd, B., 1990, *Urban Planning and Civic Order in Germany*, 1860-1914, Cambridge MA: Harvard University Press.

Ladd, B., 1997, *The Ghosts of Berlin: Confronting German History in the Urban Landscape*, Chicago and London: University of Chicago Press.

Lang, B., 1994, *Unter Grund: Ethnographische Erkundungen in der Berliner U-Bahn*, Tübingen: Tübinger Vereinigung für Volkskunde e.V.

Langhelle, A., 2003, ddr, in Maechtel, A., (ed.), *Dokumentation des künstlerischen Wettbewerbs der NGBK Berlin Alexanderplatz U2 03/04*, Berlin: NGBK, n.p.

Larner, W. and Laurie, N., 2010, Traveling technocrats, embodied knowledges: Globalising privatization in telecoms and water, Geoforum, 41(2), pp.218-226.

Last, J., 1999, The Ghost Stations, Metro, Monday 8th November 1999, p.33.

Latham, A., 2006a, Euro-Commentary: Anglophone Urban Studies and the European City: Some Comments on Interpreting Berlin, *European Urban and Regional Studies*, 13(1), pp.88–92.

Latham, A., 2006b, Euro-commentary: Berlin and Everywhere Else: A Reply to Allan Cochrane, *European Urban and Regional Studies*, 13(4), pp.377–379.

Latour, B., 2005, *Reassembling the Social: An Introduction to Actor-Network-Theory*, Oxford: Oxford University Press.

Lawrence, D., 2008, *Bright Underground Spaces: The Railway Stations of Charles Holden*, Harrow: Capital Transport.

Lawrence, D., 2013, A Logo for London, London: Lawrence King.

Leboff, D., 2002, The Underground Stations of Leslie Green, Harrow: Capital Transport.

Leboff, D. and Demuth, T., 1999, *No Need To Ask! Early Maps of London's Underground Railways*, Harrow: Capital Transport.

LeCompte, M.D. and Schensul, J.J., 1999, *Analyzing and interpreting ethnographic data*, Oxford: Altamira Press.

Lefebvre, H., 1991, *The Production of Space*, [Trans. Nicholson-Smith, D.], Cornwall: Blackwell.

Legg, S., 2004, Memory and nostalgia, Cultural Geographies, 11(1), pp.99-107.

Legg, S., 2005, Contesting and surviving memory: space, nation, and nostalgia in Les Lieux de Mémoire, *Environment and Planning D: Society and Space*, 23(4), pp.481-504.

Legg, S., 2007, Reviewing geographies of memory/forgetting, *Environment and Planning A*, 39(2), pp.456-466.

Lemke, U. and Poppel, U., 1996. Berliner U-Bahn (4th Edition), Düsseldorf: Alba.

Lesser, W., 1987, *The Life Below the Ground: A Study of the Subterranean in Literature and History*, Boston: Faber and Faber.

Lessig, L., 2006, CODE version 2.0, New York: Basic Books.

Le Tissier, T., 1999, *Race for the Reichstag: the 1945 Battle for Berlin*, Oregon: Frank Cass Publishers.

Lewis, P., 1979, Axioms for reading the landscape, some guides to the American scene, in Meinig, D., (ed.), *The Interpretation of Ordinary Landscapes*, New York: Oxford University Press, pp. 11-32.

Linke, U., 1995, Murderous Fantasies: Violence, Memory, and Selfhood in Germany, *New German Critique*, 64, pp.37-59.

Litschko, K., 2006, Polizei blockiert den Verkehr, *Die Tageszeitung*, TAZ Berlin Lokal, Monday 27 November 2006, p.21.

Livingstone, S., 2003, On the Challenges of Cross-National Comparative Media Research, *European Journal of Communication*, 18(4), pp.477-500.

Lofland, J., Snow, D.A., Anderson, L. and Lofland, L.H., 2006, *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis*, Belmont CA: Wadsworth Thomson.

London Evening Standard, 2013, Tube 150: Lost and found – a secret underground journey, Thursday 4 July 2013, [Online] Available from: http://www.standard.co.uk/news/tube150/tube-150-lost-and-found--a-secret-underground-journey-8687413.html, [Last accessed 31 May 2014].

LT (= London Transport), 1994, *How to use and Protect the Intellectual Property Rights of London Transport Issue 1*, London: London Transport.

London Transport News, 1993, Plaque Marks Tragedy, 25 March 1993, p.5.

Lowenthal, D., 1998, Fabricating Heritage, History & Memory, 10(1), pp.5-24.

Loy, T., 2012, Ein Jahr nach dem Gewaltexzess Torben p. wartet auf Haftantritt, *Der Tagesspiegel*, Sunday 22 April 2012, [Online] Available from:

http://www.tagesspiegel.de/berlin/ein-jahr-nach-dem-gewaltexzess-torben-p-wartet-auf-haftantritt/6539554.html, [Last accessed 12 May 2014].

LTM (= London Transport Museum), n.d., *Aldwych Underground station open days terms and conditions*, [Online] Available from: http://www.ltmuseum.co.uk/assets/downloads/aldwych terms conditions.pdf [Last

accessed 5 May 2014].

LTM, 1999, *Mind the* ©opyright. *Have You Ever Thought About Using the Underground Map and Logo?* London: LTM.

LTM, 2011, Aldwych Underground Station Open Day, London: LTM.

LTM, 2013, *London Transport Museum Yearbook 2012/13*, London: LTM, [Online] Available from: http://www.ltmuseum.co.uk/assets/LTM\_Yearbook\_2012-13.pdf, [Last accessed 26 Feb 2014].

LTM, 2014, *About us: a brief history*, [Online] Available from: http://www.ltmuseum.co.uk/about-us/a-brief-history, [Last accessed 26 Feb 2014].

Lucas, G., 2013, A most distinctive corporate typeface, *Creative Review*, 33(3), pp.26-30.

Luescher, A., 2002, Refashioning no-Man's-Land: Urban Image Politics ad the Visual Dimensions of Democracy, *Cities*, 19(3), pp. 155-160.

LUL (= London Underground Limited), 2006, *Good practice guide: Managing Underground heritage*, London: LUL.

Lynch, K., 1960, The image of the city, Cambridge MA: MIT Press.

### Μ

Mace, R., 1976, Trafalgar Square: Emblem of Empire, London: Lawrence and Wishart.

Mah, A., 2012, *Industrial Ruination, Community, and Place: Landscapes and Legacies of Urban Decline*, Toronto: University of Toronto Press.

Mansfield, I., 2013, *Harry Beck commemorative plaques*, [Online] Available from: https://www.flickr.com/photos/ianvisits/sets/72157633083461055, [Last accessed 21 Jul 2014].

Marcus, G.E., 1995, Ethnography in/of the World System: The Emergence of Multi-Sited Ethnography, *Annual Review of Anthropology*, 24, pp.95-117.

Margry, P.J. and Sánchez-Carretero, C., 2011, Introduction: Rethinking Memorialization: The Concept of Grassroots Memorials, in Margry, P.J. and Sánchez-Carretero, C., (eds.), *Grassroots Memorials: The Politics of Memorializing Traumatic Death*, USA: Berghahn, pp.1-48.

Marks, L., 1976, Was it Suicide, *The Sunday Times*, Sunday 29 February 1976, pp.16-17.

Marks, L., 2010, Thirty-five years after Britain's worst Tube crash one victim's son asks: Did a suicidal driver kill 42 innocent passengers? *MailOnline*, 5 January 2010, [Online] Available from: www.dailymail.co.uk/news/article-1240625/Thirty-years-Britains-worst-Tube-crash-victims-son-asks-Did-suicidal-driver-kill-42-innocent-passengers.html, [Last accessed 22 Aug 2011].

Maron, K., 1946, Zum Todestag Bersarins, Berliner Zeitung, Sunday 16 June 1946, p.1.

Martenstein, H., 2013, Frauen, auf die Straßen! *Die Tagesspiegel*, Sunday 28 April 2013, [Online] Available from: http://www.tagesspiegel.de/meinung/straßenumbenennungenin-friedrichshain-kreuzberg-frauen-auf-die-straßen/8133930.html, [Last accessed 11 Jul 2014].

Malvern, J., 2003, Still Life puts life into a Tube station, *The Times*, Monday 31 March 2003, p.11.

Manicke, H., 2010, *Berlin in Transit(ion) – A study of the significance of the U- and S-Bahn systems in Berlin's cultural texts*, [Unpublished Master Dissertation], Queen's University, Canada.

Matless, D. 1992, An occasion for geography: landscape, representation and Foucault's corpus, *Environment and Planning D: Society and Space*, 10(1), pp.41-56.

Matless, D., 1996, New material? Work in cultural and social geography, 1995, *Progress in Human Geography*, 20(3), pp.379-391.

Mauruszat, A., 2012, *Das Berliner U-Bahn-Archiv*, [Online], Available from: http://www.u-bahn-archiv.de/, [Last accessed 21 Jul 2014].

Mauruszat, A. and Topel, K., 2008, Marmor-Mythos Mohrenstraße, *Verkehrsgeschichtliche Blätter*, 2008(4), pp.106-109.

