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Defensible space as a mobile concept

The role of transfer mechanisms and evidence in housing research, policy and practice

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**Defensible space as a mobile concept:
The role of transfer mechanisms and
evidence in housing research,
policy and practice.**

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March 2015

Abstract

Defensible space is a contested yet influential approach to designing-out-crime on social housing estates. This thesis uses defensible space as the vehicle to explore how movement changes concepts; to extend the learning on policy mobility mechanisms; to investigate the varied cross-disciplinary nature of evidence use; and to explore the interaction of policy, the housing sector and the state.

Deepening the international policy mobilities narrative, the study traces the dispersal/embedding of the concept in Britain since the 1980s by revisiting the operational and theoretical account of defensible space proposed by Alice Coleman in the Design Improvement Controlled Experiment (DICE). Drawing on interviews with planning and architecture practitioners, housing managers and elite policymakers, the thesis explores the multiple ways the concept was interpreted and implemented as it circulated from national to local level and within three London housing estates, illustrating how the transfer mechanisms worked at both a policy and practical level.

Despite being a concept whose principles continue to underpin design guidance (such as Secured by Design), defensible space failed to coalesce into a single formal policy, remaining a cluster of associated disputed elements. How these conceptual elements aided or hindered transfer and take up is noted by tracking routes to acceptance, the roles of formal transfer mechanisms, informal information sharing by transfer agents traversing networks, or practitioners' local contextualization of generic guidance.

The research demonstrates the ongoing resilience and acceptance of defensible space, despite biased evaluation, the mismatch of DICE to the politics of the time and the uncertain nature of the concept. By questioning whether positivist scientific theoretical unity is achievable in practice, it argues for greater trust in practitioner experience, and proposes a looser middle-range approach to theory building for ambiguous concepts such as defensible space.

Table of contents

Abstract	1
Table of contents	2
List of figures	5
List of tables	6
Glossary	7
Acknowledgements	8
Chapter 1: Defensible space and its transfer agents	9
Introduction.....	9
1.1 Defensible space: an unstable concept.....	11
1.2 From theory to evidence-based practice	14
1.3 Structuring the narrative	20
Chapter 2: Examining mobile concepts, evidence use and values	24
Introduction.....	24
2.1 Defensible space evolves.....	26
2.2 Policy mobilities.....	45
2.3 Evidence-based policymaking	55
2.4 Epistemological issues: rationality and determinism	64
Conclusion.....	69
Chapter 3: Research design, methodology and positionality	73
Introduction.....	73
3.1 Intensive research and using case studies	74
3.2 Personalizing grounded theory	81
3.3 Matching methods and material.....	84
3.4 Beyond a triangulation of facts.....	102
Conclusion.....	108
Chapter 4: Defensible Space ‘travels’ to and lands in the UK.....	111
Introduction.....	111
4.1 Oscar Newman lands in the UK.....	113

4.2	Sheena Wilson links Newman and Coleman	122
4.3	Alice Coleman brings defensible space to the British Government	134
	Conclusion.....	141
Chapter 5: The Response to <i>Utopia on Trial</i>		145
	Introduction.....	145
5.1	Publishing and promoting <i>Utopia on Trial</i>	146
5.2	Reactions to <i>Utopia on Trial</i>	150
5.3	The 1987 <i>ReHumanizing Housing</i> conference	160
5.4	Catching Margaret Thatcher's eye.....	167
	Conclusion.....	173
Chapter 6: Implementing defensible space on the DICE estates		177
	Introduction.....	177
6.1	Coleman establishes a DICE Unit	178
6.2	Two examples of DICE-ed estates	186
6.3	Outcomes post DICE	205
	Conclusion.....	214
Chapter 7: Evaluating DICE.....		218
	Introduction.....	218
7.1	The Safe Neighbourhoods Unit meta-analysis	219
7.2	The DoE's (Price Waterhouse) Evaluation.....	221
7.3	A muted reception to the Price Waterhouse Evaluation.....	235
7.4	Coleman's own evaluation of DICE	237
	Conclusion.....	244
Chapter 8: Defensible space mutates into Secured by Design and beyond		247
	Introduction.....	247
8.1	Episteme, techne and phronesis	249
8.2	Defensible space codified into British Standards and Secured by Design	253

8.3	Defensible space practised on the Mozart Estate.....	262
8.4	Post DICE deliberations on evidence in policy	274
	Conclusion.....	279
Chapter 9: Conclusions - Valuing experience		
	Introduction.....	283
9.1	An evolving conceptual framework.....	283
9.2	Mobile concepts: Lessons for academia and policy	293
9.3	Practitioners develop a ‘middle-range theory’ about defensible space.....	294
	Conclusion.....	300
Appendices.....		
	Appendix A: Timeline of individuals’ stories, key events and political/policy context.....	303
	Appendix B: Examples of the mechanisms of policy transfer used within DICE.....	304
	Appendix C: List of Interviewees	306
	Appendix D: Table comparing Newman’s and Coleman’s design variables, Hillier’s rules of thumb and Power’s list of design and construction issues that make living conditions for residents difficult	309
	Appendix E: Reported costs for DICE.....	313
	Appendix F The experimental impact of resident churn	315
	Appendix G: Table applying the SNU framework for evaluation of crime initiatives to the Price Waterhouse and the KCL DICE Unit evaluation reports	321
	Bibliography	325

List of figures

Figure 1.1 Summary timeline of episodes	21
Figure 2.1 Newman's typology of space	30
Figure 2.2 Newman's sketch of Van Dyke (L) and Brownsville (R), New York	31
Figure 2.3 Transfer mechanisms used in DICE	54
Figure 3.1 Case study selection strategy	78
Figure 3.2 Roles of those interviewed	88
Figure 3.3 Nested layers of 'discourse analysis'	97
Figure 4.1 Defensible Space, American and UK editions	114
Figure 4.2 Oscar Newman	117
Figure 4.3 Key English regeneration and housing programmes since 1979	127
Figure 4.4 Priority Estates Project crime model	130
Figure 4.5 Coleman's trend lines for social malaise and crime	138
Figure 4.6 Alice Coleman	139
Figure 5.1 Alice Coleman's Libertarian Alliance book signing	150
Figure 5.2 Letter from Jane Jacobs to Alice Coleman	152
Figure 5.3 Bill Hillier	155
Figure 5.4 Anne Power	164
Figure 6.1 Coleman's surveyed estates	186
Figure 6.2 DICE estates in Tower Hamlets	187
Figure 6.3 Rogers Estate: Pre-DICE	190
Figure 6.4 Rogers Estate site plans: Pre- and Post-DICE	191
Figure 6.5 Ranwell East Estate: Pre-DICE	195
Figure 6.6 Ranwell East Estate site plan: Pre-DICE	196
Figure 6.7 Ranwell East Estate site plan: Post-DICE	196

Figure 6.8 Walkways at Ranwell East Estate	197
Figure 6.9 Construction of Alice Lane	198
Figure 6.10 Rogers Estate: Post-DICE	207
Figure 6.11 Ranwell East Estate: Post-DICE	209
Figure 7.1 Evaluation themes used by Price Waterhouse	230
Figure 8.1 Mozart Estate Walkways 1982	263
Figure 8.2 Coleman vs. the community architects	264
Figure 8.3 Demolishing the walkways	269
Figure 8.4 Community consultation	272
Figure 8.5 The remodelled Mozart estate	273
Figure 9.1 Initial / revised interrelationship between research, policy and practice	285

List of tables

Table 2.1 Newman's and Coleman's negative design variables	37
Table 3.1 Types of case explored	76
Table 6.1 Design disadvantage and abuse scores in Utopia on Trial	192
Table 6.2 Design disadvantage and abuse scores for Rogers and Ranwell East Estates: Pre- and Post-DICE	205
Table 6.3 DICE conforming to multiple definitions of policy	213

Glossary

AJ	Architects' Journal
ALMOs	Arms Length Management Organisations
ALO	Architectural Liaison Officer
BD	Building Design
CABE	Commission for Architecture and the Built Environment
CPTED	Crime Prevention Through Environmental Design
CPLO	Crime Prevention Liaison Officer
DICE	Design Improvement Controlled Experiment
DCLG	Department for Communities And Local Government
DDS	Design Disadvantage Score
DoE	Department of the Environment
EA	Estates Action
GLA	Greater London Authority
GLC	Greater London Council
HDD	Housing Development Directorate
HIP	Housing Investment Programme
HO	Home Office
HUD	United States Department of Housing and Urban Development
JRMT	Joseph Rowntree Memorial Trust
JRF	Joseph Rowntree Foundation
KCL	King's College London
LSE	London School of Economics
MORI	UK market research company – now Ipsos MORI
NACRO	National Association for the Care and Resettlement of Offenders
ODPM	Office of the Deputy Prime Minister
PEP	Priority Estates Project
SBD	Secured by Design
SNU	Safe Neighbourhoods Unit
SRB	Single Regeneration Budget
SRB	Social Research Branch
SRD	Social Research Division
UCL	University College London
UHRU	Urban Housing Renewal Unit

Acknowledgements

I am grateful to many individuals for their aid undertaking this research.

I'm indebted to Professor Loretta Lees' and Professor Jane M. Jacobs' foundational work on Alice Coleman, starting with salvaging the box of papers from Alice's old office in Surrey Street. As a supervisor I owe Loretta so much. This has been a shared exploration, grounded in similar outlooks on life but with valuably distinct opinions and complementary disciplinary viewpoints. Thanks also to Professors Rob Imrie and Tim Butler for taking up the reins at King's.

Many thanks to the mentors from my professional career who opened doors and passed on contacts including Robin Nicholson, John Worthington and Bill Bordass. Thanks as well to those colleagues at organisations known by acronyms: at LBTH, ACPO, DCLG, and too many people to mention from CABE, who provided funding for the initial stages of this study. Special thanks are due to Toby Taper from MORI, with whom a chance encounter at the Whitechapel Gallery unlocked access to sufficient material to write several theses.

I owe sincere thanks to all those who participated in the interviews at the heart of this thesis, including Alice Coleman for her time and generously making her papers available. And for everyone who took time to read, comment and proofread chapters; any weaknesses in argument, inaccuracy, or long-winded turns of phrase are my own responsibility.

Finally special thanks to all my family; particularly Rob whose unquestioning belief sustained me when I doubted the usefulness of yet more academic study and Dora who hadn't even been born when I started and is now old enough to ask intelligent questions about why PhDs take so long.

Thank you all for your patience, encouragement and intellectual support.

Chapter 1: Defensible space and its transfer agents

Introduction

This thesis explores the impact of the British geographer Alice Coleman (b.1923), the most well-known, almost notorious, proponent of defensible space in Britain. Other key transfer agents for defensible space will be encountered, in particular the American architect and planner Oscar Newman (b.1935 d.2004) and Home Office psychologist/criminologist Sheena Wilson. But Coleman is the focus for study as she is commonly held to have introduced defensible space to the British academic planning and housing community, generating much contentious publicity in the process¹.

The day before her 90th birthday, emeritus geography professor Alice Coleman was being feted. At the culmination of a University alumni weekend, past geography students (and a couple of ex-colleagues) had gathered in the panelled committee room opposite the painted chapel in King's College London (KCL). The deputy head of the geography department made a complimentary speech referring to the vast quantity of research funding Coleman had brought to the department, to her being KCL's first female professor of geography, to her energy undertaking the extensive Second Land Use Survey and to the ongoing practical and policy impact of her work. He mentioned a paper in *International Journal of Urban and Regional Research* (Jacobs and Lees, 2013) on defensible space, Coleman's most influential area of work, which explored the relationship between the design of housing estates, crime and anti-social behaviour. Known as DICE (Design Improvement Controlled Experiment) this housing regeneration programme received £50 million of funding from the Government led by Margaret Thatcher to test Coleman's hypotheses on the impact of design on behaviour.

¹ Coleman continues to be held up as iconoclastic. A recent review of Danny Dorling's book *All that is Solid: The Great Housing Disaster* (2014), roundly chides Dorling for overlooking Jacobs', Newman's and Coleman's work, particularly Coleman's critique of pre-1970s council housing. The review continues "for Dorling to have ignored these feisty predecessors makes his work questionable" (Bar-Hillel, 2014, p.46)

Coleman graciously accepted these compliments on her contribution to the department and the wider geographical field. Responding modestly, she attributed this success to natural curiosity, hard work and persistence in adversity. She even alluded to her deafness as a career advantage, excluding her from many time-consuming university committees, enabling her to concentrate on teaching and research. Coleman recounted sitting in the same room thirty years earlier showing graphs from her research to a panel of the Metropolitan Police, illustrating how housing design and planning caused social breakdown and fostered criminal behaviour. Present then was a sociologist from the Joseph Rowntree Memorial Trust, which had funded Coleman's data collection from blocks of flats in Tower Hamlets and Southwark. This large-scale study provided the material for her most influential and widely read book, *Utopia on Trial* (1985a). Earlier he had disagreed with Coleman on the methodological direction of her research, wanting her to apply more sociological methods. Coleman recalled:

“He was there listening and when he saw how enthusiastically the police agreed with my findings he stopped trying to make me take a sociological route and trusted me to follow a geographical one” (Interview Coleman, 2013).

A birthday cake was brought in and before blowing out the candles Coleman counted them, announcing with typical quantitative preciseness that the cake was extremely flattering as it only had 22 candles. The laughter continued, as she was surrounded by past students, affectionately and fondly praising her academic generosity and personal kindness. This celebration provided a portrait of a respected retired emeritus professor, happily reflecting with colleagues on an influential and successful career.

This portrait was rather different from the impression I had received from my interviews with Coleman's former colleagues on the DICE project.

“She's not a woman that warms the cockles of your heart” (Interview Sporle, 2011).

“If you talked to anybody about Alice Coleman at the time, they'd say 'bloody nutter'. Some of them were worse than that saying she verged on a Hitlerian perspective of human nature because of her environmental determinism” (Interview Stride, 2011).

Coleman was clearly very driven. Yet even amongst colleagues who acknowledged that this resulted in a difficult and fraught working relationship (the description “a dictator” was mentioned), there is also an obvious sense of respect.

“She was very conscientious, working many, many hours a day, a diligent hard worker” (Interview McKeown, 2013).

Ex-colleagues described her as passionate (both those who agreed and disagreed with her) and caring deeply about her work. Yet, as with her work ethic, this passion had uncomfortable results.

“In Alice you have someone who's obviously clearly quite brilliant ... but quite strange, obviously an environmental determinist, which is not something I'd go for. And so she would make comments and you would think, hold on, something's not right there. This is my view...but most people felt that with her. But she was very able. She was driven. And clearly, a lot of her passion was genuine in terms that she wanted to see a change in how people lived and their quality of life” (Interview Stride, 2011).

“A lovely eccentric lady. Very passionate about what she believed in. My only concern as a project manager was that I could contain her” (Interview McCarthy, 2011).

Her drive seems to have derived from a strong conviction and certainty in her own singular viewpoint:

“I'm not decrying what she was doing at all. But from my perspective, she didn't set out to persuade, she set out to instruct” (Interview Sporle, 2011).

“We got along like a house on fire actually. I admired her theory. She was such a forcible character however, that she alienated so many people who all thought they knew better than she did and she wouldn't have any of that” (Interview Stanford, 2011).

So it was with a degree of nervousness that I introduced myself to Alice Coleman at her birthday celebration in the summer of 2013, and explained that I was studying the use of ‘defensible space’ in remaking failing housing estates.

1.1 Defensible space: an unstable concept

The concept of defensible space sets out to demonstrate the interrelationship between the physical design of spaces, social interaction and crime. At its simplest defensible space can be defined as space that is overseen and controlled by residents of surrounding buildings;

“space over which the occupiers of adjacent buildings can exercise effective supervision and control” (Cowan, 2005 p.102). The design of our surroundings is agreed to be a fundamental method of demarcating private territory physically or symbolically (Lynch, 1960; Ley, 1974b; Sennett, 1986), yet the concept of defensible space is contradictory, tentative and ill-defined. Its principles can contradict requirements of environmental legalisation, such as fire regulations, and their application is hampered by ambitions for inhabitants’ privacy. The principles also conflict with urban design ideals such as permeability of spaces and the concept is criticised as resulting in fortress-like housing estates and gated communities (Minton, 2009). Despite all this, the concept has proved ambiguous and malleable enough to support diverse interdisciplinary interpretations and is a ubiquitous, familiar concept, not only with the built environment professionals I interviewed (it has power and resilience of meaning with practitioners of all disciplines) but also with residents on the estates I was studying.

The validity of defensible space as a concept has been repeatedly questioned (Hillier, 1973; Cozens, Saville et al., 2001, 2005; Hillier and Sahbaz, 2007; Ekblom, 2011). Yet rather than completely discrediting it, this continuous critical inquiry has resulted in elaborations of the initially simple concept, in an attempt to better explain the perceptible effects. It is possible to trace back through this divergent history to a handful of foundational ideas (ownership, surveillance, interaction, territoriality). A striking aspect of this situation has been the malleability of the concept of defensible space. It has been promoted as a universal ‘snake oil’, before being attacked, refuted and disproved (Interview Riley, 2011). And yet it remains a ‘common sense’ concept, continuing to be used by architects and housing managers, and investigated by researchers with just enough agreement on what it constitutes for the idea to be applied in a workable way. Popularly the term defensible space appears in newspapers as a positive recognisable housing attribute (Economist, 2006; Jenkins, 2010). As with the professions, a basic version of defensible space is recognised by the general public. It is this slippery ambiguity that is intriguing, as is the way its mutability helps the concept adapt as it moves across disciplines, networks and policy domains. This is not to conclude that defensible space is inherently unstable or endlessly flexible. Lerner and Le Heron (2002)

describe how concepts interacting in the world “stabilise (become rationalities, metadiscourses, logics) as they are communicated and are instituted as the basis of action” (ibid., p.720). Defensible space is a telling example of a concept that is highly durable and stable as the basis of certain practical actions yet less successful at retaining its logic when removed from this ‘real world’ by being transferred into formal policy.

The majority of the £50 million Coleman received in 1988 to test her version of defensible space was spent on the capital regeneration costs for seven DICE estates in east London, Northampton, Lancashire and Manchester. The proportion invested in research and evaluation was an early commitment to evidence-based housing policy. However, despite the generous government funding, Coleman’s relationship with the Department of the Environment (the DoE) was far from smooth and the transfer of research understanding into influential policy was at best partial. The DICE renewal programme illustrated a fracture in the idealised progression of research influencing policy, influencing practice. Crucially, this study offered an opportunity for mapping this three-way influence – policy on practice, practice on research and research on policy. In each of these three pairings, I explored the processes and mechanisms, the relationships (and personalities) involved, to explain the resilient strength of defensible space despite fierce criticism. This re-emergence of ambiguous concepts used by urban and housing policy to justify action (and funding) seems particularly pertinent now. We are at a point when conviction has replaced evidence in policy-making and the shift from national housing standards and (potentially environmentally deterministic) design guidance to a more locally based approach to planning and housing design is gathering momentum (DCLG, 2012, 2014a; Lord Taylor, 2012; Williams, 2014). Equally important was the task of re-examining recent historical solutions to the challenges of remaking unpopular post-war housing estates; these challenges have clearly not been conclusively solved as ongoing debates over regeneration projects such as the Woodberry Down, Aylesbury and Haygate estates show (Chakraborty and Robinson-Tillett, 2014; Lees, In press 2014). It is worrying how little current proposed solutions to the housing crisis refer to earlier attempts to rectify failed high density, (modernist) urban housing. In our rush to construct more housing are we allowing our prejudiced perceptions of who promoted or

devised an idea to blind us to the insights that might be gleaned from them? Does this bias towards simplified solutions of demolition and new-building over more complex processes of remaking and repair increase the danger of repeating past mistakes and constructing further generations of housing designs which are likely to fail?

1.2 From theory to evidence-based practice

Thus far I have very briefly introduced the rise and fall of Coleman's influence as her academic research encountered the political vagaries of policymaking and the patchy practical application of her theories. This leads to reflection on the spectrum of theorising across research policy and planning/housing design practice by examining the disjuncture of flows of evidence between these modes of operation. Evidence-based policy is a familiar term and the concept is explored in detail. But we must remember that all policy is fundamentally a call to influence action. So there is an unspoken, underlying intent connecting evidence gathering and practical activities, which is why this study extends the role of evidence in policymaking to how it is used and operationalised in practice. This study was motivated in part by my experience of this gap or discontinuity between the three fields during my professional career researching and practising housing design and policymaking, which has included practising architecture in the public sector (for London Local Authority Architecture departments), in private practice (for Pollard Thomas Edwards Architects), undertaking and managing housing research (for the Peabody Trust and Affinity Sutton Housing Associations), policy drafting for the GLA and influencing government departments as Head of the research team at CABE. So the section starts with my personal interest in this subject and my justification for it as a valid topic for academic *geographical* study.

1.2.1 A seminal concept with personal importance

Nearly 30 years earlier as a young undergraduate, the concept of defensible space had been formative to my architectural training. I retained strong memories of arguments amongst architectural staff and students following the publication of *Utopia on Trial* in 1985. As one of the first spatial debates I was consciously aware of, it awakened a comprehension of the extent that architectural design decisions affect people's lives. I remember being very

affected by slides of prize-winning, yet decrepit and run-down brutalist concrete estates (probably of the Aylesbury or Peckham estates in London) prompting the realisation that architects might have unintentionally made mistakes and that design didn't always have the benign affects I had assumed. Notes made later during my postgraduate studies include those from a lecture on spatial analysis in 1991 where Bill Hillier² repeated his criticism of Coleman's work published earlier in his article *City of Alice's Dreams* (Hillier, 1986a). Hillier found Coleman's model of the interaction between design and crime, or other undesirable behaviours, as far too simplistic. My notes quote Hillier: "It is insufficient to quantify two variables; design features and malaise indicators, unless one is able to discount a third crucial factor – social pressures" (Hillier, 1991). Hillier argued that the significance of design's role in social breakdown was less straightforward than Coleman portrayed.

Re-reading articles in the architectural press from this period, I remembered my surprise at the strength of the conflicting positions taken, learning directly that differing academic interpretations can be argued out in a ferocious way. More positively, this was an indication that architectural theory prompted more significant concerns than mere aesthetic discussion and that academic spatial thinking could have direct practical restorative applications rather than simply provide a formative role in generating designs. Coleman's meme of differentiated public and private spaces struck me very strongly and was one I applied throughout my architectural practice. The concept of defensible space as well as the dissonance between its theory and application was to reappear throughout my professional career as a built environment researcher and in my role providing evidence to shape and influence policymaking (Phippen and Warwick, 2003; Warwick, 2001; CABE, 2010). Ironically, during this study I came to see myself as a very minor transfer agent for defensible space principles.

Grounded in the recent literature on urban geography policy mobilities (reflecting on how theory and research shape policy and practice and vice versa) (Freeman, 2012; Peck and

² Bill Hillier, Professor at the Bartlett, University College London.

Theodore, 2010; McCann, 2011a; McCann and Ward, 2012), my research reflects on the strengths, weaknesses and often hidden assumptions inherent in the more familiar scrutiny of defensible space by disciplines such as criminology, planning or architectural design. The hybrid approaches available to geography reveal the commonalities that explain the resilience and usefulness of the concept of defensible space. Geographers are leading the debate here, discovering the inadequacy of discussing policy mobilities as an abstract effect, yet without exploring how it engages with the daily mundaneness of policy formation, so often dominated by the use and misuse of evidence to justify decisions. So I wanted to explore defensible space as an example of evidence-based policy-making and its intended impact on practical actions. To do this, the thesis needed to dive deeper, examining not only how evidence is used in policy and on the ground in practice, but also as the basis of theory.

1.2.2 Evidence and policy influencing practice

Coleman's positivism underpinned her certainty that good science would easily and automatically translate into policy. This evidence-based policy would then in turn influence practitioners' actions. Her research outlook adhered to positivist tenets³ and as such she held any resultant theories to be reliable accounts of scientific observations, which were universally replicable and unaffected by any underlying values. Graduating with a degree in Geography from Birkbeck in 1947 and taking up a Geography lectureship at KCL in 1948, Coleman's experience was formed by the emergence of post-war geography as a scientific discipline and the dominance of empiricism-positivism-realism. During the 1970s and 1980s, Coleman was immersed in geography's quantitative turn and the subsequent struggle over the primacy of quantitative or qualitative methodologies. Yet the historical geographical critique of positivism has demolished claims for value-free geography (Benhabib, 1985, cited in Gregory, 2000, p.577). The impossibility of value-free theories is revealed in the antagonism that resulted from Coleman's strongly held values differing from those funding or

³ That empirical, scientific observations of the world are possible and truthful accounts of these observations can be made. That the truthfulness of these accounts can be evaluated separately from any derived theories. That scientific observation is universally repeatable. The empirically verified theories arising will assume the status of universal laws which are distinct from questions of value (Hoggart, Lees et al., 2002, p.6)

using her research, which far exceeded expected tensions between theory and praxis. That academia, policy and practice structure the (re)making of urban residential space as different “problems” is due in part to the dissimilar value systems they apply. Thus understanding the values (typically discounted in the scientific method), the assumptions and the preconceptions, with which Coleman and her contemporaries approached the challenges they saw on large-scale social housing estates, became central to this thesis.

This is not to suggest that practice is inherently less reflective, or incapable of constructing complex theory than academia, but that there is an alternative practical process of operationalising theories. This is an effective but unregarded way for concepts to travel around and so worthy of scrutiny. I intend to explore the alternative ways that knowledge becomes codified and the ways that ‘common sense ideas’ like defensible space are mobilised outside the normal policy and theory routes.

1.2.3 Practitioners’ use of evidence: defensible space as a middle range theory

My later discussion of theory will focus on the academic status given to theoretical soundness, but it must not be forgotten that not all involved in the DICE story shared this academic outlook. A characteristic that separates research, policy and practice as distinct domains is their expectation of, or engagement with, models, theories and theory building. For researchers context-dependency is aligned to a belief in scientific or non-scientific methodologies. Practice is often seen as the messy woolly obverse of academic theory. The simplified dualisms of theory in academia are helpful for polemic thinking and writing but they “inhibit understanding by implying a certain neatness that is rarely found in lived life” (Flyvbjerg, 2001, p.49). Policy makers are more concerned with a theory’s reliability; its relevance and then its repeatability in ‘lived life’. Policy makers need to consider a spectrum of possibilities and situations to understand how a policy/theory might play out in differing contexts. Flyvbjerg notes that for policy makers this is a pragmatic case of ‘Will this solution work here?’ Further, practitioners’ concerns are with making the right decision in a single context, answering this question even more specifically; ‘What can I do here, *now*, in these

circumstances? How will this solution work here?’ So for practitioners (be they architects, planners or housing managers), context-dependency is all encompassing.

Local context exerts strict limits and constraints on what constitutes the evidence needed for good decision-making. Schön’s famous quote distinguishes between technical-led and intuition/experience-led problem definitions and hence the nature of the solutions possible:

“There is a high, hard ground where practitioners can make effective use of research-based theory and technique and there is a swampy lowland where situations are confusing ‘messes’ incapable of technical solution. The difficulty is that the problems of the high ground, however great their technical interest, are often relatively unimportant to clients or the large society, while in the swamp are the problems of greatest human concern. Shall the practitioner stay on the high ground where he can practice rigorously, as he understands rigour, but where he is constrained to deal with problems of relatively little importance? Or shall he descend to the swamp where he can engage with the most important and challenging problems if he is willing to forsake technical rigour...There are those who choose the swampy lowland. They deliberately involve themselves in the messy but crucially important problems and, when asked to describe their methods of inquiry, they speak of experience, trial and error, intuition and muddling through” (Schön, 1983, pp.42-43).

As theorists, Alice Coleman and Oscar Newman were locating defensible space on the rational, technical ‘high ground’, whereas practitioners are more likely to recognise it as a ‘messy, lowland’ problem: important, but contingent on context and opportunity and not responsive to application of strict rigorously-set policy principles.

Merton’s influential notion of ‘middle-range theory’ is helpful here. Merton’s framework emerged during the 1950s as a way of providing sociological thinking with the scientific rigour required by a scientific discipline⁴. Versions of this approach have played out in most social sciences, particularly political science, but have influenced spatial disciplines striving to link the actions of people in cities to the materiality of the urban built environment, including planning and urban geography (Boudon, 1991). The strength of middle-range

⁴ Merton was also a guiding touchstone for this study because of his interest in the delay between the first appearances of ideas and when they begin to have more serious influence. He termed these ‘prediscoveries’ identifying that many scientific advances were anticipated by these form of discoveries that failed to change the thinking of the scientific establishment. Merton asked whether this was because the ‘prediscoverer’ lacked status, or the context wasn’t ready, or an essential connection was missed, emphasizing the role of chance connections and serendipity (Sampson, 2010).

theory is that it is “not mindless empiricism and not abstract theory or theory about other theorists. Merton developed theory about how the world works” (Sampson, 2010, p.72).

Green and Schweber (2008) characterise the research questions that middle-range theories are best suited to explain as those that begin with specific local-level problems, from then enquiring into the types of process encountered and to explain the underlying dynamics of the problem field. The research is then able to draw on a range of explanatory theories, “looking for mechanisms or small discrete processes that might account for what can be observed” (ibid, p.651). In this the middle-range theory approach is inherently multi-disciplinary and eclectic, incorporating the responses and solutions from across disciplines.

In these circumstances it is understandable how middle-range theory is attractive to practitioners. As an approach that focuses on small but generalizable processes, the particular and specific, it has a familiar relevance. It seems an achievable goal rather than searching fruitlessly for complete universal explanations of the whole world, or being distracted by a-theoretical local descriptions. It meets the need for theories that fill the gap between abstract theories and the thick descriptions of empirical reality. Weak, ‘vernacular’ middle-range theories may not explain all observed effects to a degree that they can predict outcomes, but they can help us understand what is going on sufficiently to develop a plausible narrative. These ‘plausible enough’ stories of causality and outcome are the kinds of narratives often used to promote or support policy or to justify taking a decision. For defensible space, activities such as adding gates, rearranging entrances or subdividing lawns may be generalised within generic ‘good design practice’ regardless of any certain theoretical explanation.

1.2.4 Questioning the value of evidence and mechanisms of transfer

The aim of this thesis was to trace the mobility of the concept of defensible space from its landing in the UK into urban/housing research, policy and practice by revisiting the operational and theoretical account of defensible space proposed by Alice Coleman in the Design Improvement Controlled Experiment (DICE). My research focused on how academics, policymakers and professionals involved in DICE each used, popularised and

gathered evidence to justify their concept of defensible space. So although DICE and the large-scale quantitative and statistical evaluation that followed it were promoted as highly scientific experimental processes, this research was a qualitative study. Through discourse analysis of the policy documents and in-depth interviews with the key actors, the varied viewpoints of these communities were examined. Despite taking as its subject a concept that might be seen to be lacking in sufficient internal validity to be truly considered a theory, theory building became a critical frame for consideration. The research also aimed to extend the literature on the movement of ideas between policy and practice (as an underdeveloped subset of the literature on policy mobilities) and to fill the gap in applying theories of policy mobilities as a concrete research method.

From these concerns I identified three research questions:

- How was defensible space mobilised into research, policy and practice?
- Did the way in which it was mobilised affect its impact?
- What does this mobility of defensible space tell us about how these different communities of practice use evidence?

I trace how alternative physical and social ways of constructing defensible space and the kernel of shared principles have been reflected in research (both Coleman's DICE and Hillier's Space Syntax), in housing policy (in the form of funding documents for the Estates Action programme) and finally codified into design guidance (the DICE Design Guides, DoE documentation and the early versions of Secured by Design).

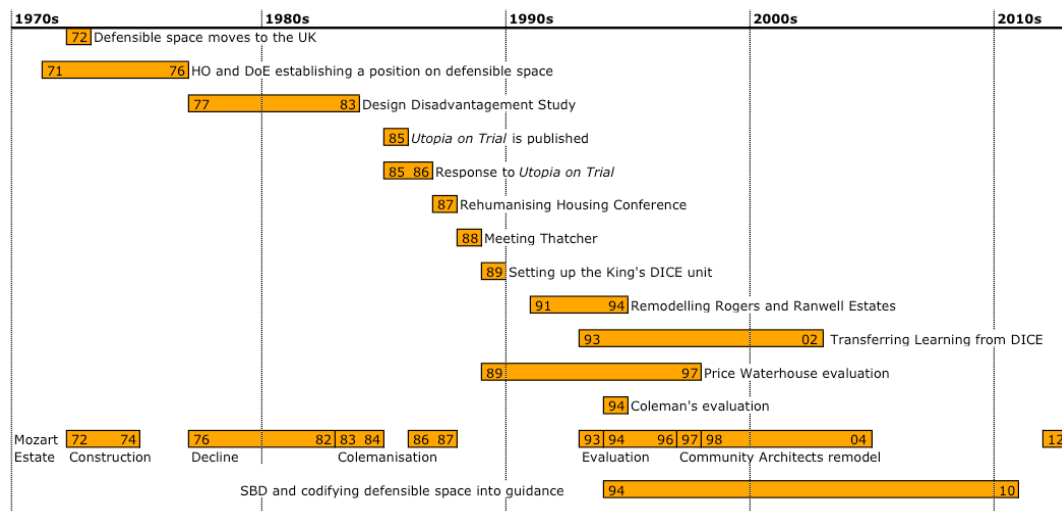
1.3 Structuring the narrative

Chapter One has introduced the concept of defensible space, DICE and explained my motivation for pursuing this study. Chapter Two reflects and draws on three bodies of literature: critical writings on defensible space, on policy mobilities and on evidence-based policy. I comment on and refine these bodies of literature identifying the existing knowledge base to build on and framing the epistemological challenges for the research. In the discussion of methodology and methods in Chapter Three, I reflect on the thirty-two semi-structured interviews I conducted, as well as my own engagement and influence on the

research process and the hybrid research/analysis framework that emerged. My methodological frame was prompted by Charmaz’s (1995) view that grounded theory facilitates construction of “middle-range theories to explain behaviour and processes” (ibid., p.28). Grounded theory’s emphasis on understanding before explanation, plus processes of theory building arising from immersion in concurrent empirical data gathering and analysis, fitted the aspirations and research design for this study, even though constraints to the actual research activity led in the end to practical adaptations of this ubiquitous social research mode.

The empirical Chapters Four to Eight describe events spanning from the early 1970s to the present⁵. Each empirical chapter focuses on several episodes within the overall narrative, showcasing the views and opinions of different disciplines, from geography, to planning, to architecture/urban design, or housing management. Episodes depict one or more transfer mechanisms, showing how particular groups favoured certain exchange routes, or how clusters of mechanisms combined to facilitate (or inhibit) movement of concepts and learning (see Appendix A: Timeline of individuals’ stories, key events and political/policy context).

Figure 1.1 Summary timeline of episodes



⁵ The richness of the story has meant excluding entertaining but less relevant episodes which have been published elsewhere, for example Coleman’s encounters with the Prince of Wales (see Jacobs and Lees, 2013) or with community architects (see Warwick, Forthcoming, 2014)

Building on the dominant conceptualisation of policy mobilities as an international process, Chapter Four opens with the movement of the concept of defensible space from the USA to the UK during the 1970s and 1980s. This section introduces three key transfer agents stimulating the movement of the concept to two potential receptor sites in English Government Departments. I describe Coleman's discovery of Newman's principles and her appropriation of them as the basis of her study of post-war housing estates, the findings of which were published in her book, *Utopia on Trial*. There was an extremely varied response to Coleman's book. Chapter Five records its enthusiastic reception from the public and mainstream press while being treated with derision in the academic sphere and by the architectural profession. One example describes a housing conference devised to refute Coleman's opinions. The chapter continues with the tale of Coleman meeting with Margaret Thatcher and acquiring the funding to apply her DICE theories in practice.

Chapter Six explores the implementation of DICE from two viewpoints, academe and practice. It starts with the formation of the research team at KCL and the process of choosing sites for the DICE experiment. Two of the selected estates are examined in detail, this time concentrating on the micro-practices played out during two major reconstruction projects. Finally, I reconsider the transfer mechanisms used, examining the ways that the project teams extracted and replicated the lessons learnt from the two selected schemes in subsequent projects. The impact of DICE was evaluated during and after its completion and Chapter Seven considers the role of social research in policy evaluation. The extensive, expensive, politically charged evaluation undertaken by consultants Price Waterhouse is compared to Coleman's far more modest, self-funded assessment.

Chapter Eight contains two narrative strands. It explores the Mozart Estate as a regeneration case study with a timeline running beside the main story of DICE. This example illustrates, on a single West London estate, many of the practical, regeneration and evaluation challenges described in earlier chapters. The chapter then proceeds to bring the story up to date, outlining the legacy of DICE and the ways defensible space has been incorporated into

policy and practical technical documents using the rise and imminent demise of *Secured by Design* to illustrate the out-of-phase cycles of policy and practice.

The concluding chapter reflects on defensible space as 'hard' or 'soft' theory and how practitioners in particular apply experience to make sense of the research and evidence that exists. It is clear that defensible space is a concept with ongoing relevance. Walking around regenerated post-war estates, many instances are visible of defensible space principles applied during the two decades since DICE. Ground floor flats now have individual front doors and fenced-in front and back gardens. Blocks that once would have shared a single entrance, opening off an internal courtyard have been reversed to face the street. New stair/lift towers have been built to break up long blocks, providing more vertical access points and allowing the demolition of high-level walkways. Some of these design alterations appear wilful and poorly considered. Yet despite these practical failings, despite the multiple academic criticisms and political attempts to stifle and undermine its theoretical basis, defensible space continues to remain a durable concept with lasting impact and influence. This thesis sets out to trace and understand how and why this mobile, resilient and mutable concept survived.

Chapter 2: Examining mobile concepts, evidence use and values

Introduction

The backdrop for this research are the practical processes of formulating, mobilising and operationalising policy and the equally practical process of gathering research evidence in different fields. That defensible space can be viewed either from Schön's (1983) theoretical high ground or from within his less rigorous 'messy swamps' is less a question of varied disciplinary perspectives than an indication of its mobile, mutable, uncertain nature. Literature reviews traditionally set out what is known about a subject, but equally importantly, what is not understood. So this Chapter is concerned with the many uncertainties around defensible space (for example its inconclusive evidence base, that it is not exclusively about crime, or that it is treated as theory despite not adhering to essential criteria for theories), as much as the areas of consensus. Any consensus is only a snapshot, as the numerous reviews of the concept show; attempts to incorporate alternative explanations have resulted in an ever-expanding definition. Cross-disciplinary interest in the topic adds to this definitional expansion and suggests that reinterpretations will continue. The latest, from a designing-out-crime standpoint, is Ekblom's (2011) deconstruction and re-construction of Crime Prevention Through Environmental Design (CPTED). So rather than extending this re-defining process further (risking yet further confusion and over-elaboration) the task of this chapter is twofold: firstly to trace the evolution of defensible space and secondly to locate the concept against two other bodies of work, the policy mobilities literature and accounts of how evidence is used in decision-making (as exemplified in evidence-based policy-making).

The first section tracks defensible space from a somewhat simplistic, almost naive concept, through a gradual process of elaboration into the current multi-faceted, multi-layered version.

Contemporary critiques are used to reveal the oppositional and contradictory aspects⁶ from distinct disciplinary perspectives: noting its inherent geographical and spatial foundations, its absorption by the architectural and design community and its use by criminologists as a key explanatory source. The second section considers policy mobilities and its transfer mechanisms, concentrating on how the process of movement shapes the formulation and reception of policy ideas. The literature is reviewed for practical research methods to track transfer/transformational mechanisms and to provide insights into ways of following the spread and take-up of such a mobile, malleable concept as defensible space. A third section reviews the literature on evidence-based policy-making considering the relationship between research, policy and practice to locate Coleman's academic positivism. This section touches on criticisms of the realist explanation of 'what works' in social urban policy interventions and Coleman's expectations for DICE as an 'experimental' approach within the governance drive to evaluate policy. While policy mobilities thinking has considered many topics (from the movement of healthcare or drug policies, to BIDS or the 'creative city', see McCann and Ward 2011) it has not been applied to the concept of defensible space. Similarly the evidence-based policy approach has not explicitly been used to trace and unpick why only some defensible space principles crystallised into policy. As these three literatures have not been combined before their intersection is aided by examining them through the frame of power and by considering ideologies of rationality, rational actions and decision-making. In a situation of multiple competing rationalities, conflicting viewpoints and a contextualised interplay of rationalities/power and politics, this provides an explanation of how certain strategies and views win through. A final section explores the role of bounded rationality in the circulation of ideas and their framing as policies or incorporation into routine regimes of practice. This novel insight is necessary to unpack the value-laden positionality of the players in the story of defensible space's travels and to address key participants (particularly Coleman's) epistemological deterministic bias.

⁶ I took a strategic decision to include widely published critiques of defensible space in this chapter, while the empirical chapters contain the criticisms recounted during interviews or pieced together from secondary sources. Similarly, footnotes signpost issues to be discussed in detail in empirical chapters.

2.1 Defensible space evolves

The emergence of defensible space as a concept is far richer and more complex than the degree that the design of spaces facilitates or inhibits criminal activity. Most commentators agree that defensible space is not solely about crime, nor that it is limited to the design of spaces and fences, the physical location of windows, or the layout of streets and neighbourhoods. Coleman's research focused on the domestic spatial scale, but she considered its impact at the broadest social level. Coleman saw the lack of defensible space as only one aspect of the disadvantage caused by design; similarly, she saw crime as only one indicator of the social malaise she was so concerned about. However while health, quality-of-life or wellbeing are also affected by design, crime is a useful place for this chapter to start due to the substantial quantity of literature on this relationship. This literature on the relationship of design to crime is extensive for historical and theoretical reasons (political desires to protect society, explain fluctuating crime rates, promote social policy as a crime solution and not least the availability of crime data).

But most helpful for this research, which set out to explore alternative views of the concept, the term defensible space is commonly used by a variety of disciplines. It has been subject to much cross-disciplinary scrutiny, not only from criminologists (Taylor 1984; Cozens, Saville et al, 2001, 2002, 2004 2005; Reynolds and Elffers 2009), but also urban sociologists (Sampson 1997; Wilson 1978, 1980, 1981; Halpern 1995), geographers/criminal cartographers (Herbert 1992; Davidson 1981), human geographers exploring the geography of crime (Smith, 1986) and urban designers/architects (Hiller 1973, 1986; Poyner 1983). Yet even within the broad topic of design and crime, Ekblom (2011) is careful to separate defensible space as a subset of crime prevention, spawning its own sub-fields such as environmental criminology. He defines defence of a space, building, object or person as a both a 'preparatory' and an 'operational' task, with the role of defence and defender as further subsets. For a space to be defensible, it requires suitable physical properties, but defence equally has social dimensions, depending on the motivations, behaviour and capacity of the defender and offender.

This chapter refines four key meta-reviews on defensible space:

- Poyner's (1983) book *Design against crime: Beyond defensible space*, an extensive cross-field reassessment following the publication of Newman's (1972) book *Defensible Space*
- the major review of CPTED by Cozens, Saville et al. (2005) which establishes a 'controlled vocabulary' for many of the terms used in later reviews to articulate the concept
- Reynald and Elffers' (2009) paper *The future of Newman's Defensible Space Theory: Linking defensible space and the routine activities of place*, and
- Ekblom's (2011) paper *Deconstructing CPTED... and reconstructing it for practice, knowledge management and research* which is an attempt to update CPTED inline with developments in design, architecture and crime science.