McBurney, S., 1999, Collisions (Director's Note to Mnemonic), in Theatre de Complicite, *Mnemonic*, London: Methuen Drama, p. iix.

McBurney, S., 2003, John Berger/ Simon McBurney The Vertical Line, in van Noord, G., (ed.), *Off Limits: 40 Artangel Projects*, London: Merrell, p.191.

McCormack, D.P., 2003, An event of geographical ethics in spaces of affect, *Transactions of the Institute of British Geographers*, 28, pp.488-507.

McCulloch, J. and Sentas, V., 2006, The Killing of Jean Charles de Menezes: Hyper-Militarism in the Neoliberal Economic Free-Fire Zone, *Social Justice*, 33(4), pp.92-106.

Mcgowan, L., 2006, Much more than a phantom menace! Assessing the character, level and threat of Neo-nazi violence in Germany, 1977-2003, *Journal of Contemporary European Studies*, 14(2), pp. 255-272.

McLean, R. 1963, Picking The Poster, *The Times*, Friday 24 May 1963, p.x.

McQuire, S., 2000, The Public and the Private: John Berger's writing on photography and memory, in Papastergiadis, N., (ed.), *What John Berger Saw*, Canberra: ANU Canberra School of Art Gallery, pp.127-140.

Mead, R., 1978, The London that Tourists Never Find, *The Times*, Saturday 8 July 1978, p.9.

Meinig, D.W. 1979, Preface, in Meinig, D.W. (ed.), *The Interpretation of Ordinary Landscapes*, New York: Oxford University Press, pp.v-vi.

Merleau-Ponty, M. 1994[1945], *Phenomenology of Perception*, [Trans. Smith, C.], London and New York: Routledge.

Merrifield, A., 2002, Metromarxism, London and New York: Routledge.

Merrill, S., 2010, War, Terrorism and Disaster Beneath: The London Underground as a Traumascape, in Merrill, S. and Schmidt, L., (eds.), *A Reader in Uncomfortable* 

*Heritage and Dark Tourism*, Cottbus: BTU, [Online] Available from: https://www-docs.tu-cottbus.de/denkmalpflege/public/downloads/UHDT\_Reader.pdf, [Last accessed 11 Jul 2014], pp. 59-72.

Merrill, S., 2011a, A Cultural Landscape Analysis of Urban Underground Railways, Tracing Power and Memory Beneath London and Berlin [Unpublished MPhil/PhD Upgrade Report] London: UCL.

Merrill, S., 2011b, Excavating buried memories, tracing difficult pasts in the landscape of the London Underground, paper presented at 9<sup>th</sup> Annual Conference of the International Association for the History of Transport, Traffic and Mobility, 6th-9th October 2011, German Technology Museum, Berlin, Germany.

Merrill, S., 2012a, Looking forward to the past: London Underground's 150<sup>th</sup> anniversary, *The Journal of Transport History*, 33(2), pp.243-252.

Merrill, S., 2012b, Excavating buried memories: the Second World War and the landscapes of the London Underground and Berlin U- and S-Bahn, paper presented at *Landscapes of War, Commemoration Strategies and Heritage Management*, 24th-26th September 2012, Academia Belgica, Rome, Italy.

Merrill, S., 2013a, Berlin: Active Remembrance in A Melancholic City, paper presented at the *Association of American Geographers Annual Conference 2013*, 9th-13th April 2013, Los Angeles, USA.

Merrill, S., 2013b, The London Underground Diagram: Between Palimpsest and Canon, *The London Journal*, 38(3), pp.245-264.

Merrill, S., 2013c, Frederick Abrams' Underground Cathedral: journeys of artistic discovery in the Undergrounds of the world, in Galviz, C. L. and Merrill, S., (eds.), *Going Underground: New Perspectives*, London: London Transport Museum, pp.82-91.

Merrill, S., 2014a, David Ashford, London Underground: A Cultural Geography, *The Journal of Transport History*, 35(1), 134-136.

Merrill, S., 2014b, Reconnecting and Rebranding the Divided City: Berlin's Transport Infrastructure after 1989, paper to be presented at 12<sup>th</sup> International Conference on Urban History European Association for Urban History, Cities in Europe, Cities in the World, 3-6<sup>th</sup> September 2014, Nova University of Lisbon, Portugal.

Merrill 2014c, 'Zurückbleiben bitte': Murder, Thrill Seeking, and Everyday Accidents on the Berlin S-Bahn, paper to be presented at 12<sup>th</sup> Annual Conference of the International Association for the History of Transport, Traffic and Mobility, September 18-21, 2014, Drexel University, Philadelphia, USA.

Merrill, S., forthcoming, Negotiating the buried memories and myths of World War Two in the railways beneath London and Berlin, in Reeves, K. and James, L., (eds.), *Managing Landscapes of War*, Palgrave Macmillan.

Merrill. S. and Jasper, S., 2014, Was ist so Berlin?/What is so Berlin? A critical review of urban research's trajectories and issues in the German capital, *sub\urban zeitschrift für kritische stadtforschung*, 2(2), pp.5-14.

Meyer, K., 1992, Die Flutung des Berliner S-Bahn-Tunnels in den letzten Kriegstagen: Rekonstruktion und Legenden, Berlin: Kunstamt Kreuzberg.

Meyer-Kronthaler, J., 1989, U-Bahnhof Dresdener Straße, *Berliner Verkehrsblätter*, 1989(5), pp.87-89.

Meyer-Kronthaler, J., 1991a, Der Lückenschluß Linie U2 kommt voran, Berliner Verkehrsblätter, 1991(8), p.172.

Meyer-Kronthaler, 1991b, U-Bahnhofs-Umbenennungen, *Berliner Verkehrsblätter*, 1991(10), pp.212-213.

Meyer-Kronthaler, J., 1992, Fortschritte beim U2-Lückenschluß, Berliner Verkehrsblätter, 1992(11), p.231.

Meyer-Kronthaler, J., 2002, Der Ringscluß der S-Bahn verbindet Berlin, Berliner Verkehrsblätter, 2002(8), pp.155-158.

Meyer-Kronthaler, J. and Poppel, U., 1995, Die letzte U-Bahn-Lücke ist geschlossen, *Berliner Verkehrsblätter*, 1995(12), p.235.

Mitchell, D., 2003, Cultural landscapes: just landscapes or landscapes of justice? *Progress in Human Geography*, 27(6), pp.787-796.

Mitchell, W.J.T., 2002, Landscape and power, Chicago: University of Chicago Press.

Mittig, H., 2005, Marmor der Reichskanzlei, in D. Bingen, D. and Hinz, H., (eds.), *Die Schleifun/Zerstörung und Wiederaufbau historischer Bauten un Deutschland und Polen*, Weisbaden: Harrassowitz Verlag, pp.174-187.

Moeller, R. G., 2005, Germans as Victims? Thoughts on a Post-Cold War History of World War II's Legacies, *History and Memory*, 17(1-2), pp. 145-194.

Mohnhaupt, J., 2009, Ein Bahnhof für den Dino, *Die Tageszeitung*, TAZ Berlin Lokal, Wednesday 9 December 2009, p.24.

Moldt, D., 2013, Das Leben toter Helden, *Die Tageszeitung*, TAZ Berlin Lokal, Friday 26 April 2013, p.23.

Mole, A., 2010, Aldwych Tube Station – Blitz Tour, [Online] Available from: http://london-underground.blogspot.de/2010/09/aldwych-tube-station-blitz-tour.html [Last accessed 5 May 2014].

Moorhouse, R., 2010. Berlin at War, New York: Basic Books.

Morrison, R., 2003. What Else is Down There Under London? The Secret City is a Great Reservoir of Urban Myth, *The Times*, Monday 9 June 2003, p.3.

Morrison, R., 2011, The man with a plan for abandoned Tube stations is no April fool, *The Times*, 1 April 2011, [Online] Available from: www.thetimes.co.uk/tto/arts/article2968507.ece, [Last accessed 5 May 2014].

Morrison, R., 2013, London's real gems lie below, *The Times*, 12 April 2013, [Online] Available from:

www.thetimes.co.uk/tto/opinion/columnists/richardmorrison/article3737267.ece [Last accessed 5 May 2014].

Morriss, R,K., 2002, The Archaeology of Buildings, Stroud: Tempus.

Moshenska, G., 2006, The archaeological uncanny, Public Archaeology, 5(2), pp.91-99.

Moshenska, G., 2010, Charred churches or iron harvests? Counter-monumentality and the commemoration of the London Blitz, *Journal of Social Archaeology*, 10(1), pp.5-27.

Moshenska, G., 2012, M.R. James and the archaeological uncanny, *Antiquity*, 86(334), pp.1192-1201.

Moss, T., 2009, Divided City, Divided Infrastructure: Securing Energy and Water Service in Postwar Berlin, *Journal of Urban History*, 35(7), pp. 923-942.

Mossop, E., 2006, Landscapes of Infrastructure, in Waldheim, C., (ed.), *The Landscape Urbanism Reader*, New York: Princeton Architectural Press, pp.163-178.

Mostafavi, M. and Doherty, G., (eds.), 2010. *Ecological Urbanism*, Baden: Lars Muller Publishers.

Mott, C. and Roberts, S.M., 2013, Difference Really Does Matter: A Reply to Garrett and Hawkins, *Antipode*, [Online] Available from:

http://radicalantipode.files.wordpress.com/2013/11/mott-and-roberts-reply.pdf [Last accessed 6 May 2014].

Mott, C. and Roberts, S.M., 2014, Not Everyone Has (the) Balls: Urban Exploration and the Persistence of Masculinist Geography, *Antipode*, 46(1), pp. 229-245.

Münter, C. and Wolff, F., 1992a, Polizei befürchtet Gewalt-Spirale in Berlin, *Berliner Morgenpost*, Tuesday 24 November 1992, p.1.

Münter, C. and Wolff, F., 1992b, Polizeivizepräsident Dieter Schenk: Berlin droht eine Welle der Gewalt durch Extremisten, *Berliner Morgenpost*, Tuesday 24 November 1992, p.8.

Musterer, C., 2006, *Aktionen auf dem U-Bahnhof Alexanderplatz 1958 – 1990*, [Online] Available from: http://ngbk.de/alexanderplatz/1958-1990/0-1958-1990.html [Last accessed 26 May 2014].

Myzelev, A., 2001, The Uncanny Memories of Architecture: Architectural Works by Rebecca Horn and Rachel Whiteread, *Athanor*, XIX, pp. 59-65.

#### Ν

Nead, L., 2000, *Victorian Babylon: People, Streets and Images in Nineteenth-Century London*, New Haven & London: Yale University Press.

Neubacher, F., 1992, Wiederinbetriebnahme des Nord-Süd-S-Bahn-Tunnels, *Berliner Verkehrsblätter*, 1992(4), pp.76-78.

Neues Deutschland, 1950a, Mit rotem Marmor aus Thüringen, Friday 12 May 1950, p.6.

Neues Deutschland, 1950b, Berlins schönster U-Bahnhof fertiggestellt, Sunday 8 January 1950, p.6.

Neues Deutschland, 1950c, Der modernste U-Bahnhof Berlins entsteht, Sunday 30 July 1950, p.8.

Neues Deutschland, 1950d, In 108 Tagen enstand Station Thälmannplatz, Saturday 19 August 1950, p.6.

Neues Deutschland, 1950e, Polnische Delegation in Berlin, Tuesday 21 March 1950, p.1.

Neues Deutschland, 1959, Schöneberger Logik, Saturday 25 July 1959, p.8.

Neues Deutschland, BVG ganz groß, Friday10 October 1969, p.8.

Neues Deutschland, 1995, Antifaschistische Demonstration, Tuesday 22 November 1995, n.p.

Neue Zeit, 1949, Berlin feiert Stalin, Sunday 18 December 1949, p.1.

Neue Zeit, 1950, Dimitroffstraße in Berlin, Tuesday 28 February 1950, p.2.

Neue Zeit, 1991a, Umbenennung von Bahnhöfen gefordert, Wednesday 17 July 1991, p.22.

Neue Zeit, 1991b, Falsche Schreibweise auf Hellersdorfer U-Bahnhof, Tuesday 8 October 1991, p.18.

Neue Zeit, 1991c, Gegen Umbenennung des Rosa-Luxemburg-Platzes, Tuesday 24 September 1991, p.18.

[The] New Northern Line News, 1996, Balham Remembers, Issue 10, p.4.

NGBK (= Neue Gesellschaft für Bildende Kunst), 2010, Open call for submissions to a public art competition in the Berlin underground train network for projects for 2011, [Online] Available from: http://www.u10-berlin.de/e-competition.htm [Last accessed 26 May 2014].

Nijman. J., 2007a, Introduction – Comparative Urbanism, *Urban Geography*, 28(1), pp. 1-6.

Nijman. J., 2007b, Place-Particularity and "Deep Analogies": A Comparative Essay on Miami's Rise as a World City, *Urban Geography*, 28(1), pp. 92-107.

Noakes, L., 1998, *War and the British: Gender, Memory and National Identity*, London: I.B.Tauris.

Noakes, L. and Pattinson, J., 2014, Introduction: 'Keep calm and carry on' – The cultural memory of the Second World War in Britain, in Noakes, L. and Pattinson, J., (eds.), British Cultural Memory and the Second World War, London: Bloomsbury, pp.4-24.

Nolan, M., 2005, Air Wars, Memory Wars, Central European History, 38(1), pp.7-40.

Nora, P., 1989, Between Memory and History: Les Liex de Mémoire, *Representations*, 26, pp.7-24.

Nora, P., (ed.), 1996, *Realms of Memory: Rethinking the French Past, Volume One: Conflicts and Divisions*, [Trans. Goldhammer, A.] New York: Columbia University Press.

Notes of Berlin, 2013, *Aktualisiertes Berliner S+U-Bahn-Netz*, [Online], Available from: http://www.notesofberlin.com/2013/03/aktualisiertes-berliner-su-bahn-netz.html, [Last accessed 21 Jul 2014].

# 0

Ocejo, R.E. and Tonnelat, S., 2013, Subway diaries: How people experience and practice riding the train, *Ethnography*, 0(00), [Published online before print], pp.1-23.

O'Donnell, J.P., 1978, The Bunker, Houghton Mifflin: Boston.

O'Driscoll, C., 2008, Fear and Trust: The Shooting of Jean Charles de Menezes and the War on Terror, *Millennium*, 36(2), pp.339-360.

Olick, J.K., 1998, What Does it Mean to Normalize the Past? Official Memory in German Politics since 1989, *Social Science History*, 22(4), pp. 547-571.

Olick, J.K., 1999, Collective Memory: The Two Cultures, *Sociological Theory*, 17(3), pp.333-348.

Olick, J.K., 2007, Collective Memory, in Darity, W.A., (ed.), *International Encyclopedia of the Social Sciences* (2<sup>nd</sup> Edition) Detroit: Macmillan Reference, pp.7-8.

Olick, J.K. and Robbins, J., 1998, Social Memory Studies: From 'Collective Memory' to the Historical Sociology of Mnemonic Practices, *Annual Review of Sociology*, 24, pp.105-140.

OLUC (= Old London Underground Company), 2012, *Photos*, [Online] Available from: https://www.facebook.com/pages/the-old-london-underground-company/126729444268?sk=photos\_stream, [Last accessed 25 Jul 2014].

Olwig, K., 1996. Recovering the Substantive Nature of Landscape, *Annals of the Association of American Geographers*, 86(4), pp.630-653.

On The Move, 1996, Memorial for Blitz victims, 3 March 1996, p.20.

Otter, 2014, *City Road Abandoned Station*, [Online], Available from: http://www.thebeardedotter.com/4.0/?p=1541, [Last accessed 25 Jul 2014].

Otto, M., 2011, Mehr Gewalt im ÖPNV?!-Untersuchung zur Kommunikation und zum Empfinden von Sicherheit und Kriminalität am Beirspiel der Münchener S- und U-Bahnen, *Berichte zur deutschen Landeskunde*, 85(2), pp.179-198.

Owen, D.E., 1982, *The Government of Victorian London, 1855-1889*, Cambridge MA: Harvard University Press.

### Р

Paul, J.D., 2009, Geology and the London Underground, *Geology Today*, 25(1), pp.12-17.

Peeters, S., Justine Henin krijgt metrostation tijdens Zomerspelen, *De Morgen*, Friday 30 March 2012, [Online] Available from:

http://www.demorgen.be/dm/nl/2766/Londen-

2012/article/detail/1416761/2012/03/30/Justine-Henin-krijgt-metrostation-tijdens-Zomerspelen.dhtml, [Last accessed 3 Jun 2014].

Penrice, L., 1975, The London Underground diagram, Graphic Lines, 1, pp.19-22.

Pentzold, C., 2009, Fixing the floating gap: The online encyclopedia Wikipedia as a global memory place, *Memory Studies*, 2(2), pp. 255-272.

Percey, P., 1991, The London Underground Diagram, in Naylor, C., (ed.), *Contemporary Masterworks*, Chicago: St James Press, p.722.

Peters, D., 2010, Digging through the Heart of Reunified Berlin: Unbundling the Decision-Making Process for the Tiergarten-Tunnel Mega Project, *European Journal of Transport and Infrastructure Research*, 10(1), pp.89-102.

Pharus, n.d., *Die Geschichte der Pharus-Pläne*, [Online] Available from: http://www.pharus.eu/geschichte.php/, [Last accessed 27 Jun 2014].

Picon, A., 2000, Anxious Landscapes: From the Ruin to Rust, Grey Room, (1), pp.65-83.

Pike, D.L., 2002, Modernist Space and the Transformation of the London Underground, in Gilbert, P.K., (ed.), *Imagined Londons*, London: State University of New York, pp. 101-119.

Pike, D.L., 2005, *Subterranean cities: the world beneath Paris and London, 1800-1945*, Ithaca and London: Cornell University Press.

Pike, D.L., 2007, *Metropolis on the styx: the underworlds of modern urban culture, 1800-2001*, Ithaca and London: Cornell University Press.

Pike, D.L., 2013a, London on Film and Underground, *The London Journal*, 38(3), pp.226-244.