In the following section I extend these four by incorporating a geographical view into the more familiar crime, planning and urban design views.

2.1.1 The emergence of the concept from architecture and planning

The architect/planner Oscar Newman's 1972 study of New York public housing (published as *Defensible Space: Crime Prevention Through Urban Design*⁷) conceptualized defensible space as a combination of spatial and social mechanisms, with the capacity to create physical zones of territorial influence, to provide natural surveillance opportunities for residents and to positively affect the (often negative) perception of a public housing scheme's distinctiveness and resultant social or economic stigma. Newman refined this definition in his *Design Guidelines for Creating Defensible Space* as:

“a residential environment whose physical characteristics—building layout and site plan—function to allow inhabitants themselves to become key agents in ensuring their security” (Newman, 1976, p.4).

⁷ The 1972 edition *Defensible Space: Crime Prevention Through Urban Design*, New York: Macmillan, was published in 1973 in Great Britain under the title: *Defensible Space: People and Design in the Violent City*, London: Architectural Press.

The geographer David Herbert's (1982) tripartite definition of defensible space, précised the range of its effects:

“as a model for residential environments which inhibit crime by creating the physical expression of a social fabric that defends itself;

as a surrogate term for the range of mechanisms – real and symbolic barriers, strongly defined areas of influence and improved opportunities for surveillance – that combine to bring an environment under the control of its residents;

and as a living environment which can be employed by its inhabitants for the enhancement of their own lives, while providing security for their neighbours, families and friends” (ibid., p.46).

Herbert's definition neatly summarizes the dichotomy of disciplinary positions on defensible space: that of criminology (with its prime objective of inhibiting crime), and of planning/urban design (which aligns itself with the final more positive, quality-of-life enhancing aims).

Spatial perspectives on the relationship of crime and housing have existed since Booth's nineteenth century maps of poverty and social class in London, Beames' studies of British rookeries or Burgess' pre-first world war concentric crime model of Chicago. The locational analyses of neighbourhoods established purely spatial patterns of crime, proposing environments without behavioural differentiation. These area-based approaches evolved into ecological analysis of the impact of poor housing, poverty and transient populations during the 1950s. These methods still maintained that a particular behavioural setting had the power to elicit similar responses from diverse occupants and remained at an aggregate inter-urban scale of investigation. It was not until the early 1970s that criminological research moved from mapping the location of offenders or offences, to proposing models of local environment as a framework for individual behaviour. More recently, research into the geography of the fear of crime describes a subtle and complex sequence of interactions that link the design of the physical environment to individuals' perceived potential for crime and hence to an individual's sense of wellbeing (Smith 1986a, 1987, 2003).

So the basis of defensible space emerges from notions of social interaction and encounter in city streets, described for example in Mumford's (1938) *The Culture of Cities*. It builds on the historical work of Wirth, Simmel and other urban sociologists exploring the influence of the

form and character of the city, or the interconnectedness of common space on the experiences of its inhabitants (Whyte, 1956). By relating image, meaning and legibility to the perceptual formulation of place, Lynch (1960) expanded understanding of the physical impact of the built environment, transforming how designers and social scientists alike perceived urban form.

Jane Jacobs' seminal contribution to the concept of defensible space must be acknowledged. In *The Death and Life of Great American Cities* (1961) Jacobs' combination of social science and planning theories presented a positive vision of urban living, where active street life and numerous social interactions were identified as indicators for successful well-designed places. She noted that more crimes occurred in the accessible but often deserted public spaces that characterized modern housing estates, than conventionally crowded streets. Poyner (1983) identified Jacobs' influence on Newman's version of the concept, as did Gehl's book *Life Between Buildings* (1971). Jacobs' other critical legacy was a taxonomy of space that shaped social interaction. Jacobs' (1961) succinct definition of the three attributes of safe spaces included a plea for the delineation of public and private space.

“First there must be a clear demarcation between what is public space and what is private space. Public and private spaces cannot ooze into each other as they do typically in suburban settings or in projects.

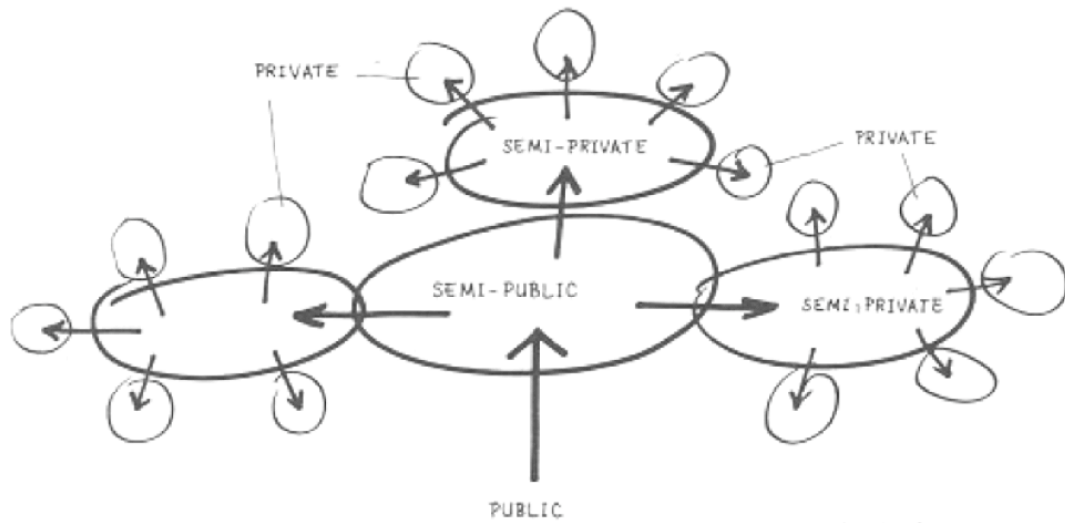
Second there must be eyes on the street: eyes belonging to those we might call the natural proprietors of the street. The buildings on a street equipped to handle strangers and to ensure the safety of both residents and strangers must be orientated to the street.

And third, the sidewalk must have users on it fairly continuously both to add to the number of effective eyes on the street and to induce people in buildings along the street to watch the sidewalks in sufficient numbers” (ibid., p.35).

Newman's version of defensible space extended Jacobs' two discrete definitions of public and private space into four categories; private, semi-private, semi-public and public space.⁸

⁸ Newman's classifications are: Interior spaces within flats are private and streets public. Lobbies, stairs or shared internal spaces are semi-private spaces and external gardens accessed by a number of residents, semi-public. However depending on the design and layout, internal circulation areas can be classified as public. Coleman's later categories included “confused” space, corresponding to the planning term SLOPE - space left over from planning.

Figure 2.1 Newman's typology of space



© Newman, 1972, *Defensible Space* p.17

However other studies refute such distinct categories, for example Moran and Dolphin (1986) suggest a spectrum of public accessibility between highly and less public space. In his influential paper on the infamous Pruitt-Igoe housing project in St Louis, Yancey (1971) found that residents easily recognised the difference between private apartment space and public shared amenities. His critique of the estate's design identified a lack of semi-public space, which he believed housing management professionals considered to be "wasted space" (ibid., p.11). But far from being wasteful, he argued that this deficiency resulted in residents retreating into private internal spaces. Yancey termed these semi-private areas 'defensible space' (ibid., p.17) using the term several years before Newman. Similar to residents socializing on their front steps in the North End of Boston described by Jacobs (1961), the semi-public space outside family homes "provides the ecological basis around which informal networks of friends and relatives may develop" (Yancey, 1971, p.17). These spatial relationships impacted on the social networks of residents, with physical designs inhibiting occupants from extending their sphere of influence beyond the confines of their individual dwellings.

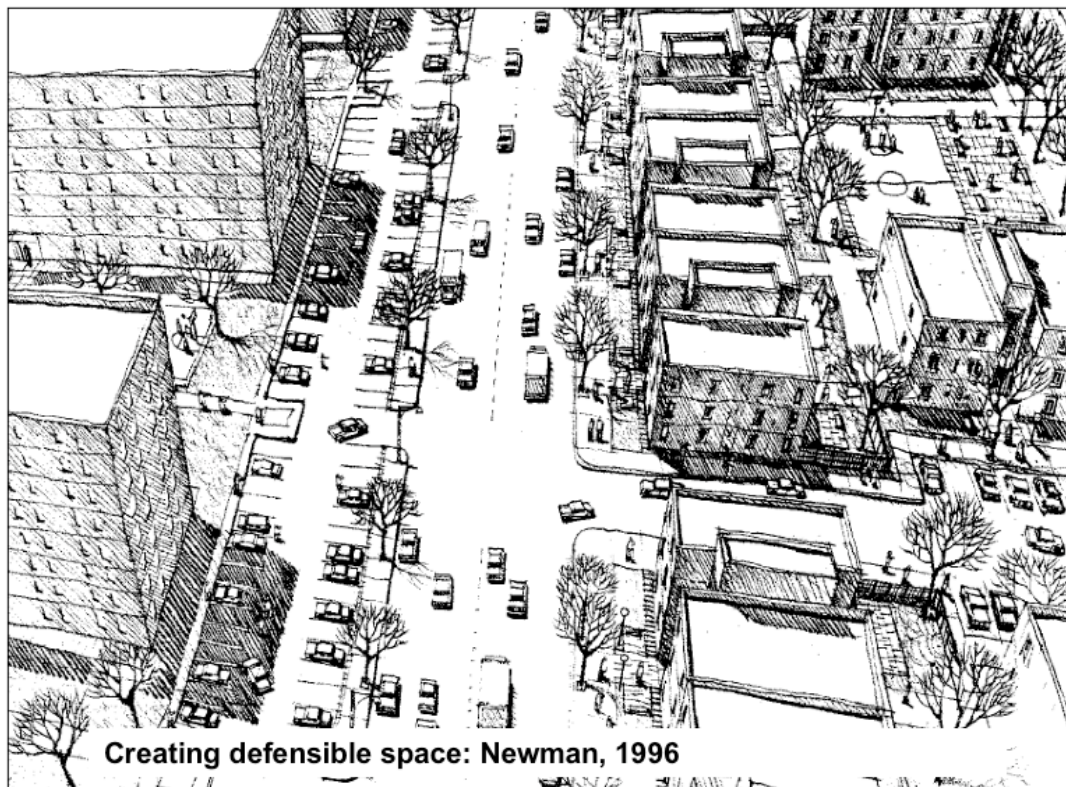
2.1.2 Newman's conceptualization of defensible space

Newman's housing research career began during the mid-1960s in St Louis, leading to empirical studies undertaken on New York Housing Authority housing estates in Yonkers and

the Bronx in 1969, continuing in Chicago in the 1980s and Dayton Ohio until the early 1990s (Newman, 1995). The New York study assessed two housing projects, drawing on the New York Housing Authority Police crime statistics as well as his own data generated through resident interviews and building analysis. One estate with high-rise blocks, Van Dyke, had a 50% higher crime-rate than Brownsville, which consisted of mid-rise walk-ups.

Finding higher crime rates in the lifts, stairways and landings of the high-rise apartment buildings, Newman argued that the Van Dyke residents felt no personal responsibility for communal areas shared by many occupants. Good design and certain physical characteristics allowed Brownsville residents to monitor and occupy semi-private spaces, ensuring their security. Although intended as practical, applied research, Newman's assertions for verifiable scientific methods enhanced the reputation of his work (he maintained the study compared identical communities, with constant social characteristics and only building forms varied). However these positivist methodological assertions legitimised later scientifically based criticisms of Newman's research.

Figure 2.2 Newman's sketch of Van Dyke (L) and Brownsville (R), New York



Newman's concept of defensible space derived from these studies elaborated on Jacobs' attributes of safe public spaces. Safe spaces required: "visibility to witnesses, community spirit and being prepared to guard neutral territory, a stream of potential witnesses and demarcation of private territory physically and symbolically" (Mawby, 1977, p.171). The 'dimensions' that underpin Newman's concept are:

- the capacity of the physical environment to create physical zones of territorial influence
- the capacity of physical design to provide surveillance opportunities for residents and their agents
- the capacity of physical design to influence the perception of a project's uniqueness, isolation and stigma, and
- the influence of geographical juxtaposition with 'safe zones' on the security of adjacent areas (Newman, 1972, p.50).

These four dimensions of territoriality, natural surveillance, image and milieu interact. The latter three function as 'components of territoriality' or 'mechanisms that facilitate territoriality' in that their effects provide feedback reinforcing the overarching sense of territoriality (Reynald and Elffers, 2009, p.30). Territoriality has been widely explored in social science as both a positive and negative attribute. Cozens, Saville et al. (2005) caution that territoriality "is fraught with difficulties associated with definition, interpretation and measurement" (ibid., p.331). The broad interpretation ranges from a concept of place-attachment or social commitment to location, to animal-like defending of 'turf' through symbolic or physical acts. Territoriality is enacted across physical scales relating to specific spaces, neighbourhoods or national boundaries. Nation scale territoriality is not a concern here, but its long historical influence underpins the vernacular understanding of territoriality and the urban spatial version retains resonances of warfare and defence. Sennett (1986) traced the significant historical social interactions shaping and controlling urban space. Control over space can be established in a multitude of ways: physical (individual presence inhibiting criminal activity, physical barriers such as fences or walls); symbolic (plants, seats or other objects signifying ownership of the space); visual ('beware of the dog' signs); or

physiological through fostering feelings of safety. Tactics for imposing control cover a spectrum of immediacy from a sense of ownership to 'proprietary concern' and guardianship (Cozens, Saville et al., 2005). Yet Hillier (1973) disagreed that territoriality was either a "behavioural universal" or the principal explanation of human spatial behaviour.

To Newman, territoriality arose from interconnected actions; establishing a sense of ownership for legitimate users of the space, who in turn imbued areas with visibly legible boundaries and encouraged familiarity with neighbours or passers-by. Identifying who was a legitimate 'user/inhabitant' and how they 'control' a space, is fluid and open to interpretation. Ley (1974b) characterised territoriality as "the absence of anonymity" for rightful inhabitants. For Newman, this exclusion of non-inhabitants is directed at strangers by limiting access and movement through the estate. The impact of the number/frequency of passers-by is complex, with several explanations; many strangers might provide greater anonymity for criminals, valuable potential witnesses or positive opportunities for social interaction. These nuanced interpretations of control vary at a cultural or individual, household, community level as well as a geographical scale (Merry, 1981). Residents' established norms and sense of community aid detection and halting of undesirable behaviour. Yet territoriality might include factors that jeopardize as well as improve security. The presence of graffiti can symbolically control and negatively influence a space, acting as a reminder of intimidation as well as neglect. These contradictory readings become explicit when intervening or designing for territoriality. Ekblom (2011) lists the tradeoffs that designers negotiate between aims for privacy/ownership or inclusiveness/community, or permeability. Design creativity is needed to resolve these compromises, for example see-through barriers that maintain good surveillance.

Surveillance is the second of Newman's dimensions, favouring the use of natural, informal surveillance (windows overlooking public spaces, active street frontages) over mechanical (CCTVs) or active supervision such as security guards. However even with natural surveillance, there are contradictory aspects requiring consequences to be explored. Ground floor windows may improve visibility over adjacent spaces, but might also advertise

opportunities for burglary and will be worthless if the resident feels exposed, hanging up curtains to ensure privacy. Similarly high-level walkways (criticized by Newman and Coleman as exposed semi-public space, providing escape routes for offenders) have been shown to offer excellent surveillance opportunities for crimes occurring below (Mawby, 1977).

This suggests two alternative models of natural surveillance. First, natural surveillance from windows, which relies on two recursive activities, initially that residents watch over their own (or neighbours') property. Then, on seeing criminal activity, the occupants must be confident that either reporting the incident will elicit a satisfactory police response, or that they themselves can safely intervene. This secondary response (by the resident, or police) is required to stop crime that is taking place. Yet natural surveillance (or the impression of it) can still inhibit and deter crime from occurring by making intruders feel conspicuous. The second form of surveillance arises from well-used spaces and familiarity of use, improving the desire to defend that space. These two models interact creating a virtuous circle where the increased sense of security generated by encouraging natural surveillance results in more frequent use of spaces, which in turn increases surveillance.

Image is the least well defined but most tangible of Newman's dimensions. Image results from the use of distinctive built forms, materials, or aesthetics with associations to a particular social class or lifestyle. This effect, explored by both urban and social writers (Lynch, 1960; Halpern, 1995) encompasses the size and scale of blocks to the selection of particularly intuitional or vulnerable materials. It is, of course, affected by the physical condition of the buildings and spaces, by signs of decay, neglect or lack of maintenance. Good management, implying careful and contentious ongoing guardianship, is the basis of Wilson and Kelling's (1982) "Broken Windows" hypothesis which is highly reliant on considered and maintainable designs. Image is particularly subject to negative differentiation. The image of an estate contributes to attracting or repelling individuals or fostering positive or negative subcultures and normative behaviours (expectations of 'cleaning the front step' or well-maintained private gardens can be influenced as strongly by communal culture as the design itself). Image appears to be the characteristic least discussed in the criminological

and geographical writings - many studies include the impact of built form within their definitions of territoriality or the effect of stigmatisation under milieu.

Milieu is the positive influence of activities perceived as safe (such as police stations or well used streets) on adjacent areas. Newman's analysis of it simplistically juxtaposes high and low crime areas and as a solution, proposes pepper-potting difficult residents within quiet well-behaved neighbourhoods. Newman ignored the relationship of an estate to the wider city scale or the intra-urban social organisation and crime levels. Limiting the manipulation of built form to the block, the estate and neighbourhood, ignores the city level patterns of affluence and social cohesion (Hirschfield and Bowers 1997). Understanding what constitutes a safe neighbourhood is fundamental to the interpretation of milieu, but there are many contradictory views about why one neighbourhood feels safe, another scary.

The title of Poyner's *Design Against Crime: Beyond Defensible Space* (1983) shows how deeply established Newman's approach became in the subsequent decade. Despite doubts about his research methods, Poyner conceded that Newman's book convinced many that the design of buildings might contribute to increasing levels of crime, acting as a foundation for an extensive quantity of research. Poyner's meta-review examined crime-reduction research in the decade following the publication of Newman's book. It considered neighbourhood planning, residential burglary, wilful damage to public housing, as well as criminal activity on streets and city centres, public transport and schools. The majority of the studies were from Britain and North America, with a few from France, Australia and New Zealand, covering three kinds of literature: theoretical writings, reports of empirical research studies and guidance on security design.

Each kind of literature was targeted at a specific audience of academicians or practitioners. Theoretical reviews by criminologists and designers tended to criticize both Newman's methodology and construction of predictive theory, leaving a negative impression and minimising the lessons relevant to practitioners. As an architect/researcher Poyner was sensitive to this, questioning whether architects, planners and others involved in decisions about the built environment could be held responsible for the rise in crime. He distinguished

between social scientists (including criminologists) who were “primarily concerned with scientific statements” and whose findings were presented as predictive descriptions, against designers whose recommendations were expressed as the prescriptive actions needed to achieve a desired affect (ibid., p.4). More relevant to planning professionals were the geographical studies on mapping and distribution of crime. Poyner cited evaluations and reports of good empirical research that examined the impact of environmental factors on crime levels in a practically pragmatic way. But Poyner found the paucity of conclusive findings frustrating when considering future practical applications. Similarly the guidance and proposed interventions in the early 1980s, were generic, weak and obvious (‘fit stronger locks’, ‘improve street lighting’) with insufficient depth to the evaluation of what actions were effective in which situations.

2.1.3 Coleman’s operationalization of defensible space

Newman identified eight specific design variables that contributed to poor defensible space. Coleman added to these, deriving a set of measurable criteria to evaluate the design failings of individual blocks (Coleman, 1985a) (see Table 2.1). Newman proposed a cluster of three variables causing anonymity arising from a large number of neighbours: the size and scale of the block and estate, the number of dwellings using the same entrance and the numbers of stories per block. Three variables related to levels of passive surveillance: whether grounds and common areas were shared by different families, if internal corridors were enclosed and not openly visible, and the location and form of the entrance (flush entrances being preferable to set back or entrances facing away from the street). Two negative circulation factors were the presence of multiple alternative escape routes or interconnected stairs or lifts. Coleman added further factors: more than one storey per dwelling (Coleman felt flats were preferable to maisonettes which tended to accommodate families and thus a proxy for children living above ground level). Individual entrances to houses/flats were preferable to a single communal entrance.

Table 2.1 Newman's and Coleman's negative design variables

	Coleman's design characteristics	Thresholds for harm
	Size variable	
1*	Dwellings per block	> 12
2*	Dwellings per entrance	> 6
3*	Storeys per block	> 3
4	Flats or maisonettes	Maisonettes
	Circulation variables	
5	Overhead walkways	> 0
6*	Interconnected exits	> 1
7*	Interconnecting lifts/ stairs	> 1
8*	Corridor type /Dwellings per corridor	> 4
	Entrance variables	
9	Entrance type	Communal only
10*	Entrance position	Facing into estate, distant from street
11	Doors or apertures	Open apertures
12	Pilotti, garages, shops	> 0
	Features of the grounds	
13	Blocks per site	> 1
14	Access points or perimeter gates	> 1
15	Play areas	> 0
16*	Spatial organisation	Confused space

* Newman's' original design variables (Adapted from Coleman 1985b p.14)

See also Appendix D for detailed comparison of Newman's and Coleman's design variables

Other variables assessed the spatial organisation of the estate: the number of blocks or access points onto the site providing a distinct delineated boundary to prevent trespass. The presence of overhead walkways provided potential escape routes. Finally, a cluster of design factors regulated levels of activity: whether blocks were raised up on pilotti or above garages (resulting in inactive frontages) or had play areas, which she felt acted as attractors for crime and anti-social behaviour. Coleman codified the measurement of these design features into indicators with thresholds to devise her design disadvantage score (Coleman,

1985a), forming the diagnostic and design basis of the remodelling process dubbed 'Colemanisation' by *The Architects' Journal* (1990). Coleman's scoring system underpinned DICE, but was also used by others to assess levels of physical incivilities and mental health. For example, Birtchnell, Masters and Deahl (1988, quoted in Halpern, 1995) found strong associations between an estate design disadvantage score and levels of vandalism and residents' depression. Newman developed a similar 100 point scoring system in the *Defensible Space Guidelines* for Yonkers Municipal Housing Authority (Newman, 1976).

2.1.4 Geographers' interpretation of defensible space

Coleman's surveying and quantitative scoring owed much to her geographical tradition of spatial analysis while other geographers took Newman's concept in a more human geographical direction. R. N. Davidson's (1981) book *Crime and Environment* combined cartographical criminology (the spatial distribution of crime) with concepts from social psychology, particularly fear of crime. His description of defensible space was the basis of a comparison of stable urban areas with areas in transition. In *The Geography of Crime*, Herbert (1982) expanded these areas of spatial transition by attempting to classify vulnerable urban environments. His influential study of burgled homes in Swansea tracked the interrelationship of physical and social factors increasing exposure to different types of offence. He mapped spaces with increasing levels of vulnerability, investigating whether the occupants of these susceptible areas could subjectively characterise their home's vulnerable qualities (ibid., p.53). He found that particular design features of a dwelling did increase the likelihood of burglary, but that design needed to be considered alongside social values and the meaning of space and place. Herbert compared his findings on the design of specific residential environments against areal approaches (studies of neighbourhood distribution patterns of offences and offenders) that aggregate crime data to reveal patterns of social forces, inequality or power. Herbert's Swansea study contained a careful critique of defensible space, concluding that the causal uncertainty around how it worked had affected its incorporation into policy guidance. Herbert was unconcerned by this, arguing if positive effects were noted then ambiguities about the precise way that defensible space acted mattered little:

“if applications of defensible space ideas and associated social policies can improve the quality of life in city neighbourhoods and increase feelings of wellbeing, then these are in themselves ample justifications for such policies” (ibid., p.110).

2.1.5 Criminologists’ extend defensible space

One of the most thorough dissections of the concept was by three criminologists whose work focused around Crime Prevention Through Environmental Design (CPTED)⁹. Cozens, Hillier et al. (2001) exhaustively reviewed writings on the relationship of the built environment and crime, producing a table of key studies related to defensible space published between the 1970s to 1990s (ibid., pp.153-155). They devised a model with four sequential levels of space: defensible space, undefended space, offensible space and indefensible space. As described above, defensible space is capable of being protected and encourages a strong ownership response from occupiers (Newman, 1972). Undefended space (Merry, 1981) may have defensible space characteristics (well surveyed, overlooked and inhabited) but is not actively defended and for some reason does not stimulate positive ownership from residents. A third example, offensible space (Atlas, 1991) is still defended, but by ‘others’. This parallel situation occurs where defensible space principles have been applied, but in a corrupted, anti-social way. For example, where space has been manipulated to facilitate prohibited activities and where the criminals (perhaps drug dealers or gangs) employ surveillance, territoriality and spatial image to increase their security against the police. David Ley’s exploration of gang territory in Philadelphia during the 1970s provides an example of the alternative readings of a single area. Ley’s ethnographic research combined environmental psychology and behavioural science methods to show how the identity of spaces reinforces the social identity of each group inhabiting them (Ley, 1974a). The spaces contain clues that encourage appropriate forms of behaviour, with gang members or residents recognising and avoiding dangerous territory. The last category is indefensible space (Cozens, Hillier et al. 2001a, 2001b) where, regardless of the physical characteristics, informal social control mechanisms have broken down to such an extent that any design features are ineffective.

⁹ Jeffrey who originally devised the term ‘Crime Prevention Through Environmental Design’ (CPTED) in 1971 stated that its principles were largely based on Newman’s work (Jeffrey 1999).

Cozens, Saville et al. (2005) argue that criminologists are indifferent to defensible space for several reasons: they are critical of the poor research methods used by designers/architects; their misreading of the theory promotes accusations of environmental determinism; and criminologists misunderstand the challenges of implementing design changes. They conclude that CPTED is a “self-evident idea” with decades of research merely confirming “what many people think is just good, common sense” (ibid., p.344). More doubtful is how the component parts of CPTED work or can be evaluated. Yet critiques tend to find design factors to be *less* effective than other factors (rather than not effective at all) acknowledging that there may be other benefits from the design interventions.

Eklom’s (2011) recent review updates CPTED’s seven component concepts: territoriality; surveillance; image and management/maintenance; defensible space (as a distinct component from the former three), as well as target hardening, access control and activity support. These core concepts overlap, for example territory is defended by controlling access to it, or surveillance influences opportunities for defence. Eklom is concerned with the fluid definition of these concepts and how this has hindered a consistent understanding of the relationships between the terms. He explored the particular definitional weakness around territoriality. He highlights practitioners’ assumptions that they agree on what is meant by territoriality, yet how the vague interpretation hinders communication and presents “obstacles to cross-disciplinary collaboration” (ibid., p.8). Eklom traces the genealogy of the CPTED schools (Jacobs, 1961; Jeffrey, 1971; Newman, 1972; Wilson and Kelling, 1982) seeing its evolution as an accretion of ideas rather than progress towards a synthesized whole. The result he suggests, “is a layered, badly stirred mixture rather than a well prepared construction with reliably known properties” (Eklom, 2011, p.10). He catalogues fundamental candidate causal properties. These properties interact with other characteristics (the site, the general environments, the residents or offenders themselves) to generate mechanisms that influence the likelihood of a criminal event. This list contains properties such as how space can contain people, places or objects, or facilitate their movement, enclosure, or ‘understandability’ (more usually ‘legibility’ in urban design terms). These properties extend from the individual (motivational/emotional prompts towards defence or

fear), to the interpersonal community interactions or conflict arising from poor boundaries. They interconnect with design features to produce good or bad outcomes – so an alley in combination with an overlooking window and a well-placed streetlight can ensure non-criminal behaviour. This notion of assemblage will be picked up in my discussion of policy mobilities in the later section. An equally useful insight was Ekblom's belief that CPTED would benefit from a model not based on direct causality, but one of intermediary outcomes related to these interconnected properties, features and mechanisms.

An unsuccessful search for theoretical rigour is common amongst scholars writing on defensible space. In their comprehensive meta-review of the many research studies investigating defensible space, Reynald and Elffers (2009) conclude “much conceptual ambiguity still remains, thus overshadowing any successful application of the theory” (ibid., p.33). Nonetheless by assuming that defensible space constitutes a theory they applied a scientific framework to unpack the concept. They listed six damaging areas of conceptual ambiguity, each supported by research studies and evidence: i) Roundly condemning Newman's investigative methods, they criticised him for taking a simplistic universal view of how individuals perceive their environment, ignoring social psychological and behavioural processes, and ii) neglecting the dynamic and evolutionary nature of crime. iii) They accused Newman of taking an unscientific and methodologically flawed approach, presenting only a partial view by excluding social/behavioural processes. iv) Newman's dimensions of defensible space could confusingly be applied to both encourage and jeopardize security. v) His theory both failed to explain how effects occur and provided vague advice when simplified into guidance. vi) The ambiguity resulting from Newman's contradictory empirical findings led them to conclude that defensible space was based on “unscientific concepts rooted in conjecture and deprived of any rigorous empirical testing” (ibid., p.30). Reviewing Herbert's Swansea (1982) study, Reynald and Elffers (2009) interpret him as implying that the “contradictory and unresolved arguments” about causality are immaterial if the effects are found to be positive and appear to work (ibid., p.32). It may be distaste at Herbert's shallow logic that alienates academic theorists but by concentrating on the theoretical critiques

Reynald and Elffers overlook the extent that defensible space has been applied successfully in practice.

They conclude “Newman’s theory leaves room for varied subjective interpretations” and the conflicting empirical evidence seen in subsequent studies arises from each study measuring different fragments “of the theory that have been operationalised in very different ways” (ibid., p.32). They argue that these studies are evaluating partial aspects of the concept that have been applied differently in varying contexts. I would agree that this partial appropriation of fragments only works because defensible space just is not a unified theory, more a cluster of associated ideas. However I would suggest that it is exactly this characteristic flexibility and ability to be operationalised in a multitude of ways that has ensured its repeated and ongoing application.

2.1.6 Cross-disciplinary criticism of Newman’s concept of defensible space

The preceding sections have described the contradictory interpretations and partial appropriation of Newman’s conceptual principles by different disciplines (and later chapters will similarly explore the varied response and critiques of Coleman’s version of the concept), but it is helpful to also summarise the cross-disciplinary scientific and methodological criticisms of the original research as these will provide background for Coleman’s later ‘scientific’ attempts to test her theories. Critics implied that Newman manipulatively selected which projects to examine (Hillier, 1973; Bottoms, 1974; Mawby, 1977; Merry, 1981). He mentions several positive and negative examples of neighbourhoods and projects but only talks about a single pair of estates - Van Dyke and Brownsville - in detail while failing to demonstrate the comparability of these two projects to other examples. Finding truly ‘paired’ estates to compare may be impossible (see Chapter Seven) but the differences that Newman ignored were ones that influenced his arguments greatly. For example Brownsville was completed over a decade earlier than Van Dyke so perhaps further advanced along a cycle of popularity or decay (Bottoms, 1974). Newman’s shallow ethnographical summary of residents interviews was methodologically weak (Ley, 1974b). When characterising the estates as having similar resident populations in terms of income, race, family size, Newman

ignored the less favourable reputation of one estate which may have discouraged better-off residents and was accused of omitting potentially conflicting or explanatory data; for example on income or social class (Hillier, 1973; Mawby, 1977).

Subsequent researchers identified statistical flaws in Newman's data analysis, questioning both the selective use and underplaying of statistics (Bottoms, 1974; Ley, 1974b; Mawby, 1977). Newman failed to separate strength of correlation or causation for his proposed linkages between crime levels and built form. Newman (and later Coleman) concentrated on measuring easily quantifiable effects (Moran and Dolphin, 1986), relying on statistical analysis of numerical data (Newman, 1972; Coleman, 1985a). Subsequent defensible space research applied more rigorous and in-depth methods (see Merry's (1981) detailed ethnographical victimisation studies improving on Newman's anecdotal stories, or Cozens, Hillier et al.'s (2001b) exploration of participants' perceptions).

Newman's dimensions rely on concepts drawn from across spatial and social fields. His book states his ambition to draw together and incorporate material into an interdisciplinary perspective¹⁰ and his references are grouped into sections by discipline: environmental form, social policy, human territoriality, urban crime, housing and the sociology of the family. Reviews of *Defensible Space* show that his concept provoked a strong response from an array of professions. Yet each sector commended the overall idea, while criticising those aspects closest to their own disciplines' view, for example an urban sociologist attacked "the kind of sociologizing that is being done by other disciplines" (Baldassare, 1975, p.435). Compared to other urban sociology texts reviewed, the sociologist Baldassare (1975) considered *Defensible Space* a methodologically sound study. However he found Newman's interpretation of his findings "sociologically naïve, or at least unproven" (ibid., p.435), particularly Newman's assertions that a collective identity would emerge to take responsibility for residential spaces. Finding Newman's architectural evaluation shallow, the urbanist

¹⁰ "We have chosen to direct this work at a rather wide readership. It was initially intended primarily for housing developers, architects, city planners and police. But as the scope of the work grew and the significance of our findings became more apparent. It was felt that the manuscript should be reworked so as to make it more universally available" (Newman 1972. p xiii).

Rayner Banham (1973) favoured the criminological over the urban design analysis: “the non-architectural part is probably the more fruitful and meaningful of the two” (ibid., p.155). John Friedmann (1973), an architectural academic, emphasised the spatial limitations of Newman’s analysis, arguing the publication was more about people’s behaviour than spatial design. Championing more intuitive approaches, his review contained unsupported statements on society’s inherent impulses to crime and violence, taking a unenthusiastic attitude to evidence gathering: “Why do we need costly scientific studies to prove to us what should be self-evident?” (ibid., p.49). Urban regeneration studies criticised the likelihood of defensible space to displace crime rather than eliminate it, asking whether it could provide sustained and long lasting improvements (Ley, 1974b; Schneider and Kitchen, 2002). Responding to this, the main government proponents of defensible space in the US, the Department of Housing and Urban Development, argued that shifting crime away from areas of particular vulnerability made policing an easier task and that waves of defensible space strategies should be applied across a city, neighbourhood by neighbourhood (Cisneros, 1996).

So from the beginning, defensible space as a concept was disparaged for its framing of architectural form by the design professions, its views of human interaction by sociologists, its insensitivity to neighbourhood level social forces by geographers and for its crude reading of crime by criminologists (such as concentrating on the analysis of offence rates independently of offender rates (Bottoms, 1974). Nonetheless even Newman’s most vocal critics agreed he was addressing “a serious social problem” (Ley, 1974b, p.157), but that his crude interpretation ran “a serious risk of debasing the importance of that theme” (Bottoms, 1974, p.206). Despite Ley’s concerns that the significance of the idea was undermined by the poor quality of Newman’s research, his review of Newman’s book in the *Annals of the Association of American Geographers* recommended the exploration of defensible space as “an intriguing and socially responsible task for the geographer” (Ley, 1974b, p.158).

2.2 Policy mobilities

The previous section traced the evolution of defensible space and the varied disciplinary critical responses. The recent discussion of policy mobilities has followed a similar trajectory, culminating in McCann and Ward's (2013) call for a "multi-disciplinary conversation about the global circulation of policies, one in which geographers are involved alongside other disciplines, such as anthropology, history, planning and sociology, as well as political science" (ibid., p.2). This broad scrutiny is on-going with a multitude of articles published in the fields of policy science, critical policy studies, international relations and geography on the adoption and spread of social policy between governments. So to contain this investigation, this section of the literature review concentrates on policy mobilities writings that address the methodological challenges to be explored in the subsequent empirical chapters, starting with the weaknesses emerging from thinking on policy transfer that preceded and stimulated the current geographical interest in "policy assemblages, mobilities and mutations" (ibid., p3).

2.2.1 From policy transfer to policy mobilities

Stone's (2012) overview portrays a 'benign view' of "transfer as a voluntary process undertaken by civil servants and politicians seeking to emulate 'best practice'" (ibid., p.485) and as concerned with the role of agency, choice and logical selection of policy ideas. This traditional view of policy transfer described a 'free market' for policy, where supply and demand actors (termed by Peck and Theodore (2010) 'producer-innovators and consumer-emulators') exchange and select policies based on expected excellence of performance. The transfer is simplified to a transitional step in the process, an identifying marker rather than a formative exercise in the evolution of the policy. This market view accentuates successful transfers, emphasizing replicability based on perceived similarities, or generic criteria, as part of the process of deriving 'best practice', or 'lessons learnt' to be repeated where similar conditions are believed to occur (ibid., p.169). Underlying is the suggestion of the decay of ideas as successful 'exemplar' cities transfer policy and ideas to lesser cities in an imperfect process of reproduction (Healey, 2010).

Stone's (2012) model allows for opportunities for agreement or 'convergence' on broad policy objectives, while noting divergence on the mechanisms or transfer modes applied. These modes of transfer include: goals or policy ideas; institutions or governance structures; regulatory or judicial tools; personnel, consultants or experts; and finally the diffuse category of the transfer of ideas and ideologies which act as inputs to the policies that might be transferred. She compares "policy transfer entrepreneurs" who excel at the *soft* transfer of these broad diffuse policy ideas, to the *hard* policy transfer modes of policy tools via official bureaucratic routes. Adoption of even the simplest idea is remarkably complex requiring deep understanding of the context within which the idea was "articulated, injected and accepted" (ibid., p.496). So it is understandable that modes of transfer remain as high-level generic tools for repetition, with the policies themselves only altering to a limited extent.

McCann (2008) provides several pertinent critiques of policy transfer. Like Stone (2004), he argues that policy transfer literature is too focused on state actors' activities and repertory of formal 'hard' mechanisms of policy statements. Concentrating on certain modes of transfer leads to a reification of typologies and models of transfer rather than a better understanding of how they facilitate a deeper analysis of the process. By concentrating on identifying mechanisms and transfer agents McCann and Ward (2013) highlight the failure to understand how organisational and other context mediates the *agency* of these players and what they can achieve. They warn that researchers should "avoid allowing the models and typologies themselves to be reified and to become the *objects* of debate, rather than facilitating analysis of the social processes" (ibid., p.6). McCann (2008) is disappointed by the "paucity of detailed critical-geography knowledge of how policy-making works" (ibid., p.4). Peck and Theodore (2010) echo this with their call for investigative methods that get beneath the skin of actual policy formulation. A final criticism from McCann (2008) arises from the narrow definition of globalisation as a mechanism, including how new assemblages of experts and new practices of government are used to understand the global relationships of urban policy.

Yet policy mobilization is not just a trans-national process. Many of the techniques and mechanisms considered are those of practice and while international modes of practice are well explored (see Rapoport, 2014) this differs critically from working within the constraints of smaller-scale local-fields of practice. There is a persistent idealized image of policy transfer as a set of models “stabilized and validated (into) an explicit set of rules” to be rationally applied in a foreign setting and achieving expected results. It is often acknowledged that this “is persistently disrupted by the messy realities of policymaking at the ‘ground’ level” (Peck and Theodore, 2010, p.170). The relationship of policy to practice is similarly emergent and recursive, yet little reference is made in the existing literature to the ‘messy realities’ of practice.

Peck and Theodore’s (2010) discussion of policy mobilities evolution from policy transfer summarizes five effects: i) The inherently political aspect of ideas moving within a shifting context of ideological/theoretical positions and the fluctuating dynamics of power relationships. ii) This movement arises from, and colours, mechanisms such as social connections between particular policymakers and particular sites, leading to the construction of ‘favoured models’. McCann (2011a) emphasises the promotion of selected models as “exemplars giving more priority to some elements of policy over others” (ibid., p.3). These favoured models are informative both in their formation and their role as catalysis for policy movement or as magnets for support. iii) The interconnected nature of the epistemic, expert and practice communities that policy and practice actors are part of reinforces shared views of these favoured models. iv) The piecemeal way that policies move, not as comprehensive totalities, or ‘complete packages’ but as elements or versions of the whole prioritises certain aspects. v) That unlike a more traditional view of policy transfer, the process of policy mobilities is not a linear one of direct imitation and replication, but more complicated and reproductive. As the ideas cross, mix and mutate these five effects combine so the multi-directional nonlinearity is not just a description of the process but the territory that the process works through; which itself is multi-dimensional, temporal, evolving, interlocking and uneven (Peck and Theodore, 2010, pp.167-168).

However these recent assertive academic claims for policy mobilities as a novel, complex, non-linear, recursive process in turn prompt a critique of the literature to-date. Policy mobilities can be criticised as a repackaging of existing policy transfer ideas, for its presentist concentration on current neo-liberal globalisation and its methodological and practical immaturity (Jacobs and Lees 2013). Questioning whether policy mobilities extends rather than merely reworks the ideas behind policy transfer, Stone (2012) cautions that to caricature schools of policy analysis into policy convergence, diffusion, transfer and translation is another example of blurred sub-fields where “rather than transfer studies or diffusion approaches being regarded as a distinct approach, it becomes just one mode of evidence-based policy or symptomatic of wider ‘policy independences’” (ibid., p.490). However much current scholars attempt to distinguish it, policy mobilities could be considered as yet another sub-field of [evidence-based] policy-making.

The policy mobilities and policy transfer literatures often lack a longer-term temporal diagnosis. The focus on rapidly changing political contexts and “open ended and politicized processes of networking and mutation across shifting social landscapes” invokes notions of speedy rational diffusion and best-practice replication (Peck and Theodore, 2010, p.173). Contradicting this, Jacobs and Lees (2013) locate Coleman’s story as a historical counterpoint to the presentist emphasis they find in recent policy mobilities scholarship. They note the paucity of work on broader urban rationalities other than globalizing neo-liberalism, using their reading of defensible space’s international transfer and earlier historical examples to show that policy mobilities is not a new phenomenon (ibid., p.1561). Jacobs and Lees’ (2013) account of defensible space on the move is based on three further insights: i) policy does not move as a homogenous ‘fully formed’ piece, but as disaggregated elements (of pre-policy, sub-policy epistemes or practices). ii) these fragments of knowledge are translated into policy only in a context (in-situ). iii) that the relationship between academic research and policy is not a simple linear progression of policy appropriating and utilising university created research. They argue that the interplay between academic knowledge and policy formation is complex, contingent and often controversial. Developing Jacobs and Lees’ (2013) criticism of the literature’s blinkered focus on international policy transfer suggests

two further failings. Often the problem to be addressed by policy is posed in unfamiliar terms, alien to the context the policy is moving to, adding to the potential for confusion or mis-reading of the problem/solution definition. Yet focusing within a single location is unlikely to be simpler. Intra-national policy transfer is as complex and convoluted as international (McCann and Ward, 2013). Even within the UK national government, barriers are erected against the movement of ideas.