Pike, D.L., 2013b, Fun in Victorian London Today, *Journal of Victorian Culture*, 18(4), pp.516-525.

Pile, S., 2010, Emotions and affect in recent human geography, *Transactions of the Institute of British Geographers*, 35, pp.5-20.

Pohl, H., 1990, Berliner U-Bahn-Netz wieder fast komplett, *Verkehrsgeschichtliche Blätter*, 1990(4), p.91.

Pollock, G., 2006, The Image in Psychoanalysis and the Archaeological Metaphor, in Pollock, G., (ed.), *Psychoanalysis and the Image: Transdisciplinary Perspectives*, Oxford: Oxford University Press.

Poster, M., 1982, Foucault and History, Social Research, 49(1), pp.116-142.

Prager, F., Beeler Asay, G.R., Lee, B. and von Winterfeldt, D., 2011, Exploring Reductions in London Underground Passenger Journeys Following the July 2005 Bombings, *Risk Analysis*, 31(5), pp.773-786.

Pred, A., 1990, Lost words and lost worlds: modernity and the language of everyday life in late nineteenth-century Stockholm, Cambridge: Cambridge University Press.

Prescott, H., 2009, birth-place, Feminist Review, 93, pp.101-108.

Prescott, H., 2011, Reclaiming Ruins: Childbirth, Ruination and Urban Exploration Photography of the Ruined Maternity Ward, *Women's Studies Quarterly*, 39(3/4), pp.113-132.

Primeresi.com, 2013. Brompton Road tube station sold for luxury resi conversion, [Online] Available from: www.primeresi.com/brompton-road-tube-station-sold-for-luxury-resi-conversion/26566/ [Last accessed 5 May 2014].

Puschner, S. and Litschko, K., 2012, Straßenkampf, *Die Tageszeitung*, TAZ Berlin Lokal, Tuesday 20 November 2012, p.21.

Putbrese, B., 2009, Actions at the Underground Station Alexanderplatz 1990 to 2005, in Baumann, L. and Ebert, H., (eds.), *Neue Gesellschaft für Bildende Kunst 40 Years*, Berlin: NGBK, pp. 74-80.

# Q

Qviström, M., 2012, Network Ruins and Green Structure Development: An Attempt to Trace Relational Spaces of a Railway Ruin, *Landscape Research*, 37(3), pp.257-275.

Rada, U., 1992a, Wut und Trauer nach dem Tod von Silvio M, *Die Tageszeitung*, TAZ Berlin Lokal, Monday 23 November 1992, p.21.

Radstone, S., 2000, Working with Memory: an Introduction, in Radstone, S., (ed.), *Memory and Methodology*, Oxford: Berg, pp.1-22.

Ragin, C.C., 1989, *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies*, Berkley: University of California Press.

Ratzel, F., 1882, *Anthropo-Geographie oder Grundzünge der Anwendung der Erdkunde auf die Geschichte*, Stuttgart: J. Engelhorn.

Read, A. and Fisher, D., 1992, The Fall of Berlin, London: Hutchinson Radius.

Reading, A., 2011, The London bombings: Mobile witnessing, mortal bodies and globital time, *Memory Studies*, 4 (3), pp.298-311.

Rebbert, K., 2011, Opening Remarks, in Gallico, J. and Rekade, C., (eds.), *U10 – von hier aus ins Imaginäre und wieder zurück*, Berlin: NGBK, pp.10-11.

Reif, H., 2004, "Mobilität für alle" – 75 Jahre BVG, 1929–2004, in BVG, 75 Jahre BVG. Tradition auf neuen Gleisen, Beilage Festschrift, Berlin: BVG.

Reimer, M., 1991a, Untergrundentdeckungen, Verkehrsgeschichtliche Blätter, 1991(1), p.18.

Reimer, M., 1991b, "Sicherheit" auf der Nord-Süd-S-Bahn, Verkehrsgeschichtliche Blätter, 1991(5), pp.118-120.

Reineke, R., 2011, *S-, U- und Straßen-Bahn Netzspinnen*, [Online] Available from: http://www.berliner-verkehr.de/snetze.htm, [Last accessed 21 Jul 2014].

Reinelt, J., 2000, Mnemonic, Theatre Journal, 52(4), pp.578-579.

Reinelt, J., 2001, Performing Europe: Identity Formation for a "New" Europe, *Theatre Journal*, 53(3), pp. 365-387.

Reinfried, L., 1998, Mahnwache erinnert an ermordeten Silvio Meier, *Berliner Zeitung*, Monday 23<sup>rd</sup> November 1998, n.p.

Rendell, R., 1991, A transport of love in the underworld, *The Guardian*, Thursday 17 October 1991, p.21.

Reuters, 1989, 'Ghost station' opens, The Observer, Sunday 12 November 1989, p.10.

Ridley, T, M., 1985, The London Underground – what next? Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 199(2), pp.105-112.

Rigney, A, 2005, Plenitude, Scarcity and the Circulation of Cultural Memory, *Journal of European Studies*, 35(1), pp.11-28.

Roach, J. 1996, Cities of the Dead, New York: Columbia University Press.

Röbel, S., 2011, Jugendgewalt Exzess um Untergrund, *Der Spiegel*, 2011(32), Monday 8 August 2011, p.41.

Roberts, A., 2009, Menzes gets his memorial, *Morning Star*, Friday 11 December 2009, p. 5.

R

Roberts, M.J., 2008, Underground Maps After Beck, Harrow: Capital Transport.

Robertson, S., 2007, Visions of urban mobility: the Westway, London, England, *Cultural Geographies*, 14(1), pp.74-91.

Robinson, J., 2002, Global and world cities: a view from off the map, *International Journal of Urban and Regional Research*, 26(3), pp.531-554, p.532.

Robinson, J., 2004, In the tracks of Comparative Urbanism: Difference, Urban Modernity and the Primitive, *Urban Geography*, 25(8), pp.709-723.

Robinson, J., 2011, Cities in a World of Cities: The Comparative Gesture, *International Journal of Urban and Regional Research*, 35(1), pp.1-23.

Rogers, R., 2013, Digital Methods, Cambridge MA: MIT Press.

Rohrlach, R., 2014, Ein U-Bahnhof in Berlin und seine schreckliche Geschichte, *Schattenwelt*, 2014(1), pp.26-27.

Rosa, B., 2013, *Beneath the Arches: Re-appropriating the Spaces of Infrastructure in Manchester*, [Unpublished Doctoral Thesis], Manchester: University of Manchester.

Rose, D., 2007, *The London Underground: A Diagrammatic History* (8<sup>th</sup> Edition), London: Douglas Rose.

Rose, G., 2006, *Visual Methodologies: An Introduction to the Interpretation of Visual Materials*, (2<sup>nd</sup> Edition), London: Sage.

Rosenfeld, G.D., 2009, A Looming Crash or a Soft Landing? Forecasting the Future of the Memory "Industry", *Journal of Modern History*, 81, pp.122-158.

Rose-Redwood, R., 2011, Rethinking the Agenda of Political Toponymy, *ACME: An International E-Journal for Critical Geographies*, 10(1), pp.34-41.

Rose-Redwood, R., Alderman, D. and Azaryahu, M., 2010, Geographies of toponymic inscription: new directions in critical place-name studies, *Progress in Human Geography*, 34(4), 453-470.

Rosser, R., Dewer. S. and Thompson, J., 1991, Psychiatric aspects of disaster: Psychological aftermath of the King's Cross fire, *Journal of the Royal Society of Medicine*, 84, pp.4-8.

Rowlands, M., 1998, Trauma, Memory and Memorials, *British Journal of Psychotherapy*, 15(1), pp.54-64.

Roy, A., 2003, Paradigms Of Propertied Citizenship, *Urban Affairs Review*, 38(4), pp.463 -491.

Royal Geographic Society, 2006, *Research Ethics and Code of Practice*, [Online] Available from: www.rgs.org/grants-ethics, [Last accessed 13 November 2014].

#### S

S-Bahn-Berlin, 2013, *Zahlenspiegel (Stand 31.12.2012)*, [Online] Available from: www.s-bahn-berlin.de/unternehmen/firmenprofil/kurzfassung.htm, [Las accessed 21 Feb 2014].

Saler, M., 1999, *The Avant-Garde in Interwar England: Medieval Modernism and the London Underground*, New York: Oxford University Press.

Saler, M., 2008, Down the Tube, *Cabinet*, 30, [Online] Available from: http://www.cabinetmagazine.org/issues/30/saler.php, [Last accessed 18 Jul 2014].

Sälter, G. and Schaller, T., 2013, Fluchtversuche durch die S- und U-Bahn-Tunnel, in Sälter, G. and Schaller, T., (eds.), *Grenz- und Geisterbahnhöfe im geteilten Berlin*, Berlin: Ch. Links Verlag, pp.100-112.

Samuels, M.S., 1979, The Biography of Landscape, cause and culpability, in Meinig, D.W. (ed.), *The Interpretation of Ordinary Landscapes*, New York: Oxford University Press, pp. 51-88.

Sauer, C.O., [1925]1963, Land and Life, Berkeley: University of California Press.

Scalway, H., 2000, Travelling Blind, in Pile, S. and Thrift, N., (eds.), *City a-z: urban fragments*, New York: Routledge, pp. xvi-xvii.

Scalway, H., 2014, *Travelling Blind*, [Online] Available from: http://www.helenscalway.com/travelling-blind/ [Last accessed 21 Jul 2014].

Schama, S., 1996, Landscape and Memory, Bath: Fontana Press.

Schivelbusch, W., 1979, *The Railway Journey: The Industrialization of Time and Space in the 19<sup>th</sup> Century*, Berkeley: University of California Press.

Schmalenbach, C. and Bobileva, O., 2014, Streit der Initiativen entbrannt Mohrenstraße zu rassistisch? *Berliner Kurier*, Tuesday 18 February 2014, [Online] Available from: http://www.berliner-kurier.de/kiez-stadt/streit-der-initiativen-entbrannt-mohrenstraße-zu-rassistisch-7169128,26239854.html, [Last accessed 21 June 2014].

Schmidl, K., 1998, Silvios Freunde erstatten Anziege gegen Unbekannt, *Berliner Zeitung*, Thursday 25 November 1998, [Online], Available from: http://www.berliner-zeitung.de/archiv/tafel-fuer-ermordeten-hausbesetzer-am-u-bahnhof-samariterstraße-erneut-abmontiert-silvios-freunde-erstatten-anzeige-gegen-unbekannt,10810590,9514832.html, [Last accessed 19 Jul 2014].

Schmidt, L., 2008, Architectural Conservation: An Introduction. Berlin: Westkreuz-Verlag.

Schneider, W., 1987, Der Stätische Berliner Öffentliche Nahverkehr (Band 1-12), Berlin: BVG.

Schomacker, M., 2009, *Die Berliner Untergrundbahn*, [Online] Available from: http://www.berliner-untergrundbahn.de/, [Last accessed 21 Jul 2014].

Schouten, F.F.J., 1995, Heritage as Historical Reality, in Herbert, D.T., (ed.), *Heritage, Tourism and Society*, Guildford: Mansell, pp.21-31.

Schulze, M., 1992, Polizei hat keine Spur von den Mörden an Silvio Meier, *Neues Deutschland*, Tuesday 24 November 1992. n.p.

Schwartz, B., and Kim, M., 2002, Honor, Dignity, and Collective Memory: Judging the Past in Korea and the United States, in Cerulo, K. A., (ed.), *Culture in Mind: Toward a Sociology of Culture and Cognition*, New York: Routledge, pp.209-26.

Schwartz, J. and Cook, T., 2002, Archives, records and power: The making of modern memory, *Archival Science*, 2, pp.1-19.

Schwartz, M., 2010, Ecological Urbanism and the Landscape, in Mostafavi, M. and Doherty, G., (eds.), *Ecological Urbanism*, London: Lars Muller Publishers, pp.524-525.

[Das] Schwarze Korps, 1935, Juden im Hintergrund: Die Zusammenhänge der Berliner Einsturkatastrophe, Thursday 3 October 1935, p.1.

Scott, J. and Zac, L., 1993, Collective Memories in Britain and the United States, *Public Opinion Quarterly*, 57(3), pp.315-331.

Seefeldt, A. and Günther, M., 1994a, "Blinde Tunnels" unter Berlins Pflaster: Unterirdische Bahnanlagen als Bauvorleistungen und als Investruinen, *Verkehrsgeschichtliche Blätter*, 1994(2), pp.26-38.

Seefeldt, A. and Günther, M., 1994b, "Blinde Tunnels" unter Berlins Pflaster: Unterirdische Bahnanlagen als Bauvorleistungen und als Investruinen, *Verkehrsgeschichtliche Blätter*, 1994(3), pp.63-71.

Seefeldt, A. and Günther, M., 1994c, "Blinde Tunnels" unter Berlins Pflaster: Unterirdische Bahnanlagen als Bauvorleistungen und als Investruinen, *Verkehrsgeschichtliche Blätter*, 1994(4), pp.87-92.

Seefeldt, A. and Günther, M., 1994d, "Blinde Tunnels" unter Berlins Pflaster: Unterirdische Bahnanlagen als Bauvorleistungen und als Investruinen, *Verkehrsgeschichtliche Blätter*, 1994(5), pp.118-121.

Seefeldt, A. and Günther, M., 1995, Licht am Ende der Tunnels? Notwendige Nachträge zu "Blinde Tunnels...", *Verkehrsgeschichtliche Blätter*, 1995(5), pp.122-125.

Self, W., 2014, Give the freedom of the city to our urban explorers, *The London Evening Standard*, Friday 25 April 2014, [Online] Available from: http://www.standard.co.uk/comment/will-self-give-the-freedom-of-the-city-to-our-urban-explorers-9286780.html [Last accessed 6 May 2014].

Semple, E.C., 1911, *Influences of geographic environment, on the basis of Ratzel's system of anthropo-geography*, New York: H. Holt and Co.

Seyfried, G., 1990, Flucht Aus Berlin, Berlin: Rotbuch Verlag.

Sharr, A., 2010, The sedimentation of memory, *The Journal of Architecture*, 15(4), pp.499-515.

Sheller, M. and Urry, J., 2003, Mobile Transformations of 'Public' and 'Private' Life, *Theory, Culture & Society*, 20(3), pp.107-125.

Sheller, M., 2004, Mobile publics: beyond the network perspective, *Environment and Planning D: Society and Space*, 22(1), pp.39-52.

Seigel, M., 2005, Beyond Compare: Comparative Method after the Transnational Turn, *Radical History Review*, 91, pp.62-90.

Simmel, G., 1997[1903], The Metropolis and Mental Life, in Frisby, D. and Featherstone, M., (eds.), *Simmel on Culture: Selected Writings*, London: Sage, pp.137-170.

Singh, D.Z., 2011, Subterranean displays: exploring the Buenos Aires Underground as a visual device, paper presented at *Annual Conference of the International Association for the History of Transport, Traffic and Mobility*, 6th-9th October 2011, German Technology Museum, Berlin, Germany.

Singh, D.Z., 2012, *The history of the Buenos Aires Underground: A cultural analysis of the modernization process in a peripheral metropolis (1886-1944)*, [Unpublished

Doctoral Thesis], The Institute of Historical Research, School of Advanced Study, University of London.

Singh, D.Z., 2013, Towards a Cultural History of Underground Railways, in Norton, P., Mom, G., Millward, L., Flonneau, M. and Errázuriz, T., (eds.), *Mobility in History: The Yearbook of the International Association for the History of Transport, Traffic and Mobility, Volume 4*, USA: Berghahn. Pp.106-112.

Slupski, G., 1945, Pontonfahrt im S-Bahn-Tunnel, *Berliner Zeitung*, Sunday 7 October 1945, p. 2.

Smallman, G., 2009, Jean Charles de Menezes memorial, *Socialist Worker*, Tuesday 28 July 2009, [Online], Available from:

http://socialistworker.co.uk/art/18281/Jean+Charles+de+Menezes+memorial, [Last Accessed 28 May 2014].

Smedley, T., 2014. Hydroponics used to grow salad in tunnels under London, *The Guardian*, Thursday 30 January 2014, [Online] Available from: http://www.theguardian.com/sustainable-business/hydroponics-grow-salad-tunnels-london-underground, [Last accessed 12 May 2014].

Smithers, A., 2009, New Ideas In The Interpretation of Complex Rail Networks, *The Bulletin of the Society of Cartographers*, 43(1/2), pp.13-21.

Smithson, R., 1967, A Tour of The Monuments of Passaic, New Jersey, *Artforum*, 6(4), pp.48-51.

Spectrum Drama, 2014, *Latest News*, [Online] Available from: http://www.spectrumdrama.com/index.htm, [Last accessed Jul 24 2014].

[Der] Spiegel, 2011, Kinder der Finsternis, 2011(18), Monday 2 May 2011.

Spiegel Online, 2013, *Berliner Kanzler-Bahn wird 92 Millionen Euro teurer*, 24 November 2014, [Online] Available from: http://www.spiegel.de/wirtschaft/soziales/berliner-kanzler-bahn-wird-92-millioneneuro-teurer-a-935338.html, [Last accessed 15 Jul 2014].

Spry, T., 2001, Performing Autoethnography: An Embodied Methodological Praxis, *Qualitative Inquiry*, 7(6), pp.706-732.

Staroste, H., 2008, Verkehrsdenkmale der Berliner Hoch- und Untergrundbahn – eine Zwischenbilanz, in Haspel, J., Petzet, M. and Schmückle-Mollard, C., (eds.), *World Heritage Sites of the 20<sup>th</sup> Century: Gaps and Risk from a European Point of View*, Petersberg: Michael Imhof Verlag, pp.139-146.

Steinweg, M., 15 Statements zum Verhältnis von Kunst, Philosophie, Subjektivität, Liebe, Freundschaft und Namenlosigkeit, in Jonas, U., Neumann, T. and Schumacher, B.A., (eds.), *U2 Alexanderplatz 2006*, Berlin: NGBK, pp.46-57.

Stephens, A. C., 2007, "Seven Million Londoners, One London": National and Urban Ideas of Community in the Aftermath of the 7 July 2005 Bombings in London, *Alternatives*, 32(2), pp.155-176.