To date the policy mobilities literature has only vaguely conceptualised how its theories are applied in practice. Methods can be found to trace slippery and disjointed policy fragments but there are at least three methodological gaps that this research attempts to address: i) Most of the policy mobilities literature looks to examples of successful transfer (Stone, 2004; 2012; Ward, 2007; McCann, 2011b; Marsh and Evans, 2012). This study examines DICE as an unsuccessful transfer, to see which mechanisms failed and why. The question becomes not whether defensible space is a fundamentally poor idea (which seems unlikely despite its strengths and weaknesses), but its mismatch with policy contexts, or failure due to the personalities involved. ii) There is little mention of competing mechanisms for transfer and rival means of movement. In the DICE example multiple practical transfer mechanisms were used *in combination* (transfer via books, press and individuals) via multiple routes and following alternative parallel channels. iii) The literature suggests tracing links between networks but fails to propose techniques to trace mechanisms that are particularly prolific, or circulating across disciplines, or how to assess if the movement is affected by the interlocking nature of policy domains. This thesis attempts to find ways of doing this.

2.2.2 What constitutes policy?

A final meta-critique emergent from all the literatures (policy analysis¹¹, political geography, policy transfer, policy mobilities etc.) is a definitional one; that the definition of what

¹¹ It is important here to separate the differing intents of policy-making/formation from policy analysis and policy evaluation. Policy analysis is limited to questions such as 'will the policy achieve its objectives', whereas policy evaluation is concerned with the implementation of the policy, the process, outcomes and longer-term impact. Understanding the mechanisms by which a 'policy might work' are different from understanding the mechanisms by which a policy might move.

constitutes policy is extensive, amorphous and mutable. So (as with Ekblom's (2011) redefinition of CPTED) a necessary, if obvious, question to resolve is what policy is, or rather what is to be considered policy in this case and how does this affect how it moves? McCann and Ward's (2012) book *Mobile Urbanism* acknowledges the diversity of "written policies, policy models and best practices, policy knowledge, policy response to specific concerns, and the sociospatial manifestations of policy work" (ibid., p.42). The simplistic definition of policy as directed decision-making does at least have the advantage of familiarity, consensus and a high level of recognition. Similarly, few would disagree that much policy starts out as a plausible initial idea of an intervention that might work in practice to resolve a problem¹². The process of policy implementation also relies on populist recognition, with salient policies being those that fit with a popular view or existing model of interaction. Cartwright and Hardie (2012) argue that policy recognition and acceptance are a greater indicator of success than replicability or reliability. They believe relevance (rather than 'trustworthiness') is a safer route to assessing what evidence is needed to choose an effective policy.

Indeed, it is hard to trace something as loosely defined as 'policy' (it being both mobile and amorphous) let alone gather evidence needed to persuade others of its relevance and usefulness. Helpfully Hogwood and Gunn (1984, cited in Palfrey, Thomas et al. 2012, p.223) identify five tangible policy categories. Policy can be one or all of the following; i) Policy is a mission statement, or high-level aspiration for beneficial change. ii) Policy is a set of proposals refining these aspirations into a statement of intent (in a national Government context a White paper or election manifesto, or elsewhere a proposition document). iii) Policy is formal authorisation. This can be authorised via an informal declaration, or legislation, such as Government proposals legitimised by an Act of Parliament¹³. iv) Policy is a programme of activity (a relatively specific sphere of activity accompanied by a ring-fenced

¹² The 'common sense' model of defensible space is a good example of this.

¹³ For example, Margaret Thatcher authorising funding for DICE legitimised it as a housing research programme, or the Audit Office incorporating the DICE principles into their reports legitimising them as 'best practice'.

budget). v) Policy as a field of activity, as a process of debate and intercommunication¹⁴. Hogwood and Gunn emphasise that rather than a single outcome, policy is a cyclical process consisting of a continuum of agenda setting, policy formation, decision-making, policy implementation, monitoring and evaluation, before returning to resetting agendas. A statement of intent can be (re)shaped at various stages in this cycle of formulation and implementation, so need not be regarded as fixed, permanent or immutable. Thus while it is perhaps simplistic to perceive defensible space as a policy per se, there are points in the story described in later chapters, where the concept, DICE and Coleman's principles conform to each of the five descriptions of what constitutes policy.

So, in a similar way that defensible space cannot be considered a theory (despite exhibiting some characteristics of theories) it did not coalesce into a formal policy suitable for the replication described in the policy transfer literature. Nonetheless, following policy mobilities thinking and conceptualising it as a framework of ideas or policy fragments, or a cluster of concepts allows it to align with the looser definitions of policy. The closeness of alignment depends on the fit of each cluster of elements to the temporal cycle of policy mentioned above. Jacobs and Lees' (2013) category of pre-policy implies that this proto-policy will be identified through agenda setting, will progress through the stage of policy formation and emerge as a mature policy. Continuing through the policy cycle, the decision-making stage often occurs in circumstances of uncertain knowledge. Responding to political expediency, but hampered by lack of resources or relevant evidence, many 'policies' are stuck at the level of what Gustafsson (1983) refers to as *pseudo policy*. Here knowledge, especially on the preconditions for implementation, is missing (or not available) making the policy hard to carry out. His related form *symbolic policy*, refers to ideas which are proposed with no intention to implement them fully. The final stages in the cycle are the practices of policy implementation and evaluation before the revised context requires further rounds of agenda setting.

¹⁴ One such broad debate is the policy relationship between crime and housing, incorporating audiences spanning youth crime prevention to construction professionals.

2.2.3 Transfer mechanisms

Methodologically the policy mobilities literature calls for a careful consideration of the range of practical mechanisms used to move and translate policy. The risk is that this becomes a disjointed activity that fails to recognise the interconnected influence of multiple techniques applied simultaneously. A structuring framework was needed that could incorporate multiple mechanisms as they appear or reappear. Taking a narrative approach helped to make sense of these fluid, fragmentary interlocking strands. In *Reading Policy Narratives: Beginnings, Middles and Ends*, Kaplan (1993) explores narrative forms of interpreting policy issues. Fisher and Forester (1993) identify that another advantage of applying the narrative structure to policy *analysis* is greater depth, communicative clarity and persuasiveness:

“The analyst or planner who can recognise an ‘ordering plot’ that can weave through differing - even contradictory - values and events, can reach insights and conclusions that might not otherwise be obtained” (ibid., p.11).

Applying a narrative approach to policy formation and mobilities, creates an explanatory narrative curve of a distinct beginning, middle and end. This contains the messy transfer/translation/evolution/mutation to the middle section, allowing the beginning ‘originating’ and end ‘landing’ contexts to remain as relatively fixed points. Kaplan (1993) also argues that a good indication of ‘narrative truth’ is the strength of internal linking and connection between the “five core elements of narrative: agent, act, scene, agency and purpose (who, what, where, how and why)” (ibid., p.179). So a good indication of policy ‘truth’ within the fluidity of policy mobilities would be tracing the links and connections between the agents, their actions, the scenes and locations of the social practices of transfer and particularly the agency and purpose behind the mobilization.

The long list of mechanisms (idea brokers, academic papers, international conferences, policy tourists, professional networks, site visits, study tours etc etc) can also be sub-divided across the five narrative structure elements mentioned by Kaplan (1993). The initial category is those *who* transfer, the individuals that act as agents of transfer. In fact the key actors in this process are routinely referred to as ‘transfer agents’ (Stone, 2004, 2012; McCann, 2010;

McCann and Ward, 2011) or “players in the policy transfer “business” such as consultants, advocates, evaluators, gurus, and critics” (Peck and Theodore, 2010), “policy entrepreneurs” (Rydin, 2003) “idea brokers” (Smith, 1991) or “mediators” even “policy tourists”:

“Some more than others, are likely to have their ideas and policies made mobile, and they are in turn most likely to stamp their authority on emergent urban assemblages/territories” (McCann and Ward 2011, p.xxv).

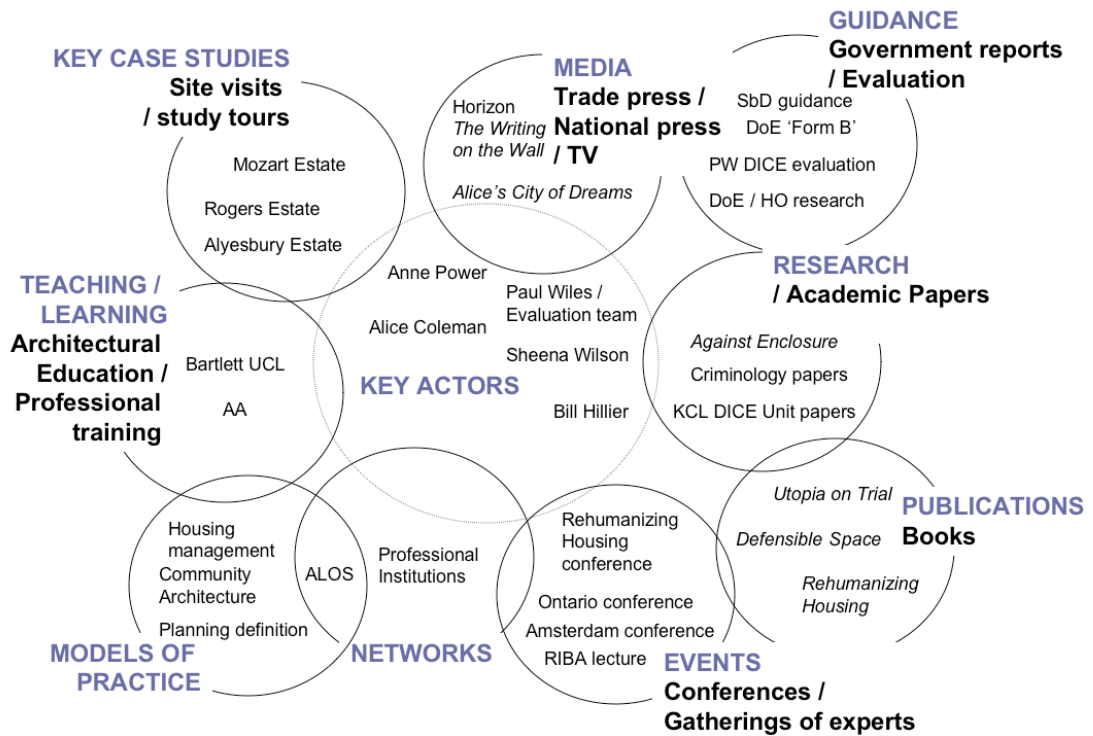
Peck and Theodore (2012) warn against the tracking of policies as if they were ‘things’. Thus it is helpful to interpret *what* is moving under the narrative structure, either as the object (*what* is moving) or more appropriately here, the action (*what* happens). The ‘objects’ that move, the books, academic papers, newspaper articles, policies, have accompanying actions: the construction of policy models, the drafting of policy principles, the writing of pieces that appear in trade magazines, blogs or websites.

So again a catalogue of *what* transfers is far more extensive than policy manifested as written policy, funding guidance or evaluations documents. Case studies, stories, travelling ideas are all exchanged through the processes of meeting, lecturing, or professional exchanges. The settings or spaces of engagement for these exchanges constitute another sub-division in the list of transfer mechanisms - *where* exchange occurs. Just as ideas circulate so do individuals and the theme of *being elsewhere* to learn and discover novel ideas is a common thread. The purposeful gathering of people at meetings, events or conferences, or visits and study tours to exemplar cities, or the sites of successful projects locates these activities as a form of intellectual ‘hunter gathering’. More frivolously, recent writing explores the role of international conferences in the rise of ‘policy tourism’. But to ‘be there’ you need to be aware of the opportunity and hence participate in communities or networks that facilitate or channel meeting and exchange (McCann and Ward, 2010, p.177). *How* and *why* this exchange happens requires an examination of structure and agency in combination with purpose and it is this motivation that my interviews with the DICE actors tried to uncover.

Despite the literature listing numerous mechanisms, most policy mobilities writings only follow one, or at most two, mechanisms. Figure 2.3 below and Appendix B map the dozen or

so mechanism types I identified as being used within DICE showing a far messier and interconnected reality than the literature might suggest.

Figure 2.3 Transfer mechanisms used in DICE



What is also striking here is the number of mechanisms that either merge or combine and the range of policy/practice domains that they impact on (planning and building regulations, housing management/architecture, professional education/journalism).

Within this “new ‘grand narrative’ of mobility, fluidity or liquidity” (McCann and Ward, 2011, p.xxiii) much of the literature advocates a methodological shift, calling for “more careful tracking of the intellectual, policy and practitioner networks”, or “detailed tracings of social practices, relations and embeddings” (Larner 2003, pp.510-511). Freedman (2012) argues “policy, like the wave, exists only because the elements it is composed of are moving” (ibid., p.18), arguing that policy “must change in order to move and it must move in order to exist” (ibid., p.20). If policy’s intent is to shift, alter (and ideally improve) a situation, then continual change, evolution and movement are essential characteristics to recognize and acknowledge. Solidifying a policy and the evidence supporting it into a generalized unity is

likely to hinder its replicability, pinning it down to one location and one set of circumstances, at one point in time:

“Yet Peck and Theodore are equally convinced of the importance of acknowledging the mutability of policies and emphasise the importance of recognising that it is not appropriate to follow them as if they were identifiable ‘things’. What they offer however...is an ability to trace power rather more clearly and explicitly through the sets of relations associated with policy mobility, the translation of policies from one context to another” (Cochrane and Ward, 2012, p.8).

Looking at a ‘policy’ in more than one context highlights how it has changed and that some change is inevitable. It also reinforces that the simple appropriation of a policy as “borrowing and reuse” is “a fantasy of rational evidence-based policy-making” (Peck and Theodore, 2012, quoted in Cochrane and Ward, 2012, p.8). In the following section I elaborate on the challenges of tracing power and the role that evidence plays within the policy-making process.

2.3 Evidence-based policymaking

“The rationality of the policy process is shown to be an illusion, a cloak for the operation of power” (Flyvbjerg, 1998, p.4).

With this quote Flyvbjerg dismisses the belief that one can act solely on the basis of objective knowledge as naïve, using his experience of the Aalborg project¹⁵ as an example of how powerful political forces can be used to subvert and overcome a more democratic decision making process.

The literature reviewed here (and later empirical work) demonstrates the extent to which the conceptualisation of defensible space is intractably linked into debates on evidence. Taking the concept of fluid policy elements from the policy mobilities literature, the preceding section has shown that this fragmentary model of defensible space allows it to align with, if not to totally conform to, views of policy used in the process of *policy-making* and *policy-formation*.

¹⁵ Flyvbjerg used the Aalborg project to explore the intertwined missions of democracy and modernism. This thesis is less ambitious; there are echoes of Flyvbjerg’s themes of implementation of power and even modernism as it is given form through architecture and planning, but it is his practical methodological thoughts on case studies that have been appropriated. The subsequent methodology chapter draws heavily on Flyvbjerg’s methodological guidance whereas this section explores his broader ideas on the influence of rationality and power on narratives of decision-making.

Thus this next section proceeds by considering the history and critical literature on evidence-based policy, to establish the legitimacy of considering defensible space in the form of the DICE project as an example of evidence-based policy. By examining the critiques of evidence-based policy and particularly the relationships of researchers producing evidence for policymakers, I establish the constraints and conditions used in later chapters to assess Coleman's success or failure as an academic geographer endeavouring to influence and shape Government policy on housing regeneration and crime.

Defensible space as an example of evidence-based policy is not a novel idea. In his paper *Designing-Out-Crime: From Evidence To Action*, Cozens (2005) cites 'designing-out-crime' (and by default Newman's concept of defensible space which he assigns as the origins of designing-out-crime principles) as an instance of evidence-based policy. Here Cozens reviews the evidence adopted by the State Government in Western Australia, concluding that the time and context-specific nature of designing-out-crime negates positive results arising automatically from generalised best practice. In fact, he argues applying universalised versions of designing-out-crime policies indiscriminately may result in highly negative outcomes particularly where locally specific successful interventions are naively 'transplanted' to another context. With this Cozens is making a similar argument as much of the policy mobilities literature (Ward, 2007; Marsh and Evans, 2012).

2.3.1 Governments calling for policy relevant research

Young, Ashby et al. (2002) and Wells' (2007) historical accounts of evidence-based policy from the 1950s describe traditional government policy-making as highly reliant on research to inform policy for major programmes of investment in energy or aviation. This technological bias existed until the mid-1960s, when the rapid growth in public services required a commensurable increase in understanding the nature of social problems (Sanderson, 2002). Jones and Seelig (2004) describe the trajectory of applied social policy research within the British Government, from its high point in the late 1960s to the decline of its perceived effectiveness during the late 1970s and 1980s. They identify concerns over the fate of policy-orientated research as funding was reduced. This led to increased reliance on "an

ideologically-driven approach to policy formulation, in which the social sciences had little role to play” (ibid., p.5) during the Conservative governments of Thatcher and Major and a resultant adversarial relationship between social scientists and Whitehall. Since the 1980s Governments increasingly favoured independent, impartial technical assessments in an attempt to counter suspicions of ideological partiality in the social policy arena (Jacobs and Manzi, 2013). The rise of ‘value for money’ studies in the 1980s and 1990s indicated a quantitative, instrumentalist interest, resulting in policy preoccupied with measurement and methodological reliability. This encouraged what Solesbury (2001) termed the utilitarian turn in social research during the 1990s and wide scale production of best practice and guidance to inform and improve professional practice. Davies, Nutley et al. (2000) note that during the Conservative Government covering the historical period of DICE, evidence gathering became an arms-length activity, with an expansion in the number of external think-tanks promoting political agendas through policy research and advocacy. Evidence gathering followed a highly politicised model, where the value of research to Government was dictated by its strength as ammunition to support or scupper opposition to a pre-determined position.

In contrast to the ‘conviction politics’ that characterized the Thatcher and Major Governments, Solesbury (2001) identified the early years of Blair’s Labour Government as adopting a “pragmatic, anti-ideological approach to governance focused on the question, ‘what works?’” (ibid., p1). Using this emergence of evidence-based policy post-1997 and its decline in subsequent Governments to frame my argument could open this thesis up to the risk of a presentist reading. Nonetheless it seems legitimate to apply the concept of evidence-based policy to the DICE project despite it being a term that only gained widespread currency just as the project itself began to fade, due to its close alignment to Coleman’s own positivist quantitative epistemological position. So evidence-based policy is a helpful way to frame her intent and the temporal lag is a reminder of the slippages and

overlaps in how concepts appear and disappear¹⁶.

During 1999 several government papers and documents were published signalling the extent that evidence-based policy was a central tool in the Labour administration's agenda to reform the practical workings of government, including a report from the Cabinet Office positioning research and evidence gathering as a professional managerial activity (Strategic Policy Making Team, 1999). This culminated in a influential speech given at an EPSRC conference where David Blunkett, then Education Secretary, stated:

“it should be self-evident that decisions on Government policy ought to be informed by sound evidence. Social science research ought to be contributing a major part of that evidence base” (Blunkett, 2000, para.2).

This speech was intended to counter the perception within the civil service of academia as inaccessible and irrelevant to practical policy-making. There were pockets within government that understood the potential contribution of research to policy-making, for example in 1992 Gloria Laycock of the Home Office established a social research programme which:

“set out to address directly the criticisms of research, justified or not, as seen by some civil servants. With some notable exceptions, research was characterised as always too late, too esoteric, more or less irrelevant to the current panic and expensive” (Davies Nutley et al., 2000, p.236).

New Labour's wholesale appropriation of evidence-based policy is indicated by Blunkett's rhetoric:

“This Government has given a clear commitment that we will be guided not by dogma but by an open-minded approach to what works and why?” (Blunkett, 2000, para.6).

These two phrases coined by Blunkett, “policy informed by sound evidence” and “being guided by what works” are the embodiment of evidence-based policy. They signalled an explosion in evidence-based policy initiatives across sectors such as education, social care, transport, criminal justice and most relevantly, housing. Following thirteen years of Labour Government, the 2010 Coalition Government's return to ideologically-led policy forecasted a

¹⁶ It is also important to acknowledge that while I was working as a policy/research professional during the late 1990s and 2000s the rhetoric and practice of evidence-based policy was a personally formative notion.

decreased reliance on evidence-based policy. Nevertheless Jacobs and Manzi (2013) detect that evidence-based policy's ubiquitous presence across government departments has persisted across administrations. They continue to perceive similar instrumental and managerial paradigms behind change, particularly within housing policy.

2.3.2 What constitutes evidence in policy-making

The Cabinet Office definition of what constitutes evidence for policy formation is extensive and inclusive, deriving from an equally broad definition of information.

“... policy decisions should be based on sound evidence. The raw ingredient of evidence is information. Good quality policy making depends on high quality information, derived from a variety of sources - expert knowledge; existing domestic and international research; existing statistics; stakeholder consultation; evaluation of previous policies; new research, if appropriate; or secondary sources, including the internet” (Strategic Policy Making Team, 1999, p.31).

Earlier sections in this chapter identified the occasionally conflicted and often confrontational relationship between academia and policy professionals and the potential for academic influence within the policy debate. The practices of those engaged in policy-making are diverse: from the “banal practices of bureaucrats” (McCann and Ward, 2010), the political manoeuvring of elites acting as “patrons or conduits for the realization of policy” or the financial expediency of consultants, including “academic researchers being paid to produce public or policy relevant knowledge” (Jacobs and Lees, 2013, p.1577).

Davies (1999) neutrally defined evidence-based policy as an approach that “helps people make well-informed decisions about policies, programmes and projects by putting the best available evidence from research at the heart of policy development and implementation” (ibid., p.7). Yet as Jacobs and Lees (2013) succinctly conclude, the question of research's relevance to policy is related to queries on the basic nature of research, who it is intended for, its aims and the process of how it becomes relevant. They continue “We should not then assume that quality (detailed and rigorous empirical work), socially relevant (an unquestioning relevance to the policy realm) geography can (and ought to) influence policy” (ibid., p.1577). They use the story of Coleman's DICE study to refute the assumption that

“research equals evidence” (Duncan, 2005, p.1578). Above all the relevance of research is dictated by the status of its commissioner:

“Power determines what counts as knowledge, what kind of interpretation attains authority as the dominant interpretation” (Flyvbjerg, 1998, p.226).

Evaluation of what constituted suitable evidence to aid policy-making was tied to evaluation of the policies themselves. A guidance manual produced by the Treasury (1988) for civil servants managing research projects was the UK Government’s first official recognition of a need to evaluate policies in a systematic way. Shortly after, the DoE team responsible for housing research (the Social Research Division) produced a report *Policy Evaluation: the role of social research* (Doig, Littlewood et al., 1992). This referred to Cabinet level involvement, showing the value placed by government at the time on evaluation to assist policy-making. The DoE report contained a long list of guidelines for undertaking policy evaluation. These are a mix of conceptual, “evaluation is never value free and the same data can be variously interpreted”; methodological, “both qualitative and quantitative data are used in most of the evaluations as the two designs complement each other”; and procedural, “evaluation studies should not be embarked upon until policy objectives have been clearly established” (ibid., paraphrased in Palfrey, Thomas, et al. 2012, p.225)¹⁷.

McFarlane (2010) identified that policy-making favours particular types of learning. The Cabinet Office description above implies that while information is the raw ingredient for policy decisions, other criteria are used to judge the quality of ‘sound evidence’ with explicit/implicit barriers to it being considered relevant to policy. New research is low down the list of sources (qualified further by the phrase “if appropriate”) well below existing research, or the implied first point of reference - expert knowledge. Great emphasis is placed on systematic reviews of existing research¹⁸. Revisiting and utilizing existing knowledge is valued above

¹⁷ The report records the historic expectations for policy evaluation within the DoE at the point when DICE was beginning and by which Coleman’s work would be judged.

¹⁸ Coleman for all her positivist intent was less systematic in her reviewing of available evidence, surprisingly excluded closely related research studies. She makes no mention of Safe Neighbourhoods Unit research (SNU, 1988, 1993) or any references to CPTED and was extremely dismissive of earlier DoE research (Coleman 1985a).

generating exploratory investigative novel insights. Government policy-making welcomes quantitative, sizable, repeatable studies that build on a careful examination of the current knowledge base with policy innovation built on a foundation of findings from earlier studies (Blunkett, 2000). Research (rather than solely evidence gathering) implies experimentation, and while policy innovation is prevalent, with new thinking eventually becoming routine activity, Healey, de Magalhes et al. (2003) suggest that 'business as usual' is the mainstream governmental default; "those [experiments] that succeed the best seem to be those that can fit within established modes of sectorial organization or existing policy networks" questioning "the potential for experiments to shift the discourses and practices of the mainstream" (ibid., p.62).

The literature identifies a number of ways that research can influence policy. The critical reflection is whether these modes of influence are a realistic view of the role research can play. Young, Ashby et al. (2002) identify the following models for research and policy interaction: i) *A knowledge driven model* with primacy to the expert (examples of this being recent expert led policy reviews (Barker, 2004; Harman, 2012)). ii) *A problem solving model* where the expert is closely associated, practically supporting the policy team. iii) *An enlightenment model* where research stands apart from policy-making and new evidence or research ideas filter into policy networks and shape policy in complex, indirect ways. Research 'enlightens' rather than directs those who influence decision making, meaning that "policy is evidence informed rather than evidence-based" (Wells, 2007, p.25). iv) *A strategic model* where decision-makers commission research to delay decision making or make highly selective use of research findings to support their own interests or positions. This is also termed a *political/tactical model* resulting in the politicisation of social science (Palfrey, Thomas, et al., 2012). v) *An elective affinity model* where policy makers are more likely to act on research if the findings are in tune with their own pre-existing views and beliefs. vi) *A two communities model* which recognises that policy makers and researchers come from different communities and have disparities in terms of language, understanding technical issues, incentives, accountability, or time frames. vii) *An advocacy coalition model* stresses the need for collaboration among researchers, policy makers and affected stakeholders

through networks. This final idealized situation is the most infrequently seen of these models, as evidence is more often used to close down a debate rather than foster collaborative open enquiry. In summary researchers can influence policy makers through sustained interaction, particularly by involving decision makers in the research process (Young, Ashby et al. 2002; Wells, 2007, p.25). Jacobs and Lees (2013) cite Barnes' (2004) analysis of those "sub-groups of academic geographers whose research effort was incorporated into government policy development and research"¹⁹, thus recognising that Governments' views of what constitutes policy relevant research is selective and not always aligned to the views of academics.

2.3.3 Critiques of evidence-based policy

There are two significant critiques of evidence-based policy; that the concentration on 'what works' is an impossible aim, and that the simplification of policy analysis to aid the generation of policy options is a naive aspiration. Despite the rhetorical power that evidence-based policy provided the New Labour Government (Robinson and Wells, 2009), Maclennan and More (1999) cite a minority of circumstances when evidence has truly shaped policy, implying that evidence does not automatically exert effective influence. The conditions they identify for evidence to inform or influence policy are: a close alignment to a specific policy question, targeting a single government department and a resulting reduction in public spending. Maclennan and More note that these conditions rarely apply to housing policy, which requires partnership working and cross-department activity, that can seldom be delivered at a local scale let alone at a regional or national level.

By aspiring for decision-making based on objective transparent criteria, evidence-based policy-making claimed to be above and apart from politics. Yet it has been accused of ignoring the unavoidable effects of politics, positionality and power (Wells, 2007). The ubiquity of political influences that shape policy make this unavoidable and range from the

¹⁹ Jacobs and Lees (2013 p.1562) argue that Coleman's work, "although quantitative was not considered sufficiently so" by Hillier (1986a) and others (Anson, 1986; Ravez 1988). See Chapter Five.

practicalities of everyday politics, parliamentary responses to unexpected events, the experience/values of policy officials, the lobbying of media/ interest groups and the decisions made by Government Ministers. Thus 'politically-based policy-making' (Edwards and Evans, 2011) is inevitable, inherently based on ideology and argument, and not solely on evidence. Jacobs and Manzi (2013) accused the Labour Government of attempting to avoid political or ideological scrutiny by using evidence-based policy as a shield to avoid ideological debate, to deflect criticisms of public sector reforms and to "gain legitimacy through an appeal to technical rationality" (ibid., p.1). They go further, stating that "the primary value of evidence-based policy for government is a post hoc justification" (ibid., p.4). A second order complaint is the extent that evidence can actively contribute to policy formation (evidence-based policy-making) rather than merely being used to justify a pre-made decision (policy-led evidence making). As Flyvbjerg concludes: "analysis instead of acting as a foundation for intelligent policy-making becomes a manipulated instrument of politics" (Flyvbjerg, 1998, p.35).

Policymaking cannot (even through the application of evidence-based policy approaches) be reduced to a simple managerial task, but is one that requires interpretation, iterative understanding and reflection. It requires the coordination of complex interactions between a multitude of actors, organizations and the state (itself a disparate group of actors/organizations with concealed/revealed interests rather than a set of coolly rational coordinators). Evidence-based policy is defined and applied dissimilarly in academia and policy situations, with varied degrees of rigour and enthusiasm. This grows naturally from the task that evidence-based policy sets itself, to draw from, and unify, diverse and uncertain knowledge fields, some with well established evidence bases and transmission routes (law, medicine), to others that are innovative and by their nature evolving (novel examples include global governance, e-government or the regulation of biotechnology (Mulgan, 2003)). These knowledge fields have distinct epistemological foundations and evidence-based policy is populated by varied theoretical perspectives. Yet more diversity arises from the individual epistemological and ontological bases of the different professions and social science disciplines that generate the evidence, arising in unequal validity for the knowledge created

(Sanderson, 2002; Wells, 2007). Hidden by assertions of objective evidence and evaluation, these values or issues of positionality are rarely acknowledged.

“In short evidence-based policy has led to a proliferation of technical specialists and policy entrepreneurs who are increasingly detached from value based debates” (Jacobs and Manzi, 2013, p.9).

2.4 Epistemological issues: rationality and determinism

As the discussion of values, positionality and the use of power to legitimise or discount evidence will reappear in all of the following empirical chapters, Flyvbjerg’s (1998) careful discussion of the dynamic interplay of rationality and power is an important line of thinking to unpack at this point. It is clear that the timing of research input into policy and whether it is supported by powerful interests is as important as the quality of the evidence provided. But Flyvbjerg argues for a more direct and controlling relationship:

“Power quite simply produces the knowledge and rationality that is conducive to the reality it wants. Conversely power suppresses that knowledge and rationality for which it has no use” (Flyvbjerg, 1998, p.36).

The accepted concept of rationality is that individuals (and governments) generally take actions for reasons, even if these are unconscious. Rationality, then is the exercise of reason, to systematically and explicitly think about how things are and how they should be or could be. To be rational is to be consistent, coherent and context-neutral. Claims to rationality rely on assumptions of what is logical, or favoured ways of thinking, or norms or accepted values. This equates closely to the way that evidence-based policy has been described in the literature. However Foucault (1980), Flyvbjerg (1998; 2001), Barnes (2004) and others suggest that rationality and what is perceived as rational action are highly context dependent. Barnes’ (2004, p.569) view is that scientific ideas are not linked to “a polished, distant, universal rationality”. Rather ideas and the rationality they illustrate are “closely tethered to the eccentricities, complex interests, materialities and messiness of lives lived at particular times and places” (ibid., p.569). More, a single universal rationality is unachievable, there are multiple rationalities leading to multiple ways of thinking, structuring logic and deriving conclusions. In addition, each of these rationalities are bounded and

constrained in different ways. The historical/technical view of policy-making described above promoted an idealized view that the policy-making process followed a linear yet cyclical model of goal identification, solution formation, solution/option evaluation, selection of 'best' option, implementation then review. This ability to identify all potential impacts, consequences and costs of each option before selecting which course to pursue would require an impossibly 'comprehensive rationality'. Simon (1957) recognized that this was an idealized situation, limited by time, resources and other constraints, resulting in a compromise: 'bounded rationality'. This more closely reflects the realistic search (widely recognised in practice) for the 'good enough solution' that will 'satisfice', that is a solution that will satisfy sufficiently (Simon 1957, cited in Palfrey, Thomas et al., p.39)²⁰.

Thus the problematization of social housing and resultant solutions are defined by both multiple assumptions, and dominant yet bounded rationalities. Even with a shared, agreed understanding of the problems (a rundown, unpopular housing estate requiring regeneration) the remedies favoured by those involved may derive from conflicting or incompatible motivations: local councillors motivated by political pressure to participate in a pilot programme, local planners wishing to innovate, or the expectations of residents based on their former experience of council-led refurbishment projects. Moore (2005) extended this through her 'rationalities approach' to New Urbanism. She considered socially constructed rationalities which were shaped by the problems they were responding to. Coherent ways of acting emerge in response to these problems, which Moore terms 'regimes of practice'. Moore's examples of 'sustainability' and 'urban renewal' are defined by urban decline, loss of nature, sprawl and pollution. In the case of DICE, 'failing housing estates' are defined by residualised resident populations, concentration of economic and social deprivation, technical failures of construction systems, etc. Each of these problematisations have norms of conduct, 'regimes of practice' which are bound up in the identities of the institution, organisation or individuals, for example local authority departments, planners, architects and

²⁰ More recently the governmentality literature has suggested that to be 'rational' is to strive to shape and control human behaviour through the machinery not only of formal government power regimes but other forms, for example decentralised self-government (see Foucault, 1980).

housing managers. So Moore (2005) argues that rationalities are relational, discursive and are operationalised within 'regimes of practice'.

Section one of this review described several rationality based models that underpin the concept of defensible space. The model of positive territoriality assumes it is rational for communities to take possession of the spaces on their estates and to want to exert control excluding certain individuals and discouraging poor behaviour. The rational choice model (in combination with the routine activity model) is the dominant model for situational crime prevention theory (Cornish and Clarke, 1986; Schneider and Kitchen, 2007). The offender's assessment of a situation and resultant decisions may be ill-informed, hasty or clouded in some way, but beneath is a criminal rationality which is highly influenced by ease of reward, balanced against risk of interruption or capture and effort.

Prompted by Flyvbjerg (2001), this thesis tries to be highly conscious of the competing rationalities. Within defensible space one can note at least four competing rationalities: scientific, political, technical and procedural rationalities, each with individual ways of systematically thinking through and defining problems, gathering and applying evidence and knowledge, even different ways of acting and justifying these actions. Flyvbjerg's practical response to the imposition of rationality (as in these models) or the challenge of multiple rationalities is via his notion of 'value-rationality' which seeks to question both the purpose and motivations of decision-makers, to uncover and expose the values underpinning their beliefs and actions. As an example the model of ownership and territoriality can be seen as a normative position. The position of normative theory "which concerns what ought to be" can be set against positivist theory "which concerns what is, was and will be". These two positions have long been intertwined and Chisholm (1978) quotes the often mistaken belief that positive theory would lead to normative insights (Chisholm, 1978, cited in Gregory, 2000, p.577). The two positions (normative and positive) also neatly summarise the alternative readings/interpretations of defensible space by criminologists and designers. The purer investigative approach of criminologists is addressing the desire to explain "how things are" against designers' (and Coleman's) desire to envision "how they could or should be".

Significantly, a normative theory should not be adjusted by an appeal to the facts: its internal consistency is reliant on disclosure of competing value systems (Lipsey, 1966, cited in Gregory, 2000, p.577). Thus, Coleman's reversion to claims for the precedence of "common sense" to support her position when her scientific or statistical methods were undermined, indicates the inadequacy of a solely positivist stance.

The thesis has also been sensitive to epistemological arguments about how the creation of understanding shapes its value and perceived usefulness. Coleman's epistemological position and her resultant study design is strongly positivist and her scientifically justified belief in the power of the built environment to determine social behaviour exposed Coleman to repeated accusations of environmental, architectural (or even social) determinism. The term 'architectural determinism' was first coined by a planner Maurice Broady (1966) and used (usually in a pejorative way) to describe an exaggerated belief in the extent that the design of an environment could control the way that individuals behave. Markus' (1987) paper examining government housing guidance analysed texts to expose the hidden agendas behind housing policies. He argued that particular care was needed unpacking the language of housing discourse and criticism, which I discuss in greater detail in the following chapter on the methodological application of discourse analysis. In addition, Markus also pointed out the particular sensitivities within housing research for certain words and implied associated ideologies. Markus complained that it was:

"deemed sufficient to damn a research project or an idea without any further analysis of the results or consideration of the methods and theories used; 'determinist', 'positivist' and 'reductionist' are common examples used to discredit work, often by critics who have but the faintest understanding of the philosophical and scientific roots of the words" (Markus, 1988, p.10).

Coleman's critics detected deterministic tendencies through her scientific claims for DICE. Yet as Jacobs and Lees (2013) point out, Coleman's geographical background and the debate within the discipline had imbued her with a keen awareness of environmental determinism. She addressed accusations of determinism early on in *Utopia on Trial*: "We are not dealing with determinism...Bad design does not determine anything, but it increases the odds against which people have to struggle to preserve civilised standards" (Coleman,

1985a, p.83). Similarly Coleman is clear about the contribution of design being secondary to say, the responsibility of good parenting.

“A badly designed block does not force children to become litter louts or vandals, but if the design makes it difficult for parents to supervise them and keep away from bad company, it increases their probability of behaving anti-socially” (Coleman, 1984, p.351).

However the moralistic tone of ‘civilised standards’ occurs frequently throughout the book and Campkin (2013) argues that it is Coleman’s “presumption of bad company that is deterministic” promoting a stereotyped view of housing estate residents (ibid., p.92). Coleman repeatedly claimed that her work was merely probabilistic, brushing off negative connotations of determinism.

“I don’t think it’s right to say that determinism is a bad thing. My work is not determinist. It is probabilistic. All this deterministic business, it’s talk about nothing” (Interview Coleman 2010, quoted in Jacobs and Lees, 2013, p.1571).

In fact Coleman levels the charge of determinism at her detractors. In *Utopia on Trial* she branded the DoE’s support of Radiant City/Garden City principles as environmental determinism. She attributes any undesirable behaviour in these types of settlements as an inevitable outcome from what she saw as the poor principles and ideological town-planning dogma at the heart of Garden Cities:

“It is sad and surprising that neither the Garden City or Radiant City had any scientific background whatsoever...Both were based upon intuitive beliefs and prejudices...And made contagious by sincerity, enthusiasm and attractive sketches. They were carried into action by such powerful propaganda that they have become deeply embedded in our way of thinking and are difficult to dislodge” (Coleman, 1985a, pp.6-7).

But Coleman is equally critical of those planners who reject determinism. She accused DoE staff of ‘renouncing’ deterministic models as a way of absolving themselves of the consequences of their housing designs and shifting the blame to ‘problem people’ (Coleman, 1985a, p.19). Here Coleman’s simplistic reading of town planning principles (along with her cynical reading of the DoE motivation) falls into the trap of conflating spatial versions of determinism (architectural or environmental/geographical/climatic) with social engineering. David Harvey (1997) writing on urbanism identifies a failing of modernism as “its persistent habit of privileging spatial forms over social processes” (ibid., p.2). Harvey counters that the

antidote to this spatial determinism is “to understand urbanism as a series of fluid processes in a dialectic relationship to the spatial forms which then give rise to forms which in turn create them” (ibid., p.3). The task of placemaking then becomes a process of engaging and selecting a more “socially just, politically emancipatory, ecologically sane mix of spatial-temporal production processes” (ibid., p.3).

Planning and housing disciplines have displayed an instinctive distrust of being classified as determinist, without fully understanding what this criticism means (especially design disciplines which Markus (1988) suggests have a more uncertain relationship to scientific theory). Many would aspire to producing designs that aid Harvey’s socially just production processes, whilst failing to acknowledge the limitations of the tools they have to influence and improve society. Till (1998) echoes Harvey’s suspicion that spatial processes are privileged over social ones, referring to Coleman:

“To promote, say, balcony access over chronic unemployment as the cause for social unrest is symptomatic of a determinist approach to architecture [that is] extraordinarily misinformed [and] extraordinarily dangerous. Misinformed because, in its focus on architecture alone, it conveniently overlooks the wider social and political structures that contribute to the production and inhabitation of the built environment; dangerous because of the political amnesia that it thereby induces” (ibid., p.66).

Conclusion

The review of these three bodies of literature: defensible space with its inherent spatial and geographical basis; recent policy mobilities writing on transfer mechanisms/agents; and evidence-based policy-making, has been used to discuss the relationship between research, policy and practice. This in turn clarified the understanding needed to address the three research questions (see Section 1.2.4). Exploring the evolution of defensible space established a working definition of the concept. The policy mobilities literature provided an understanding of mobilisation. Despite the criticisms I’ve presented of this literature I concentrated on reviewing ideas of policy transfer/policy mobilities (rather than say research mobility), on mobilisation mechanisms and policy impact (particularly how impact related to evidence-based policy). It was helpful to untangle policy impact from definitions of research impact or practical impact, as was distinguishing between policy evaluation and policy

analysis. And lastly the discussion of evidence-based policy-making established the basis for considering the use of evidence. Each of these aspects was examined to consider the different 'ways of doing things' within 'regimes of practice', starting with diverse disciplinary takes on defensible space. Reynald and Elffers (2009) reiterate that Newman's version of defensible space is still accepted as a foundational concept for conceptualising the impact of design on crime:

"all contemporary approaches and discussions of the crime-design relationship use Newman's defensible space theory as a critical point of reference" (ibid., p.26).

And despite Hillier's (1986a) persuasive moves to unpick defensible space as theory and establish an alternative (and in many ways more theoretically robust) model for this relationship, it remains "a theoretical cornerstone" of current crime prevention guidance and design advice such as Secured by Design, or Politiekeurmerk Veilig Wonen (the Dutch version of Secured by Design) (Reynald and Elffers, 2009, p.27).

The significance of creating applicable tools for practice is central to evidence-based policy's concentration on "what works"²¹, so it is telling that so many rules and codes have emerged from the defensible space approach. Rules themselves exist along a spectrum with more/less freedom for discretion and more/less hermeneutic interpretation, from regulatory legal requirements (Building Regulations or British Standards), through to codes of behaviour and protocols (Special Planning Guidance requiring Secured by Design), to best practice, rules of thumb and so on. Some of these rules can be applied in an unconscious way. Some rules require judgement. An alternative to codifying messy concepts into rules is to rely more on thinking and interpretation of principles. The 'rules/principles' of defensible space seem to sit in an interesting middle ground, consisting of a mix of the easily applicable and those requiring more informed interpretation. Hence the relevance of middle-range theory building which provides a way for the policy maker or practitioner to structure a diffuse and complex

²¹ DICE's potential popularity in government was as a quantifiable index to aid investment decision-making. It became less accepted when it became clear that the principles were not automatically replicable and still required interpretation and design expertise to successfully apply them.

process consisting of guidelines and best practice, certainties and hunches. Reviewing the extensive critiques of Newman and Coleman's research revealed that considering defensible space a unified all encompassing theory was inherently unrealistic: "At best defensible space theory can only be partial...at worst it may obscure the importance of other factors, which may nullify attempts to use the theory to control crime" (Davidson, 1981, p.84).

Similarly, to try to constrain defensible space within a single conceptualisation of 'policy' as formal authorisation would unhelpfully obscure the importance of the aspirational, visionary and political qualities which are used to justify actions. The policy mobilities and evidence-based policy literature illuminates these more intangible aspects of the concept, but its epistemological value-laden positionality is still overlooked. The literature uncovered evidence-based policy's inherent positivism and its privileging of 'objective' evidence. The impossibility of this objectivity becomes obvious when the abstractions of academe have to engage with the powerful political pressures of policy and the day-to-day constraints of practice: "evidence, in itself can not help to resolve conflicts of value in an uncertain world" (Parsons, 2002, p.49 paraphrasing Schön, 1973, p.28). The questions '*whose* evidence and *what* do they count as evidence?' demonstrate the significance of considering power and rationality as embodiments of epistemological position.