Stinchcombe. A., 1979, *Theoretical Methods in Social History*, New York: Academic Press.

Stone, P., 2006, A Dark Tourism Spectrum: towards a typology of death and macabre related tourist sites, attractions and exhibitions, *Tourism*, 54(2), pp.145-160.

Strangleman, T., 1999, The Nostalgia of Organisation and the Organisation of Nostalgia: Past and Present in the Contemporary Railway Industry, *Sociology*, 33(4), pp.725-746.

Striegl, S., 1992, Ganz Berlin ist ohne Fahrplan, *Die Tageszeitung*, TAZ Berlin Lokal, Saturday 14 March 1992, p.34.

[The] Sunday Express, 2006, Tribute to Shot Brazilian, Sunday 23 July 2006, p.6.

Swerdlow, M., 1998, *Underground Woman: My Four Years as a New York City Subway Conductor*, Philadelphia: Temple University Press.

#### Т

[Die] Tageszeitung, 1991a, Umbenennungen: Rosa L. überfahren, TAZ Berlin Lokal, Tuesday 24 September 1991, p.21.

[Die] Tageszeitung, 1991b, Der Verkehrssenator löst den Beförderungsstau, TAZ Berlin Lokal, Tuesday 1 October 1991, p.22.

[Die] Tageszeitung, 1991c, Bahnhofsumbenennung von "Autonomen", TAZ Berlin Lokal, Friday 22 November 1991, p.21.

[Die] Tageszeitung, 1992, Unter Honi wär det nich passiert, TAZ Berlin Lokal, Tuesday 24 November 1992, p.17.

[Die] Tageszeitung, 1993, Trauermarsch für Silvio, TAZ Berlin Lokal, Monday 22 November 1993, p.21.

[Die] Tageszeitung, 1994, Nach Mahnwache für Silvio Meier Demo, TAZ Berlin Lokal, Wednesday 23 November 1994, p.19.

[Die] Tageszeitung, 1999, Gut gelauntes Gedenken, TAZ Berlin Lokal, Monday 27 November 1999, p.20.

[Die] Tageszeitung, 2003, Was macht eigentlich...Otis?, TAZ Berlin Lokal, Tuesday 7 January 2003, p.22.

[Die] Tageszeitung, 2004, Betricht: Dutschke-Straße, TAZ Magazine, Friday 31 December 2004, p.8.

[Die] Tageszeitung, 2005a, Dutschke-Straße Die Nachrichtenlage, TAZ Berlin Lokal, Wednesday 26 January 2005, p.21.

[Die] Tageszeitung, 2005b, CDU: U-Bahnhöfe umbenennen, TAZ Berlin Lokal, Tuesday 14 June 2005, p.24.

[Die] Tageszeitung, 2007a, Für lau Knochen gucken, TAZ Berlin Lokal, Wednesday 19 December 2007, p.22.

[Die] Tageszeitung, 2007b, Chronologie des Straßenkampf, Saturday 13 January 2007, [Online], Available from: http://www.taz.de/1/archiv/?dig=2007/01/13/a0192, [Last accessed 27 Jul 2014].

Tanenbaum, S.J., 1995, *Underground Harmonies: Music and Politics in the Subways of New York*, Ithaca: Cornell University Press.

Taylor, F., 2006, The Berlin Wall, London: Bloomsbury Publishing.

Taylor, J. R., 1980, Romantic reactions to the magnetic East, *The Times*, Tuesday 1 July 1980, p. 11.

Taylor, P., 1999, Going underground to search for artists lost in time, *The Independent*, Saturday 6 February 1999, [Online] Available from:

http://www.independent.co.uk/news/first-night-going-underground-to-search-for-artists-lost-in-time-1068793.html, [Last accessed 19 Jul 2014].

[The] Telegraph, 2010, Under London: Blitz experience tours of Aldwych Underground station, [Online] Available from:

http://www.telegraph.co.uk/news/picturegalleries/uknews/8021050/Under-London-Blitz-experience-tours-of-Aldwych-Underground-station.html?image=11, [Last accessed 31 May 2014].

[The] Telegraph, 2013, *Archive footage released as Tube celebrates 150th anniversary*, 9 January 2013, [Online] Available from:

http://www.telegraph.co.uk/news/uknews/9790306/Archive-footage-released-as-Tube-celebrates-150th-anniversary.html, [Last accessed 17 Jul 2014].

TfL (= Transport for London), 2003, *How to use and protect the intellectual property rights of Transport for London*, London: TfL.

TfL, 2013, *TfL Annual Report and Statement of Accounts for the Year Ended 31 March 2013*, [Online] Available from: www.tfl.gov.uk/assets/downloads/Part-1-Item06-Annual-Report-and-Accounts-2012-13%281%29.pdf ,[Last accessed 21 Feb 2014].

Thomas, J., 2004, Archaeology and Modernity, London: Routledge.

Thornton, S., 1997, Introduction to Part Four, in Gelder, K. and Thornton, S., *The Subcultures Reader*, London: Routledge, pp.213-216.

Till, K.E., 2005, *The New Berlin: Memory, Politics, Place*, Minneapolis: University of Minnesota Press.

Till, K.E., 2006, Memory Studies, History Workshop Journal, 62, pp. 325-341.

Till, K.E., 2008, Artistic and activist memory-work: Approaching place-based practice, *Memory Studies*, 1(1), pp.99-113.

Till, K.E., 2012, Wounded cities: Memory-work and a place-based ethics of care, *Political Geography*, pp.3-14.

Tilley, C., 1997, *A Phenomenology of Landscape: Places, Paths and Monuments*, Oxford: Berg.

Tilly, C., 1984, *Big structures, large processes, huge comparisons*, New York: Russell Sage Foundation.

Time Out London, 2007, Ghost Stations, April 18-27, 2007. p. 15.

[The] Times, 1980, London's historic new shopping experience opens today at 3pm, Thursday 19 June 1980, p.25.

[The] Times, 2004, Family of victim 115 could get payout, Monday 26 January 2004, [Online] Available from: http://www.thetimes.co.uk/tto/news/uk/article1900014.ece, [Last accessed 19 Jul 2014].

Tobin, L., 2011, The grape escape for Oxford Circus: Tube station nearly renamed in winemaker's sponsor deal, *The London Evening Standard*, Friday 24 June 2011, [Online] Available from: http://www.standard.co.uk/news/the-grape-escape-for-oxford-

circus-tube-station-nearly-renamed-in-winemakers-sponsor-deal-6414885.html, [Last accessed 19 June 2014].

Tolia-Kelly, D.P., 2006, Affect – an ethnocentric encounter? Exploring the 'universalist' imperative of emotional/affectual geographies, *Area*, 38(2), pp.213-217.

Tolia-Kelly, D.P., 2013, Landscape and memory, in Howard, P., Thompson, I., and Waterton, E., (eds), *The Routledge Companion to Landscape Studies*, London and New York: Routledge, pp. 322-334.

Tonkiss, F., 2005, *Space, the City and Social Theory: Social Relations and Urban Forms*, Oxford: Polity.

Tonnelat, S., 2010, The sociology of urban public spaces, in Wang, H., Savy, M. and Zhai, G., (eds.), *Territorial Evolution and Planning Solution: Experiences from China and France*, Paris: Atlantis Press, pp.84-92.

Trench, R. and Hillman, E., 1984, London under London, London: John Murray.

Turmarkin, M., 2005, *Traumascapes: The Power and Fate of Places Transformed by Tragedy*, Melbourne: Melbourne University Press.

### U

U-Magazine, 1994, Mayor Unveils Memorial to King's Cross Victims, No 5, December 1994, p. 12.

Underground News, 1999, Disused London Underground Stations by Mike Ashworth – A Report of the Baden-Powell House Meeting – 7<sup>th</sup> April 1998, No. 445, January 1999, pp.41-43.

Unsere BVG Zeitung, 1959, Neun Jahre U-Bahnhof Thälmannplatz, No.19, August 1959, pp.1-2.

Urban-Halle, P., 1984, Der Einsturz beim Bau der Nord-Süd-Bahn, in Hickethier, K., (ed.), *S-Bahn Berlin*, Berlin: NGBK, pp.131-134.

### V

Vaidhyanathan, S., 2001, Copyrights and copywrongs: the rise of intellectual property and how it threatens creativity, New York: New York University Press.

Vaidhyanathan, S., 2005, Remote Control: The Rise of Electronic Cultural Policy, *Annals of the American Academy of Political and Social Science*, 597(1), pp.122-133.

van Noord, G., (ed.), 2003, Off Limits: 40 Artangel Projects, London: Merrell.

Vaughan-Williams, N., 2007, The Shooting of Jean Charles de Menezes: New Border Politics? *Alternatives*, 32(2), pp.177-195.

Vergunst, J.L. and Ingold, T., (eds.), 2008. *Ways of Walking: Ethnography and Practice on Foot*, Aldershot: Ashgate.

Vertesi, J., 2008, Mind the Gap: The London Underground Map and Users' Representations of Urban Space. *Social Studies of Science*, 38(1), pp.7-33.