Thus the following empirical chapters seek for examples of both power and rationality in the story of DICE. There are multiple occurrences of power within the literature which are relevant; defensible space covers the direct power to take ownership of a territory, or the indirect power of using the design to empower residents. In policy transfer/mobilities literatures the discussions of policy elites are explicitly about power. Policy (in its multiple definitions) has the power to select, promote, or give weight to selected evidence. It also has the ability to encourage or demand action or to fund activity. Government has many powers beyond legislation: the power to support or to block ideas, to respond or to resist political pressures. This should be separated from the historical rise and fall of political parties and their ideological positions. It is important for this story to be read against the political backdrop of Conservatism and the rise of the New Right during the mid 1980s (see Chapter

Five on the political background to the *Rehumanising Housing* conference), then the rise of the New Left in the mid 1990s with the resultant growing enthusiasm for evidence-based policy-making and community architecture (see the case study of the Mozart estate in Chapter Eight). In comparison the power of researchers may seem limited; their power is definitional, epistemological and intangible. They have to rely on the power to persuade with argument not coerce. And for practitioners, the freedom and opportunities to wield power can seem even more variable. Their practical powers are defined within the client/consultant relationship, or other professional ethical or contractual obligations. But this is to overlook the power arising from considered action, exerting power (of intent/collective knowledge) through the process of design and making decisions on the ground. In addition, Schön's (1973) reflective practitioner has not only the power to solve problems, but having identified successful solutions to circulate these and keep good practice in currency, the vital power of *phronesis* or practical wisdom (Schön, 1973; Flyvbjerg, 2001).

The expectations for rationality also vary across research, policy and practice in the story that follows. This variation is true both in the commonplace meaning of 'acting rationally' and the more relevant meaning of socially constructed rationalities, that is "coherent sets of ways of going about doing things" (Moore, 2005, p.312). Conflicts arise from separate disciplines having their own set ways of seeing the world, for establishing shared knowledge/evidence bases and hence "doing things". The empirical chapters describe various examples of these conflicts: where a policymaker's view of what constitutes evaluation differs from an academic's, or the evidence needed for a researcher's recommendation for a regeneration project differs from the architect's. The epistemological basis for these different knowledge claims rework any shared rationalities arising from the simple foundational principles of defensible space (criminal rationality, rationalities of territoriality or ownership). Discussion of these epistemological issues continues in the following methodology chapter, which also (in an echo of the evidence-based policy-making process) sets out what will be considered evidence within this thesis.

Chapter 3: Research design, methodology and positionality

Introduction

In discussing the methods used to gather the empirical data in this thesis, this chapter does more than describe the technical ways that data was collected, how interviewees were selected or modes of analysis applied. This chapter sets out what constitutes 'data' in this research. It describes the methodological direction and techniques that best address the lines of enquiry, as well as the empirical methods employed to combine the diversity of primary and secondary data gathered. Throughout I refer back to the epistemological issues identified in the last chapter to show the dual tasks to address: the task of explaining these epistemological challenges (Coleman's positivism, the positive/negative value given to her research by others because of who she was) whilst also reflecting on my own ontological and epistemological framework. Using Grounded Theory approaches for thematic analysis, I could exploit its flexibility both as a methodological framework and a practical method. In addition its proponents describe it as bridge between positivist and interpretive methods (Charmaz, 1996, p.30). I also needed a method that could highlight the significance of knowledge claims and the way research is valued depending on how it was created, and by who. Thus discourse analysis was selected to unpack the recursive relationship between individuals, their power relationships with others and the way language was used to make their case.

The terms primary and secondary data are not used to denote significance, merely the modes of collection. Primary data collection was by a series of in-depth interviews with actors involved in the DICE programme. Historical narratives were gathered from elites, practitioners and estate residents and were compared to the contemporary views of current Tower Hamlets housing managers and a local Crime Prevention Liaison Officer. These first-hand historical and contemporary narratives were triangulated with secondary data consisting of a varied mix of written articles, surveys, reports and drawings. While much of this historical material was publicly available (archival articles, formal policy documents) a large proportion was taken from grey literature/private archive collections, consisting of

project management documents, drawings, unpublished research reports or survey data. Some collections of papers were uncovered and examined for the first time since their creation. Each of these sources required a particular method, from a brief overview of the historical quantitative survey data, to a more detailed discourse analysis of the formal policy and guidance documents from the 1970s that provided context for DICE. The variety of material explored necessitated a flexible, eclectic application of relevant theories and methods, as it was not clear in advance which analysis method would reveal most from the data. Similarly the uncertain process of discovery, relying on an intuitive judgment of the found material's value, required repeated immersion in the data. So an iterative, reflective yet systematic and disciplined framework was developed to direct the analysis process.

This chapter describes the range of approaches undertaken, it considers theoretical and practical issues and lists the significant difficulties encountered, showing how these were either mitigated or how they shaped the study. It sets out the justification for participant selection and the selective case study approach. It discusses the ethics of researching recent historical events involving well-known individuals with outspoken personalities and contentious opinions. Keeping in mind Flyvbjerg's comment that "power defines what counts as knowledge and rationality ... and ultimately what counts as reality." (Flyvbjerg, 1998, p.27), it considers the position and power, not just of those interviewed but also the power of a researcher to uncover buried information, to reopen closed debates, or to represent alternative readings of past episodes. Finally I reflect on the experience of undertaking research as a mature, experienced researcher closely involved and associated with the subject under study. This integral concern with researcher positionality questions the possibility of objective knowledge or rationality, particularly when engaging with research areas with an ongoing practical influence as well as policy impact.

3.1 Intensive research and using case studies

The nature of the topics and material under investigation suggested an intensive rather than extensive research methodology. The research design adhered to Sayer's (1984) definition of intensive research by exploring the research questions through a small number of cases.

Taking a case study approach had high-level methodology implications based on the epistemological framework, in addition to the practical ways that data was collected. These methodological/practical implications are discussed together. In a similar way the constraints of an intensive case study approach impacted on grounded theory to crystallize into a workable set of research activities. Methodologically the investigation posed questions about what produced an effect, or what actions agents took in a particular circumstance. It looked for substantial connections between relationships, rather than similarities of relationship, and looked for a causal explanation of events – even if events were not representative - as opposed to searching out descriptive representational generalizations. Finally the case studies, networks and interviewees were characterized into causal groups (defined by their relationships and interaction) rather than taxonomic ones (derived from a process of listing populations or allocating places in a hierarchy). During the execution of this research design, the strengths and weaknesses from the intensive nature of the research emerged. These had to be managed during fieldwork and the analysis. In particular, the closeness of the relationship of the researcher to interviewees was beneficial in the joint creation of knowledge about the subject, but this intense social interaction was clearly not a neutral objective process. Similarly the analysis was probing for individual responses arising from possibly unique circumstances, yet was using these to question processes of generalisation, so required an robust strategy of convergence to reach convincing conclusions. This is where the concept of saturation from grounded theory was helpful. Practical explanations of how to recognize theoretical saturation are vague (Charmaz, 1996), so I took it to mean the process of repeatedly searching for concepts during data collection, narrowing in to identify cases that would explore all properties of a research theme until no new insights could be gained.

The thesis was concerned with the use of case studies at two levels: the methodological justification for the selection of case studies as the content (*taking a case study approach*), and the *conceptual use of case studies* as a transfer mechanism for ideas, knowledge and learning. This latter conceptual use was discussed in the earlier section 2.2.3 on transfer mechanisms and led to the mechanism-based model that I devised for analysis. The

primary decision was either to select multiple comparative case studies or a single in-depth study. As will be described later, the story of defensible space in the UK is one with multiple interpretations, so my first decision was to concentrate on Coleman's interpretation as embodied by DICE, referring only where necessary to other versions of the concept. However, within this in-depth study of one version of defensible space, there were still multiple decisions to be made about what constituted an appropriate 'case' for consideration.

Table 3.1 Types of case explored

Type of Case/Causal group	Example selected
Regeneration projects	Rogers Estate, Tower Hamlets
	Ranwell East Estate, Tower Hamlets
	Mozart Estate, Westminster
Evaluation exercises	DoE / Price Waterhouse evaluation of DICE
	Coleman's evaluation of DICE
Publications aiming to challenge the status quo	<i>Defensible Space (1972)</i>
	<i>Utopia on Trial (1985)</i>
	<i>Rehumanizing Housing (1988)</i>

These eight cases covered a range of disparate forms, as I looked at three London housing estates, two evaluation exercises and several publications which aimed to influence thinking on housing regeneration. Throughout the research interviewees suggested examples of housing estates as potential case studies. But selecting estates as 'case sites' only on the basis of these surface characteristics was insufficient. To provide comparisons that could address the research questions, required careful selection against two levels of logical criteria; firstly the characteristics of the cases themselves (age of estate, location, regeneration approach applied), and secondly on the degree of freedom these particular cases gave to the later processes of theorizing (what did this case illustrate, what type of

comparison could it provide?) To do this I drew closely on Flyvbjerg's (2006) paper *Five misunderstandings about case study research*²².

The third of the misunderstandings Flyvbjerg dismantles is the impossibility of generalising from single examples.

“One can often generalise on the basis of a single case and the case study may be central to scientific development via generalisation as supplement or alternative to other methods. But formal generalisation is overvalued as a source of scientific development, whereas the ‘the force of example’ is underestimated” (ibid., p.228).

He proposes that case studies are useful both in the early stages of research in generating a hypothesis, as well as the later steps of hypothesis testing and theory building. Flyvbjerg relates this back to his second misunderstanding on the power of the individual case study and its contribution to ‘scientific development’. Flyvbjerg’s counter arguments are highly relevant when considering Coleman’s scientific reliance on quantitative data, her simplistic generalisations about how to apply the DICE principles to different built forms and her one-dimensional causal expectation for the relationship between design and behaviour. It is also significant when considering the importance given to case studies by practitioners and their belief in “the force of example”, or when examining claims for ‘evidence-based policy’ based on selective case studies. My focus on the case study approach was a way of exploring the risks of this method of generalization.

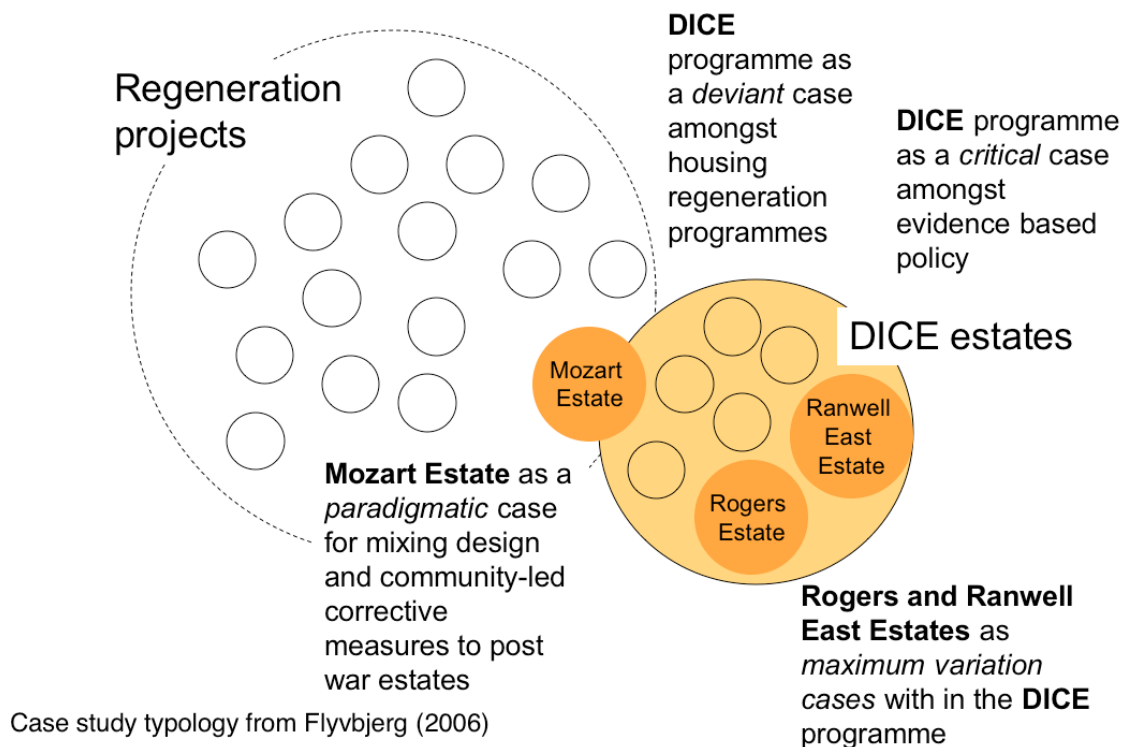
Flyvbjerg identifies strategies for selecting cases from within a restricted pool of examples that precludes any random or representative sampling. The biggest challenge is choosing a single, or very small number of examples, based on their *expected* information content. In the early stages of research, Flyvberg advises a strategic selection, not of the most typical or average case, but those which are “richest in information” as “atypical cases often reveal more information because they activate more actors and more basic mechanisms in the situation studied” (ibid., p.229). He proposes four strategies: choosing extreme or deviant

²² Flyvbjerg’s first misunderstanding, that general, theoretical (context-independent) knowledge is more valuable than concrete, practical (context-dependent) knowledge, is explored in detail in Chapters Six and Eight.

cases, cases which illustrate maximum variation, critical cases, or paradigmatic cases, each to maximise the usefulness of individual examples.

Figure 3.1 shows how the selection of the case studies for this thesis considered these four definitions, as well as Flyvbjerg's insight that an example may fit several definitions simultaneously, allowing multiple perspectives on a single case.

Figure 3.1 Case study selection strategy



The DICE programme can be seen as a *deviant* case amongst housing regeneration programmes, in that it was especially problematic in several ways. It was an extremely small pilot with unprecedented investment, taking an uncompromising experimental approach, applying a design-led process that was at odds to normative opinion which then favoured management-led interventions. From an initial review of the whole DICE regeneration programme, I selected two case studies, Rogers and Ranwell East estates, which demonstrated *maximum variation* across several physical and social variables. They were different in scale, built form, density, severity of the social/crime problems experienced and the design solutions proposed. Their shared Local Authority context and easy access to

interviewees reinforced their selection. However while these selection criteria were part of the initial review, it was only following more detailed investigation that the distinct disparity in the success of the projects and the attitudes of the individuals involved at Rogers and Ranwell East emerged.

Flyvbjerg's (2006) explanation of a *critical case* is one with strategic significance arising from its ability to stimulate generalisation of the kind "if X is valid for this case, then X is valid for all (or many) cases" or alternatively "if X is not valid in this case then X is not valid for any (or only a few cases)" (ibid., p.230). Thinking about the third key research question: *What does this mobility of defensible space tell us about how different communities of practice (academia, practice and policymakers) use evidence?* I initially saw DICE as one of these second 'exclusion by negative proof' critical cases amongst examples of evidence-based policy research. I thought that if a research project such as DICE was unable to influence policy (or transfer successfully) with the extensive amounts of money, time, data and careful evaluation expended on it, then this lack of success undermined many of the assumptions about the role of research and evidence in evidence based policy. However having traced the story of DICE and seen how its progress was affected by political decisions, individual rationalities and personal views - including the conviction that Coleman's ideas were so flawed that they had absolutely no long term policy value (Interviews with Wiles, 2011; Riley, 2011) - I had to reconsider this claim for critical significance. DICE was portrayed by many interviewees as too problematic and the opinions of it too extreme and deviant from contemporaneous regeneration programmes. It was still possible to generalise about the conditions necessary for successful policy transfer, but a stronger message was how these conditions were dependent on the status of the participants and could be over turned by strength of opinion, or power. Flyvbjerg (2006) describes a similar situation in his Aalborg study where he believed he had uncovered a critical case, but altered this when he realised that he was in fact studying an extreme case. His thoughts went as follows: as rationality and urban planning were held in such high esteem by planners in Aalborg, if Flyvbjerg found that both rationality and urban planning were too weak to withstand institutional power then they would likely be too weak elsewhere in Denmark. Yet part way through his study,

Flyvbjerg decided he had been mistaken, as he found unusually strong examples of both rationality and power in Aalborg. His redefinition of Aalborg as an extreme case and my own reclassification of DICE show the extent that a researcher needs to be open to shifts in interpretation and not tied down by conceptual frameworks:

“Good social science is problem driven and not methodology driven in the sense that it employs these methods that for a given problematic best help answer the research question at hand“ (ibid., p.242).

So I found it helpful to consider DICE as either a critical or a deviant case, but only in so far as these definitions led to useful conclusions.

Flyvbjerg warns that his fourth typology, a *paradigmatic case*, is challenging to identify as it is hard to establish if a specific case has metaphorical or prototypical value (ibid., p.232) I argue later in the thesis that the Mozart Estate regeneration project has some prototypical qualities. Although not one of the DICE funded schemes, it acted as a pilot for them. It has a familiar notoriety within the canon of housing regeneration projects (more than DICE perhaps), and was frequently referred to during interviews by architects as a symbolic site where new ideas had been tried (Interviews with Stanford, 2011, Derbyshire and Hammill, 2012). However the Mozart's usefulness to this thesis is primarily as a conceptual archetype. In one location, it catalogues the spectrum of defensible space theories as they were implemented.

Thinking about generalization, I decided it was important to examine the macro situation through the micro. So my analysis combined an intensive small scale approach combining Healey's (2010) advice to scrutinise the micro practices of daily policy and planning processes at their most mundane level of implementation, with Flyvbjerg's (2006) insistence to consider the *longue durée*. The problem of housing estates is played out over the very long run. Their design, construction and subsequent regeneration are drawn out over many years, with the impact of management and maintenance continuing even longer. The symptoms of the problem may shift and solutions evolve over the lifetime of the place (promoting intermediate forms of tenure as a solution for affordable housing need or high

density design supplanting other urban design solutions) but the underlying problems are unlikely to disappear²³.

Occasionally the research method itself set the limits of enquiry before the content was explored to its potential saturation (for example preconceptions about what case studies entailed, or finding grounded theory as classically applied too reliant on procedural coding practices). In this situation, Peck and Theodore's (2012) methodological expansion of Burawoy's (2009) extended case method into a 'distended approach' provided inspiration to adapt the existing canon of methodological approaches, rather than feel constrained by their limits. Their evolution of Burawoy's well-known case study approach was an attempt to give "license to an open ended embrace of methodological experimentation and reflexivity" (Peck and Theodore, 2012, p.24). They believe this provides the freedom for "road testing hunches, hypotheses and theories in reconstruction across cumulative sequence of multi-site investigations or 'experiments'" (ibid., p.24). But more than merely applying, confirming or 'testing' the lessons of a case, one should aim "for theoretical extension and reconstruction" (ibid., p.25). Devising a hybrid process that focused on the research questions and converged toward a limited number of inferences aided the process of theory building and decisions over which material to incorporate or discard.

3.2 Personalizing grounded theory

The appeal of applying grounded theory to this rich complex study stems from the apparent freedom arising from treating all material as data and from exploring leads suggested by the material itself rather than existing theories. Material gathered is both filter and frame for study:

"You begin with an area to study. Then you build your theoretical analysis on what you discover is relevant in the actual worlds that you study within these areas" (Charmaz, 1996, p.28).

²³ This is illustrated by Cooper's (Interview 2013) belief that many of the housing issues that were explored at the *Rehumanising Housing Conference* described in Chapter Five are now more intractable than when they were being discussed in 1986.

“Joint collection, coding and analysis of data is the underlying operation. The generation of theory, coupled with the notion of theory as process... should blur and intertwine continually from the beginning of an investigation to its end” (Glaser and Strauss, 1967, p.43).

Many definitions of what constitutes grounded theory have evolved since Glaser and Strauss’ ‘discovery’ of the approach in the 1960s. For example Charmaz (1996) identifies a number of inductive strategies that all grounded theories should have:

- “1) Simultaneous involvement in data collection and analysis;
- 2) creation of analytic codes and categories developed from data and not by pre-conceived hypotheses;
- 3) the development of middle-range theories to explain behaviour and process;
- 4) memo-making, that is writing analytical notes... as the step between coding and writing first drafts of papers:
- 5) theoretical sampling, that is sampling for theory construction not for representativeness, to check and refine the analysis and emerging conceptual categories;
- 6) and delay of the literature review” (Charmaz, 1996, p.28).

From this I took to heart Charmaz’s (1996) advice to begin with as few predetermined ideas as possible. Nonetheless, I could not aspire to a theoretical tabular rasa, as my knowledge of existing literature, theory and most significantly, prior experience as researcher was indispensable in identifying themes and categories. But I heeded the warning that theoretical sensitivity was essential so that emergent themes should not be forced to fit the literature or pre-existing knowledge. Grounded theory suggests that researchers can become theoretically sensitive by immersing themselves in data collected or trying to understand the data’s significance from the perspective of interviewees. Concurrent data collection and analysis encourages data immersion, while interrogating the material gathered in interviews in a reflective but open way keeps the participants’ viewpoint foremost. Constructing categories and themes began at the scale of concrete individual cases (the sites studied and themes being tracked) and moved towards a more abstract categorization of concepts. Finally, the concepts were used to synthesise relationships within the data and their integration into a theoretical framework. This form of inductive, intensive emergent research resulted in a rich, complex and broad ranging picture, but one that was potentially open

ended. Often completion of a strand of enquiry was defined by the practicalities of research (working within limited time resources over an extended period) more than when theoretical saturation was reached.

Thomas and James (2006) are wary of the description of this approach as grounded *theory* because of its concentration on a proscribed method, arguing strongly that it has become a mechanical process to follow rather than a theory that can help explain circumstances. The overall approach suited the material and how I was investigating it, but as the case studies illustrate, rather than following a purely grounded approach in this study, I borrowed and adapted, formulating a simplified application.

Aspects where I simplified Charmaz's (1996) or Glaser and Strauss' (1967) versions of grounded theory included: exploring my previously held ideas, being less reliant on prescriptive coding procedures, or clustering findings onto a few core categories. While I avoided coding interviews line-by-line, I did establish lists of ideas and themes. To conform to 'classic' grounded theory, themes must be allowed to emerge from the data applying inductive tactics (generalizing from the particular) rather than an 'off the shelf' deductive method (particularising from the general) (Glaser and Strauss, 1967, cited in Palfrey, Thomas et al., 2012, p.59). Similarly as an alternative to the recommendation to delay reviewing the literature, I rather moved between differing bodies of literature during the research, following what Eisenhardt (1989) terms 'enfolding the literature' by comparing the material I was reviewing with conflicting literatures as well as similar literatures at various points. More useful was the grounded theory approach of overlapping data collection and analysis, where the data search followed the leads and themes as they emerged. Conducting semi-structured, in-depth interviews, with open-ended questions which were modified to reflect the emerging themes, meant that my interviews data collection became more focused. Also fruitful was seeing the reiterative process of identifying and classifying who was interviewed as a demonstration of theoretical sampling. The evolving classification of interviewees and resultant search for those best to talk with established my theoretical ideas on the role of epistemic networks against communities of practice (the first form of

network being concerned with the generation of knowledge within a specific domain, while the second constructed new knowledge through their practical activities). A second example of theoretical sampling led to my analysis model based on transfer-mechanisms. The mechanism used to communicate ideas about defensible space had been identified as significant from the beginning, but it was only as the multiple transfer mechanisms were collated and arranged (see Figure 2.3) that the conceptual category of personality emerged (the guru/anti-guru theme). As I considered why certain reports, television programmes or newspaper articles sparked particularly powerful responses it became apparent that I was looking for examples which demonstrated how closely (or not) they were associated to one of the key personalities; that the books, media articles, or TV programmes were as much about wider opinions of Coleman or Newman as their views about defensible space.

3.3 Matching methods and material

3.3.1 Historiography

The advantage of using archive materials was the relative ease of access and the stability and reliability of a view frozen in time, attributable to a particular person. This is in contrast to spoken accounts. However each of these advantages are balanced by methodological weaknesses. As the thesis was focused on the transfer of ideas from policymakers to practitioners, it seemed reasonable to restrict archival sources to those readily accessible to both. Yet to limit the research to only published material might promote a selective view. So the critical breadth was improved by consulting a wide range of secondary documentary sources. These materials, which were used to establish the background and develop the narrative of DICE, or as the foundation for the case studies, or as preparation for interviewing, included;

- Media articles, both from the architectural and mainstream press, including the press cuttings of Coleman's publishers dating from the 1980s to the present.

- Contemporary policy documents dating from the 1970s that set the context for DICE as well as more recent policy documents to trace the emergence of Coleman's ideas in subsequent planning, housing design and management guidance.
- DoE's internal DICE reports.
- MORI's numerical survey data for the DICE estates and their preliminary reports to Price Waterhouse for the DICE project.
- AEDAS Architects' project documents for the regeneration of the Mozart Estate.
- A member of the King's College London (KCL) DICE Unit's private archive of papers and reports.
- Alice Coleman's own archive of reports prepared for the DoE and others.

Of this list, only the first two - the media articles and policy documents - were publicly available. As discussed later, it is simpler to locate articles in the mainstream media and trade press along a critical spectrum as they tend to accentuate the particular attitudes of the publishers, or the audience they were addressing.

An attempt was made to consult national government records in the form of DoE documents via negotiated access to the DCLG's research library. Despite being relatively recent, the surviving grey unpublished literature here only consists of the departmental reports that were not subject to confidentiality restrictions. Unfortunately the minutes of DICE evaluation meetings or other ministerial briefings which may have reviewed the decision-making process behind the policy had not been archived²⁴ (Interview Kirby, 2009). A second example of selective inclusion was the selection of data for the Price Waterhouse DICE evaluation report. In this case I was able to inspect MORI's preliminary reports and data tables and identify that the published DICE evaluation was a highly curtailed summary, omitting several themes worthy of deeper investigation.

²⁴ There are no references to DICE related papers within the National Archive catalogue. Under the 30 year rule papers on the "difficult to let estates" project, including PEP material dating from 1979 have been available since 2006, but any unidentified DICE papers from the late 1980s/1990s would not yet be open for viewing.

Fortunately, a series of chance encounters opened access to secondary contemporaneous grey/personal archives such as the briefs, feasibility studies, drawings and funding documents gathered by the architects for the Mozart Estate (the AEDAS archive). As with the private papers of the KCL DICE researcher, these suffered from a common drawback of informal archives in that they were highly selective and non-systematic, yet provided a candid interpretation of the situation. Discovering this rich mass of material led to a greater understanding of the historical context, but needed the primary interviews to aid its interpretation. Each of these archives had been gathered by key actors for specific reasons (for example the press cuttings collected by Coleman's publishers were gathered to promote her book), so I needed to be conscious of what was included or excluded and how this distorted my research theme of following the spread of ideas via publicly accessible routes.

3.3.2 In-depth interviews

Hoggart, Lees et al. (2002) helpfully articulate intensive primary data collection as in-depth interviews that have a heightened level of 'close encounter' (ibid., p.205). They highlight the need to be acutely aware of the power relationships that occur in intensive research: "The process of place and positioning is intimately interwoven with power dynamics between researcher and researched" (ibid., p.230). By using these terms they are referring not only to the challenges of identifying and selecting desirable participants to interview, but the 'placing or positioning' of myself as a researcher both to access and to interact closely with those I wished to talk with. This was acutely true in this case, where I was taking advantage of my professional networks to access participants and where the nature of the interviews wavered from more formal interviews to informal conversations, asides or occasionally even requests for consultancy advice. The confusion of these roles was especially pertinent when talking to elites with extensive research and interviewing experience.

The interview schedule of 33 semi-structured interviews was drawn-out over an extended period. All interviews were conducted face to face and with permission, digitally recorded. Almost 50 hours of interviews were transcribed. In a few instances where recording was not possible, notes were written up as soon as possible to avoid loss of data, or

misrepresentation of the conversation. An initial scoping interview conducted in May 2009 with two individuals involved in the DICE evaluation mapped accessibility of other potential participants. This was followed by four main interview phases: Summer 2011 (focusing on those involved with the DICE projects on site), Winter 2012 (exploratory interviews with estate residents), early Spring 2013 (members of the KCL DICE Unit and organizers of the *Rehumanising Housing* conference) and finally during Summer 2013, with Alice Coleman herself.

3.3.4 Searching out interviewees

The tiny populations and small number of interviews precluded any form of probabilistic sampling. Tracing, then accessing individuals associated with a historical event such as DICE was always likely to result in a form of convenience sampling. Yet it was important not just to be led by who was still identifiable, but to provide as balanced a view as possible across disciplines, organisational type/role and contribution to the DICE history. So rather than merely relying on snowballing methods once interviews were underway (where initial interviews are asked for others to talk to and so on), I took a more purposeful targeted approach. By reviewing press articles and reports I identified an initial list of participants in DICE, including the DoE clients and evaluation team. This list was tested in the first scoping interviews and was expanded during the interviewing process. Three particularly well placed interviewees (Howard, Taper and Cooper) with extensive and well-connected networks, proved to be fruitful gatekeepers, unlocking access to a wide number of other interviewees. While undertaking other professional activities, I mentioned my research to a wide range of individuals working within the architecture, planning and housing professions. On a number of occasions, I chanced upon people who had encountered Alice Coleman, who had reviewed *Utopia on Trial* or been associated with DoE or DICE project in some way. These serendipitous encounters were followed up by e-mail or more formal interviews.

I was interested in the way professional and personal networks functioned as transfer mechanisms. During interviews I was often asked “Who else have you spoken with?” As all contributors had agreed to be named I could pass on news of former colleagues without

breaching ethics principles (and also establish myself within their network). But this accentuated the close-knit network and limited pool of participants I was investigating. My closing interview question of “Who else should I talk to?” expanded the potential interviewee list a little, but less than hoped.

Figure 3.2 Roles of those interviewed

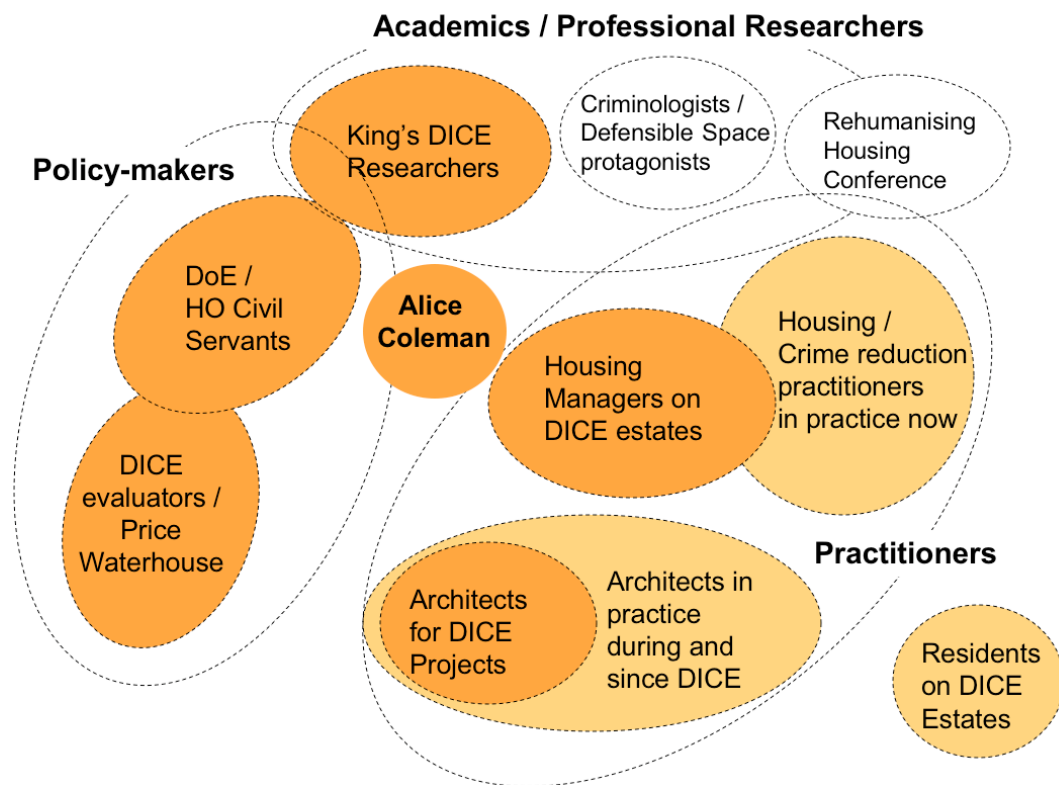


Figure 3.2 shows the roles of those interviewed within two distinct populations; the main professional players in the defensible space debate and its practical application and a far smaller group of residents living on the estates where the ideas were tried out.

A handful of exploratory semi-structured interviews and informal conversations during site visits were conducted with residents on the Rogers and Ranwell East Estate. The research intent here was threefold: to explore the impact of the DICE works, whether this improvement had been sustained and to test the on-going relevance of the concept of defensible space with occupants of the homes subject to Coleman's changes. These residents' interviews were treated as a form of pilot, identifying the availability of suitable interviewees, the strength of their recollections and range of their opinions, while also exploring how to analyse

and integrate the interview data from the two distinct populations. With the professionals, the limited but targeted sampling strategy described above defined the population boundaries and shaped its analysis. I had no ambition to replicate MORI and Price Waterhouse's extensive, resource-intensive residents surveys and obtain a comprehensively representative view of estate residents' opinions. Rather, I used MORI's work as a springboard by examining the historic data and selecting certain themes and survey questions from the 1991 and 1994 surveys to explore further. In an example of the grounded approach these pre-existing themes and categories were redirected or reinforced by the leads that emerged from the conversations with residents. Reflecting on this phase of the research, it became clear that a thorough examination of residents' perceptions of defensible space was beyond the scope of this thesis. Several limitations emerged, which undermined my confidence in the potential quality of the data gathered as well as the process of the research. Historic photos of the estates and site plans were used to prompt recollections and some residents were keen to show me their flats and gardens, pointing out alterations made during the DICE process. However despite the disruptive remodelling, many residents' memories of DICE were muted over time. The academic status of the study became a sensitive ethical issue, even after explaining that this research was not associated with a practical program of building work. At Ranwell East a large-scale Decent Homes refurbishment programme was underway, alongside consultation for other external works and it became obvious that residents were more concerned with discussing present and future changes to their estate rather than the historical DICE alterations.

Yet themes and insights did emerge from talking with residents that were highly relevant to the three research questions: for example, residents' perceptions of how their views were included in the DICE proposals, or comparing Coleman's approach to residents consultation against the growing interest in tenant engagement within Tower Hamlets. These extracts have been included in the thesis where they contribute to the main argument, underlining that material from residents interviews was no less significant than those with professionals. Appendix F contains lines of enquiry that may not directly address the research questions but are worthy of further investigation.

The professional populations were broadly divided in two groups. First, those who were involved in DICE or academia or architectural regeneration during the 1970s to 1990s, and second, those currently working in these fields. Interestingly there were overlaps in these groups, not just over time, from those who continue to practice architecture, or have remained working on the same housing estate or have maintained a continuing policy involvement in the issues being investigated, but also those who moved between disciplines. Some have progressed in careers that now exert significant influence, for example in roles as head of the planning inspectorate, Home Office Chief Scientific Advisor, or as the CEO of an East London Housing Association.

The advancing age of some of the participants influenced their willingness and availability, with several retiring before I could talk with them. I was highly reliant on my existing contacts within housing research, particularly contacting interviewees who had relocated to France or Ireland. However through the use of these personal introductions, most of those approached required little persuasion to meet and only one potential interviewee declined to talk to me. The gender balance of the interviewees was unintentionally similar, with an even mix of women to men, countering the bias towards more males being involved in housing/construction disciplines. Despite being a mature female 'student' undertaking the historical investigation of a feisty female geographer (both Coleman and Power were described in these terms), the impact of gender was not an explicit theme I explored, or considered in my role generating this research, although it was an issue that coloured several of the responses. While gender provided an unspoken undercurrent (which Jacobs and Lees (2013) allude to), a more overt expression of personality mentioned was the influence of Coleman's strong and forceful character.

Under these circumstances ethical considerations were at the forefront throughout. The ethical issues considered can be divided into two types: those to do with data collection, and those associated with the content and subject matter of the study. For the first type, this research was in the main ethically straightforward as it did not involve any deception or

withholding of information and participants were not subject to any inherent risks of harm as a result of taking part. Questions were posed in a professional work-related context, although many participants chose to share biographical details. However the second type of ethical issue associated with content and the reporting of participants' occasionally forthright and blunt views was more delicate to resolve. All those interviewed signed consent forms, agreeing to be identified by name. Access to residents was very dependent on the goodwill of the current housing management staff, who asked that residents comments were anonymised. However I made the decision not to anonymise quotes from other interviewees, for three interrelated reasons. First, the nature of the story means that many actors have already been named or quoted in press articles and reports. Second, in such a small pool of participants, any comments would likely to be attributable through context. And finally it seemed unjust that Alice Coleman and perhaps only a few other published authors such as Anne Power or Bill Hillier should be named. This might be perceived as concentrating the critique on Alice Coleman. Throughout her career she has (often forthrightly) defended her opinions and during our conversations openly discussed the impact of this frankness required by her maverick viewpoint. Yet despite this reflective sense of self, her age and potential vulnerability to personal criticism was an issue to be considered seriously and treated sensitively.

The rationale for not approaching Coleman until the final stage of interviewing was twofold. Initial research on Coleman and her work had been completed by colleagues at KCL during 2008-2010 (see Jacobs and Lees, 2013). This consisted of videoed walks through East London estates that Coleman had worked on, a couple of recorded interviews and a visit to her archive. Their experience indicated that while there was a mass of material to explore, due to her age, face-to-face access to Coleman was likely to be limited to avoid fatiguing her physically or exhausting her attention span. It seemed sensible to ration this access, approaching her only once the key issues that could not be investigated elsewhere had been identified. Secondly, having interviewed a variety of people who had encountered Coleman or worked with her on DICE, it quickly became obvious that she engendered extremely strong, but polarized reactions in people. These ranged from a partisan evangelising of her

thinking from her disciples, to a cynical dismissal by her critics. There was occasionally grudging respect even from those who rejected her views. Thus in an attempt to remain objective and open-minded and not being forced to position myself in either the pro- or anti-Coleman camps, I decided to defer talking to Coleman until after other interviews had been completed. This enabled me to reply honestly and neutrally when asked by interviewees (as I frequently was) “Well what did you think of her?”

3.3.4 Interview or conversation?

Qualitative depth, the potential for collecting rich complex data and flexibility as research progressed and understanding of the topic evolved, were the primary reasons for selecting face-to-face semi-structured interviews. Given the personal and ethical sensitivity involved, all of the interviews within this study were carried out by the researcher. The discursive, (on some occasions, rambling) nature of the semi-structured interviews was a way of identifying topics and issues that the interviewee felt were most relevant or important. Care was needed on the occasions where the researcher was in a more informed position than the interviewee not to lead or overly direct the direction of responses. There were also several interviews where the relationship of the researcher/interviewee resulted in a more conversational co-production of information (such as situations where we had worked together in the past). In these cases the discussion often leapt across topics, as novel ideas were suggested and explored, hypotheses proposed with speculation flowing from unplanned questions.

A detailed interview frame was prepared on each occasion, but this was followed in a very flexible and fluid way. I encouraged the interviewee to lead the direction of the conversation, with questions typified as finding out what interviewees did then/did now, what they know, or what they believe. As I was recording multiple viewpoints, questions were devised that were sensitive to the double heuristic of reporting remembered situations and interviewees' individual perceptions. A few common questions were asked on most occasions, in addition to their memories of the context and history of DICE, such as;

- reflecting on DICE's impact on policy and practice,

- the strengths or weaknesses of the evaluation process/analysis, what was missing from or may have hindered its impact,
- how their experience with DICE formed/influenced their current thinking about defensible space.

The challenge was framing and asking questions that revealed the links between the actors and the movement of ideas. While the questions were devised to take forty minutes to complete, unplanned questions or digressions meant the interviews invariably took longer. Even in professional settings where only an hour of time had been allocated, most took an hour and a half. In one case the two interviewees were so enthused by the discussion that they rearranged other meetings and continued talking for three hours. This flexibility illustrated the willingness and enthusiasm to participate in the research. Interviewees commented that they had enjoyed recalling DICE and sharing their memories.

The interviews followed a pattern of a briefing stage and an introductory period establishing trust. A final debriefing section had two purposes: summarising and recapping the topics covered, and giving the interviewee the opportunity to add or redact anything. The prompt “Was there any thing else I should have asked?” occasionally restarted the interview. Several follow-up interviews were held with key individuals (Alice Coleman in particular) and these quickly progressed from initial interviews, to less formal conversations while examining archive papers or articles, to e-mail exchanges confirming particular points. Interviewees received transcripts of our conversations, but only a tiny number made adjustments or alterations to their recorded texts²⁵.

The introductory stage was noticeably sensitive, where under the guise of communicating clearly the types of information that I wanted to uncover, several other interactions were taking place. I needed to rapidly build a rapport with the interviewee, establishing the extent of our shared knowledge base and our relative positional status. My own status and role as a

²⁵ Alice Coleman drafted a short paper specifically for me following our first interview titled “The Curse of Modernism’ which expanded on the topics raised in our conversation. Several interviewees read and commented on draft chapters they featured in and were often more interested in the views of their peers than how they, or their experiences, had been portrayed.

researcher was surprisingly fluid and I adopted multiple personas. With the exception of two individuals, all the interviewees were older and more experienced than me. Relying on the status and credibility provided by my then role as Head of Research at CABE, or earlier years of architectural experience, rather than defining myself as a student researcher aided the interaction in a couple of ways. It provided me the guise of a 'work colleague', thinking and engaging with a shared problem in a practical way. I also experienced few of the difficulties often encountered interviewing elites, such as probing beyond "the scripted encounters" with articulate and powerful policy actors. I also rarely experienced the tendency to rewrite historical contributions or provide "exaggerated accounts of foresight, rationality or creative entrepreneurship", what Peck and Theodore (2012, p.26) term 'agent inflation'. So in the main my experience was of candid, non-patronizing exchanges resulting in the "purposeful co-production of social data".

It helped that I could align to individual's interests, both of elites and more prosaic 'street-level' participants. So with the project manager I established credibility through a detailed discussion of costs and programming, with housing managers through drawing on my experience liaising with tenants; as well as commiserating with the former Chief Scientific Officer on the diplomatic sensitivities of briefing Ministers. Highlighting this shared experience was particularly useful with the couple of participants who were uncomfortable with the interviewing process. These required sustained encouragement, drawing out reflections based on their very practical detailed description of their working practices, reassuring them of the relevance of recollections that they considered to be merely gossip. This may have resulted in the participant being more at ease and more reflective, but possibly inhibited whether I was as sufficiently probing an interviewer.