Vidler, A., 1987, The Architecture of the Uncanny: The Unhomely Houses of the Romantic Sublime, *Assemblage*, 3, pp.6-29.

Vidler. A., 1992, *The Architectural Uncanny: Essays in the Modern Unhomely*, Cambridge MA: MIT Press.

#### W

Waldheim, C., (ed.), 2006. *The Landscape Urbanism Reader*, New York: Princeton Architectural Press.

Walker, J.A., 1979, The London Underground diagram, Icographic, 14/15, pp.2-4.

Walker, J.A. and Chaplin, S., 1997, *Visual Culture: an introduction*, Manchester: Manchester University Press.

Ward, K., 2008, Editorial—Toward a Comparative (Re)turn in Urban Studies? Some Reflections, *Urban Geography*, 29(5), pp.405-410.

Watson, L., 2013, Mystery Ukrainian billionaire plans to turn 'ghost' tube station that was used by Winston Churchill into flats after buying it for £50million, *mailonline*, [Online] Available from: http://www.dailymail.co.uk/news/article-2514404/Brompton-Road-station-turned-flats-Ukrainian-billionaire.html, [Last accessed 5 December 2013].

Weber, C., 2006, An Aesthetics of Fear: The 7/7 London Bombings, the Sublime, and Werenotafraid.com, *Millennium*, 34(3), pp.683-710.

Weber, U., 2006, Building the Tube: zur Londoner Rezeption der Berliner U- und S-Bahnhöfe in den 1920/30er Jahren, in Fioretos, A. (ed.), *Berlin über und unter der Erde. Alfred Grenander, die U-Bahn und die Kultur der Metropole*, Berlin Nicolai, pp.88-93.

Weissbrod, L., 1994, Nationalism in reunified Germany, *German Politics*, 3(2), pp. 222-232.

Welsh, D., 2010, Underground Writing: The London Tube from George Gissing to Virginia Woolf, Liverpool: Liverpool University Press.

[Die] Welt, 1994, Krawalle bei der Mahnwache für Silvio Meier, Tuesday 22 November 1994, n.p.

Westle, B. and Niedermayer, O., 1992, Contemporary right-wing extremism in West Germany 'The Republicans' and their electorate, *European Journal of Political Research*, 22(1), pp. 83-100.

Whelan, Y. and Moore, N., 2006, *Heritage, Memory and the Politics of Identity: New Perspectives on the Cultural Landscape,* Aldershot: Ashgate.

White, A., 2014, The ghosts and potential treasure hidden under London's streets, *The Telegraph*, Saturday 3 May 2014, [Online] Available from:

http://www.telegraph.co.uk/finance/newsbysector/transport/10806202/Abandoned-Tube-stations-The-ghosts-and-potential-treasure-hidden-under-Londons-streets.html, [Last accessed 12 May 2014].

Whitehand, J.W.R., 2001, British urban morphology: the Conzenian tradition, *Urban Morphology*, 5(2), pp.103-109.

Williams, H., 2000a. *Aldwych Tour* [Online] Available from: http://www.underground-history.co.uk/aldwych\_tour.php, [Last accessed 10 May 2013].

Williams, H., 2000b. *Down St. Tour* [Online] Available from: http://www.undergroundhistory.co.uk/downtour.php, [Last accessed 10 May 2013]

Williams, R., 2008[1990]. Notes on the Underground: An Essay on Technology, Society, and the Imagination (New Edition), Cambridge Ma and London: MIT Press.

Williams, T., 1994, Second LURS Visit to Aldwych Branch – 27<sup>th</sup> September 1993, *Underground News*, No. 385, January 1994, pp.28-31.

Winchester, H.P.M., Kong, L. and Dunn, K., 2003. *Landscapes: ways of imagining the world*, Malaysia: Pearson Education.

Winter, J., 2000, The Generation of Memory: Reflections on the 'Memory Boom' in Contemporary Historical Studies, *Bulletin of the German Historical Institute*, 27 (3) [Online] Available from: http://www.ghi-

dc.org/publications/ghipubs/bu/027/b27winterframe.html, [Last accessed 5 February 2014].

Wolff, F., 1992b, Silvio Meier doch von Rechtsextremen erstochen? *Berliner Morgenpost*, Monday 23 November 1992, p.9.

Wolff, F., 1992a, Überfall in der U-Bahn: Hausbesetzer erstochen, *Berliner Morgenpost*, Sunday 22 November 1992, p.13.

Wolmar, C., 2005, *The Subterranean Railway: How the London Underground Was Built and How it Changed the City Forever*, London: Atlantic Books.

Wood, D., Rethinking the power of maps, New York: Guilford Press.

Woodman, P., 2012, RMT mark 25th anniversary of Kings Cross fire by demanding the scrapping proposed staffing cuts, *The Independent*, Sunday 18 November 2012, [Online] Available from: www.independent.co.uk/news/uk/home-news/rmt-mark-25th-anniversary-of-kings-cross-fire-by-demanding-the-scrapping-proposed-staffing-cuts-8326919.html, [Last accessed 11 December 2013].

Wüstenberg, J., 2009, Vom alternativen Laden zum Dienstleistungsbetrieb: the Berliner Geschichtswerkstatt. A Case Study in Activist Memory Politics, *German Studies Review*, 32(3), pp. 590-618.

Wylie, J., 2005, A single day's walking: narrating self and landscape on the South West Coast Path, *Transactions of the Institute of British Geographers*, 30(2), pp.234-247.

Wylie, J. 2007, Landscape, London and New York: Routledge.

Wylie, J., 2009, Landscape, absence and the geographies of love, *Transactions of the Institute of British Geographers*, 34(3), pp.275-289.

#### Х

Y

Young, J.E., 1992, The Counter-Monument: Memory against Itself in Germany Today, *Critical Inquiry*, 18(2), pp.267-296.

Young, J.E., 1993, The Texture of Memory, New Haven: Yale University Press.

Young, J.E., 2000, Daniel Libeskind's Jewish Museum in Berlin: The Uncanny Arts of Memorial Architecture, *Jewish Social Studies*, 6(2), pp.1-23.

### Ζ

Zach, W. and Evers, K., 2003, Der Berliner Schnellbahnnetze – ihre Entwicklung und ihre Funktionen, *Berlinerstatistik*, Monatsschrift, 3(7), pp.266-294.

[Die] Zeit, 1962, Die Geisterbahn von Westberlin, Friday 20 July 1962, [Online] Available from: http://www.zeit.de/1962/29/die-geisterbahn-von-westberlin, [Last accessed 3 June 2014].

Zerubavel, E., 1996, Social Memories: Steps to a Sociology of the Past, *Qualitative Sociology*, 19(3), pp.283-299.

Zhang, M., 2011, *DSLRs Banned from UK Tube Station*, [Online], Available from: http://petapixel.com/2011/12/05/dslrs-banned-from-uk-tube-station/, [Last accessed 25 Jul 2014].

#### Interviews [and conversations]\*

Abrams, F., 2013\*, Independent artists, 15 April 2013, Los Angeles, USA.

Arnold, I., 2013\*, Berliner Unterwelten e.V. co-founder and archivist, 30 July 2013, Berlin, Germany.

Ashworth, M., 2011\*, TfL Design and Heritage Manager, 22 June 2011, London, UK.

Boersma, S., 2012\*, TfL Brand Development Manager, 22 March 2012, London, UK.

Catford, N., 2013\*, Subterranea Britannica Membership Secretary, 14 May 2013, Swanley, UK.

Chambers, A., 2012\*, Chief Executive Office of The Old London Underground Company, 19 September 2012, London, UK.

Donner, U., 2012\*, Community Artists and Activist, 24 October 2012, Berlin, Germany.

Gottwaldt, A., 2012\* Deutsches Technikmuseum Berlin Curator, 9 May 2012, Berlin, Germany.

Heilein, K., 2013\*, Organiser of the NGBK U10 Construction Time Again Project, 16 August 2013, Berlin, Germany.

Jones, R., 2012\*, Moorgate Family and Friends Memorial Campaign Leader, 16 March 2012, London, UK.

Kohl, S., 2014\*, Volunteer of the NGBK U10 Construction Time Again Project, 31 May 2014, Berlin, Germany.

Lawrence, D., 2013\*, London Transport Museum Research Fellow, 1 March 2013, London, UK. [Conversation].

Marshall, G., 2012\*, London Underground enthusiast and diagram masher, 24 March 2012, London, UK.

Noad, M., 2012\*, Designer of the London-Tubemap, 28 March 2012, London, UK.

Poncé, D., 2014\*, Director of the Berliner U-Bahn Museum, 29 May 2014, Berlin, Germany. [Conversation].

Rebbert, K., 2012\*, Managing Director of NGBK. 6 November 2012, Berlin, Germany.

Roberts, M., 2012\*, Psychology Lecturer University of Essex, 29 March 2012, London, UK.

Stock, S, 2012\*, Jugend [Widerstands] Museum Curator, 16 October 2012, Berlin, Germany.

Page, A, 2012\*, NGBK U10 Project Organiser. 10 October 2012, Berlin, Germany. [Conversation].

Zöllner, R., 2013\*, Freelance Photographer, 1 August 2013, Berlin, Germany.