The willingness of busy professionals to give time to the research demonstrated its ongoing relevance. Several housing professionals brought colleagues along to the interviews. These (occasionally unexpected) additional participants altered the conversational dynamic. This took the form of testing how relevant and helpful this study might be to their organisation. In exchange for the information I needed for my research, how could I help them in return? In

most cases this exchange was implied, but on two occasions resulted in a direct request for help. In this situation I was non-committal about responding, trying not to confuse “professional advice giving” with researcher mode, but the experience illustrated clearly the organisations’ desire for and need for practical input in this area and the blurring of my investigatory researcher and potential professional consultant roles.

There were occasions when the roles of interviewer and interviewee were reversed. Several times I encountered dismissive attitudes to the study, with the interviewee turning interrogator, questioning why was I (as an experienced housing researcher) interested in such an ‘old hat’, discredited approach such as Coleman’s version of defensible space? I tried two alternative responses to this: initially deflecting the issues of current relevance by mentioning a CABE/Home Office research project on a similar topic (the impact of housing layout on crime) which had begun to re-examine several themes covered by Coleman. The second, more readily accepted explanation was to refer to my biographical interest in the movement of ideas and how having worked as a designer, then a researcher involved in policy making I wished to reflect on my own experience in a deeper more theoretical way. Presenting this as an exploratory rather than a definitive/influencing study, was surprisingly interpreted by one interviewee that the Ph.D. was somehow an inconsequential ‘academic’ exercise, less practically focused and less practically driven than research projects I had worked on professionally. More often it prompted questions about “What was I going to do with my findings?” or “How (*not if*) I was going to use this study to influence housing policy”? These questions reinforced that for the interviewees, engagement was important and many had concrete expectations in return for their participation in the study. These expectations were speculative or reflective or nostalgic, but underlined the intensive, almost personal nature of the interactions.

3.3.5 Discourse analysis

Discourse analysis was selected over more traditional forms of document or policy analysis which Jacobs (2006, p.555) describes as focusing on “uncovering the role of bureaucratic modes of organization, practices and techniques, but [being] less good at illuminating the

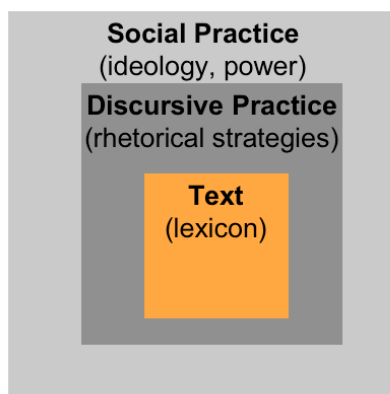
conflicts” particularly those over power or ideology. A method was required that could to unpack disputed areas, the nuances of politics, and interpretations of contested evidence and conviction. By using discourse analysis, the aim was to examine not just *what* was said, but also *how* and *why*. This required a detailed knowledge and understanding of the historical, political, social and above all practical context that produced a particular text or discussion. This method appealed to me as a researcher who had practiced in the sector being scrutinized. I was familiar with the ‘linguistic register’ and the technical vocabulary used, but while this familiarity aided comprehension, it could also obscure objectivity or result in a lack of sensitivity to covert assumptions or the normalizing effect of the dominant narrative (Jaworski and Coupland, 1999). There were other practical difficulties in operationalising discourse analysis as a method that have been identified by many commentators (Jacobs and Manzi, 1996; Lees, 2004; Jacobs, 2006). I was acutely aware of Edward’s (2003) warning against discourse analysis that “simply consists of spotting features” or textural or interview data that is under-analyzed through over-quotation or isolated quotation (Antaki, Billig et al., 2003).

However while it had problems, discourse analysis seemed a way to delve into the meanings embedded in policy and guidance documents and the conversations about them. The study concentrated on the first of Lees’ (2004) two categories of discourse analysis, that of *critical discourse analysis*. This meant following a process that emphasized identifying “the linguistic strategies that are deployed by key actors to shape policy” (Fairclough, 1992, p.41). Lees (2004) notes a second category of analysis which was also found to be relevant: a more Foucauldian process exposing the networks of relationships and the recursive relationship between language and power, recognizing the ways that language both shapes and is shaped by power relationships. Jameson (1991) suggests that this approach is particularly suited to the type of archival/historical research that was undertaken - looking for terms that demonstrated attempts to influence, exert authoritative power, or manipulate a situation. And finally by referring to a third approach identified by Jacobs (2006) as deriving from discursive psychology (and as precursor to the grounded theory approach), the study focused on individual actors’ interpretations, particularly in analyzing data gathered from interviews and

transcriptions of conversations. For example Coleman's use of the term 'maps' to include estate layouts and house floor plans, anchored her in a geographical surveying rationale, with mapping as both a process and an outcome (similar to many architects dual use of the term 'design'). Interviewees either accepted this (and tacitly accepted Coleman's reading of space) or questioned it as a way of distancing themselves from Coleman's interpretation (Interviews Hammill and Stanford 2011, McKowen and Silver 2013).

Technically my analysis applied only the two outer layers of Fairclough's (1992) tripartite framework from Figure 3.3 below. It did this first by undertaking a broad reading of social practices, which Fairclough defines as the study of discourse in relation to wider power structures and ideology. This helped to unpack the variation in value and meaning used, for example, between the varied professional groups interviewed. Foremost was the insight provided by commentators (Jacobs and Manzi, 1996; Lees, 2004) that policy language is neither a neutral or objective medium, but more a "political activity in its own right" (Jacobs, 2006, p.554).

Figure 3.3 Nested layers of 'discourse analysis'



Conceptual framework for discourse analysis, adapted from Fairclough (1992)

The next step in the analysis was a closer look at the discursive practices, the "analysis of the processes in which texts are framed, that is the context in which statements are made and fed into other debates" (Fairclough, 1992, p.544 cited in Jacobs, 2006, p.42). Fairclough

here refers to rhetorical strategies such as metaphor, synecdoche²⁶, metonymy²⁷, ethos and persuasive forms of argumentative closure. These may seem too detailed and close a reading of the text. However Rydin (2003) identified the powerful persuasive use of all of these tropes in her careful examination of the institutional discourses surrounding sustainable planning. Within environmental planning, Rydin uses these tropes to illustrate three contrasting rationalities: a scientific, economic and a communicative rationality. A similar explanation is needed of the multiple competing rationalities within DICE described in Section 2.4: scientific, political, technical and procedural rationalities each providing their own view of problems and possible solutions.

This thesis is too limited to undertake Fairclough's (1992) innermost layer of textual analysis, studying the structure of text, vocabulary and the construction of grammar (lexicon). This detailed textual analysis is a linguistic task, as is the deep structuralist examining of the constructions of meaning, the sign systems, the signifier (the linguistic form) and the signified (concept). Yet there were exact phrases and a precise vocabulary to be noted and considered: for example the shift in usage from 'council housing tenants' to 'residents', between 'territorial control' and 'control of space and territory' or even 'modernism'. The precise definitions of these terms vary with discipline, 'space' in particular meaning subtly dissimilar things to a geographer than an architect. 'Space' to an geographer such as Doreen Massey (2002, 2005) is a container for social activity rather than an entity that can be constructed, altered and formed through design. The practices of each discipline can be constrained and bounded by the expected meanings of their language. Architectural historian Forty (2000) remarks that the architectural vocabulary has many words describing physical form and characteristics (texture, articulation or transparency.....) but far fewer, far less precise ones for social qualities (community, urbanity...). This point is significant to my argument because of the emphasis that 20th century architects and planners place on

²⁶ The rhetorical substitution of synecdoche does seem relevant here, with crime level standing for the condition of society, or the poor physical cleanliness of an estate standing in for social malaise.

²⁷ Similarly defensible space is often read as a symbol; of informal community control, rather than privatized individual ownership.

concepts of urbanity and utopianism that they equate to modernism (as a project or process of change and re-examination (Berman, 1983)). In an unpublished paper *The Curse of Modernism*, Coleman herself proposes 'modernist' as the defining word of the past century, noting that it has had both positive and negative outcomes. However she uses the term almost exclusively with negative connotations, calling planning a "bogus modernism" and Modern Movement Architecture an "untested foreign hypothesis" (Coleman, 2013a)²⁸. Coleman's interpretation of 'modernism' equates and conflates the 'modern movement' to a mere adjective for design, limits its application to a series of design gestures (albeit gestures with far reaching social consequences), far from the broader meaning that architects²⁹ might give it. Another reason for using discourse analysis was to unpick the nuances within Coleman's arguments, for example she argued that design disadvantage was due to objectively *poor* design rather than just *inappropriate* design.

There are other practical and technical challenges in undertaking this kind of multi-layered discourse analysis (see Jacobs, 2006). To counter these and the overarching criticism that discourse analysis can be unsystematic and irrelevant with little evidential use, I took care with the following issues: I tried to contextualize and connect texts to ideas of individual influence and wider social practices and to make the analysis sensitive to inequalities and power relationships, to ideologies and agendas. Indeed, it was this duality of applications that made discourse analysis a suitable technique for exploring the disparity of viewpoints between academics, practitioners and politicians. In fact Rosenberg (1998, cited in Jacobs and Manzi, 1996) suggests that the process of policymaking itself can be understood as a

²⁸It is worth quoting Coleman's introductory paragraph to illustrate the strength of her derision of Modernism, Modern Movement architecture and the motivations of those promoting non-scientific modes of advancement:

"If I had to summarize the nature of the 20th Century in only one word, I should choose 'modernist' - a pervading spirit of pride in our modern ability to create new advances beyond all our previous evolution. But the constructive achievements were accompanied by destructive ones. The former were based on patient scientific quests for hard evidence, jettisoning false concepts to aim for something better. The latter were the proud products of imagination, presented as desirable ideas but actually pursued for the kudos, gain and power of those who dreamed them up" (Coleman, 2013a, p.1).

²⁹ Such as interviewees John Thompson, Patrick Hammill or Ben Darbyshire.

form of discourse analysis. Colebach (2006, cited in Freeman, 2012, p.19) emphasises the reliance of policymaking on “a continuing process of articulation” both formulating policy ideas and communicating them. He stresses how the repetition, reiteration, inclusion or exclusion of concepts is fundamental to their legitimization or denial. Newman (2006, cited in Freeman, 2012, p.18) argues that it is these rehearsals and repetitions that establish “new discursive articulations” which illustrate “new orderings of power” that occur within the policymaking dialogue.

Discourse analysis then, was used as a technique for paying close attention to the evolution and translation of concepts, not only as an informative methodological mode, but also as a conceptual bridge between practice and the mechanisms of transfer. Discourse analysis could not be undertaken as a detached abstract activity, but had to be grounded in the textual and contextual understanding of daily practice:

“By the same token, translation ‘adds practice’ to discourse theory. This means no longer treating practice as the object of policy, but as its subject; that is by interrogating more closely the practices of policy making, themselves to think about and ask after what it is that policy makers do when they go to work” (Freeman, 2012, p.19).

Freeman (2012) reminds us that the practical and functional codification of all this discussion into written documents can have contradictory outcomes, “in being written down, committed to paper, a policy concept is both fixed and made mobile” (ibid, p.14). The documents that are formulated and remain from these interactions, are the traces of the meetings, like archeological artefacts that require a new interpretive story to be woven around them. Reformulation and restating is necessary as the idea passes from one context to another. The past meetings and even the documents themselves will always be imperfect records, so in each new situation the message is remade again, as it is interpreted into action. Yet the practical experience of policymaking is more than this linear set of formal interactions and meetings, it is the continuous messy discussions, the random connections, the exchanges that go on around and in parallel to the main thrust of the discourse. The white noise of these parallel exchanges can obscure and distract. The emergence and survival of a particular

message is reliant on what Freeman (2012) terms the iterative relationship that reinforces or obliterates a signal like the reverberation of a waveform:

“Policy emerged not simply in the interaction of a meeting, but in the interaction between meetings; not in the immediacy of the text but in the intertext – and then in the iterative relationship between interaction and intertext. Call this reverberation” (ibid, p.18).

The depth of the reading and analysis needs to be finely judged not just to the form of the text, the context, but with reference to the intended utility of the analysis:

“If a ‘normal’ understanding of policy discourse is at issue, then a ‘normal’ but more reflective reading of that discourse is the appropriate research technique” (Rydin, 2003, p.183).

Thus as a practical technique discourse analysis can sometimes surf the crests, sometimes dive beneath the surface of the dialogue and written words.

In the main, the thesis applied discourse analysis to publicly available, written documents. This was not that the spoken word was considered insignificant, or not worthy of detailed examination, as my careful transcription and analysis of many hours of interviews showed. But piecing together the narrative depended on many ‘lost’ spoken interchanges. Some of these meetings (consultation meetings with estate residents, the debate at the *Rehumanising Housing Conference*, the sessions of the DICE evaluation steering board, or even the momentous meeting between Coleman and Thatcher) may have been recorded in minutes, but are now unavailable. Some of these events have been translated into documents (site visits into the 40 DICE reports for example), but what is striking discussing these reports with interviewees is what was excluded as much as what was written. An example of this process of exclusion occurred in the writing of the DICE report on the Preston Estate. One of the KCL’s DICE researchers remembers drafting a passage about “big fat worms eating childrens’ discarded lunches”. Coleman expunged this phrase:

“Writing the DICE Reports was almost painting by numbers, report writing by numbers. The introduction was [gesture to show writing] and the scores before and the scores after [gesture to show writing], but you couldn’t put, ‘we did’, it was ‘the, it was done’..... And the ideas of fat worms and children with dirty faces were written out of the script; there was no individual colour allowed in the reports” (Interview McKeown, 2013).

This formulaic, mechanistic, neutral delivery could signify the constraints of academic scientific writing, or equally the constraints of time and resources arising from the need to deliver a large number of reports very rapidly to the DoE, but is quite a way from the emotive language found in Coleman's *Utopia on Trial*.

3.4 Beyond a triangulation of facts

At its simplest triangulation can be seen as the process of bringing together data gathered in more than one way from varied sources by applying complementary methods. There was the practical triangulation of "facts" between documents, cross-referencing and checking archive material against interviewees' memories. But the purpose of triangulation is not limited to verification, but also to add richness, depth and breadth of understanding (GSRU, 2011). The research process was complicated by amassing data consecutively not sequentially and I used repeated thematic frames (such as becoming an expert practitioner, codification of experience into heuristics/rules, listening to residents views, or the value of visual surveys) to bridge between the collections of material or interview data. There was the triangulation of methods, so archival materials were subject to historiographic scrutiny as well as discourse analysis looking for terms and phrases (the use of 'Utopian' tropes, or puns on Mozart in newspaper headlines). There was also an attempt at a deeper level of theoretical triangulation, where I aimed for theoretical saturation and narrowing towards a convergent strategy of enquiry with each method adding insight (Hoggart, Lees et.al., 2002, p.69). As my findings coalesced around themes and I established corroboration of the narrative strands, my confidence in the conclusions reached increased.

3.4.1 Unravelling narratives

The mix of material required disaggregating, for example using the interviews with historical participants to unpack and understand texts published during the DICE period. These processes helped build the timelines and develop the narrative - confirming or clarifying inconsistencies in the stories I'd heard, identifying if these should be considered as contradictions, or multiple versions of the truth. My concern with what should be discarded or retained within this version of the story was indicative of what could be considered evidence

for this study. Much social science, particularly qualitative research, is about strength of argument, not proof, and devising a sufficiently straightforward account of the story was the first step towards this. But it was important to move beyond constructing merely a historically legitimate narrative. While establishing the historical narrative and constructing the timeline, I was reassured by Flyvbjerg's (1998) advice, "narratology before epistemology" (ibid., p.7) and his certainty that emerging with a complex, thick, story which was hard to summarise, is not always a failing, but an indication that the researcher has uncovered a rich problematic.

In addition to the task of unraveling and tying down the broken strands of the historical narrative, I needed to speculate on ways that these strands and stories could be knitted together into alternative formations³⁰. Jacobs (2012) highlights how the retrospective challenges of tracking down and piecing together a plausible history overshadow the task of formulating other interpretations:

"The inability for current urban policy mobility work to see these other destinies is in part a methodological problem. Although urban policy mobility scholarship claims to 'follow the policy' (Peck and Theodore, 2010), essentially through techniques of policy review and key player interviews, it is more often a method of joining the dots. By that I mean instances of a policy presence are discerned and then a back story of connection, translation and arrival is charted" (Jacobs, 2012, p.419).

The primary task from the interviews was establishing a balanced narrative that encompassed all the views and perspectives gathered and to divide this continuous (occasionally parallel track) story into a series of discrete episodes which explored the mechanism and themes under consideration. These episodes were used as a method to deal with the narrative complexity. This was a recursive process, switching between episodes and themes, referring back to and drawing on the material itself to identify each theme, whilst simultaneously clustering and categorizing responses. Another specific methodological challenge to using grounded theory in this case was the requirement of the

³⁰ The timeline (Appendix A) shows how alternative formulations could be constructed, perhaps reading an individual's career progression, or strands of research interest within the Home Office, or chains of interrelated conferences and meetings, or the shifting waves of political power.

researcher to go into the study with an open mind, allowing themes to 'emerge' from the data gathered. As discussed earlier my background and former experience made approaching the material in a neutral way extremely hard. Flyvbjerg (1998) reminds us that "grounded theory [is] understood as theory inductively founded on concrete phenomenology" (ibid., p.226) legitimizing the subjective experience of both the interviewees and my own experience.

After transcribing the interview recordings, codification and analysis was undertaken by hand, rather than using qualitative analysis software. Following Rydin's (2003) recommendation I applied a close reading of transcripts rather than a computerized coding process (or the line-by line coding recommended by grounded theory), to cut down on the somewhat mechanical, time consuming process of coding which she rightly feels can limit time for reflection and analysis. However a disciplined and structured approach was taken to highlighting key ideas, or even the repetition of certain words within the transcripts. I also noted varying degrees of certainty in replies, or language traits or pauses that suggested doubts about the views expressed. I kept a research diary in the form of text comments attached to each transcript, which recorded questions, connections, links and clarifications I needed to pursue.

The interview and archival data was combined and considered within a particular episode, clustering actors who had either directly participated or commented on that period and drawing on illustrative quotes from the interviews and from the secondary material. The data was also reviewed in relation to the various communities of practice/discipline groups identified. Disparities that emerged when discussing the same topic were compared (for example responses to common questions such as "What would your definition of defensible space have been then? And now?")

The analysis process was not a discrete phase that began on completion of interviews, but was an ongoing, progressive, iterative procedure from the start. The incremental nature of the analysis gave an indication of where the informative boundaries of the subject area were to be found. Reaching saturation with a topic was not just a reflection of repetition of stories, but familiarity of how the material might fit in the analysis frame. I followed a similar

approach with documents and archival material. The sheer volume of material reinforced a selective but incremental coverage of topics (for example through the selection of particular estates as case studies). Here again the practice within grounded theory of identifying a theoretical 'sampling' frame rather than a statistical one enabled a breadth of coverage that flowed from the emerging themes (Hoggart, Lees and Davis, 2002, p.137). The empirical chapters follow the historical arc of the narrative, with themes introduced and reintroduced as necessary. This forms a larger framework which incorporated emerging insights from interviews and reviewed documents.

3.4.2 Reflections on risks and research positioning

Discourse analysis provided depth to other elements of the analysis. Yet to address concerns that discourse analysis only inadequately captures the complex process of policy, it was combined with other qualitative and ethnographic techniques to provide a sufficiently complete perspective. The discourse analysis applied to the transcripts tended to identify thematic concerns emerging through interviewees repeated use of words or phrases, or delving deeper beneath the surface tone of the encounter. These tonal differences were coloured by my research positioning. For example one session which was experienced as a rapid creative exchange of ideas leaping from topic to topic, once transcribed and analyzed proved shallow and less insightful than expected. Care was taken, however, to ensure that the individual voices of those interviewed were maintained throughout the analysis and writing. Each empirical chapter was written to preserve the conversational style and personality of those quoted within them.

As an interviewer, I had to tread a fine line between recording interviewees' views and perceptions and being drawn into a discussion that might influence or challenge their beliefs.

Kaplan (1993) identifies this challenge, but as a tool for verification:

"Policy analysts and planners use stories in similar ways to represent reality and test their versions of the truth. As in a courtroom, the dialectic interplay between two competing stories is often a useful form for evaluating the consistency of internal story elements and the likely truth of the story" (ibid., p.179).

The hardest task was accurately locating dates of events, and I was alert for historical impossibilities or contradictions. This applied not just to events but to recollections that were readjusted with hindsight.³¹ To aid this I devised a detailed timeline, which included dates in post for Secretaries of State, Housing Ministers and notable housing policy initiatives (See Appendix A). Listening to the interviewees, I tried not to contradict directly, even when I was in a position to confidently counter particular statements. However this is not to imply that I accepted interviewee's words unequivocally. I did allow myself to gently question perceived inconsistencies, either to probe for confirmation of the fact ("Was so and so's involvement possible at this date?") or for the rationale behind their opinions. This was to demonstrate that I was listening carefully and attentively to what was being said.

There was a degree of repetition of stories and narratives, either reconfirming or presenting a different viewpoint on the same incident. This verification, or reinterpretation, of events was critical amongst such contested historical subject matter. Towards the end of the data-gathering period, having spent four years immersed in the subject, I was conscious that I had a more holistic overview of events and needed to construct a multi-perspective representation incorporating each facet, while being careful not to contaminate each interviewee's partial picture. Several other potential methodological threats to the validity of the research were identified and in each case a strategy devised to try to mitigate the impact. Methodological risks were identified at three points in the process: first those arising from framing the study and setting the research questions, second, those associated with gathering data and finally reaching conclusions from the data gathered.

The methods section above describes the challenges and risks of gathering data, both the process of gaining access to suitable individuals, avoiding bias in selecting participants and uncovering pertinent views. To summarise, each of the methods described in this chapter has been adopted in a way that is attentive to the possibility of research bias. There were the

³¹ For example one interviewee's use of phrases such as "Cleaner, safer, greener", social capital and permeability showed his conceptualization of neighbourhoods and spatial interaction was strongly tinted by urban design concepts that emerged since the new millennium, a decade after working on DICE.

usual concerns over the trustworthiness of the research and the reliance on the memories and perceptions of those interviewed. On the whole interviewees seemed to be presenting their viewpoint honestly, with little hedging. Any inaccuracies or inconsistencies tended to arise from contradictory readings of a situation or vagueness about historical events.

This leaves risk concerning analysis and reaching conclusions from the data. Research bias may become established through the researcher selecting findings based on preconceptions or existing theories, or that resonate with their own views. This was addressed by imposing a threefold systematic research process. This triangulated theories pre-proposed in the literature against those that emerged during the research. It also recorded discarded cul-de-sacs or negative cases and most critically, reinforced periods of reflection on the degree that I was influencing the findings. This process of interactive interviewing, data collection and interpretation used was particularly open to my value laden positionality as both a practitioner and policy influencer.

This continual awareness of my personal engagement with the material presented a different order of risk to the threat of poor interpretation of the findings. This required a more procedural process providing an evidence trail of how interpretations and conclusions were reached, starting with initial ideas arising from conversations or prompts from colleagues or supervisors, through notes made during and on transcribing interviews and while inspecting archives. Reviewing my research notebooks (a mix of practical to-do tasks and speculative jottings) was a frustrating process, as they were full of enticing, cryptic, unfinished conjectures and un-mined ideas for future exploration. Whether this can be considered sufficient mitigation for theoretical concerns over failing to consider alternative explanations will be demonstrated in the coherence of the arguments made in this thesis. The number and richness of these un-pursued themes was as distracting as it was enticing, but I was reassured that following a consistent process along the selected explanatory paths would reach credible and legitimate conclusions. Ultimately there may be other plausible explanations or conclusions that could be reached from the data I've gathered, but I have confidence in the methodological process I have followed. This feeling of reliance on a

structured methodological process to maintain confidence in the outcomes was particularly pertinent during the analysis process.

Conclusion

This chapter has described the types and sources of data used in the subsequent empirical chapters, how these primary and secondary sources were identified and uncovered and what I considered to constitute relevant evidence for my thesis arguments. It discussed the practical processes of qualitative research, the selection of relevant appropriate methodological techniques and how these were combined to provide a wide-reaching yet consistent plan of enquiry. It explained how they were combined into an internally coherent hybrid analytical framework. This methodology depended on a combination of approaches with a triangulation of the data methods as well as data sources with my ontological reading of grounded theory as a partial process leading to case studies (Flyvbjerg, 2006) and the process of building theories from this research (Eisenhardt, 1989). This led to Thomas and James' (2006) defense of narratives and their call to be unapologetic about interpretations that offer 'merely' narrative. I noted how practical challenges were overcome ensuring that the material gathered had both internal and external validity and was as complete and accurate a representation as possible of the varied opinions obtained.

I speculated on the practice of conducting interviews, the patterns of introduction, rituals for establishing credibility and reinforcing interactions needed to establish open and candid communication. Comparing the targeted approaches suitable for articulate elites, to those approaches needed to encourage occasionally unwilling interviewees, revealed much about the chameleon task of the interviewer. By recognizing that as a researcher I was mutable, fluctuating between an assortment of roles to play, I reflected on the impact of personality and positionality on the research. Did it make any difference how I presented myself? How did this influence the parallel process of understanding how those participating in the research presented and represented their views? How did this accentuate the challenges of multiple viewpoints, opinions and ultimately multiple versions of reality and what ethical restraints did this place on the study?

I adhered to several of Flyvbjerg's (2006) recommendations on case study research (for example selecting cases with maximum variation and seeing DICE as a deviant case of regeneration policy). Initial concerns about the intensive nature of case study research, and whether studying a small number of cases drawn from potentially unique and unusual circumstances, would be sufficiently rich and informative about more general cases, proved to be unfounded. In fact, as more and more information, differing viewpoints and contradictory opinions were gathered there was a sense of being overwhelmed by the messy complexity. So many multi-faceted, intertwined but diverging, stories were being told. I was concerned that too many intriguing strands and possibly irrelevant themes were surfacing, pulling in too many directions, suggesting too many ways of joining the dots, that it would be impossible to weave them into a manageable comprehensive picture.

It was helpful at this point to return to the initial research questions and reassuring to find that they still constituted a logical route for enquiry. It was also essential to have confidence in the relevance and validity of each individual method and the theoretical clarity of each step to be followed, even if the final outcome seemed uncertain. The exploratory process of mixing methods (although not in the way that a more traditional 'mixed methods' approach might) was about selecting how deeply or far to pursue each approach relating each element of data or research question. For example the mode of 'discourse analysis' applied to dissecting interview transcripts varied from the process of reviewing and analyzing the language used in a Local Authority guidance note on Secured by Design.

Overall, the research design adhered to Cresswell's (2003) recommendations for combining qualitative techniques. His advice was to focus the attention on the research problem while being pluralistic in the attempt to derive knowledge about the problem, to be transparent about the theoretical lens being applied, while being open to different world-views and diverse assumptions and to respond to the context (social, historical and political) in which the research was currently happening as well as to recognize how this might be a significantly different context from the period under investigation. These qualitative and open methodological approaches became theoretical ways of distancing this study from

Coleman's scientific positivist stance. By applying techniques which traced local actions as a response to a specific set of circumstances, I looked for causal explanations, searching out *why these* actions were taken on *these* particular occasions. And my attempt to avoid representational, generalised, idealised summaries of these actions were all ways of ensuring a post-positivist, value-led enquiry.

The following empirical chapters tell the story of the introduction of defensible space to the UK, setting out the sequence of events as it progressed through the policy arena, resulting in the DICE regeneration programme. It gives accounts of the practical implementation of Coleman's version of defensible space on three housing estates in London, concluding with the cautionary tale of the DICE programme's evaluation. The narration is interspersed with commentary and brief theory sections, enabling me both to honestly retell and reflect the views of those interviewed, while offering a critical analysis on what occurred.

Chapter 4: Defensible Space ‘travels’ to and lands in the UK

Introduction

The first empirical chapter concentrates on the role of three transfer agents, their personalities and ability to exploit varied modes of transfer, such as media appearances or polemical books/manifestos (as opposed to anonymised formal research reports) as channels of communication. This chapter opens with the response to Oscar Newman's (1972) book *Defensible Space* which brought the concept to the UK. Contrasting the positive public reception to the book in America, to the less enthusiastic welcome from British academic and policy audiences, highlights not just varied national cultural expectations but also professional and disciplinary ones. The initiating transfer agent, Newman was highly skilled at publicising his ideas through a range of media, illustrating how communication mechanisms worked together to facilitate the international transfer of the concept. Yet receptiveness to Newman's work in Britain was significantly shaped by the contemporary concerns about crime, which were less about violent crime or burglary than vandalism.

A second transfer agent, the researcher Sheena Wilson, acted as a primary go-between, ferrying Newman's ideas from New York to the Home Office (HO) where she worked. Wilson's subsequent research into vandalism on unpopular estates aimed to test the relevance of Newman's ideas in the British context. As I argue that the freedom to adjust or align depends on how the relocated policy meshes with local conditions, this section includes an overview of English housing policy and research from the 1970s/1980s establishing the context that the concept of defensible space was moving to. Having completed her initial research, Wilson moved from the HO to the DoE, carrying her ideas with her. I suggest that this had significant influence on embedding the notion of defensible space within the housing policy/research landscape of the time.

The third transfer agent is Alice Coleman and the story continues with Jacobs and Lees' (2013) account of Coleman stumbling across a copy of Newman's book while on sabbatical in Canada. Having read it and become convinced of its policy relevance to the UK, Coleman

brought a copy home and tried to persuade the DoE that it contained the answer to their problems of urban decline. The DoE's response was unreceptive and dismissive. However this unenthusiastic rejection spurred Coleman on to undertake her own version of Newman's research to demonstrate its usefulness and applicability to English housing. Coleman did this through operationalising Newman's design variables, as the basis of her *Design Disadvantage in Housing* study. Determined to pursue this investigation, Coleman started this research without funding or access to crime data and this chapter concludes with her successfully gaining the resources and data to finish this ambitious large-scale undertaking and writing *Utopia on Trial*.

In this chapter I add to Jacobs and Lees' (2013) explanation of this moment of international transfer by looking backwards and forwards in time, from Newman and Wilson's encounter in the late 1970s to Newman and Coleman's eventual meeting just prior to the publication of *Utopia on Trial* in the mid-1980s. I also extend their version of this story of "non-linear reproduction" through an in-depth consideration of the interaction of personality and the "political medium" that Jacobs and Lees describe (ibid., p.1577). They only concentrate on a single transfer agent, Coleman, whereas I have identified two others playing variations of this role. Newman is clearly one of Stone's (2004) 'soft' policy transfer entrepreneurs facilitating a broad diffusion across disciplines and networks, whereas Wilson can be seen as part of the 'hard' policy transfer bureaucracy. Coleman however is a more ambiguous, complex example. She was not fully aligned to the hard academic/policy transfer vector (evidenced by her problematical relationship to both King's College London³² and her sponsoring government departments). While displaying the essential entrepreneurial characteristics of ambitious self-belief, persistently pursuing her ideas in the face of powerful critiques and ably broadcasting them via a host of communication modes, Coleman never achieved long-term success in that her version of the concept may have been heard, but her message was not fully heeded.

³² The relationship with her academic colleagues was difficult due to both her gender and her conservative politics within a left/liberal department.

The literature review described many versions of transfer agents (Rydin, 2003; Peck and Theodore, 2010; McCann and Ward, 2011; Stone, 2012). To date, accounts have tended to consider the role of official agencies in such processes; that is, bureaucrats, politicians and government experts. However, the agents of lesson-drawing and policy transfer cover a broader collection of individuals, networks and organizations (Stone, 2004). While this chapter concentrates on three transfer agents (Newman, Wilson and Coleman), others will be introduced in this and subsequent chapters, drawing on interviews with individuals with varying responsibility for transferring and promoting the concept. Some of these agents physically moved between (government) organisations or (housing) networks: Wilson moving between Government departments, the civil servant John Harvey³³ repositioning as a private-sector consultant for Price Waterhouse, or Steve Stride, advancing through professional housing roles from neighbourhood manager for the Rogers Estate, before becoming CEO of Poplar HARCA and President of the Chartered Institute of Housing. By referring to them as transfer agents my analysis follows McCann and Ward (2011) and Stone (2012) by concentrating more on their ability to transport and communicate the concept, than their agency to move. This raises the question of which is stronger, the agency of individuals or the organisation that they are associated with? The study was dominated by strong personalities (often with emphatically held opinions) so it is a story of individuals' views as much as the positions promoted by their organisations. Yet it would be simplistic to assume they acted with complete freedom and I was also interested in their roles as representative figures for the notion of defensible space and as cultural intermediaries in the transmission of the idea.

4.1 Oscar Newman lands in the UK

When *Defensible Space: Crime Prevention Through Urban Design* (1972) was published, Newman received a great deal of attention from the American press and television media. It was extremely accessible, illustrated by artfully composed photos and sketches, his

³³ John Harvey was initially Head of the Estate Action Team at the DoE and commissioned the DICE study from Alice Coleman.

appealing narrative style presenting the idea in a comprehensible, inviting manner to an academic and lay audience. The American architecture profession reacted positively to the publication, linking it back to the utopian ideas of Mumford, Lynch and other architectural writers (Friedmann, 1973). As Wilson commented, defensible space “had a good brand, had a good name, it had everything going for it” (Interview Wilson, 2012) and the concept moved rapidly across the Atlantic. Newman’s book was republished in Britain under the title *Defensible Space: People and Design in the Violent City* (1973).³⁴

Figure 4.1 *Defensible Space*, American and UK editions



Defensible Space: Crime Prevention Through Urban Design (1972) New York: Macmillian

Defensible Space: People and Design in the Violent City (1973) London: Architectural Press

Newman publicised his ideas via a UK book tour and lectures. One, at the University of Sheffield, was attended by Rob Mawby then Lecturer in Criminology, working on the *Sheffield Study on Urban Social Structure and Crime*. During this trip, Newman visited

³⁴ The alternative subtitles to Newman’s book in American and British editions is not commented on by any reviewers. The British version does make the link between behaviour and design clearer, however could also be read as an allusion to the perceived greater violence of American cities. The cover picture is far more melodramatic.

several British housing schemes analysing them according to his theory (Mawby, 1977). Newman presented his findings from these visits at a conference in London titled *Architecture, Planning and Urban Crime* held in December 1974. This was organised by NACRO (National Association for the Care and Resettlement of Offenders) with the Royal Institute of British Architects and the Royal Town Planning Institute. Mawby reported that this appearance prompted demands for a replication of Newman's New York study in Britain (Ash, Burbidge, et al., 1975). However overall Mawby was dismissive of architects' and planners' understanding of crime citing the DoE researcher Mike Burbidge's "rather inadequate contribution to the NACRO conference compared for example with [criminologist] Baldwin's more detailed analysis" (Mawby, 1977, p.178). Mawby includes Newman in this category of inexperienced architecture/planners condemning his crude research technique and selective reporting. "It is not sufficient to cite an advantageous factor and ignore a disadvantageous one" (ibid., p.177). Mawby re-examined his Sheffield study data in the light of Newman's theory and found little evidence in the gathered crime data to support the theory that high-rise flats were more prone to crime. However he was more supportive of Newman's explanation for the increased tendency to report witnessed crimes, which echoing Jane Jacob's (1961) "eyes on the street", appeared to be affected by how much residents believed they were living in a high crime area. Mawby complains that "'crime' as described in *Defensible Space* is invariably an emotive concept, graphically illustrated by such terms as 'vandalism' or 'mugging'" and called for a cooler more objective discussion of offenders, offence rates and possible causality (Mawby, 1977, p.175). Newman reduced 'the criminal' to a social stereotype, an inveterate and perpetual lawbreaker (Campkin, 2013).

Despite these attacks Newman's ideas spread extensively through the UK and in 1978 Wilson noted that defensible space had "become common currency amongst housing managers, architects and even tenants" (Wilson, 1978b, p.674). The book was popularly reviewed in national and local newspapers. An article in a Sheffield local paper, titled *High Rise Flats are Nurseries of Crime* uncritically reported Newman's figures, accepting without question the reliability of the data but also that the findings were transferable to the British context (Brown, 1974). The architectural press was far less favourable. The extensive US

press machine behind the publication had generated high expectations but the architectural reviewer in *Building Design* magazine found it a disappointing book providing few new insights. The review exudes a sense of British superiority: “the intolerable situation of crime and violence in America is taken at face value...The rather extreme problems of public housing in America” (*Building Design*, 1973, p.8), complaining that Newman expected architecture to solve “problems of a political nature” (*ibid.*, p.8). Other dismissive comparisons were made, for example in *The Architectural Journal*, Colin Ward’s brief review of *Defensible Space* is published alongside an extended, favourable review of his own publication *Vandalism* (Ward, 1973a). An architect, planner, writer and anarchist, Ward’s initial suspicion that Newman was “propagating a crudely deterministic approach to urban design; architecture as a branch of police science” was defused by Newman calling for greater resident participation (*ibid.*, p.1243). Yet the accusations of determinism are commonly repeated, with even the supportive Wilson reporting that Newman’s ideas were considered a “novel and contentious brand of architectural determinism” (Wilson, 1978a, p.674).

This sense of discomfort can be attributed to the book exposing serious weaknesses in the built environment profession’s understanding of the impact of building design. Bill Hillier³⁵, writing in the *RIBA Journal* argued that the book was:

“really about the crisis in our knowledge of the relationships between the forms of artificial space we create and the social behaviour that goes on in it – knowledge that architects take as their stock in trade in order to design anything. In other words *Defensible Space* is a bad book about a very important subject” (Hillier, 1973, p.543).

Some of Newman’s critics saw his promotion of defensible space as a social ‘movement’ rather than a robustly applied theoretical framework. “Newman’s writing style is predisposed to political oratory rather than serious scientific endeavour” (Mawby, 1977, p.169). Reviews such as this, exhibited a degree of professional elitism, considering Newman’s presentation of the concept better suited to addressing a general, less knowledgeable audience rather

³⁵ Bill Hillier then at the Bartlett University College London, but writing for the RIBA Intelligence Unit.

than well-informed professionals. As his television appearances show, Newman consciously presented his principles in a persuasive, appealing manner. This deliberate salesmanship echoes other descriptions of transfer agents as policy brokers or entrepreneurs (Rydin, 2003; Peck and Theodore, 2010):

“He was an unusual figure, quite charismatic. He wasn’t like a social worker who was really committed to people, he just had this theory that he sold. He was more like a businessman selling the defensible space concept. He was successful. He was travelling abroad a lot. He was almost like a social entrepreneur” (Interview Wilson, 2012).

Figure 4.2 Oscar Newman



© www.defensiblespace.com

4.1.1 Selling the idea of defensible space

A 1974 BBC *Horizon* program “*The Writing on the Wall*”, introduced Newman’s ideas to a wider British public (Mansfield, 1974). Newman’s professorial role is cited to establish his expert credibility, while he was filmed either at his office desk, overlooking dramatic New York skylines, or photogenically striding around disreputable estates in a sweeping long black coat. Newman’s showmanship was notable (Interview Wilson, 2012) and the programme had a theatrical quality. It opened with images of the poor conditions in New York housing projects (as well as of Pruitt-Igoe in St Louis) comparing crime statistics in New York to British ones, reinforcing perceptions that US crime problems were worse than in UK. Pictures of a poorly maintained housing block followed, where it was “catastrophically clear” that the physical design should be blamed; the ugly entrance ways, “these cells called

elevators” and an outside play area described as a “cage for children”. But in a suitably tele-visual shock, the narrator announced “This isn’t New York – this is England”. The Aylesbury Estate in London was not actually named as this location, but could easily be identified from a section filmed of Newman walking through the streets surrounding the estate. He described the estate’s recently completed, grey white mass as a “creature from another world”, its long horizontal concrete blocks towering above the neighbouring terraced houses and blocking off the surrounding streets.

Interviews with unhappy American and British residents voice similar complaints. Newman is filmed chatting with a group of old ladies who explain how much they enjoy living on their estate. He uses this as evidence that tower blocks can successfully house elderly residents without crime recommending against mixing families and older populations. The programme’s focus repeatedly returns to children: film clips of poorly designed, neglected play areas, children playing unsupervised in unsafe locations³⁶. Newman’s proposed solutions are a mix of careful allocation of residents, external design interventions to blocks/spaces and greater use of surveillance technology, particularly CCTV and intercoms. Throughout the program Newman rarely mentions defensible space, but talks about the “definition of space” and those “who overlook the space”.

The programme struck an odd balance between supported evidence and unsupported assertion, with Newman disingenuously describing the children filmed as the first generation of British children to grow up in high-rise homes. As the first tower blocks were constructed in England immediately after the second World War, there had been at least two decades of young inhabitants, potentially into a second generation. Tellingly, Newman attributes an inevitable progression from vandalism to more serious crime. “There’s no clear evidence in England on vandalism, but one wonders will these children grow up to be criminals?” (Newman in Mansfield, 1974). This may have been dramatic emphasis for the programme’s

³⁶ Watching the programme now, its concentration on young pre-teen children, ignoring older youths, seems nostalgic and naively dated. One clip on the Aylesbury, of a group of children running up and down access ramps and jumping over railings, illustrates the lost freedom for this age group.

finale, but was an understatement of the research understanding and level of policy interest in the issue of vandalism in Britain. Newman's photos of the housing projects' vandalized entrances, lifts and lobbies, were a highly recognisable feature to British architects, planners and housing officers, who easily transposed them to their own experience of social housing. One chapter of Poyner's widely quoted book *Design Against Crime* (1983) discusses vandalism within public housing. Here Poyner explored the British fixation on vandalism, complaining that despite the widespread attention, it was too often dismissed as a minor example of anti-social behaviour rather than a crime with serious impact. He forcefully reiterated the variation between America and Britain during the 1970s. In Britain more than a third of all housing was within the public sector, whereas less than 3% of North American housing was managed by the state, the majority of which was perceived to be problem projects, subject to the most extreme forms of crime. Yet this difference was narrowing and both incidence and fear of crime was increasing at unprecedented rates (Poyner, 1983). The positive legacy of Bevan's post war public sector housing program still coloured views of public housing with only a minority being perceived as 'difficult to let' estates. Yet while British housing estates had far lower actual crime rates than in America, the degree of public concern about vandalism was extremely high. There was extensive debate on the issue in the mainstream and the professional press amongst writers such as Laurie Taylor and Colin Ward (McKean, 1973; Taylor, 1973; Ward, 1973b; Downes, 1974). The research establishment made use of this mis-perception citing the visible indications of damage to justify further investigation, even if the vandalism consisted of numerous trivial incidents. An illustrated Design Council guide *Designing Against Vandalism* (Sykes, 1979) gathered together research summaries by Wilson and others setting out practical lessons for Local Authorities and housing managers (Wilson, 1979).

Newman's lack of awareness of the emerging British evidence, the DoE research into vandalism (Burbidge, 1973) and the evidence gathering beginning at the HO (Sturman and Wilson, 1976) can be read as a failed example of transferability, or the inability to construct a shared knowledge base due to closed or disconnected epistemic networks. The focus of epistemic networks on creating knowledge across a specific domain and establishing robust

and mutually accepted claims can result in overly inwardly-looking groups (Rydin, 2003; Cooper, 2006). But to be fair to Newman, competitive barriers existed between academic and professional networks in America and the UK. Likewise the Government research teams, while exploring the same topics and participating in similar networks, did so with differing policy drivers and hence had a tendency towards siloed working. However a few years later Newman was to meet and discuss vandalism and crime prevention with British government researcher Sheena Wilson, a specialist in the subject.

To understand that this was a meeting between researchers from very different research cultures and political backgrounds, this section explores the state of British research at the time, including studies of residents' satisfaction with housing estates, explaining the British concern with vandalism over other forms of crime. It sets out the wider housing policy context during the period, reinforcing that DICE was not a unique approach to urban housing regeneration and the emergent status given to evidence in policy making. It investigates the initial alignment of Newman's concept to this established research and policy context within two possible 'receptor landing sites' within Government departments, the Department of the Environment and the Home Office.

4.1.2 Early evidence on housing and vandalism

The DoE's housing research section dated from the mid-1960s. During his period as Minister for Housing and Local Government, Richard Crossman writes in his diaries of walking around his departmental empire and coming across a 'centre of excellence', a small left-wing group of thinkers which was the Social Research Division (SRD) later under the direction of Judith Littlewood, to become the Social Research Branch (SRB) (Crossman, 1975; Interview Taper, 2013). The remit of SRD was more overly engaged with political policy formation than the group of architects within the Housing Development Directorate (HDD). While both commissioned and undertook housing research, HDD was responsible for devising technical housing guidelines and Building Bulletins including the highly influential Design Bulletin 25 *The estate outside the dwelling; reactions of residents to aspects of housing layout* (Reynolds, Nicholson, et al., 1972).

This was the first of several bulletins dealing with the 'problems encountered' with public housing and was based on a 1967 quantitative survey of residents in six medium-density Local Authority housing estates in London and Sheffield built since 1960. The study found that housewives' overall satisfaction with living on the estates shaped their views of the estates' appearance. This overall satisfaction was a composite made up of satisfaction with the landlord (maintenance regimes, response to repairs and ability to deal with social annoyances) combined with the layout of the estate and the spaciousness of green areas. The seven variables most strongly influencing satisfaction were: appearance of the estate, the dwelling, maintenance standards, opportunities to move, problem play areas, the view from the flat and vandalism. Additional significant variables related to the concept of defensible space included private space, too many people, blocks being too large. Many of the principles that Newman and Coleman would raise later as potential problem areas had been identified in this earlier research. Surprisingly, height above the ground was found to have no impact on housewives satisfaction with their home. Space for children's play was highlighted as a significant area of concern, regardless of the quantity or design of play areas provided. The authors surmised this dissatisfaction was caused by maternal concern for childrens' safety and supervision. Yet the authors observed children playing alone throughout the estates and that most spaces, whether intended for children's activities or not, provided opportunities for play.

About a quarter of residents surveyed were unsatisfied with maintenance and over half felt that vandalism was a problem. This was attributed to insufficient staff being available to supervise the estate, especially preventing children "spoiling the place" and making it "dirty, with litter all around" (ibid., p.21). Vandalism, which was classified as damage to property as well as general 'untidiness', was perceived as a widespread problem. Complaints covered damage to lifts and telephone boxes, uprooting of trees and flowers, breaking milkbottles or windows and noisy teenagers, but graffiti was not a major concern. The discussion identified that damage was seen less as wilful destruction than the result of childrens' thoughtless behaviour taking short cuts across flowerbeds or dropping litter. Interestingly more complaints were made about the estates with the smallest number of reported occurrences,

suggesting that it was the contrast with the overall appearance of the estate being noticed. These views that vandalism was a social problem as much as a physical one contradicted Newman's opinion that poor design led inevitably to intentional damage.

4.2 Sheena Wilson links Newman and Coleman

The second influential transfer agent for defensible space is the Home Office (HO) researcher, Sheena Wilson, who brought Newman's ideas to the attention of a wide policy audience playing a critical role communicating ideas between the HO and the DoE. Wilson trained as a psychologist and studied criminology before joining the HO Research Unit in 1971 at a point when it was ceasing psychology based studies and beginning to explore socio-economic motivations for crime; moving away from the deep seated idea that there was a criminal 'type', to one where much crime was opportunistic. This alternative opportunistic model of crime opened up ideas of crime prevention, where police advice and good design practice could intervene directly in the mechanics of crime reduction (Mayhew, Clarke, et al., 1976). In parallel with the DoE, the HO began to take a growing interest in vandalism as an example of opportunistic crime. Wilson's early research set out to investigate the causes of vandalism on housing estates (Sturman and Wilson, 1976). She notes that while the study was as quantitative as possible for the time, it was in fact rather primitive:

“We tried in a very scientific way to set up a sample of different types of buildings in different areas. We used regression analysis on one of these really big computers, but we couldn't control for the background of the people because it was too hard – for one there was no computerized information. I literally went through housing records kept on index cards in each housing department” (Interview Wilson 2012).

In *Utopia on Trial* Coleman is highly critical of Sturman and Wilson's research especially their finding that one socio-economic factor - child density - exerted a stronger influence than design on levels of vandalism. Wilson wrote that only if child density were under control would design “exert a differentiating influence” (Sturman and Wilson, 1976, p.17). Indeed Coleman singles out Wilson's later work and accuses her of misunderstanding Newman's premise:

“There are other examples of how people think they have mastered the gist of Oscar Newman’s findings but are actually mis-interpreting them...Sheena Wilson jumped not only to the wrong conclusion that design cannot reduce crime, but also the more profound generalisation that it cannot cause it” (Coleman, 1985a, p.129).

Coleman is referring to Wilson’s example from the regeneration of Liverpool’s Angela Street estate. A ground floor area of the estate fenced off to form ‘semi-public space’ was soon vandalized. Wilson interpreted the speed of this damage as indicating that it was a response to the process of regeneration, not the design. The example also illustrated the ambiguity in the classification of spaces. Wilson refers to the vandalized garden as ‘semi-private space’ while Coleman argued that the fenced off area was ‘confused space’, as the garden was not visible from windows of upper flats. So the areas Wilson considered semi-private, Coleman considered semi-public, demonstrating Ekblom’s (2011) definitional inconsistencies for the way that spaces were perceived and defined.

4.2.1 The HO learning from HUD³⁷

In 1977 Wilson travelled to America and spent a day with Newman looking at housing projects in the Bronx, accompanied by a police escort. Two points struck her; the extreme levels of poverty and vandalism occurring in parts of New York compared to Britain (the post-war decline and City’s bankruptcy in the 1970s triggered a deteriorating urban environment, particularly in public housing areas) and that the manner in which improvements were implemented affected the sustainable long-term success of the changes.

“These streets were really dangerous, it was like Armageddon, riddled with potholes, there were burnt out cars, fire hydrants flowing, I’ve never seen such social desolation...We were looking at a 3rd generation permanent underclass, unemployed young guys with no teeth and on drugs, sitting round in stairwells accosting people for money. Back then in the UK we were tackling something very different: the housing design of places like Hulme, industrial system building combined with limited housing management, social inadequacies and the sheer density of children.” (Interview Wilson, 2012).

Wilson and Newman revisited Clason Point Gardens and Markham Gardens, two estates featured in *Defensible Space*. The improvements to Clason Point Gardens had relied on

³⁷ US Department of Housing and Development (HUD)

engaging and working with existing residents. To test the impact of this community involvement, Newman carried out the alterations at Markham Gardens in a more traditional authority way, with workmen appearing unannounced and erecting fences. Residents did not respond well to the imposition of these unexpected new barriers and the new landscaping had suffered substantial damage as a consequence. Writing about the visit Wilson recalls “the style with which physical improvements were implemented was more important than the measures themselves” (Wilson, 1978a, p.674).

Wilson would later argue that some of the criticisms directed at Newman’s theories were unfair. Refurbishment schemes with a too literal application of his principles were found to continue to have vandalism problems. Local Authorities who had simplistically altered the design of estate layouts without improving their management services were disappointed at the lack of territoriality or pride of place their changes generated. She felt that it was the process of testing the concept of defensible space that led the DoE to a more robust belief in the importance of non-design factors.

“Ironically it was speculation inspired by defensible space which eventually led to a clearer understanding of the non-design factors contributing to the success of housing schemes...The inconsistency of the evidence implied that design should never be considered independently of social and management factors” (Wilson, 1978a, p.674).

Coleman writes that Wilson’s research for the HO was “intended to refute Newman’s thesis” (Coleman, 1985a, p.16). But Coleman’s view that she was the only promoter of Newman, defending him against systematic discrediting by a government research establishment is unfounded, as Wilson cites Newman as a principal influence, clearly stating that she aimed to explore the relevance of Newman’s ideas in Britain. Wilson’s study had modest aims. Rather than establishing a unified comprehensive theory for causes of vandalism, it set out to track the varied levels of damage across a large sample of inner London estates and see if these variations might be explained by their layout and design.

Poyner’s (1983) view of Wilson’s research is far more balanced than Coleman’s. Wilson’s (1980) study looked at all estates with more than 100 homes in two inner London Boroughs. This consisted of 285 blocks, over half of which were four or five storey gallery or balcony

access blocks or nine storey slab blocks. The remainder were lower walk-up blocks, towers and a few terraces of houses. Following Newman, a similar set of characteristics were assessed: the height and size of blocks, the number of shared entrances and through routes, a classification of spaces into private, semi-private, semi-public and public. These were compared to Local Authority housing repair records and tenancy agreements to provide a figure for child density. Newman had used the New York City Housing Authority Police Department crime records, a comprehensive and centralized source. But the records Wilson was interested in were scattered, none were computerized requiring her to look through the paper repair chits or tenants index cards held by each housing department. Wilson undertook a visual survey, characterising the blocks and observing levels of vandalism. These relatively subjective observational measures aggregated all forms of damage (number of walls written on, smashed windows, damaged rubbish bins) as a composite block score against a four-point scale (from 1, minimal or no damage, 2, a few panes broken or some graffiti, 3, more than a few panes broken and considerable graffiti and 4, extensive boarding up, breakage and graffiti).

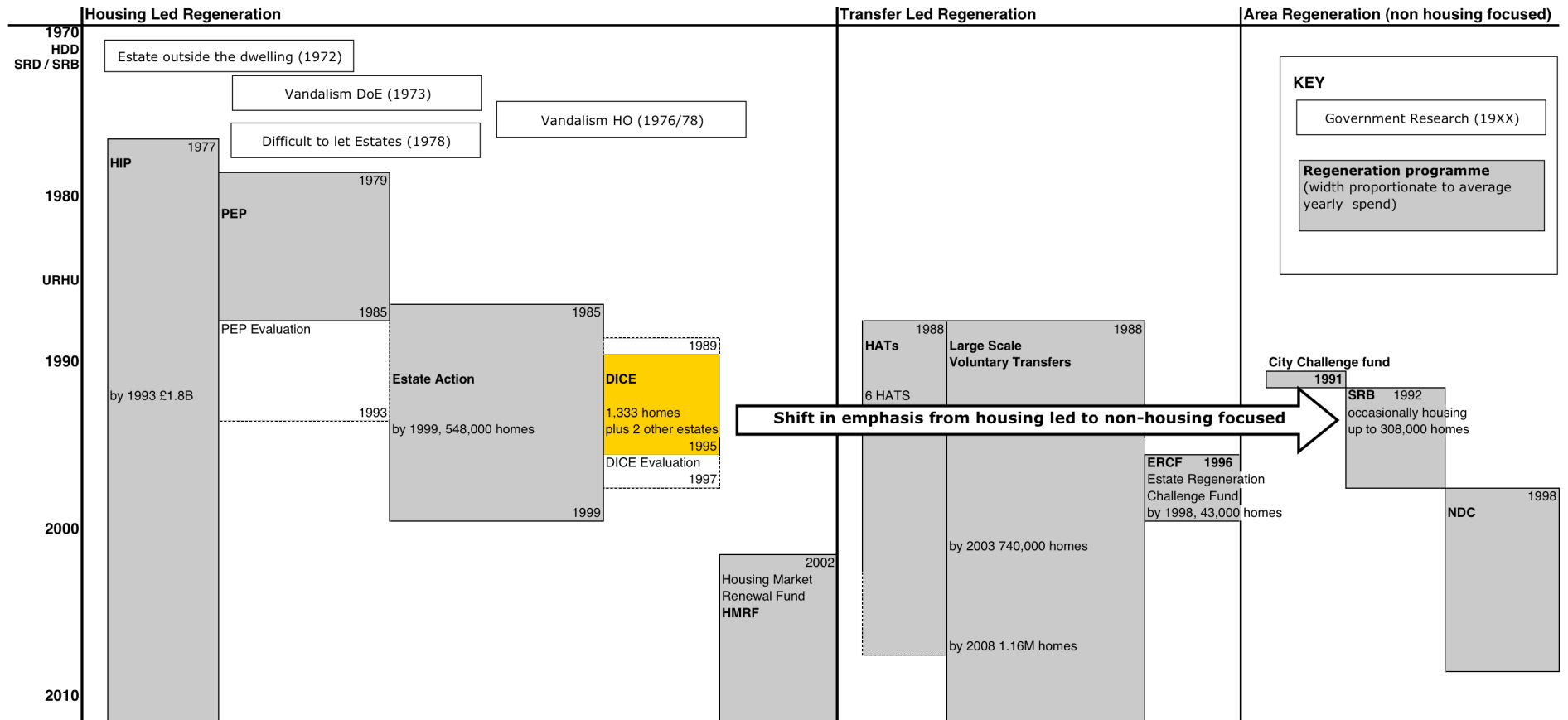
The study analyzed where damage occurred; in public or private spaces, to ground floor flats or above (lower ones were more likely to have broken windows) or to empty/occupied homes. There appeared to be little defensible space in the estates studied. The number of voids on an estate proved a good indicator for decline, with more dwellings vandalised when empty. But the most significant factor identified was child density. Wilson describes how she stumbled across the number of children per household as a critical variable and how in retrospect had suitable records been available she would have broken this down into a more sensitive indicator of the density of boys between 14 and 18, as the density of boys demonstrated the clearest correlation to levels of vandalism (Interview Wilson, 2012). Yet the relationship was complicated and leading to Wilson's tentative threshold of child density, with more than three children per ten dwellings signifying 'high child density' blocks. In 'high child density' blocks, most design typologies were found to be equally vulnerable. Where there were fewer children, rates of damage were influenced more by design factors, such as open, ungated entrances (Wilson, 1980).

4.2.2 The English housing policy context

The literature review questioned the prospects for research informing or shaping policy, characterising the 1970s and 1980s as a low point in social scientists' influence prior to the resurgence of evidence use under the rise of evidence-based policy-making (Sanderson 2002; Jones and Seelig, 2004). However the diagram below (adapted from Hall, Murie, et al., 2004, p.16) showing key English housing and regeneration programmes and selected research would suggest that the DoE during this period was a relatively fertile location to conduct studies that led to programmes of direct intervention.

Figure 4.3 summarises four points relevant to this thesis and the context for DICE. First, that investment available via the main housing programmes from the Housing Investment Programme (HIP) through the Priority Estates Project (PEP), Estates Action (EA) until DICE, was constrained to individual estates. Second, that there was a shift in emphasis from housing-led to non-housing-led regeneration policy in the early 1990s, just as DICE was beginning. The later phases of stock transfer-led regeneration, Housing Action Trusts (HATs) and Large Scale Voluntary Transfers (LSVTs) centred on the extensive transfer of multiple housing estates into local management, ALMOs, or Housing Associations. Area policies such as the City Challenge Fund, Single Regeneration Budget (SRB) or New Deal for Communities (NDC), pooled budgets across policy areas and funded social and physical solutions for whole neighbourhoods.

Figure 4.3 Key English regeneration and housing programmes since 1979



(Adapted from Hall, Murie, et al., 2004, Fig 1.3, p.16 and, Wilcox and Perry, 2014, Table 67a, p.178)

It was not until the Housing Market Renewal projects at the beginning of twenty-first century that intervention refocused on solely physical interventions. Third, there was extreme variation in the relative scales of investment, numbers of homes affected by each of the programmes and the differing periods of evaluation of these projects. The DICE evaluations although lengthy, were far shorter than the evaluation of PEP. Finally even within the DoE, separate directorates, with differing remits, undertook research.

Wilson's research for the HO had been prompted by a DoE paper for the Housing Development Directorate (HDD) *Vandalism; a constructive approach* (Burbidge, 1973). Having completed this study, Wilson moved to the DoE in 1978 to collaborate with Mike Burbidge (then the HDD's lead researcher) on a far larger study *An Investigation of Difficult to Let Housing: Case studies of pre-war estates* (Burbidge, Kirby, et al. 1980). The major outcome of the 'difficult to let' study was the DoE's Priority Estates Project (PEP) an influential and far-reaching housing programme. Starting in 1979, PEP assessed 30 large estates (not only estates of high-rise flats, but also Radburn layouts and traditional pre-war cottage layouts. In conclusion, the PEP study:

“spelt out the design failure of large modern estates and underlined the need for compensatory management if flatted estates were to work. Coupled with design aberrations, the decline of localised housing management and the concentration of desperate households within unpopular estates were both direct causes of disintegration” (Power, 1985, p.524).

The council estates' bad reputations resulted from a combination of many aspects; poor design, poor management, as well as anti-social behaviour arising from the specific social problems of the families living there (Power, 1984a; 1984b; 1985; Interview Wilson, 2012).

The Priority Estates Project (PEP) provided a unique learning opportunity bringing together housing and crime researchers including Anne Power³⁸ whose research for PEP provided the material for her PhD thesis (1985), *The development of unpopular council housing estates and attempted remedies 1895-1984*. PEP was perceived as a 'live experiment', to

³⁸ Anne Power, then an early career academic at LSE. Her academic rivalry with Coleman is explored in Chapter Five.

demonstrate the importance of effective localised management approaches in the regeneration of run down estates. The essence of the PEP was establishing a local management office undertaking landlord's tasks, caretaking activities and giving the tenants the opportunity to exercise control over their homes and neighbourhood. While reduction of crime and vandalism weren't the main focus of the PEP model, these were seen as important goals.

Between 1987 and 1993 the HO conducted a study into the impact of PEP on crime and community life³⁹. The summary of the final report identified PEP as promoting four means of crime prevention, notably with defensible space at the start of the list:

- "i) creating better dwelling security and more 'defensible space';
- ii) halting the spiral of deterioration, tackling vandalism, caretaking, cleaning up the estate, thereby reducing the 'signs of disorder' and fear of crime and signifying that the estate is well cared for;
- iii) investing in the estate so that residents will develop a positive view and thus a greater stake in their community and a greater expectation of law-abiding behaviour;
- iv) increasing informal community control over crime both through increased surveillance and supervision by residents and housing officials and facilitating the development of a set of norms and expectations against offending on the estate" (Foster and Hope, 1993, p. vi).

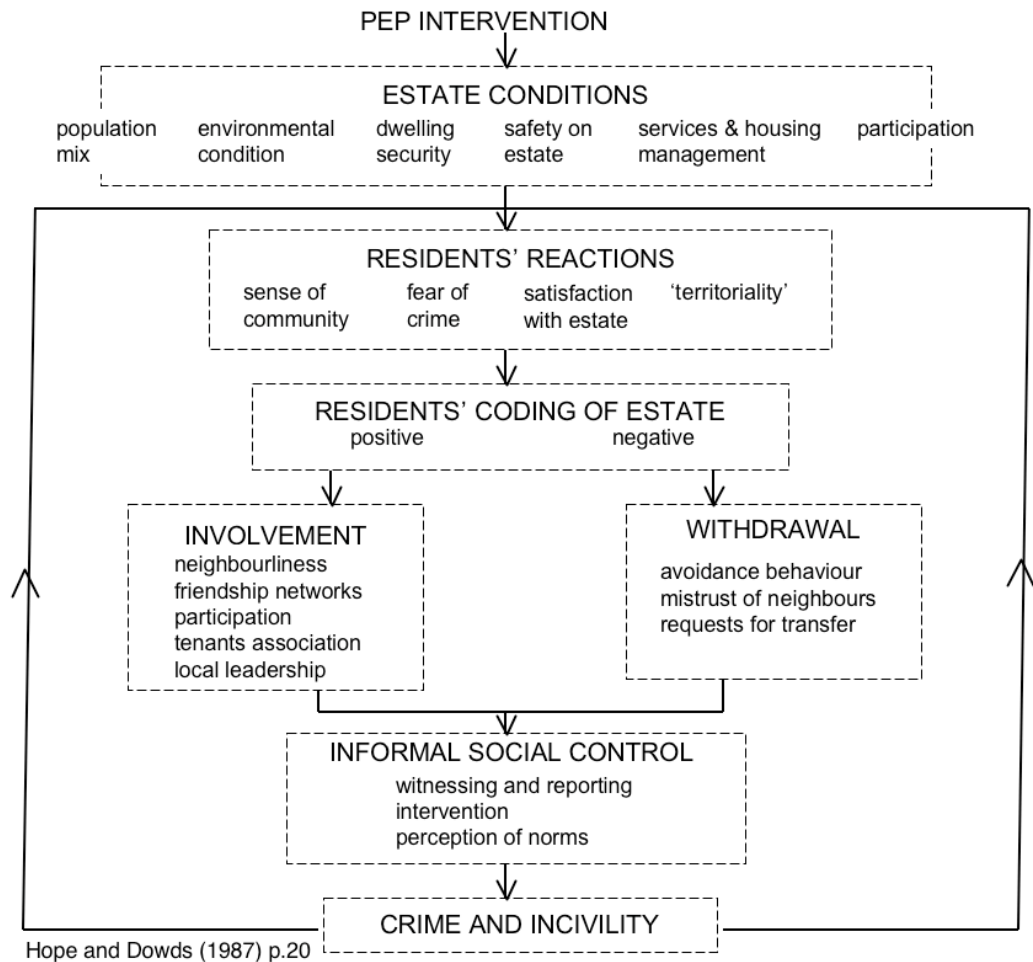
Hope and Dowds (1987) proposed a model (Figure 4.4) which attempted to explain how the PEP interventions increased residents' informal control over their estates and might positively reduce crime and incivilities. Residents' collective commitment to the estate, arising from greater concern for its physical conditions and standards of social conduct, would be influenced by their positive or negative 'coding' of the estate and individual sense of community, territoriality, fear of crime and satisfaction with the estate.

The findings from the initial 20 PEP estates were highly positive with most of the estates improving rapidly. The evaluation studies by DoE and Power at LSE, established a powerful

³⁹The HO published the first British Crime Survey (BSC) in 1982 as an attempt to uncover the mass of unrecorded crime (of the 11 million crimes estimated to have occurred in 1981, only 3 million were reported) but also the impact of fear of crime. The condition of the physical surroundings was a key contributor to this (Smith, 1987) and the BCS found that vandalism was the most commonly experienced crime and equally the most unreported (Minton, 2009).

and widely used body of best practice for delivering housing services and involving tenants in the day-to-day running of their estates such as the *PEP Guide to Local Housing Management* (Power, 1987).

Figure 4.4 Priority Estates Project crime model



The reputation enhancing delivery of policy-influencing research by the DoE's SRD/HDD housing directorates throughout the 1980s was in contrast to the perception of the Department's Inner Cities Directorate. Despite the urban programmes that the Inner Cities Directorate had been running for several years, this team was belittled for its apparent lack of impact in the wake of the inner city riots in Brixton and Tottenham in 1983. The shock of the riots prompted a call for a more locally based approach to housing and regeneration policy. The PEP, based on local housing offices and residents' involvement, seemed a tailor made approach. Yet PEP was not felt to be progressing far or fast enough and in 1985 Michael Heseltine and the Housing Minister at the time Sir George Young, set up the Urban

Housing Renewal Unit (UHRU) to intervene in housing directly. UHRU initially concentrated on urban housing authorities, with the remit to identify failing, unpopular estates and to devise a targeted funding programme to address their intense problems. Sir George Young found the title 'Urban Housing Renewal Unit' an unwieldy mouthful and the name of the team and programme was rapidly changed to Estates Action (EA). By 1987 their remit was enlarged to include all housing authorities across England rather than just 'problem' inner city estates. Schemes were funded with money diverted from the existing Housing Investment Programme (HIP). This was not initially popular with council housing delivery teams who were also unhappy with the requirement to diversify tenure. The Treasury felt that pilots were needed for the first physical improvement grants, before any large-scale funds could be allocated. After much negotiation, an initial £15 million was released with agreement that further money would be top-sliced from the HIP programme. A similar process of top-slicing bids was later repeated for the DICE program (Interview Harvey, 2009)⁴⁰.

4.2.3 Government departments operationalising defensible space

Newman's New York research was funded by a broad range of public institutions, the New York City Housing Authority, the Department of Housing and Urban Development (HUD), as well as the National Institute of Law Enforcement and the US Department of Justice, under the US Interagency Urban Initiatives Anti-Crimes programme, showing that by 1980 North American government departments were working together on the issue of housing and crime. The situation in the UK was less joined-up, with responsibility for physical crime prevention confusingly spread across several departments. So while the HO had started to popularize a more situational crime prevention approach across national government, practical activities to reduce crimes were still being addressed in a fragmented way. For example the Department of Transport was responsible for physical design interventions such as the closure of footpaths at the rear of houses though the mechanism of Gating Orders

⁴⁰ The total EA budget rapidly grew from £45M pa in 1986/87 to £180M pa by 1989/1990 (Hall, Murie et al. 2004) so the £50M spent on DICE between 1989 and 1994 was a significant proportion.

under section 129A of the Highways Act 1980. One HO situational response focused on practical local interventions was the creation in 1978 of NACRO's Crime Prevention Unit, later expanded in 1981 by the formation of the Safe Neighbourhoods Unit (SNU). Initially funded by the GLC, SNU operated within London Boroughs until becoming a national organization in 1990 (Shaftoe, 2004). During the early 1980s the SNU worked with local authorities undertaking local estate level crime audits and promoting tenant management and community safety through estate design, use of wardens and CCTV (SNU, 2009). Between 1981 and 1986 it ran projects on 18 London estates, several of which Coleman evaluated for *Utopia on Trial* including Ranwell East in Bow (SNU, 1988).

It is not clear if Newman ever directly approached either of the British government departments with his research, although he shared platforms with DoE and HO researchers at conferences. And while the research from these two departments complemented each other, it is telling that it was not until much later (following SNU's (1993) review of crime on council estates or the HO evaluation of the impact of the PEP on crime (Foster and Hope, 1993)) that collaborative work in this area occurred. At this point in time Wilson (with the external stimulus of Newman) can be seen as a key transfer agent transferring knowledge between the two departments. Wilson moved from the HO to the DoE in 1979 looking for more opportunity to explore rounded, practical, responses to the housing problems she had encountered. She was highly influential, shaping DoE thinking about vandalism, crime and interventions on housing estates and setting the foundations for the PEP. She characterizes the DoE as being more interested in applicable solutions than the HO, but less able to produce robust research:

“The focus moved from crime to public housing because there were so many difficulties. The whole inner urban research and the criminological research [at that time] was all about causes and blame. Then it moved to tackling, not solving; solving's top-down but tackling's bottom-up. Defensible space was about imposing solutions, whereas the process you're describing [community architecture/resident engagement] is about trying out a whole lot of different things but ultimately trying to get a bit of responsibility over to members of the community rather than coming in from outside with solutions. There is no such thing as a solution” (Interview Wilson, 2012).

So despite the extensive investigations and evidence gathering, there was a sense that a universally applicable top-down solution was unfeasible.

However Wilson (directly echoing Coleman's denigration of the DoE in *Utopia on Trial*) was quite critical of the ability of Government researchers to deliver 'useful research':

"I can tell you, moving from being a criminologist with the HO to being a social researcher for the DoE, the DoE is full of people like Alice Coleman, who use hundreds of thousands of pounds of public money to do academic research, where they bit off more than they could chew, they didn't know how to analyze it properly and they certainly couldn't move from the analysis to policy. Government research offices were littered with people like that" (Interview Wilson, 2012).

Wilson dated the increasing desire for policy to rapidly distil practical measures from academic research as starting in the early 1980s, a clear fore runner of evidence-based policy-making. Wilson identified a further inability of Government departments to understand the constraints of implementing their policy on the ground:

"You had these incredibly literate civil servants being asked to get their hands dirty in something they didn't understand at all. They were amenable to the idea, but they hadn't any idea what to do. I mean they weren't community activists at all, they were mandarins" (Interview Wilson, 2012).

She distinguished between academics theorising about residents, from community 'agitators' and the lack at the time of 'professional intermediaries' who could take theoretical ideas and shape them into ways of working. She welcomed this new class of professionals specialising in community engagement as stimulating essential innovation in knowledge transfer. Wilson's views here are based on her own experiences attempting to establish a Tenants Association on a difficult to let estate on Swindon, aiming to apply her research findings in practice. Comparing herself unfavourably to other more grass roots organisers⁴¹ she attributes this failure to a mixture of personal and political naiveté:

"The Tenants Association was riddled with factions and I probably wasn't charismatic enough...My background was academia so I was too analytical

⁴¹ Wilson recalled Anne Power as an example of a motivating organizer. A tenants newsletter circa 1976 contained a cartoon (drawn by the Head of Housing at Islington Council, Bill Murray) portraying Anne Power as Joan of Arc mobilising an army of residents (Interviews Wilson, 2012 and Taper, 2013).

and not hands on enough...I wasn't a social activist" (Interview Wilson, 2012).

She felt her most useful contribution was enabling busy housing managers, fire-fighting daily tasks, to explore ideas and alternative solutions. Wilson left the DoE in 1984 and was working on the Swindon estate improvement scheme when *Utopia on Trial* was published. Despite Wilson being one of the leading governmental researchers associated with estates regeneration and defensible space, having publicised academic papers, press articles and HO guidance during the period that Coleman was surveying her London estates, she and Coleman never met or discussed their respective positions.

4.3 Alice Coleman brings defensible space to the British Government

The third transfer agent is Coleman herself, an academic aspiring to influence both policy and practice. Unlike the other two she was not part of established practitioner or policymaking networks. So her transfer mechanisms, while similar to Newman's (personal interactions and a polemical book) were initially unsuccessful at attracting her target governmental audience.

Jacobs and Lees (2013) describe Coleman's serendipitous discovery of Newman's *Defensible Space*. In 1976 Coleman was invited to spend a year as visiting lecturer at the University of Western Ontario undertaking field surveys of neglected urban wastelands measuring what she termed "dying inner city syndrome" (Coleman, 1980). While on this sabbatical Coleman chanced across Newman's book in the University bookshop (Jacobs and Lees, 2013, p.1565). Newman's discussion of urban deterioration and his proposed solutions struck a chord with Coleman, as similar to the 'land use deterioration' she had noticed in British cities during her Second Land Use Survey. Believing that Newman's concept provided a potential solution to 'problem estates' she determined to recommend it to the DoE.

Coleman made an initial attempt to contact the DoE in late 1976, convinced they would be interested in Newman's ideas. She was disappointed that her suggestions received an unenthusiastic hearing;

“I read Oscar Newman’s book when I was working in Canada, I came home with the idea that the Department of the Environment would want to know this. But they said, No, that’s an American problem. There wasn’t a care about it here and that’s why I thought I should map something to find out if it did. That’s how I started doing the work in England. Then, of course, it got me hooked and I wrote the book [Utopia on Trial]” (Interview Coleman 2013⁴²).

The DoE was unconvinced about Newman’s research for three reasons: firstly, their belief he was addressing a particularly American problem, occurring on a tiny proportion of publicly provided housing which notoriously concentrated a disaffected underclass. The scale and intensity of issues being dealt with in the UK was completely different. Secondly, doubt over Newman’s simplistic model of causality. Coleman characterised the DoE’s explanatory model as expecting that:

“the cure should be socio-economic. I thought how many years have we had child allowance, how many years have we had the dole, how many years have we had this welfare? The socio-economic things were in place all the time, but they never had any effect – quite the reverse sometimes” (Interview Coleman, 2013).

However it is unlikely that the DoE felt the problem (or the solution) was solely attributable to a single cause, “all socio-economic” as Coleman claims. There was already a strong suspicion of environmental determinism within the Department as an explanatory framework. From the evidence gathered for the *Design Bulletin No 25* (1972) the DoE believed they had a robust model to explain the balance of physical and social causes of residents satisfaction. This included design, vandalism and maintenance as well as non-environmental aspects such as a desire to move away from the estate. Variables that that did not relate to this estate satisfaction model were mostly the socio-economic characteristics of the households (employment, rent/income level, number of children) and their previous housing experiences, amongst other social aspects such as participation in Tenants Associations (ibid., p.27).⁴³

⁴² Coleman reported this encounter with the DoE in very similar terms when interviewed by Jacobs and Lees in 2008 (see Jacobs and Lees, 2013, p. 1567), repeating her words from *Utopia on Trial* (Coleman 1985a, p. 16)

⁴³ Excluding these socio-economic characteristics from a model of estate satisfaction would seem surprising (if not highly questionable) today. Subsequent research into factors such as levels of residents involvement (Cole, 1996) negative impacts of unemployment and resultant extended periods of high occupation (Livingston, et al. 2008) or the wellbeing derived from participation in communal activities (Fujiwara, 2013) might have on satisfaction with housing has substantially advanced

Based on this the DoE argued for the value of well designed surroundings contributing to successful estates in a report setting standards for the external residential environment (DoE, 1976). It is clear from these research reports and subsequent *Housing Building Bulletins* that the DoE had great confidence in the design guidance that they were publishing to provide a suitable and thriving environment. And thirdly, the DoE were aware that researchers in the HO were already considering Newman's findings as part of their own research into designs that discouraged vandalism. The DoE's own report *Vandalism, A Constructive Approach* (Burbidge, 1973) had identified typologies of vandalism and proposed a mix of design and lettings approaches to reduce its occurrence.

4.3.1 Coleman gathers her evidence

Yet Coleman was undeterred by the DoE's dismissal and in 1977 set out to gather the evidence that she felt would prove the relevance of Newman's ideas. This would consist of an extensive large-scale mapping exercise she called the '*Design Disadvantage in Housing*' project. Coleman initially selected Tower Hamlets and Southwark, the two London Boroughs containing the largest number of post-war blocks of flats. Coleman had become interested in Tower Hamlets during her Second Land Use Survey. Coleman's maps for this distinguished between derelict land created during the Second World War and that arising from subsequent slum clearance (Coleman, 1980). In Tower Hamlets Coleman found six times as much unbuilt land arising from the post-war demolition programme as from bomb damage. She felt that while rebuilding had removed unsanitary housing and reduced overall housing density, it had also increased overcrowding in the new modernist blocks (Coleman, 1980; 2013a; 2013b). This is indicative of how, unlike Newman or Wilson, she approached the issue of housing from a land-use mapping and geographical survey direction. The study expanded to cover 27 estates across London (Southwark, Camden, Westminster, Wandsworth, Tower Hamlets and Lambeth, a total of over 4,099 blocks of flats and acting as

understanding of how these factors contribute. Some of these shifts can be explained looking at changes in during the period (see Tunstall and Coulter, 2006). However this thesis has endeavoured to carefully set down the contemporaneous position, based on the knowledge base and evidence available to the DoE at the time that the reports were published.

controls, another 4,172 houses across the London Boroughs and in Blackbird Leys in Oxford⁴⁴.

Coleman began her ambitious survey without funding in place, but quickly identified a source of support. As dissemination of the Second Land Use Survey, the Joseph Rowntree Memorial Trust had provided Coleman with a loan to publish the maps of the Yorkshire area. This loan was to be repaid as and when the maps were sold. Soon after starting the *Design Disadvantage in Housing Survey*, Coleman forwarded two pages of preliminary findings to the Trust. They responded enthusiastically and on the basis of a single face-to-face meeting agreed to fund the work. Despite the substantial sum Coleman requested (£199,000 over five years) it was unflinchingly granted. However her two Joseph Rowntree contacts retired and their replacement, a sociologist, was less certain about the approach Coleman had taken, preferring greater use of residents' interviews. Coleman replied to his concerns with a letter setting out the benefits of taking a geographical approach rather than applying sociological methods. The research manager was interested, but wanted to have a meeting jointly with police to discuss the validity of Coleman's findings. This led to a meeting in the Council Chamber at KCL (described in Chapter One) where Coleman presented her trend lines of design disadvantage features against proportion of blocks suffering abuse of various kinds (Coleman, 1980; 2013a; 2013d).

The nature of the evidence Coleman gathered and the techniques she used to present her arguments, were dictated not only by her own epistemological and disciplinary leanings, but more prosaic limitations. Unlike Newman's or Wilson's research, Coleman made minimal use of locational crime figures. Coleman was aware of this shortcoming (Jacobs and Lees, 2013) blaming Michael Heseltine⁴⁵ who had returned to the post of Environment Secretary in 1990:

⁴⁴ The apparent anomaly of including Blackbird Leys as an estate outside London arose as a case of opportunist data gathering as one of the KCL survey team moved into a home nearby (Interview Coleman, 2013).

⁴⁵ Secretary of State for Environment May 1979 – January 1983 and November 1990 – April 1992.

“and she [Thatcher] was out. And old Heseltine confiscated the money she’d promised and told the police not to give me the crime figures so I was never able to write it up properly.” (Interview Coleman, 2013)

However following the KCL meeting with Joseph Rowntree and the Metropolitan police, Coleman approached the Chief Police Commissioner Sir Kenneth Newman, who provided her with crime figures for six London police divisions. Coleman analysed this data and in February 1985 presented a report to the Metropolitan Police. The analysis compared crime data to the design assessments and measurement of ‘social malaise’ for the Carter Street neighbourhood in Southwark (surveyed by the KCL Land Use Research Unit in 1980). This report contains initial versions of the crime trend lines that are used to illustrate *Utopia on Trial*.

From this brief analysis Coleman derived a hierarchy of crimes and taboos, with the weakest taboo against littering most easily broken, followed by graffiti then more serious abuses. Anticipating Wilson and Kelling’s (1982) broken windows theory, Coleman observed that vandalism and other abuses were more likely to occur where both littering and graffiti had a foothold. Analysing the data collected for the design disadvantage study, Coleman found this pattern repeated for each of her design variables.

Figure 4.5 Coleman’s trend lines for social malaise and crime

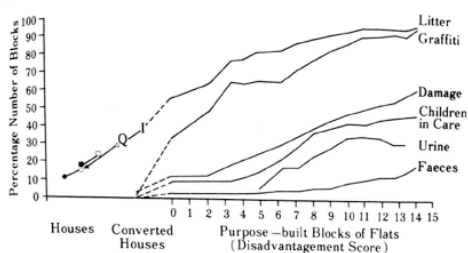


FIG.29. Trend lines for the six test measures in houses (left), converted houses (left-centre) and purpose-built blocks of flats (right). The houses are divided into age groups: circles for inter-war, squares for post-war, and triangles for pre-1914. In each case black symbols denote houses with front garden fences and gates and white symbols denote houses lacking one or more of these features. The converted houses are divided into two groups. Those in Queen’s Park (Q) are smaller and less littered than those in the inner city (I). Purpose-built flats are divided into classes with different disadvantage scores from 0 to 15. As their trend lines reflect the combined effect of all 15 designs they are generally smoother than those for individual designs. The graph as a whole approximates to the theoretical growth curves in Fig.8.

Coleman, 1985a, p.127

Coleman, 1985a, p.172

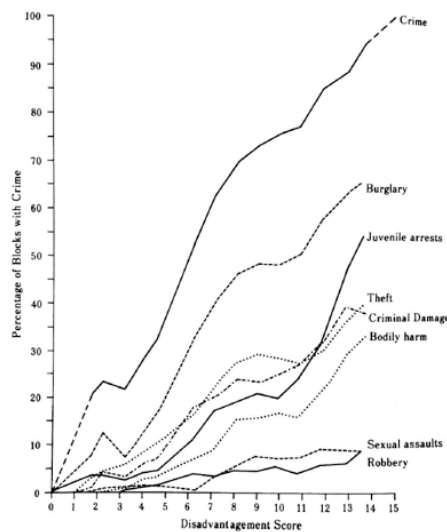


FIG.40. Trend lines for seven classes of crime in 729 blocks of flats in the Carter Street Police Division of Southwark. Crime increases as design disadvantage worsens. No crimes were reported from the blocks with zero disadvantage score, but the average rate for blocks with scores of 13, 14 and 15 exceeded one crime per five dwellings (1980 figures).

4.3.2 *Utopia on Trial* as a practical manifesto

Coleman had some success presenting these findings face-to-face but needed a way to communicate them to a wider audience and so began drafting a book. *Utopia on Trial* (1985a) was written in the form of a courtroom trial, with suspect design features and Coleman's evidence 'cross-examined'. Markus and Cameron's (2002) history of influential planning/architectural documents criticised the manifestos that litter architectural theory for relying too heavily on rhetorical authority, not engaging in a critical dialogue or making little reference to other texts. These manifestoes are not explicitly political, but more usually de-contextual propaganda and self-promotion. Newman's *Defensible Space* fits this description closely and while Coleman's publications are more academic and dry in style than Newman's well-illustrated books, the general account is easily recognizable in *Utopia on Trial*⁴⁶.

Figure 4.6 Alice Coleman



Scourge of the DoE : Alice Coleman at an estate in Southwark, south London—'No more flats.'
NEIL LIBBERT

Observer, Sunday 28 April 1985

⁴⁶ The architectural community's consciousness that it can be easily swayed by persuasive polemic or a resonant phrase is another reason for the profession's lingering discomfort with the book.

The chapter *Utopia Accused* dismissively condemned post-war housing as failed utopias and criticised authoritarian and paternalistic planners within the Ministry of Housing, Local Government and DoE, while promoting “design modification as an important new weapon in the fight against crime” (ibid., p16). The final chapter *Summing up* was a diatribe against DoE researchers as “reluctant to open their collective mind to evidence related to design” (ibid., p.181). It continued with a scathing attack on civil servants masquerading as researchers who unlike *true* researchers are not “dedicated to truth as their highest allegiance” but “have an interest in influencing policies and people, an activity that requires quite different mental attitudes from research” (ibid., pp.181-182). *Utopia on Trial* referred infrequently to other research, except for Coleman’s admiringly description of Newman’s work as “the most scientific research to date” describing it as “a brilliant concept, quite independent in its origin and approach” (ibid., p.13). Acknowledging the mixed reception his book received she highlighted the support for the ideas from housing officers, police and other on-the-ground practitioners. Coleman claimed that any backlash was stirred up by those responsible for the construction of the failing blocks of flats. Regardless of poor reviews or academic criticism Coleman retained complete confidence in Newman’s research which:

“proved that the relationship was not merely associative but also causal, in that if worst values of the designs were changed to better ones, local crime rates fell, although they were rising everywhere else” (Coleman and Cross, 1995, p.145).

However this statement could also be interpreted as reinforcing her own position and findings.

While Coleman was writing *Utopia on Trial*, she and Newman met in New York to discuss the basic principles behind defensible space, meeting again at KCL to talk though Coleman’s early findings. Newman had mixed compliments for Coleman’s work:

“Alice had the concept of defensible space down rather well before she arrived. What she had difficulty with were the objective physical measures” (Newman quoted in Heck, 1987, p.30).

Newman considered that these difficulties with calibration of measurements lead to a lack of robust data on ‘social malaise’.