## Appendix A

Select list of archives, libraries and museums consulted.

Artangel Archive, 31 Eyre Street Hill, London EC1R 5EW, UK.

[The] Bauhaus Archive [Das Bauhaus-archiv], Klingelhöfer Straße, 14, 10785, Berlin, Germany.

[The] Berlin State Archive [Das Landesarchiv Berlin], Eichborndamm 115-121,13403 Berlin, Germany.

Berlin State Library [Staatsbibliothek zu Berlin], Potsdamer Straße 33, 10785 Berlin, Germany.

[The] Berlin U-Bahn Museum [Berliner U-Bahn Museum], Rossitter Weg 1, 14053, Berlin, Germany.

[The] Berlin Underworlds Archive [Berliner Unterwelten e.V. Archiv], Brunnenstraße 105, 13355 Berlin, Germany.

[The] British Library, 96 Euston Road, London NW1 2DB, UK.

[The] BVG Archives [Archiv der BVG], Indira-Gandhi-Straße 98, 13053 Berlin, Germany.

German Federal Archive [Das Bundesarchiv], Finckensteinallee 63, 12205, Berlin, Germany.

German Museum of Technology, Berlin [Deutsches Technikmuseum Berlin], Trebbiner Straße 9, 10963 Berlin, Germany.

Historical Archive on Tourism [Historisches Archiv zum Tourismus], Hardenbergstr. 16-18, 10623 Berlin, Germany.

[The] London Transport Museum, Covent Garden Piazza, London WC2E 7BB, UK.

Senate House Library, Malet Street, London WC1E 7HU, UK.

TfL Historical Archives, 55 Broadway, London SW1H 0BD, UK.

UCL Archaeology Library, Institute Of Archaeology, 31-34 Gordon Square, WC1H 0PY, London, UK.

UCL Bartlett Library, Wates House, 22 Gordon Street, WC1H 0QB, London, UK.

UCL Science Library, DMS Watson Building, Malet Place, WC1E 6BT, London, UK.

Youth [Resistance] Museum [Jugend [Widerstand] Museum], Rigaer Straße 10, 10247, Berlin, Germany.

# Appendix **B**

The research information sheet and informed consent form that was distributed to interviewees.

## **B.1.** The Research Information Sheet



# UNIVERSITY COLLEGE LONDON

# **RESEARCH INFORMATION SHEET**

Please note:

This information sheet is for distribution to all participants interviewed in the course of research relating to the project below. It is also to be distributed to relevant parties or anyone who requests information during periods of participant observation.

This study has been approved by the UCL Research Ethics Committee:

(Project ID Number): 3512/001

(Data Protection Number): Z6364106/2011/12/39

You are invited to participate in the following research project:

**Project Title:** The Production of Social Memory in the Landscapes of London and Berlin's Buried Transport Infrastructure.

Principle Researcher: Samuel Merrill

[University College London Department of Geography]

Contact Details: UCL Geography, Room 117, 26 Bedford Way, London, WC1H0AP, UK

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Research Supervisor: Prof. Richard Dennis

#### [University College London Department of Geography]

#### **Details of Study:**

This study investigates social memory in the London Underground and the Berlin U-Bahn and S-Bahn. It intends to understand the potential for four aspects of these transport networks to display collective memories of the past and to be subjected to change and revision. These four aspects are: transit maps; memorials; disused sections of the networks; and human customs and behavior.

Please ask if you require additional clarification on the nature of the study from the principle researcher.

It is hoped your involvement in the research will benefit these aims.

If you have requested information regarding this project it is possible that you have or will participate in the research through the everyday observation of the London Underground and Berlin U-Bahn in which case your complete anonymity will be maintained unless you wish otherwise or wish to withdraw completely from the research process.

If you have been invited to participate in the research you will have been forwarded this information sheet ahead of an interview. This interview will involve a one-hour semi-structured interview that will be audio recorded with the possibility of additional interviews following your agreement.

You will have the opportunity to withdraw from the research process at any time and retain the option not to answer specific questions should you so wish.

Arrangements to ensure your anonymity and confidentiality will be made and tailored to your specific needs or wishes.

You will be entitled to an electronic version of the transcribed interview and the final report should you so wish.

In accordance with the Date Protection Act 1998 transcripts, recordings and notes relating to the interview(s) will only be accessible by myself and will be securely stored.

If you decide to take part you will be given this information sheet to keep and be asked to sign a consent form.

#### Thank you for taking the time to read this information sheet

#### **B.2.** The Informed Consent Form



# **UNIVERSITY COLLEGE LONDON**

# **INFORMED CONSENT FORM**

Thank you for your interest in taking part in this research. Before you agree to take part the principle researcher must explain the project to you. If you have any questions once you have read the Information Sheet or following explanation please ask the principle researcher before completing this form. Please complete two copies of this form once you are happy to do so. You will retain one copy and the principle researcher the other.

This study has been approved by the UCL Research Ethics Committee:

(Project ID Number): **3512/001** 

(Data Protection Number): Z6364106/2011/12/39

**Project Title:** The Production of Social Memory in the Landscapes of London and Berlin's Buried Transport Infrastructure.

I, .....

have read the notes written above and the Information Sheet, and understand what the study involves.

I understand that if I decide at any time that I no longer wish to take part in this project, I can notify the researchers involved and withdraw immediately.

I understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.

I agree that the research project named above has been explained to me to my satisfaction and I agree to take part in this study.

I understand that my participation will be audio recorded and I consent to use of this material as part of the project.

I understand that the information I have submitted may be published as a report and I will be sent a copy if I request a copy. To request a copy please tick this box  $\Box$ 

I understand that confidentiality and anonymity will be maintained and it will not be possible to identify me from any publications unless otherwise indicated (see below).

If I am happy to be identified by name/institution [Delete as applicable] within published material I will tick this box  $\Box$ 

# Appendix C

Lists of London and Berlin's past and present subterranean railway ruins and vestiges.

## C.1. The Underground's current subterranean disused stations

Station [current name and (line)]	Opened	Closed
1. Aldwych (Piccadilly)	30.11.1907	03.10.1994
2. Brompton Road (Piccadilly)	15.12.1906	30.07.1934
3. British Museum (Central)	30.07.1900	25.09.1933
4. City Road (Northern)	17.11.1901	09.08.1922
5. Down Street (Piccadilly)	15.03.1907	22.05.1932
6. (Old) King's Cross (Circle)	10.01.1863	09.12.2007
7. King William Street (Northern)	18.12.1890	25.02.1900
8. Lords (Metropolitan)	13.04.1868	20.11.1939
9. Mark Lane (District)	06.10.1884	05.02.1967
10. Marlborough Road (Metropolitan)	13.04.1868	20.11.1939
11. North End (Northern)	Abandoned during construction in 1906	
12.South Kentish Town (Northern)	22.06.1907	05.06.1924
13. St Mary's (District)	03.03.1884	01.05.1938
14. (Old) Swiss Cottage (Metropolitan)	13.04.1868	18.08.1940
15. Wood Lane (Central)	14.05.1908	23.11.1947
16. York Road (Piccadilly)	15.12.1906	19.09.1932

## C.2. The U- and S-Bahn's Cold War subterranean ghost-stations

Station [current name and (line)]	Closed	Reopened
1. Alexanderplatz (U8)	13.08.1961	01.07.1990
2. Bernauer Straße (U8)	13.08.1961	12.04.1990
3. Brandenburger Tor (S1 & S2)	13.08.1961	01.09.1990

4. Französische Straße (U6)	13.08.1961	01.07.1990
5. Henrich-Heine Straße (U8)	13.08.1961	01.07.1990
6. Jannowitzbrücke (U8)	13.08.1961	11.11.1989
7. Naturkundemuseum (U6)	13.08.1961	01.07.1990
8. Nordbahnhof (S1 & S2)	13.08.1961	01.09.1990
9. Oranienburger Straße (S1 & S2)	13.08.1961	02.07.1990
10. Oranienburger Tor (U6)	13.08.1961	01.07.1990
11. Potsdamer Platz (S1 & S2)	13.08.1961	03.03.1992
12. Rosenthaler Platz (U8)	13.08.1961	22.12.1989
13. Stadtmitte (U6)	13.08.1961	01.07.1990
14. Schwartzkopffstraße (U6)	13.08.1961	01.07.1990
15. Weinmeisterstraße (U8)	13.08.1961	01.07.1990

# C.3. A selection of the U- Bahn's current subterranean vestiges

Station/ Tunnel [name(s) and past and present planned (Line(s))]	Construction
1. Alexanderplatz (F/ U10)	1927-1930
2. Berliner Rathaus (F/ U10/ U3)	2010-
3. Dresdener Straße (GN-Bahn/ D/ U8)	1913-1917
4. Innsbrucker Platz	1971-1979
5. Kleist Park (F/U10)	1966-1969
6. Mühlendamm Tunnel (F/ U10)	1936-1937
7. Potsdamer Platz (F/ U10/ U3)	2006
8. Rathaus Steglitz (F/ U10/ U9)	1969-1974
9. Steglitz Tunnel (F/ U10/ U9)	1969-1974
10. Schloßstraße (F/U10/ U9)	1971-1973