“Utopia on Trial does not pay sufficient attention to social factors interacting with physical causes of housing dysfunction. The thing I missed was the fit between building type and family type” (ibid, p.30).

Newman uses this criticism to reiterate his own consideration of social factors, claiming that he carefully identified not that the built form of the high-rise was a un-liveable form, only that it was unsuitable for low-income families.

“I see high rises as quite suitable for the elderly, or for working couples, or for singles Alice doesn’t make that distinction” (ibid, p.31).

Conclusion

Recounting this initial international journey of defensible space shows it to be a travelling concept. There are familiar parallels between the vocabulary used to describe policy mobility emerging from earlier conceptualisations of policy transfer to descriptions of defensible space. “In contrast with the orthodox literature on policy transfer, the governing metaphors in critical policy studies are not those of transit and transaction, but of mobility and mutation” (Peck and Theodore, 2010, p.170). Rather than a straight forward transitional transfer this chapter describes a story of “a complexity of open systems, full of conflict and contradictions and interaction with ‘agency energy’” (Healey, 2010). Defensible space has been shown to have a mutating mobility. This slippery mutability appears to be a defining characteristic of defensible space. Yet considering defensible space as an inherently unstable or flexible concept is not automatically a negative characteristic. As later chapters show, it is this adaptability and looseness of interpretation that has ensured its resilience in practice. However if this is the case why were the initial attempts of international transfer into policy only partially successful? Why was it not able to mutate to fit itself to the available policy shaped hole? Particularly as so many of the mechanism and techniques for suitable transfer identified by commentators (eg Ward 2006; McCann 2010; 2011; Peck and Theodore 2010) such as books, academic papers, research evidence, conference discussions, were evident.

Defensible space’s journey from the US to the UK reinforces my criticisms of policy mobilities literature. Essentially, the reading of the problem to be solved by defensible space were fundamentally different between America and Britain. It counters the presumption that a pre-packaged policy concept exists, waiting identification of a suitable landing site to be

transferred. Individual participants' interpretation of the context and how the bundle of defensible space 'policy' concepts might adapt to fit are diverse and possibly contradictory. It illustrates that multiple practical transfer mechanisms were used (books, press, television programmes or individuals), via multiple routes and alternative channels to reach the varied audiences in the range of situations with potential to take up the ideas. These overlapping, interweaving international movements continue with equally complex intra-national transfers. Both Wilson's HO study and Coleman's design disadvantage research can be read as attempts to 'naturalise' or adapt Newman's research into a National Government milieu. The nature of the organisational, political and personal barriers that are erected between two central Government departments are duplicated and multiplied at regional and local Government levels. However Coleman's initial failure as a carrying agent bringing defensible space to the DoE was due to a series of reasons. The misalignment of the concept to the receptor context, which needed fertile locations for the ideas to take root; a receptive landing site was missing. This hostile environment arose partly because the suitable DoE niche was already filled with a 'favoured model' arising from the Priority Estates Project. Coleman's outspoken rant against DoE mandarins is likely to have reinforced these organisational barriers and biases. And finally in line with Peck and Theodore's (2010) accusations of academics having insufficient experience of the messy 'ground level' realities of policy making, Coleman, unlike Wilson, had little insight into the practice of policy-making.

Jacobs and Lees (2013) state that "scientific inquiry undertaken in the context of the academy was central to how defensible space both travelled across the Atlantic and entered the public policy of Thatcher's Conservative government." (ibid, p.1560). I'd disagree in that this mis-assigns the importance of the academy, I would argue instead that this chapter shows that the movement of the concept at this point is better seen as an example of mobility through institutional or practice-led inquiry. It utilized mechanisms such as individual encounters, site visits, newspaper articles and TV programmes, which while they are used within the academic sphere, are often discounted as populist. It was only despite the constraints of the academy (Coleman's initial failure to obtain academic funding for her research however scientifically grounded or presented) plus the bureaucratic institutional

opposition of the DoE (the artificial competition and un-transparent comparison between the PEP research and DICE) that the initial transfer occurred. So to limit this to an academic view of 'truth' obtained via 'scholarship' is to neglect the ways that defensible space did travel and take hold. While Coleman undertook pragmatic research in the "extra-academic realm", Jacobs and Lees argue that she was engaged with the "wrong brand of public geography" and hence was out of step with the changes and shifts within academic practice and thought (ibid., p.1565).

This chapter has revolved around three main transfer agents, showing how their ability to translate the concept was accentuated by their individual character traits. The literature review identified a range of transfer agent roles within the 'policy transfer business'; the consultant, advocates, evaluators, as well as critics. Even disparaging reviews can help sustain interest in and proliferate an idea. Most commonly these are thought of as Lerner and Lauries' (2010) 'charismatic individuals'. However unlike Newman, it is hard to fit Coleman into this stereotype of the persuasive, convincing guru.

"She had none of the charisma of Oscar Newman; he was very authoritative figure, very articulate, and he was very clever, but he didn't have this personal agenda of being angry about anything. He was just a problem solver" (Interview Wilson, 2012).

Indeed, Barry Sandford, an architect who worked closely with Coleman, recognised that his complementary skills were needed to win over clients and residents to Coleman's idea of defensible space:

"She wasn't just prickly with residents, she was prickly with the council and with everybody. She was a very forceful woman. I admired her greatly, that's why we got on. I was sent in as a sort of politician to try and placate people. To show them design after design, show them how wonderful it was all going to be, which I did somewhat cynically, but I nevertheless did it, because that was my job. I sell and I design and I sell. Sometimes you believe what you're selling and sometimes you don't. But I do believe in defensible space" (Interview Stanford, 2011).

But even these positive and negative aspects of personality are subject to the specifics of context and relationships. The following chapter describes how Coleman's determination to continue regardless was recognised by Margaret Thatcher. What was perceived by some as

inflexibility (even megalomania) appeared, in the context of these two single-minded women, as focused resolve:

“How she managed to persuade Thatcher, I don’t know. I can only assume, because I’ve done a couple of rounds with Mrs. Thatcher on a couple of occasions, there was some kind of rivalry between them, almost a dare. ‘It can’t be done!’ ‘I can show you how it can be done!’” (Interview Sporle, 2011).

So the case of Coleman can be used to add the ‘anti-guru’ to the typologies of transfer agents. An individual who, however unlikely and despite their shortcomings, has the determination to promote and mobilize concepts. This reinforces the use of the term ‘mobilize’ under McCann and Ward’s (2011) reading “in the sense that people, frequently working in institutions, mobilize objects and ideas to serve particular interests and particular material consequences” (ibid., p.xxiv). Coleman’s individual interests may have clashed with the DoE’s, but her very presence as a counterfactual acted as a prompt and spur to their own research activities.

There are later points in the story that show that Coleman’s ideas were aided by this academic consensus on scientific approaches (her encounter with Margaret Thatcher is one) and equally where the scientific apparatus of the academy was used to dismantle her arguments (the *Rehumanizing Housing Conference*). Yet the initial stages of the transfer - the transatlantic crossing - were still reliant on more populist routes that circumvented the limits of academic transfer at the time. This is highly visible in the way her book *Utopia on Trial* was framed and marketed. Coleman’s encounter with the Prime Minister Margaret Thatcher, the *Rehumanizing Housing Conference* and her book *Utopia on Trial* are all explored as transfer mechanisms in the next chapter.

Chapter 5: The Response to *Utopia on Trial*

Introduction

“The academic standing of a text is an uncertain guide to its social and political impact. The substantial, largely favourable reception given to Coleman’s ideas is rooted in their resonance with notions and understandings which are widely prevailing. Her pronouncements on housing feed off and are amplified by the prevailing New Right ideology which they echo” (Lipman and Harris, 1988, p.182).

This chapter explores three themes from Lipman and Harris’ quote. It unpacks the varied reception to *Utopia on Trial* (1985a) within academic, political and professional circles and amongst a lay audience. It questions whether any positive resonance was due to Coleman’s ideas, or the mechanisms promoting them. And finally it considers the impact of Coleman’s own politics and how this reflected the aspirations of high-level politicians, while irritating and alienating policy-level civil servants and conflicting with the normative liberal/socialist politics of many housing professionals.

Having completed her design disadvantage research and drafted *Utopia on Trial* Coleman initially found dissemination of her findings difficult, beyond a few formal academic lectures. Looking to the immense popularity, reach and impact of Newman’s (1972) *Defensible Space*, Coleman wished to reach a wider audience. This chapter opens with the setting up of a publishing house who selected her manuscript as a controversial and revolutionary text. In the light of her publishers’ desire that the text should appeal to readers of all political positions, I consider the balance of interest for Coleman’s ideas across the political spectrum, from new-right journals to liberal broadsheets. I discuss the process of establishing Coleman’s media personality as the principal transfer agent for defensible space and the media use of housing academic Anne Power as a sometime ally, or more often a foil, for Coleman’s views.

The hostile response from the architectural press and civil servants within the DoE was in contrast to an Audit Commission report on council housing where her findings were accepted and incorporated wholesale. Next the 1987 *Rehumanizing Housing Conference* is explored. Growing out of a series of academic papers refuting Coleman’s position, this conference

illustrates the process of academic research entering the sphere of practice described earlier in Chapter Two. The event was identified by an attendee as a “crystallisation moment”, a critical juncture in mobilizing the housing profession’s resistance to the rise of New Right ideology during the 1980s (Interview Cooper, 2013). The chapter follows this direct politicised assault on Coleman as a symbol of neo-liberalism, with her process of courting and gaining support from the Conservative Prime Minister Margaret Thatcher.

5.1 Publishing and promoting *Utopia on Trial*

The publication of *Utopia on Trial* (1985a) as a paperback was as fortuitous as Coleman chancing across Newman’s (1972) book *Defensible Space*. *Utopia on Trial* was the first publication from a new (and short lived) publishing house, Hilary Shipman Ltd. Despite having a weighty and authoritative name, the publishing house in fact consisted of a partnership of two: an accountant and, pertinently, a former journalist. Their intent from the start was to publish radical books, that were serious and intellectually rigorous yet accessible to a lay audience, with the central ambition of questioning accepted views; as they termed it “exploding sacred cows” (Macaskill, 1985, para.1).

Coleman had publicised her research findings through traditional academic mechanisms and routes. A lecture in May 1983 jointly hosted by the Royal Geographical Society (RGS) and the Architectural Association was published in *The Geographical Journal* the following year. Under the collective title *Trouble in Utopia*, Coleman’s (1984) paper *Design influences in blocks of flats* was accompanied by a paper from Anne Power *Rescuing unpopular council estates through local management* (1984b). This was the first occasion that Alice Coleman and Anne Power were paired, each promoting alternative solutions to failing council run estates, either physical modification or local management. Power recognized the cycles of regeneration and decline, arguing for constant nurturing and investment in an estate in contrast to Coleman’s faith in enduring one-off design improvements:

“Anne Power was very good at going and talking to tenants and persuading them to behave better. I don’t know for how long. But, I took design because, it was land use for a start and was permanent until somebody actually changed it” (Interview Coleman, 2013).

There was limited mainstream newspaper interest in the research. In April 1984, Coleman was interviewed in the Daily Telegraph (Edmunds, 1984). Here she discussed the Second Land Use Study and the lack of public funds to support the King's Land Use Research Unit. She linked 18 (sic) design factors to the levels of dirt, litter and degradation and crime to be found on some estates. Hilary Macaskill (the journalist partner of Hilary Shipman Ltd) read the article in the Daily Telegraph and despite knowing nothing about the topic, was intrigued by the forthright argument and noting that Coleman was looking for a publisher, approached her. Coleman was struggling to find an academic publisher prepared to produce a low-cost edition and the idea of a first paperback edition priced at less than £8 was appealing (Interview Macaskill, 2013)⁴⁷.

The publishers' stance challenging accepted conventions also suited Coleman and despite being from opposite ends of the political spectrum the editorial relationship was productive. Macaskill remembers an intense but collaborative editorial process prior to the publication of the first edition in May 1985. The title was a rare area of disagreement. Macaskill thought the title while catchy, was insufficiently precise, believing any portrayal of urban housing estates as utopian was implausible (Interview Macaskill, 2013). However the title proved timely, catching the mood of the moment. In an interview titled *We were all wets when we were building Utopia* (Davie, 1984)⁴⁸ Sir Hugh Casson had framed post-war housing as a utopian socialist experiment, positioning himself as anti-Thatcherite. *Utopia on Trial's* structure as an accusative trial proved equally attention catching. Article titles frequently used wordplay (for example *Coleman's utopia goes on trial* (Architects' Journal, 1985a) or *It's hell for tenants in the bureaucrats' utopia* (Davie, 1986)), raising associations with justice, equality, objective

⁴⁷ Surprisingly Joseph Rowntree Memorial Trust (JRMT), having awarded such a generous grant for the research, did not fund publicising the findings. However, it was only when the JRMT became the Joseph Rowntree Foundation in 1988 that they began to place greater emphasis on dissemination, starting to publish findings of funded studies. Coleman recalled that she was visiting China when JRMT wanted to publish the study and was unable to produce a suitable summary (Interview Coleman, 2013).

⁴⁸ During the Thatcher government, the term 'wets' was applied to opponents of her more hard-line, monetarist policies, or policies reducing the regulatory power of the state.

fairness and reasoned argued debate. Coleman claimed that her intent was not to be openly or personally critical.

“I’ve never really been intending to criticise people. I just thought ‘This is an interesting subject and this is what I found’. But of course, it [*Utopia on Trial*] does criticise, so I’m a whistle blower by default. And they don’t like it. I’m not surprised” (Interview Coleman, 2013).

Yet several interviewees describe the text as opinionated polemic, a “rant against modernism” (Interview Wiles, 2011) and sections of the book contain tirades against not only civil servants in government departments, but individual named researchers. Macaskill disagrees with this allegation, claiming the tone was “not immediately antagonistic” and reading the accusations against the DoE as “robust confrontation” (Interview Macaskill, 2013). Conceding that they had capitalized on the politics of the moment, as editors, Macaskill aimed for as fair-minded and factual representation of the findings as possible, wanting the text to be accepted by readers regardless of their political complexion.

“Her political views are not our views What we had to make sure was that the book was not taken as a political tract. In fact, there was no problem about that with Alice, because her politics are ingrained in her but what she wanted to do was get the substance of her research, her findings across to the world. So it wasn’t an issue. She wasn’t trying to make political statements. She was political, obviously, but we wanted to make sure that it was accessible, that that’s what she wanted, for everybody to be able to read it” (Interview Macaskill, 2013).

Despite targeting a lay audience it was not an easy book for a tiny publisher to promote. Initial routine pre-publication approaches resulted in subdued interest from bookshops. However this rapidly altered after a successful press splash two weeks before publication. Two short articles appeared in the Observer and Sunday Telegraph on April 28th. Then a long piece by Christopher Booker in the Daily Mail on 30th April described the “remarkable” research “lucidly and humanly presented by Miss Coleman” (Booker, 1985, para.11). Another skeptic of establishment positions, Booker was supportive of Coleman’s ideas as they reinforced his own opinions stated in a BBC (1979) documentary *City of Towers*, that huge concrete housing estates were “the greatest social disaster in Britain since the war” (ibid., para.3). Booker’s main thrust and final critical point however, was a warning against the dangers of central bureaucracy (particularly the DoE), who discounted what he saw as

“irrefutable conclusions”; ignoring criticisms of their policies or actions. The Daily Mail article resulted in a flurry of media activity. Macaskill had immense confidence in Coleman’s ability to put her case, to weather the interviews and to “sail through it all”. She describes Coleman as their “secret weapon” in publicizing the book describing her as “absolutely doughty”, certain in her facts, with a “mass of thorough observation” to combat the arguments against her. Her publishers would have been daunted if Coleman had not been “so fearless” (Interview Macaskill, 2013). Their cuttings archive shows the press coverage was extensive, with 98 pieces alone listed in the first nine months post publication and many more subsequently (Macaskill, 1986). Interviews and reviews appeared in disparate national and international journals; from *The Times Higher Education Supplement*, *The Spectator*, *New Society*, *The Glasgow Herald*, *The Australian Adelaide Review*, *Cosmopolitan*, *The Lady*, *Good Housekeeping*, to *The Field*. Some of this can be explained by the media’s tendency to recycle and magnify interest in a marketable commodity, but there was widespread interest and demand for a quote from the geographer Alice Coleman.

There was also competition across other broadcast media. Three Radio Four programmes, *World at One*, *Today* and *Woman’s Hour* wanted to interview Coleman but each demanded exclusivity. Coleman appeared on *Women’s Hour*. There was equal rivalry in the contest for television news coverage (Macaskill, 1985). Thames Television News filmed a first report, then the BBC planned to broadcast a debate between Anne Power⁴⁹ and Alice Coleman on *Newsnight* on the day of publication. During the week preceding publication, the number of newspaper articles increased and Breakfast Time TV as well as TV-AM impatiently requested interviews (Interview Macaskill, 2013). The paperback edition of *Utopia on Trial* was an immediate commercial success, with a reprint within three months. The revised edition of *Utopia on Trial*, published in 1990, book-ended the three year lifespan of Hilary Shipman Ltd as their first and last book, but is the only publication that they continue to publish (Interview Macaskill, 2013).

⁴⁹ Anne Power submitted her PhD thesis to the LSE just two months later in July 1985. In it she refers to both Newman and Coleman, citing Coleman’s (1984) paper *Trouble in Utopia: Design Influences in Blocks of Flats* and including *Utopia on Trial* in a couple of footnotes and once in the main text.

5.2 Reactions to *Utopia on Trial*

5.2.1 Politically balanced press, but suspicion from the professions

The mainstream press of all political persuasions was enthusiastic. Even Martin Pawley, the architectural critic of the Guardian, not an obvious supporter of the free market beliefs expressed, gave the book a balanced reading, gently chiding Coleman for ignoring the impact of the sale of desirable council houses and extensive cuts in public housing expenditure on the estates that she'd studied (Pawley, 1985). The wider media coverage continued, with an ITV *World in Action* programme called *Designed for Living* broadcast in November 1985 (Building Design, 1985b) discussing *Utopia on Trial* and the growing popularity of community architecture, showing Coleman and the community Architect John Thompson⁵⁰ walking around Lea View Estate in Hackney (Interview Coleman, 2013).

Coleman undertook a round of book signings promoting *Utopia on Trial*, including at The Alternative Bookshop, Covent Garden shortly before its closure in 1985. Coleman was photographed with Chris Tame, director of the free market civil liberties think-tank, the Libertarian Alliance.

Figure 5.1 Alice Coleman's Libertarian Alliance book signing



© Alternative Bookshop's
Broadsheet 1985

A review of *Utopia on Trial* in the Alternative Bookshop's Broadsheet (1985) makes their appreciation of Coleman's neo-liberal political position very clear. Echoing Coleman's views

⁵⁰ John Thompson then Architect / Director at Hunt Thompson Associates.

on modernist architecture, the broadsheet characterises the Modern movement as “not merely similar to Socialism, but different faces of the same collectivist catastrophe” (ibid., p.1).

Comparing Coleman to Jane Jacobs, who they describe as “no party line, classic liberal or libertarian, more a lady of the soft centre”, praising Jacobs’ (1961) classic *The Death and Life of Great American Cities* the review continues;

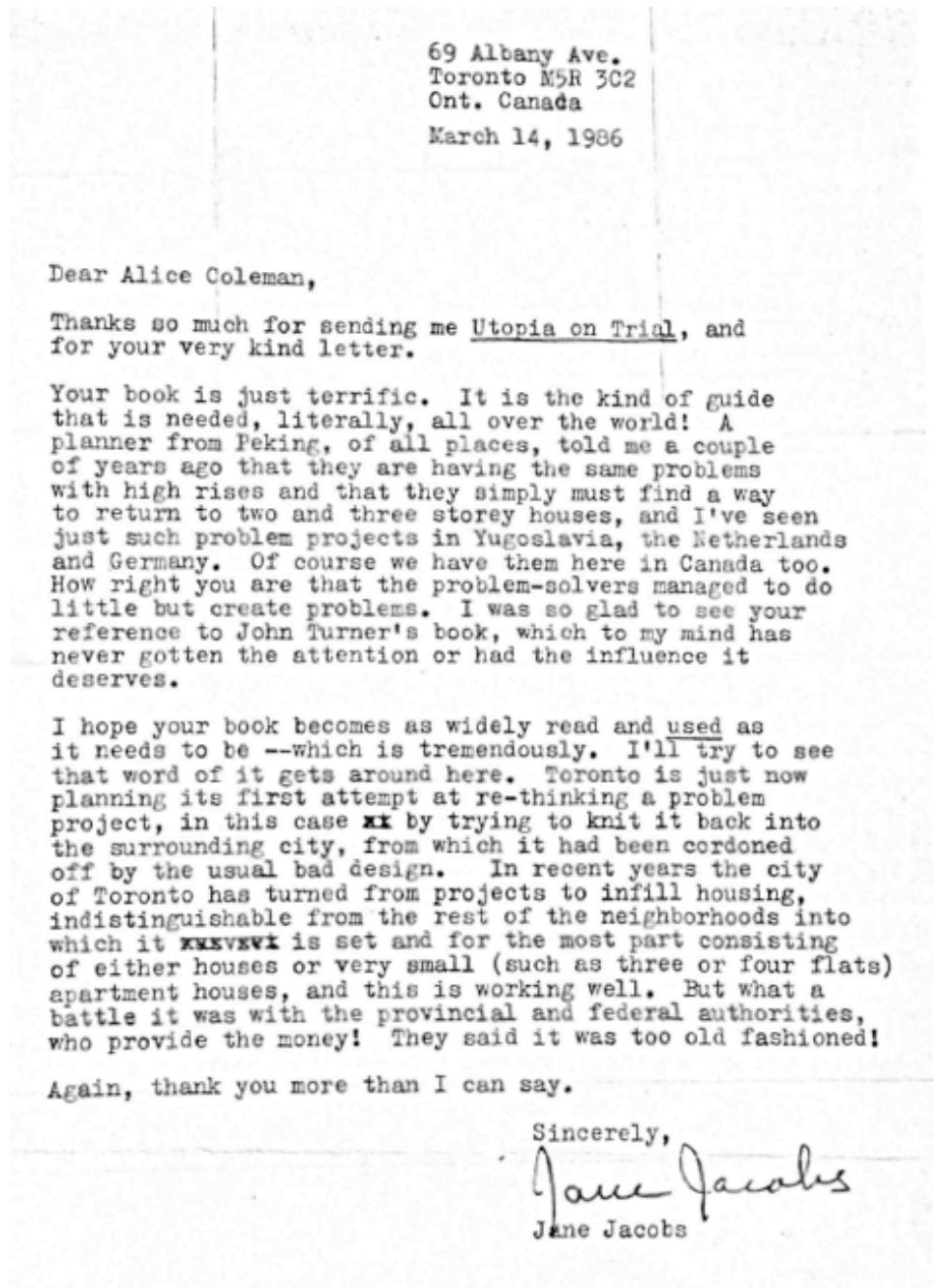
“It is hard to think of a book that has done more good and less harm, so for us Britains to say that Alice Coleman may be our Jane Jacobs is the highest praise there is” (ibid., p.1).

Coleman had in fact sent a copy of *Utopia on Trial* to Jane Jacobs in Canada and received a letter of enthusiastic praise in return:

“Your book is just terrific. It is the kind of guide that is needed, literally, all over the world! ... I hope your book becomes widely read and used as it needs to be – which is tremendously. I’ll try to see that word of it gets around here” (Jacobs, 1986, p.1).

Here being Toronto where, as Jacobs continued, a problem housing project was successfully being replaced with small-scale infill houses or small apartment blocks. Jacobs concluded her letter with a complaint over battling the funding authorities over what they felt was an out-moded approach. Accusations that Coleman’s work was similarly old fashioned and insufficiently modern were to reappear.

Figure 5.2 Letter from Jane Jacobs to Alice Coleman



The architectural press initially followed the national newspapers' lead promoting *Utopia on Trial*, with several articles authored by Coleman. A four-page spread in the most read architectural weekly broadsheet, *Building Design (BD)* (Coleman, 1985b) was followed by an extract of the chapter on the Mozart estate in the monthly RIBA journal (Coleman, 1985c). However, in contrast to how Coleman was feted in the mainstream press, as with Newman,

the response in architectural and housing publications was less warm, with the professions annoyed by the temerity of a geographer advising them on how to rectify their designs. There were mentions of *Utopia on Trial* in the architecture and planning press, becoming more critical throughout the autumn of 1985 (Armstrong, 1985; Building Design, 1985a; 1985c). A report on Westminster Council's plans to implement Coleman's recommendations on the Mozart estate antagonistically described Coleman as "arch-critic of housing estate design and heroine of the current municipal war against architects" (Architect's Journal, 1985a, p.8). A review of *Utopia on Trial* titled *Polemic with statistics* appeared in BD in October 1985, claiming that Coleman's research and recommendations were so lacking in credibility that they created hostility to her cause and obscured the important discussion of how to improve estates (Ash, 1985). By the time that Coleman presented her research at the RIBA in January 1986 the architectural profession's response was openly hostile. In an article titled *Alice in Blunderland* Coleman was sarcastically described as an urban geographer "radiating old-fashioned common sense" (Gorst, 1986, p.2), implying that she had little understanding of contemporary architectural thought. The report of the lecture in *The Architects' Journal (AJ)* (1986a) describes the audience as "largely skeptical" with Coleman remaining steadfast against challenges from the floor, when exceptions to her rules on walkways, large blocks, or confused space were cited from "every corner of the hall" (ibid., p.25). In response to Coleman's lecture, Byron Mikellides, an environmental psychologist at Oxford Polytechnic, raised the concern that social deprivation and poverty were stronger explanatory factors for patterns of behaviour on certain estates. Both articles derisively quote Coleman as irritably responding to the idea that socio-economic factors were more relevant. "Poverty and unemployment' she almost shouted 'are *not* as strong an influence on behaviour as design'" (Gorst, 1986, p.2; Architects' Journal, 1986a).

One explanation for Coleman's lack of popularity amongst architects was that her analysis was myopically founded on her dislike (and mis-understanding) of Modernism as a specific architectural style. Her sweeping anti-Modernist judgments conflate crimes such as drug taking onto design to an extent that seems ridiculous;

“The defective designs are all fundamental features of the architectural fashion known as the Modern Movement and since its introduction into Britain the crime rate has multiplied enormously, with particular concentration in the worst designed estates. For examples, drug problems were rare in the 1980s but now are commonplace where certain design and layout features exist“ (Coleman and Cross, 1995, pp.146-147).

Coleman was promoting what architects perceived as outmoded ideas of housing design and historically discredited deterministic views. Yet confusingly her rejection not just of modernism as a style, but modernism as a formative concept and her call to return to the social values of the past as well as the housing designs of the past, was being presented as a symbol of Thatcher’s revolutionary ideas for housing. The effects of this overt political association on the popularity (or not) of Coleman’s ideas with certain groups are explored below.

5.2.2 Academics unpicking the “science” of Coleman’s work.

As much as Coleman’s environmental determinism and anti-Modernism antagonized the architectural profession, her conviction that design was more significant than any other explanatory factors was equally disparaged by academic colleagues. In addition the academic critiques identified technical weaknesses: methodological and statistical failings and ignoring social and economic variables. Her research findings were uninformed by contemporary housing and policy context to an extent that her practical recommendations lacked plausibility.

Coleman’s lack of statistical sophistication and failure to control for background variables was widely criticized (Hillier, 1986a; Smith, 1986; Halpern, 1995). Repeating his earlier (1973) dismantling of Newman’s statistical methods, Bill Hillier (1986a) unpicked Coleman’s use of correlation and trend lines in his article *City of Alice's Dreams*:

“Her method of quantification of malaise is flawed, her correlations largely illusory and her attempt to test for social factors desultory” (ibid, p.39).

Figure 5.3 Bill Hillier



Hillier's piece was one of a series of articles in *The Architectural Journal (AJ)* professing a balanced examination of Coleman's theories⁵¹. Brian Anson's⁵² (1986) contribution derided the "pseudo-scientific edifice" assembled by environmental determinists of whom Coleman was chief protagonist. Both speculate on what a 'Colemanised' estate might be like, concerned that 'territorialising' blocks would result in greater segregation without addressing the root causes of the decline in inner-city housing. They wished to expose the failings in Coleman's methods as a counterbalance to the extensive publicity *Utopia on Trial* had received and the resultant risks of implementation based on false arguments. Coleman's (1986b) reply to their criticisms was detailed, addressing each statistical point and in return rebutting Hillier's own calculations. Coleman concluded by brushing off the vociferous criticisms as inaccurate "academic games", still confident in the warm welcome her work had received from frontline housing staff. However a fourth article in the *AJ* from a London

⁵¹ The articles illustrate that *Utopia on Trial* had rapidly become ubiquitous since publication, yet by promoting these 'very personal views' the *AJ* was able to reinforce the views of Coleman's critics while appearing to be neutral. "No conference, seminar or meeting at No 10 Downing Street on 'crime and design' has been quite the same since the publication of Alice Coleman's book *Utopia on Trial*, which has been instrumental in bringing the subject to the forefront of ministerial attention. Critics of her research findings and proposals are regularly silenced by Coleman's claims on the scientific quality of her research work. Bill Hillier, reader in architecture at the Bartlett, puts Coleman's science on trial" (Hillier, 1986, p.39).

⁵² Brian Anson, former Greater London Council architect, then community activist and planning advisor for Planning Aid.

Borough of Hackney Housing official in turn responding to Coleman, showed that many of this workforce remained unconvinced that the proposed remedies could resolve the complex housing and social problems they encountered (Heaven, 1986).

Coleman's geographical research methods seemed outdated and crude (Ash, 1985) when her simplistic visual coding/mapping of the space around blocks were compared to Hillier's detailed spatial analysis techniques. Coleman's lack of familiarity with housing management regimes was shown through her failure to consider either who might be responsible for dropping the litter, or the caretaking processes expected to tidy up her indicators of social malaise. She counted only the presence of litter, but not where it occurred; and failed to consider the incidence of litter per dwelling, or per number of people using a space, or by child density. Marion Roberts saw Coleman's indicators not as a "barometer of breakdown in society" but "as a breakdown in municipal housekeeping" (Roberts, 1988, p.123). Alison Ravetz (1986) argued that beneath the "apparently clear and 'scientific' surface" (ibid p. 279) Coleman was vague about essential issues: the morphology of the blocks surveyed, how the form of houses might differ as much as flats, construction defects, the variations in adjacent streets or the relationship of the estate to the wider neighbourhood. This vagueness extended to practical design matters and the mechanics of housing policy. Coleman's research condemned design features that architects were no longer incorporating in the homes and estates they were now building and even her complaints against the Housing Development Directorate at the DoE were out of date as it had been disbanded in 1982 (Ash, 1985).

As an academic specializing in social policy, Paul Spicker (1987) called for caution in deriving any policy initiatives based on Coleman's interpretation of her data. Spicker's detailed paper pointed out the multiple statistical problems with Coleman's methods, for example her design variables not being independent and failing to control for the interactive influence of factors. He argued that the presence of children or pensioners might explain the outcomes as much as design. There were other crucial omissions: overlooking the impact of tenure, housing allocation policy, the sale of council properties or increasing numbers of

owner-occupiers on estates. He rejected two of her recommendations (build no more flats and abandon recent design layouts) as unsupported by her evidence and argued that the third recommendation for design modifications would be a waste of resources that could more usefully be allocated to alleviating tenants' poverty:

“Coleman’s dismissal of the influence of poverty is based on an unsound method and an inadequate theoretical analysis. Her recommendations for policy are in consequence a diversion from the real needs and issues” (Spicker, 1987, p.283).

This warning to policy-makers looking for easily applied solutions and a ready made programme to implement is repeated by Ravetz:

“Coleman offers, instead, a ‘scientific proof’ of causal links between design and deviant behaviours with a consequent and foolproof programme for design remedy. It is understandable that to a fast reader, particularly if he or she is a distracted official or committee member looking for solutions to problem estates, the book should seem a model of clarity. But it is in fact a classic instance of a study that is not what it seems and its head on, pragmatic approach and abundance of figures and graphs actually mask a considerable degree of confusion” (Ravetz, 1988, p.155).

Similarly the housing geographer Susan Smith, having dismantled Coleman’s scientific tests and the accuracy of her ‘fair and unbiased’ evidence concluded that there were risks in the oversimplified solutions presented:

“She has done nothing to clarify our understanding of relationships between dwelling design and the quality of life, and her recommendations are dangerous in offering politicians and planners an over-simplistic, yet superficially appealing, panacea for the complex social problems of urban communities in an ailing economy” (Smith, 1986, p.246).

5.2.3 A mixed response within Government

The appeal to Government looking for such a panacea is obvious, yet an article describing Coleman as *persona non grata* at the DoE (Bar-Hillel, 1986b) documented the Department’s ambivalence to her views. Unsurprisingly considering her comments about them in *Utopia on Trial*, Coleman’s relationship with the DoE civil servants was not constructive.

“She had been so rude about the Social Research Division and Housing Development Directorate. They were at loggerheads. Battle lines were drawn” (Interview Harvey, 2009).

This distrust progressed up the civil service. After a “dusty response from ministers” when *Utopia on Trial* appeared (Bar-Hillel, 1986b), a tentative acceptance at the higher-level was hastened by the riots in Brixton and Broadwater Farm during the autumn of 1985. These disturbances prompted a conference on crime prevention, organized by the Institute of Housing in March 1986 and reported in *New Society*, *The Guardian* as well as the construction press (Ardill, 1986; *Building Design*, 1986b; *New Society*, 1986). Coleman ran a workshop at the conference and Sir George Young, then Junior Environment Minister, was the keynote speaker. Young reiterated that the Urban Housing Renewal Unit at the DoE did not accept that signs of social breakdown such as scattered rubbish, graffiti and vandalism had a simple causal relationship with design. For Coleman’s recommendations to have practical benefit they needed to be accompanied by better management (Ardill, 1986).

John Harvey, Head of the Estate Action Team at the DoE, recalled the depth of the bitterness against Coleman.

“You couldn't mention the name Alice Coleman to any of them because she was anathema. I couldn't understand this. I came in one day and said, 'I was at a conference and I met this woman Alice Coleman'. And they said 'What!' And I'd told her what we were doing, and they said 'You shouldn't have said a word to her'. 'What's going on?' They said 'You've read the book?' and I said 'No what book?' '*Utopia on Trial*'. So I read it and I thought this was interesting stuff. Then they said 'Have you read the PEP research? No? Read that DoE report'. It was the Mike Burbidge⁵³ commission, which says there were five factors at play in rundown estates. One was the location, one was design, one was the economic profile of people, one was the remote unresponsive management and finally, resident involvement” (Interview Harvey, 2009).

Harvey’s surprise at the personal hostility and his openness to Coleman’s ideas was not shared by his colleagues. Coleman (1986a) complained openly in the *AJ* and planning journals of the opposition that her findings had met within the department, with the *AJ* reporting there was greater interest in Coleman’s work within the Home Office than the DoE (Heck, 1987).

⁵³ Mike Burbidge, then lead housing researcher Housing Development Directorate at the DoE.

Other government organisations took greater notice of her findings. In March 1986 the Audit Commission published a report *Managing the Crisis in Council Housing* (1986). The report justified the use of the overworked term 'crisis' by referring to the large proportion of substandard council-owned dwellings in England. Blaming design faults such as flat roofs, deck access, non-traditional construction methods, even 'the wrong type of housing', it attributed the high numbers of 'difficult to let' estates (estimated by the Commission as up to 30% of some Local Authorities' stock) to these failings. The list continued with more familiar failings: shortage of rental housing, increasing homelessness, unrealistic rent pricing and weak management control.

The report criticised design standards that favoured speed and quantity before quality, particularly combined with technical problems arising from system building. But the Commission's complaints extended beyond the impact on health caused by structural defects or inadequate heating systems to more social problems:

"The high-rise, deck access, 'concrete jungle' estates have seemingly bred crime, vandalism and loneliness in many authorities" (Audit Commission, 1986, p.34).

The report called on housing authorities to "be aware of the lessons to be drawn from the design mistakes of the past" (ibid., p.34) and to refurbish run-down estates, to correct (or at least to avoid) these historic errors in future. It directly recommended Coleman's findings, summarizing her refurbishment principles and reprinting the graph of Design Disadvantage score against types of crime from *Utopia on Trial*. In an example of the *elective affinity model* of research (Young, Ashbey et al., 2002) successfully influencing policy by reinforcing policy makers' existing beliefs, the report concluded with a statement that Coleman's recommendations corresponded closely to those reached by experienced members of the Commission. The report proposed:

"that general application of these recommendations will benefit both tenants and ratepayers. At minimum, *Utopia on Trial* should be read by all concerned with the management of local housing; and all housing authorities should submit all improvement schemes to careful evaluation in light of these well researched recommendations" (ibid., 1986, p.37).

This statement proved to be the highpoint of governmental commendation of Coleman's version of defensible space principles.

5.3 The 1987 *Rehumanizing Housing* conference

5.3.1 Housing as an intractable problem and the fight back against determinism

In February 1987, a group of 75 researchers, housing managers, architects, town planners and community activists gathered in London for a conference titled *Rehumanizing Housing*. They aimed to fundamentally reconsider housing practice and research. But while the conference theme was apparently improving housing research, there was in fact, a lightly hidden critical undercurrent. Nearly every paper either referred directly to Coleman, her writing or to other judgmental articles such as Hillier's (1986a) *City of Alice's Dreams*. So the conference's significance in academic terms should be offset against its role as a vehicle to focus criticisms of Coleman (Lowenfeld, 2008). One attendee, the researcher Ian Cooper, recalls the conference as an event unlike others he participated in. Despite having done little housing research, he attended it because of the "constellation of people who were gathered together" (Interview Cooper, 2013). Yet it was not a mainstream event, independent of academic, government or private sector sponsorship. Even its location in the Whitechapel Art Gallery referred to a legacy of alternative intellectual thinking and education, emphasizing the conference organizers' countervailing, independent view.

The conference was framed as a new look at the contemporary crisis in local authority inner-city housing stock. One theme was the intransigent problems that inundated housing. Poor housing was associated with a host of issues: poor health, vandalism, homelessness, even civil unrest. These were countered by a long list of housing initiatives, including 'decentralized, locally controlled management regimes', 'resident involvement', 'community architecture', 'participatory design' or better economic opportunities (Markus, 1988, p.2). But the complexity, magnitude and unyieldingness of the task seemed daunting and a considerable question hanging over the debate was the possibility of definitive 'solutions' at all. Cooper characterized several of the authors as "non-resolutionists" in that they

considered these problems were to be managed, not to be resolved or solved (Interview Cooper, 2013). For example Mike Jenks' paper *Housing problems and the dangers of certainty* expounded on the fallacy of "single or simple or once-and-for-all solutions" (Jenks, 1988).

One of the conference conveners, Tom Woolley located the conference in the front line of the struggle against environmental behaviorism. Similar debates within the social sciences, particularly between sociology and architecture, had been common during the 1970s and 1980s where most architecture schools had employed social scientists in their teaching staff, but by the mid 1980s these embedded posts had declined rapidly. Recalling the strong body of intellectual effort gathered to 'debunk' the architectural determinism movement, when interviewed Woolley sighed, continuing "and Alice Coleman then comes along and just revives it" (Interview Woolley, 2013). Cooper used even more militaristic terms for this struggle, describing the "rear guard action being made against determinism" and theorists still "fighting the same battles" a decade after Newman (Interview Cooper, 2013). Cooper identified the conference as a "point of flux", a period where the world within which housing researchers were operating was altering, where the work most of them wanted to do was becoming less fashionable and less favoured by funding. Woolley puts this more strongly:

"The line-up here is essentially the last-ditch stand of people working within architecture education trying to wave the flag of responsible social sciences as it applies to architecture. And after that we never showed that character again!" (Interview Woolley, 2013).

So the conference was a reaction both against the revival of architectural determinism as personified by Coleman and her belief in simplistic one-off design interventions as a long-term solution. Cooper also articulated the opportunistic way that Coleman and her work was used to signify a wider threat. The conference:

"became a crystallisation moment because it was so easy to demonise Alice. You could see here a kind of coherence, of people coming together around a demonised figure. In that sense, she was a kind of representative totem. We recognised that the political landscape was changing in ways we didn't like, but that was very diffuse. But she was a concretised representation of everything that we thought was going wrong. And not only that, she was patently wrong and I think— this is a very large claim — we [the conveners of the *Rehumanizing Housing*

conference] thought that if only we could point out how wrong she was, that there might be some victory, that this might reverse this underlying malaise that we could see developing - the rise of the right" (Interview Cooper, 2013).

Woolley contended that architects' criticism was (and still is) too often personality based and fails to emerge beyond a simplistic oppositional liking or loathing, with limited reflection. This conference aimed for a more academic and reasoned level of debate. To facilitate this, papers were circulated beforehand and rather than formal presentations, speakers and participants discussed them together (Interview Woolley, 2013). However despite this attempt at academic, depersonalized critique, most papers were extremely disparaging of Coleman's politics, not just her research. Several of the authors, Anson (1986), Hillier (1986a; 1986b) and Ravetz (1986) had already published highly critical articles. Nevertheless, this perhaps supports their aspiration for objectivity, as any overt intention for the character assassination of an unpopular academic would have been undermined by circulating papers in advance. Discussions were recorded and while the tapes are no longer available, they were used to revise the fourteen papers gathered together into an academic book in 1988.

The published papers (Teymur et al., 1988) covered diverse topics: housing space standards, practical and formal architectural issues, community-based interventions and housing policy. Woolley described the speakers as an "unholy alliance" of thought and experience. While all of the papers used practical examples to strengthen the connection between practice and reflection, the fifteen authors' backgrounds varied. The majority claimed academic affiliation as an umbrella term⁵⁴; yet there was only partial attempt to move beyond the academic/epistemological community. Only four authors considered themselves practicing architects, one working for a local authority Direct Labour Organisation. Contributors took aspects of Coleman's argument and used them to explore their own beliefs. Malpass (1988) and Jenks (1988) discussed the return to conservative Victorian values and the free market via suburban housing designs, Roberts (1988) the

⁵⁴ These academic roles varied from emeritus professor, chair of architecture, senior lecturers, to an early career academic working as a local authority research officer.

negative consequences of failures in ‘municipal housekeeping’. Others were more openly critical of Coleman. Markus (1988) cites Newman’s and Coleman’s work as examples of ideological, fashionable, yet empirically flawed, research studies and the essential roles of critique in testing the rigour of housing research. Hiller’s (1988) seminal paper *Against Enclosure*, uses axial mapping of movement through the Marquess Estate in Islington, tracking the location of building entrances and burglaries in an alternative model to positive territoriality; proposing that the more segregated a home, the more vulnerable to crime it is. Ravetz’s (1988) detailed critique of Coleman’s statistical methods noted her lack of attention to tenure and historical influence in UK housing. The book concludes with Lipman and Harris’ (1988) openly scathing attack on Coleman, *Dystopian aesthetics – a refusal from ‘nowhere’*.

5.3.2 Coleman’s response to the conference

One striking impression from the book is the extent that Coleman is present through her absence. She did not attend the conference and had no opportunity to make her case, defending her views. This resulted in a less balanced debate than the earlier *Newsnight* dispute with Anne Power, or at lectures and Cooper recalls:

“there were those who spoke from her position because there was really overt antagonism, which isn’t so clear from the book” (Interview Cooper, 2013).

Woolley confirmed that while Coleman wasn’t at the event her supporters were:

“somebody who turned up at the conference and really had a go at us on the basis that Alice Coleman was next to Jesus and who were we to dare to criticise such a wonderful person? We definitely felt like we were putting our heads above the parapet” (Interview Woolley, 2013).

When the book was published, the *AJ* asked both Anne Power and Alice Coleman to respond. Again the pairing was set up as adversarial, expecting two opposing views. Power’s review supported the general sentiment of the book and conference, that policies and practices needed to change to achieve more humane housing. Greater influence should be given to the powerless, alienated and ignored individuals living in social housing: “Rented housing to suit the customers rather than the politicians, professionals and bureaucrats

whose needs and views tend to dominate” (Power, 1986, p.30). Tellingly Power’s housing occupiers are no longer council tenants, or even residents, but ‘customers’, with an unacknowledged reflection of Coleman’s belief in the oppressive impacts of bureaucratic domination.

Despite a shared distrust of top-down Government interventions, Power considered *Rehumanising Housing* as presenting a powerful case for rejecting the link between design and social problems. She stressed the essential role of good management, citing the multifaceted role of caretakers, not just as cleaners, but undertaking the informal repair and policing responsibilities on estates. The tone of Power’s piece was measured, warning against “carping antagonism, blind certainties and above all expensive design prescriptions” (ibid., p.30). But she was unable to resist a veiled reference to Coleman’s research methods. Power concluded that design modification had “gladiator-like protagonists” who were not providing suitably holistic answers; and until this was understood researchers would “continue to generate research grants to count KitKat and crisp wrappings” (ibid, pp.30-31).

Figure 5.4 Anne Power



Anne Power circa 1999 © JRF

More combatively, Coleman’s response launched into a point-by-point, page-by-page rebuttal of the criticisms directed at her. She countered each of the points against her, with varying degrees of ridicule. Dismissing Lipman and Harris’ paper as “42 abusive items including self-contradictory charges of positivism and negativism, or naivety and ingenuousness found compatible with ruthless manipulation” (1986b, p.31), she accuses her critics of lacking intellectual thoroughness. Her assailants’ thinking is “emotive”, Roberts

“seems confused”. Hillier is accused not just of “fabricating charges” about her aims, but devising the “bogus arithmetic” and Ravetz of promoting false assumptions about Coleman’s data. This is overly harsh as Ravetz (1988) in fact concludes her careful statistical criticism of Coleman’s methods with the measured suggestion that the truth probably lies somewhere between the extremes of data interpretation.

Coleman accused the book’s editors of being blinkered by their political views, unjustly seeing her work as an attack on socialism. She criticised the book as myopic “suffering from being too much a product of like minds and not the wider debate it claims to be.” (Coleman, 1986b, p.30) Following Power’s more general review, her brusque replies read more as an angry personal spat than a balanced academic argument. This must have thrilled the *AJ*’s publishers and Macaskill who welcomed the disputatious nature of the reviews and articles as good publicity (Interview Macaskill, 2013).

5.3.3 More correspondence than variance

Interestingly overlooked at the conference was how ambiguously defined concepts, such as defensible space, provided a springboard for individuals’ own interpretation. Comparing Newman’s, Coleman’s, Power’s and even Hillier’s practical advice for the design of mass housing, many of their individual recommendations are less disparate than the vociferous discussion and the antagonistic opposition would lead one to expect (See Appendix D). There *are* fundamental differences in their theorizing of how space is perceived. For example Hillier’s serious, substantiated concerns over isolated estates disconnected from the street layout (Hillier, 1988) leads to his and Power’s opposition to Coleman’s recommendation of separation of blocks from their surroundings and enclosed spaces. Power attributed social ghettoisation to this spatial segregation (Power, 1998) and in *Against Enclosure* Hillier argued that locally enclosed urban spaces can encourage a greater vulnerability to crime, “even though we commonly think of them as ‘defensible’” (Hillier, 1988, p.69). However as a basic list of design criteria to be avoided many of the recommendations of the four theorists are not mutually exclusive, nor particularly novel. The knowledge that the scale and density of large blocks can overwhelm individuals, or that secluded areas should be avoided, have

long been part of designers' toolkits. Hillier's advice to avoid spaces too small to have entrances paralleled Coleman's call for individual front doors to all ground floor homes. Similarly to Newman, Coleman's principles supported Power's suggestion that too many high level corridors and landings dilute the numbers of people at ground level, reducing social contact.

It was the certainty with which each of these academics promoted their position as unconditional absolutes that was appealing to policy-makers searching for reliable evidence on 'what works'. If this evidence happens to be in tune with the prevailing political direction, all the better:

“Positivism and certainties appear to characterize many conflicting claims. When these certainties coincide with political belief and dogma, as happened to a large degree in the 1980s, the brew is a potent one for public sector housing” (Jenks, 1988, p.53).

So a critical constraint on the transfer of policies and ideas is their fit to the political direction of the time. Yet for those communities of practice implementing the policies in a practical attempt to improve housing, this political fit to funders or other Local Government regimes was more significant than any theoretical inconsistencies of the concepts. This is explored further in Chapters Six and Eight.

The impermanence of apparently vitriolic academic disagreements is illustrated by looking forward a decade. In November 1998 Bill Hillier presented a paper on cul-de-sacs and crime to a Home Office conference (Hillier and Shu, 2000). This was reported in *Building Design* (1998) with an editorial titled *Coleman can't cut the mustard* contradicting the “long-fashionable theories of defensible space” (ibid., p.7). The article led to a fiery exchange of letters from readers (Bar-Hillel, 1998; Randall, 1998; Scott, 1998), one calling for an immediate apology to Alice Coleman for mis-representing her research as pro-cul-de-sac. This debate continued in *The Guardian* (Glancy, 1998) until Hillier, again interviewed in *BD*, opined that Coleman *had* been influenced by SpaceSyntax, but that the details of the dispute had moved on. Coleman, he claimed:

“said Oscar Newman was right inside the housing estates and we [SpaceSyntax] were right in the streets. It’s a long time since we had any disagreements with Alice Coleman” (Hillier reported in *BD*, 1998, p.6)⁵⁵.

Hillier had earlier stated his “great sympathy for what she is trying to say with her evidence”, his concern being that no conclusion could be drawn from her work because of its methodological flaws (Hillier, 1986b, p.14), and now openly acknowledged their convergence of opinions as the evidence for and against defensible space was explored further.

5.4 Catching Margaret Thatcher’s eye

5.4.1 Dealing with housing of last resort

During the 1980s perceptions of council housing were polarized by Margaret Thatcher’s ‘right to buy’ scheme, conceived just months after her election and resulting in the sale of over 1.34 million council homes in the first decade after it was enacted in October 1980 (CIH, 2013). Proving extremely popular amongst voters, the initiative rapidly siphoned off the more desirable council properties (Meek, 2014). Yet even with substantial discounts, homes on unpopular estates were hard to sell, influenced by an estate’s poor reputation, or high levels of crime and vandalism. Simultaneously the press covered stories of deprived, unstable populations living in neglected, poorly maintained inner-city estates and dramatized housing related events such as the Broadwater Farm riots. This concentration on the extremes (the best and the worst of social housing) aided the decline in the perceptions of council run housing, reinforcing a simplistic division of housing into ‘bad’ public sector and ‘good’ private ownership (Malpass, 1988; Heaven, 1986). Bevan’s post war ambition that council housing should be of a calibre to be the housing choice for all, had declined to a situation where the public housing sector had become the preserve of ‘problem’ families. Local authorities were left with a housing stock tainted by the view that council housing was for those with no other

⁵⁵ Bill Hillier described his initial meeting with Alice Coleman at KCL discussing her design disadvantage survey data as convivial and he was pleased to be mentioned in *Utopia on Trial*. He assured me that any apparent animosity was not personal and that he “only did a hatchet job because he’d been asked to by the DoE”. In fact, after reading *Against Enclosure* (1987), Coleman had called Hillier up agreeing with every word. Hillier considered them now the “best of friends” (Hillier, Personal communication, 2006)

option, or those too poor to buy out of it. Solutions were needed to dramatically transform unpopular estates, if only to maintain sufficient desirable, sellable properties for the Prime Minister's flagship 'right to buy' policy.

Following the mixed governmental reception of *Utopia on Trial*, Coleman proactively set out to attract the attention of those in sufficiently powerful positions to promote her research. Macaskill recalled Coleman indiscriminately contacting all the political parties and was prepared to talk to anyone who she felt might provide support (Interview Macaskill, 2013). Coleman (1986b) recalled that other than a conversation with Jeff Rooker, then shadow housing minister, Labour were indifferent to her advances. But as *Utopia on Trial* became widely known Coleman was asked to speak at several party conferences including the Green Party and the Social and Liberal Democrats (Interview Coleman, 2013). In 1986 Coleman spoke to a fringe group at the Conservative Party's Spring Conference in Bournemouth. This session was attended by Hartley Booth, advisor to Margaret Thatcher, who was sufficiently impressed by Coleman to buy a copy of her book. She was also invited for a short meeting with Sir Keith Joseph, then Secretary of State for Education and Science, where they discussed her crime graphs. Jacobs and Lees (2013) report that Sir Joseph was clearly impressed with her and as well as 'alerting' the cabinet to her work, he was reported in the *Geographical Magazine* stating how much he admired the work of both Alice Coleman and Peter Hall⁵⁶ (Anon, 1985a).

Coleman wrote directly to Margaret Thatcher on 18 December 1987, asking for a meeting. Her timing was apt, as during 1987 the Prime Minister had invited housing experts to Downing Street to discuss crime prevention and housing design (Heck, 1987). In January 1988, Coleman visited Downing Street for a half hour meeting with Thatcher and two advisors, one of whom was William Waldegrave (briefly Minister for Housing and Planning between 1987-1988). Jacobs and Lees (2013) describe how successful this encounter was. Coleman was very impressed with Thatcher's business-like grasp of the material under

⁵⁶ Sir Peter Hall, planning academic at UCL.

discussion (Guest, 1990). Thatcher was well briefed on *Utopia on Trial* in that she was asking for clarification rather than instruction. “She [Thatcher] had read the book, she knew what it was about and she was asking supplementary questions” (Interview Coleman 2008 quoted in Jacobs and Lees, 2013, p.1574). The two women made an immediate connection, grounded as Jacobs and Lees (2013) point out, on their shared belief in scientific facts as the basis for policy. Jacobs and Lees identify the importance of Coleman sketching a graph in the air to illustrate her argument as a persuasive moment. Thatcher grasped the intent immediately and convinced by Coleman’s explanation, asked her what further help she needed. Coleman asked for money to support five years of practical trials into design improvement. Thatcher agreed on the spot, asking when Coleman could leave her post at King’s College London and start as advisor either at the Home Office or DoE (ibid., 2013). Coleman felt that finally her research was prompting action. “Two days later I got a letter from her, telling me to see Nicholas Ridley, the Environment Secretary. From then on it was in the bag, just a matter of waiting” (Guest, 1990, p.20).

However this positive response from Margaret Thatcher was not the ‘open sesame’ that it seemed. Thatcher may have recognised that her imposition of Coleman and her ideas in a top-down way was likely to be unpopular and contrary to the DoE’s established routes for deriving and testing research questions.

“I went further than the DoE in believing that the design of estates was critical to their success in reducing the amount of crime. I was a great admirer of the works of Professor Alice Coleman and I made her an advisor to the DoE, to their dismay” (Thatcher, 1993, p.605 in Jacobs and Lees, 2013, p.1575).

This high level endorsement ensured that authorization proceeded rapidly. John Harvey remembers the urgency for the DoE to act:

“I got a phone call one day from the Secretary of State’s office, ‘Oh Professor Alice Coleman is here with the Minister [Nicholas Ridley], can you come up?’ She was coming out from the Minister. ‘Thank you for coming in to see me. . . and John, you can take the Professor Coleman and explain to her how we’re going to run this....I’ll fill you in later. But just go run after her.’ Coleman said ‘Right, it’s been decided that I’m running this project, and I’ll need £150 million.’ So they had this plan and she [Mrs Thatcher] said ‘Alice Coleman needs the money because it’s such an important social experiment, we must test it and see if it works, it’s going

to have a huge impact and we've got to see if it works.' So she [Coleman] said 'How much does it cost to renovate an estate, say a typical 1000 dwelling estate?' 'Oh you know £10 million.' 'We need to have 10 of these.' So we're looking at £100 million or whatever. Figures plucked out of the air! So I was told to find £150 million for her and the idea was it would come out of the Estate Action budget" (Interview Harvey, 2009).

The Estate Action budget was then £350 million annually (Power, 1998) and so it is unsurprising that the £150 million was scaled down to a still substantial £50 million towards what became known as the DICE project. Housing Improvement Programme (HIP) allocations allowed Boroughs to borrow money from the Estates Action fund, in a form of credit allocation. This was not what Coleman had expected, as she'd hoped to have control over a capital sum, to allocate to architects and builders as she chose. Harvey had to explain the procedure to her.

"In the end, she said, 'If that's the best you can do. I think I'll complain to No 10 . . . reneging on the agreement.' I said I was trying to do things in the way it works, through the system. But eventually she agreed" (Interview Harvey, 2009).

David Riley, who managed the DICE project for the DoE reinforced the distrust that the civil servants had for ideas being foisted upon them.

"I don't know how she got access to these people, but she did. I think it was pertinent that it [DICE] would have been killed off had it come up the usual way. The evidence wasn't strong enough to warrant that level of investment. I think it was £80 million as I remember and that might have been scaled back from her original ambitions" (Interview Riley, 2011)

Paul Wiles⁵⁷, who was involved in assessing the DICE initiative also identified that in addition to the increased resentment and rancour within the department, such highly politicised support could result in unrealistic expectations.

"You might think it's wonderful if you catch the attention of somebody like Mrs. Thatcher. But actually what you do is create expectations that are almost impossible to fulfil. So what people were looking for from DICE was a reduction in crime that was probably not credible even if she'd been right, because she'd built this up as if this was going to solve the crime problem" (Interview Wiles, 2011).

⁵⁷ Paul Wiles, then Professor of Criminology at the University of Sheffield.

Both Wiles and Jenks complained of politicians “jumping to simple conclusions” (Jenks, 1988; Interview Wiles, 2011). The political drive for reliable, immediate, large-scale solutions to contemporary housing problems and the extent that this inevitable politicization distorted objective scientific or academic debate has been demonstrated by the route taken to obtain funding for DICE:

“I think the attraction for the Minister and Margaret Thatcher was that DICE was an universal remedy that would solve anything. Maybe with a touch of snake oil in that” (Interview Riley, 2011).

It is a crude political caricature that Ministers don’t care how or why an intervention works, as long as it is seen to make a positive difference. Yet these close to the workings of policy-making recognise the truth in Flyvbjerg’s observation that:

“analysis instead of acting as a foundation for intelligent policy making becomes a manipulated instrument of politics” (Flyvbjerg, 1998, p.35).

This acknowledges the misappropriation of evidence and analytical critiques, but also that initiatives require political alignment to gain practical traction. So having finally accessed funding through circuitous political routes, DICE was going to be judged not against Coleman’s objective scientific terms but the highly critical, distrustful expectations of civil servants within the DoE. The inevitability of politics shaping policy-making is well known (Edwards and Evans, 2011) but this chapter shows the extent that even mobilizing the concept of defensible space was highly politicised at personal, organizational as well as party political levels. Chapter Seven describes how the evaluation of the DICE initiative took on a similar political flavour.

5.4.2 Agents and mechanisms for transfer across networks

Chapter Two contained a diagram (Figure 2.3) of the overlapping/interconnected transfer mechanisms tracked during this research (see Appendix B). The empirical findings discussed suggest that while some transfer mechanisms could work alone, others needed to work as an assemblage, or required a second mechanism to activate them. So, for example, ideas contained in *Utopia on Trial* were widely and successfully propagated through the press and media, but to very different effect to the discussion of the same ideas at the

Rehumanizing Housing Conference where the book worked in combination with the gathered individual positions of the authors and participants. *Utopia on Trial* here acted as a catalyst for those at the conference enabling the dispersed practical and theoretical ideas about housing to coalesce around an idea of the New Right as a political threat to public housing provision. As Markus notes *Utopia on Trial* “turned out to be a useful peg upon which to hang a much wider debate about housing research” (Markus, 1988, p.11). The *Rehumanizing Housing* Conference was also an example of the text of *Utopia on Trial* acting as a substitute for Coleman. Her ‘anti-guru’ transfer agent presence was symbolically represented, the text acting as a ‘boundary object’ that passed between academic/epistemological and practitioner networks. Jacobs and Lees (2013) also categorize Coleman’s graphs of ‘abuses compared to design features’ as another form of ‘boundary object’, not only appearing as the persuasive transfer mechanisms in her meetings with Joseph and Thatcher, but used as iconic summaries of her research; at the meeting with the Metropolitan police, reprinted in the Audit Commission report, in press articles, even in the architectural press where inclusion of scientific illustrations are rare (Hillier, 1986b) and as lecture slides. At one RIBA lecture

“graph after graph was presented, each showing those lines rising to the right... houses on stilts, places that aren’t overlooked, the number of dwellings per block, the number of dwellings per entrance.... In all cases the graphs showed that the more factors there were, the more problems were found” (Gorst, 1986, p.2).

The apparent simplicity of these graphs was one of the key academic contentions laboriously unpicked in Hillier and Coleman’s extensive correspondence on what could be inferred from the steepness of trend lines, or interpreting the shapes of curves (Coleman, 1986c; Hillier, 1986b).

My analysis based on transfer mechanisms is a novel alternative explanation to more common discipline or role based models for why some elements of the concept transferred and others did not. The unexpected populist success of the book and resultant extensive media coverage exemplifies the press’ repetitive circulatory mechanisms that privilege contentious and interest-generating concepts to promote newspaper sales. It shows the

extent that this constructed media exercise acted to fossilize support for or against Coleman and polarized opinions about her study. It was possible to be aware of *Utopia on Trial* and to have formed strong opinions on it via the architectural press without actually having read the book.

Conclusion

This chapter has demonstrated that the spectrum of reactions (from enthusiastic to antagonistic) to the concept of defensible space as it embedded and spread within the UK was influenced as much by the mechanisms used to promote it as resonance of the ideas themselves. I have explored the range of transfer mechanisms used to mobilize the concept: book, academic papers, events where individual transfer agents introduced and positioned their version of the concept. The power of these individual encounters is illustrated through Coleman's persuasive meeting with the Prime Minister Margaret Thatcher, who in turn imposed their shared 'scientific' account of defensible space on the civil servants at the DoE.

An important task was considering the effect of Coleman's politics on how her research was received and whether it unlocked access to funding and support. In fact it was a barrier to be overcome, as whilst it possibly eased her access to influential supporters in Government (Waldegrave, Joseph and ultimately Thatcher), in general her politics set her apart from and alienated the communities of practice who were discussing and potentially implementing her work. Lipman and Harris' opening quote highlighted the political positioning of the *Rehumanising Housing* conference which was an unusually intense conflict of right and left. Coleman's explicit and oppositional politicization was shocking and confronted the normative liberal/socialist political position of many housing professionals⁵⁸.

⁵⁸ The continual pairing and comparisons to Anne Power since the early 1980s, (including Coleman's reference to Power's work in *Utopia on Trial*, 1985a, p.164) accentuated Coleman's alignment to the right. "Anne Power was better looking, more dynamic, younger more socially minded. She worked at the LSE which then implied a socialist politics – not a tough conservative" (Interview McKeown, 2013).

The architecture profession in particular found it difficult to articulate their confusion to this overt politicisation. The architectural researcher Ian Cooper remembers “it was difficult to talk about politics in schools of architecture and associated research journals of the time”. Thinking about the attendees at the conference he continued “and what’s even more unbelievable is that this was probably the most politicised group of people around at the time” (Interview Cooper, 2013). Cooper and several other conference conveners and contributors, were at the time members of the New Architecture Movement⁵⁹, to the alternative left of the architectural profession. So while he found it refreshing to reconsider the conference as a historical alternative to the current neoliberal framing that most housing professionals now take as the status quo, re-reading the papers, Cooper felt that the personal attacks overwhelmed any deeply considered political debate.

Many of the criticisms of Coleman went beyond an objective critique of her work. Several harsh attacks seemed to be founded on a personal dislike of her and her politics. Yet Coleman herself could be just as outspoken and critical of her detractors and appears to have brushed off the personal nature of the arguments. Her publisher Hilary Macaskill was aware of the *Rehumanising Housing* conference being set up to refute *Utopia on Trial* but believed that “Alice was fine about it” (Interview Macaskill, 2013). Coleman was (and is) a fixedly political individual, her right of centre, free-market opinions colouring her views on most topics, from education, crime to planning. She remains determinedly anti-any form of government control, continuing to condemn what she sees as unnecessary planning bureaucracy (Coleman, 2013a; 2013b). In Macaskill’s view Coleman’s drive to gather support and publicity to widen the reach of her research was above politics and overcame her personal views (Interview Macaskill, 2013). Even while Coleman was courting the Conservatives, she was still prepared to talk with the Labour party about her work, despite their unresponsiveness and Coleman’s own (2013b) criticism of Labour’s nationalization policies. One can question whether Labour’s indifference was due to Coleman being tainted

⁵⁹ Operating between 1975 and the mid 1980s NAM provided an outspoken critique of normative professional architectural structures. See <http://www.spatialagency.net/database/new.architecture.movement.nam>.

by the Conservatives' support, or whether her ideas were at odds with their housing policy direction. Coleman herself believed that she was able to maintain this apolitical stance. Talking to a reporter about DoE officials in 1990, she carefully pointed out that following the reprint of *Utopia on Trial* and the DICE project, DoE Civil Servants were now very helpful.

“Some did prevent me from seeing John Patten when he was Minister- but they've retired now. I am not politically orientated – you have to keep politics out of things especially when talking to tenants. We are doing this to improve their lives” (Guest, 1990, p.20).

Coleman's insistence that her work was above politics or at least above the political machinations of policy-making may have been merely the pose of an 'unworldly academic' as she astutely balanced politics throughout the media dissemination of *Utopia on Trial*, even referring to the campaign to obtain funding for DICE as 'the Thatcher project' (Jacobs and Lees, 2013, p.1572). And Coleman's opinion of DoE officials also thawed slightly following the agreement to fund DICE. In the revised 1990 edition of *Utopia on Trial* Coleman mellowed her critique of the DoE's 'design misguidance', rewording her concluding chapter to attribute blame more broadly. The DoE were no longer the “king-pin of Britain's housing problems industry” (Coleman, 1985a, p.183), with the accusations now passed on to planners and the industry more generally; “Britain's great housing/planning problems industry, have been manufacturing the problems they are supposed to be solving” (Coleman, 1990, p.184).

This chapter has demonstrated the complex ways that the concept of defensible space was mobilized, from the dissemination of a publication to a broad audience catching the mood and the politics of the time. Wenger (1998) describes how a concept must be reified or an “idea adopted by a community before it can shape practice in significant ways” (ibid, p.92). This process of reifying continued with converting the abstract concept of defensible space, into the operationalised design disadvantage score, which in turn was translated into a trial that would physically transform the appearance and functioning of inhabited estates. So the concept of defensible space had to move beyond theoretical arguments about conceptual underpinnings, or political desire for a 'solution' into practical actions that would impact on residents' lives. The following chapter looks at how these very local political

negotiations were played out in practice as Coleman's DICE principles were applied to two estates in East London.

Chapter 6: Implementing defensible space on the DICE estates

Introduction

“DICE was not about bricks but about politics” (Interview McKeown, 2013).

The preceding chapter showed how insightful this quote is, with superior political will prevailing over the pragmatic expectations and regeneration aims prevalent within the Department of the Environment (DoE). This chapter now concentrates on the physical bricks and mortar changes, as Coleman’s vision of defensible space was applied to existing housing estates. It explores the practical constraints of translating policy into action.

Having acquired the support of the Prime Minister and the promise of extensive funding for her DICE project, Coleman immediately began to establish a DICE Unit at King’s College London (KCL) with the unusual hybrid mix of research and practical architectural skills required for such a complex study. The process for selecting estates to ‘DICE’ is described in detail as this apparently practical procedure of identification reveals much about the implicit expectations of the programme. It exposes the constraints of bounded rationality and constrained knowledge (over locations, compromised decisions, or the consequences of Coleman’s theories) and the differing perceptions of the construction practitioners and academics. Coleman’s ‘scientific’ methodology imposed a selection bias which impacted on the likelihood of the schemes’ success or the objective evaluation of the outcomes. I compare two of the seven DICE projects, the Rogers Estate, Bethnal Green and Ranwell East Estate, Bow. These estates varied in physical form and tellingly, the institutional character of the teams involved. However, their close proximity within Tower Hamlets simplified aspects of the comparison and continued Coleman’s investigative focus on the Borough begun during her research for *Utopia on Trial*.

The conditions of the estates prior to being DICE-ed are outlined briefly, less as a benchmark for the final outcomes, but to illustrate three criticisms of defensible space as a

driver for regeneration: first that physical condition is not a reliable indication of the wider cycles of regeneration and decline and hence the relative opportunities for long-term improvement; second, the fluctuating interrelationship of an estate to its neighbourhood; and third, that defensible space principles are insufficiently sensitive to an individual's perceptions and expectations in relation to territoriality or norms or behaviour.

The physical changes to the blocks are described to show how they supported DICE principles. I discuss the difficulties contextualizing these generic DICE principles into the unique design requirements of each scheme. I reflect on the pragmatic constraints of construction projects on site, for example where changes of personnel disrupted the decision-making processes. This explores the role and influence of the academically based KCL DICE Unit devising design proposals and acting as an additional consultant on the regeneration team for each scheme.

The chapter concludes by considering housing practitioners' preferred transfer mechanisms, in particular the failure of formal techniques such as evaluation reports. In practice objective 'evidence' has less status than a 'best practice' case study or more social mechanisms (the trust in or credibility of the individual passing on the concept, or recognition or perceived utility of the idea) to transfer and communicate 'what works'. This was reinforced during my fieldwork, as the process of interviewing morphed into story telling and gossiping. So this chapter contains many direct quotes from interviewees, enabling them to present the 'evidence' they value and trust on defensible space in their own words.

6.1 Coleman establishes a DICE Unit

Coleman had requested five years of funding for her project. This was an extremely short period of time for a single major regeneration scheme, let alone for her initial target of nine estates. The sense of urgency which flavoured Coleman's conversation with Margaret Thatcher in January 1988 dissipated amongst the machinery of departmental bureaucracy and the practicalities of establishing a hypothecated budget for the project. Despite Coleman advertising for DICE team members as soon as she was confident that funding would be available, it took a year from this meeting for the KCL DICE Unit to form and a further 11

months before the DoE officially started the project in November 1989 (Price Waterhouse, 1997a, p.1).

Initially the DICE team consisted of Coleman, a couple of geography researchers from KCL, a housing consultant, architect Mary McKeown and three postgraduate students⁶⁰. In 1991, architect Peter Silver replaced McKeown and the team was joined by an ex-policewoman and an ex-army officer with the task of directing operations. The team, which was notably light on construction experience, was supplemented with various part-time students from the Geography Department. Coleman was confident she could fill the planning role in the team but supplementary architectural skills were required. McKeown had been working as an architect in the maintenance department of the Northern Ireland Housing Executive (NIHE). Completing her training in 1972 prior to the publication of Newman's book *Defensible space*, she was unaware of the arguments over determinism, but was familiar with the government research on reducing crime in housing, as it was relevant to her work refurbishing bomb-damaged estates. Coleman visited Belfast in the autumn of 1985 and undertook a DICE survey of the infamous Divis Flats. She returned in 1986 and gave a public lecture (Bar-Hillel, 1986b) which McKeown attended, later reading *Utopia on Trial*. She "felt that *Utopia on Trial* put into rational tabular form much of what we felt was wrong and needed to be fixed" (Interview McKeown, 2013). When she was shown a job advert in the Daily Telegraph⁶¹ for a research post working for Coleman in London, she applied with enthusiasm. McKeown was appointed and transferred from a practical sphere to a research one:

"I'd left a desk where I was dealing with tenants and damp, and arrived in a hornets' nest of academia" (Interview McKeown, 2013).

⁶⁰ The DICE reports named ten members of the Unit including David Cross, Mary McKeown and Peter Silver. None of the researchers who worked on the *Utopia on Trial* study were involved, although David Cross was the longest serving, having worked with Alice Coleman since the mid 1980s.

⁶¹ The advert's location played an odd significance to McKeown's recruitment. During the interview Coleman asked which paper she read, probing for class and political alignment. McKeown believed that her NIHE background made it hard for Coleman to categorize her politics in simple left and right terms (Interview McKeown, 2013).

The architect Peter Silver had a similarly practical housing background. Having worked for the housing co-operative Solon, he graduated from the Architectural Association, before being employed as a research assistant on DICE. Again, despite studying architecture during the late 1980s, Silver was unfamiliar with the controversy around *Utopia on Trial*. His first task on joining the Unit was to read Coleman's and Newman's books (Interview Silver 2013).

6.1.1 Selecting the estates to be DICE-ed

Within Coleman's positivist epistemological framework, having formulated a hypothesis the next step in a scientific experiment would be a careful selection of its subjects of study (Hoggart, Lees et al., 2002). This selection of objects for evaluation or study is itself a form of evaluation (Palfrey, Thomas et al., 2012). Choosing the DICE estates however, was a drawn-out process; inviting Local Authorities to submit potential estates to the DoE, followed by an initial assessment survey, leading to design proposals, culminating in a consultative referendum with estate residents, before a decision was made on the estate's inclusion in the study. Each of these steps required the academic experimental model to engage with Schön's (1983) messy 'swampy lowlands' of real world problems; the competitive scramble for capital funding, the exploratory creativity needed for feasibility designs and not least the frustrations of resident engagement. As part of the annual application for Housing Investment Programme (HIP) funds, interested Local Authorities were invited to bid to participate in DICE. The bid form made clear that suggested schemes would be assessed on 'merit', the community diversity and potential for tenant involvement. Discussions with the DoE explained the funding constraints and Coleman's strict experimental plan (Interview Harvey, 2009)⁶².

Over 40 estates were surveyed with 33 *DICE Disadvantage Reports* written in an intensive thirty-five month period between early 1989 and November 1991. During her two years at the Unit, McKeown worked on 14 reports describing the process dictated by

⁶² John Harvey, Head of the DoE Estate Action Team

Coleman as formulaic; “Painting by numbers! It wasn’t that we were dumb, it was the format” (Interview McKeown, 2013). Because of the compressed timeframe, the small team was concurrently visiting potential sites, undertaking surveys and data collection, holding “endless” meetings with residents, architects and Local Authority representatives, alongside drafting the reports. There was an uneven geographical spread of sites. Of the 31 *DICE Disadvantage Reports* with identified locations, half were in Greater London. Outside London, large conurbations such as Birmingham and Manchester each proposed two or three potential sites, with individual estates scattered across the Midlands and further north across Tyneside. At least five of the London estates evaluated were in Tower Hamlets (noticeably the largest cluster), with others mainly in central urban boroughs. Four of the estates measured in *Utopia on Trial* were revisited including the Mozart Estate in Westminster.

Data collection visits were intense, rapid events, spending a single day walking the estates. There was a rigorous process for completing the ‘design and abuse’ survey. Using a pre-coded proforma each block or house on the estate was assessed. The presence of litter scored one negative point if it was “Clean or Casual” and two if it was “Dirty and Decayed”. No visible litter received an abuse score of zero and was marked as within acceptable thresholds. There was no space on the data collection form to note unanticipated circumstances, explain context or add comments. Following Coleman’s geographical mapping background, site plans were marked-up with pre-selected colour pencils classifying the space according to its privacy or public accessibility. By the end of 1992 the Unit had produced a comprehensive survey manual, with classification conventions for spaces similar to the instructions for the Second Land Use Survey⁶³ (Silver, 1995). Yet McKeown’s impression was that potential suitability was assimilated by one short walk across the estate:

⁶³ The geographical/architectural divide in terminology emerged here. Silver referred to these as colour-coded *maps* rather than *site plans*. McKeown recalled that Coleman “called everything a map where, for us [Architects] it would be a site plan. Even the drawing of a house was a map” (Interviews McKeown and Silver, 2013).

“Perhaps she got the plans of the estate in advance. But she almost already knew whether it was possible; whether this estate was going to be a DICE estate or a control estate or what she was going to do, how the scores could be reduced” (Interview McKeown, 2013).

From the completed survey sheets a ‘before’ Design Disadvantage Score was calculated for the estate. Design changes were proposed and the Design Disadvantage Score recalculated. A *DICE Disadvantage Report* was drafted to brief consultants and as a resident consultation document prior to the referendum. The standard report template consisted of an account of the DICE design principles, analysis of the design features and abuse surveys and colour-coded before and after site plans. Proposed sub-division of blocks and design changes were outlined, linked to hoped-for improvements, however the KCL DICE Unit did not write a specification or cost the alterations. In practice the Unit only devised a brief for the scheme, but Coleman was adamant that this was non-negotiable. The design improvements were presented to Local Authority councillors, staff and at tenants’ meetings where residents voted on whether to accept the proposals. If a majority agreed to the scheme, Coleman would submit their estate to the DoE for inclusion. “The final selection was carried out in consultation with Professor Coleman” (Price Waterhouse, 1997a, p.8).

Once accepted into the DICE project, the Local Authority was responsible for commissioning fully costed designs and condition surveys to assess the practicality of the DICE proposals and other necessary maintenance to the building fabric. Following these, the Local Authority had to commit to spend any additional funds needed for repairs, installation of communal heating systems, pitched roofs, or new street lighting which were not eligible under the DoE funding. The scheme would then be submitted to the Local Authority planning committee and to the DoE for approval to proceed to working drawings stage. In Silver’s opinion, gaining the co-operation of the statutory authorities was as great a challenge as gaining the acceptance of residents:

“Planning officers were going to have to sanction increased densities, fire officers were going to have to weigh the reduced likelihood of arson against a relaxation in the means of escape, housing departments were going to have to produce complex decanting programmes and often provide temporary re-housing; it was after all essential for the experiment that the original residents either remained or returned at the completion of the works” (Silver, 1995, p.6).

However Tower Hamlets Planning Department made no objections to the proposed alterations on Rogers, despite their radical nature, an indication of the amount of political pressure being exerted on the planning team to enable the funded scheme to go ahead (Interview Stride, 2011).

The perceived need (or not) for early stage feasibility design studies demonstrates the research project requirements versus the practicalities of a large-scale housing refurbishment scheme. Feasibility design studies are used not only to verify costs, or an option's functional plausibility, but as part of the iterative testing of design solutions, based on an articulation of the problems to be addressed. For Coleman, this exploratory design stage was a waste of time, as the design was arrived at by following the DICE principles (Interview McKeown, 2013). Of the seven DICE projects only Ranwell East had a separate feasibility design stage.

The decisive criterion for site selection was Coleman's perception of the extent that the Design Disadvantage Score could be reduced.

"Alice's target was to reduce the DICE defects from say 14 to 5. Alice would walk around an estate and guess the score might be a 13 but we can only get it down to a 10 so we won't do it" (Interview McKeown, 2013).

This was not an exact process but other subjective factors influenced the decision such as Coleman's view on whether she could work with the Local Authority or if residents were prepared to be "DICE-ed". Unlike typical consultative meetings with residents discussing design alternatives Coleman's meetings were framed as presentations of the DICE recommendations with the refurbishment opportunity as a stark take-it-or-leave it offer.

"All the residents' meetings I attended, were not residents' meetings like I used to have at Solon, where everyone's voice had to be heard and everyone had an opinion. Those were; 'We are going to give you some information. This is our research.' And that's why a lot of early discussions were whether the residents were going to take it on? 'If you say yes, then you go with it. You can say no. You don't have to be DICE-ed'" (Interview Silver 2013).

Coleman's inflexible theoretical approach inevitably overrode tenants wishes:

"There was nearly always a fight between Alice and the residents, about what they wanted and what she was prepared to give them. If it didn't fit

the theory she wouldn't allow them that. From an experimental point of view, she was right. If you're going to test a theory, then test just the theory" (Interview Wiles, 2011).

There was a degree of compulsion exerted by Local Authorities keen to receive the money, but there were a number of selection meetings where residents were unenthusiastic. At the Rogers Estate 74% of residents voted for the works. Interviewed by *Building Magazine*, the chairman of the Rogers' residents association explained he had not voted for the DICE proposals as he believed there had been insufficient tenant involvement in the designs (Guest, 1990). Ranwell West and Ranwell Close (a 1938 courtyard block on the northern edge of Ranwell East), both voted not to be included (Interview Smith, 2011). The proportion of tenants voting in favour of the works at Ranwell East was higher at 86%, however the scheme was highly unpopular with a vocal minority of the residents which Coleman dubbed "aggressive opposition from a few militants" (Coleman and Silver, 1995?a, p.3).

There were also suggestions of a political tint to those selected.

"What was wrong about DICE was she [Coleman] was poacher and game keeper, she set the rules and the Local Authority couldn't say anything. If they did she wouldn't work with them. Conservatives wouldn't work with her⁶⁴, Lib Dem councils might, but Alice wouldn't work with Labour councils" (Interview McKeown, 2013).

Nonetheless this selection strategy appears to have been successful in that those Authorities chosen were reported as being extremely supportive (Interview Silver, 2013). If this enthusiasm resulted from receiving additional refurbishment grants, the awards caused resentment within Boroughs not selected. As the funding for DICE was provided in the form of Supplementary Credit Approvals top-sliced from the Estate Action Programme, reducing the overall annual Estate Action budget available for non-DICE bids, there was detailed discussion and justification of the allocations within the DoE (Municipal Journal, 1990; Interview Harvey, 2011). The KCL DICE Unit reported to a shifting cast of DoE staff. McKeown mentioned the hostility within the DoE, who she felt had already written DICE off,

⁶⁴ This view is countered by the long and mostly positive working relationship Coleman had with the Conservative led Borough of Westminster while working on the Mozart Estate.

and by the end of 1990 had lost patience with Coleman and were pushing for construction to start:

“It was obvious that the DoE simply wanted to get things on site. ‘Please start because we’ve got to do an evaluation of this before we cap it. You’re the architect, get it pushed through.’ Alice was being more and more intransigent by that stage. She was working hard on the update of her book. They were appealing to me but, there was only Alice who had the right. It was her project. There was no one else who could say; ‘I think we should run with this’. In fact the one day I suggested something [to start with routine maintenance rather than DICE works] she threw the pencil down the table at me” (Interview McKeown, 2013).

David Riley⁶⁵ recalled that all the selected estates felt unwelcoming (Interview Riley, 2011). Earlier DoE regeneration programmes such as Priority Estates had already targeted the most problematic estates. Stride remembered that both the Rogers and Ranwell East “weren’t the worst in the borough”, but both “had the signs of serious dysfunctionism” which could have eventually led to their demolition (Interview Stride, 2011). Several interviewees reinforced that the selected DICE estates were not those experiencing the poorest conditions, or most extreme deprivation but with the greatest potential to change (Interviews Riley and Sanford, 2011, McKeown and Silver, 2013). So the DICE assessment contained an element of comparison to neighbouring estates as well as its current condition. Comparing ‘not the worst estates’ was a less useful criteria than choosing estates on a similar trajectory. For example, there might be more comparability between two estates in poor, but relatively stable condition than to one which was starting to decline rapidly. This relative position along a cycle of decline and regeneration influenced not only the selection process, but also the validity of Coleman’s testing of her proposals. The existing social and economic trajectory dictated whether her interventions provided a temporary halt (a sticking plaster) to inevitable decline or a longer-term reversal. Ranwell East had already received several rounds of regeneration investment and had been the site of two Safe Neighbourhoods Unit (SNU) improvement projects between 1981 and 1986. Compared to the highly problematic estates surrounding it such as Lefevre Walk, Ranwell East was at the time perceived to be in an acceptable state and an “upcoming area” (Interview Smith, 2011).

⁶⁵ David Riley managed the research project for DICE at the DoE.

Smith believed that Lefevre Walk was discounted from DICE for two reasons: it was due to be transferred into the Bow Housing Action Trust (HAT) and so could access alternative funding, and its physical and social failings were more pronounced.

“Ranwell East had its problems but not too big problems. If you do a scheme like that here, which doesn’t have as many problems as Lefevre, then people would point and say; ‘Oh, look the problems have gone away’. The problems haven’t actually gone away, it’s just there weren’t as many” (Interview Smith, 2011).

6.2 Two examples of DICE-ed estates

6.2.1 Tower Hamlets as a site of innovation

While each of the seven DICE estates would have been worthwhile to examine, Section 3.1 explained the rationale for selecting the Rogers and nearby Ranwell East Estates in Tower Hamlets as case studies (see Figure 6.1). Their morphological diversity illustrated the application of the DICE principles at opposing scales and complexity while sharing similar geographical urban conditions (see Figure 6.2).

Figure 6.1 Coleman’s surveyed estates

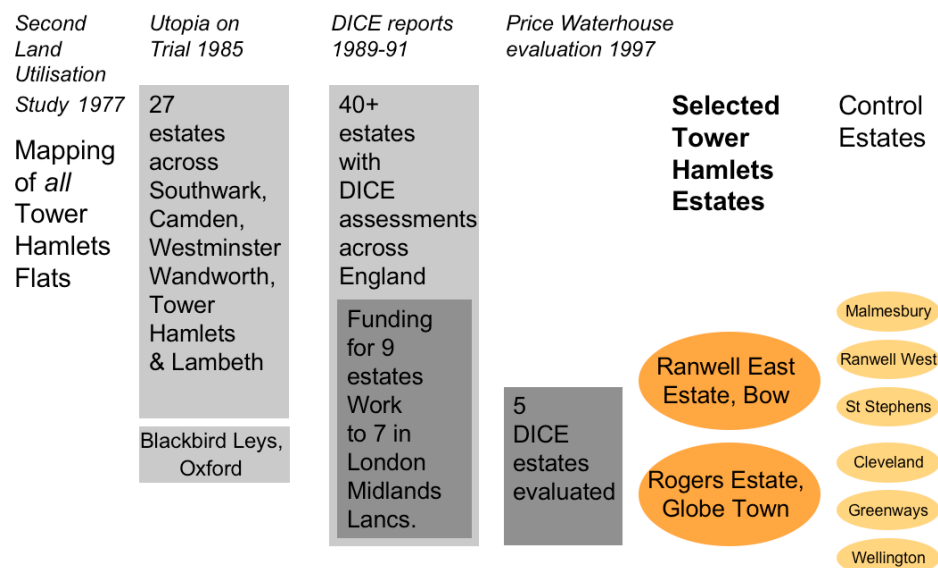


Figure 6.2 DICE estates in Tower Hamlets



Coleman writes in *Utopia on Trial* that in the 1980s, Tower Hamlets and Southwark were the two London Boroughs that contained the most council flats (Coleman, 1985a). Tower Hamlets in inner East London had a reputation for housing poor and underprivileged communities in close proximity to the high-income wealth generating employment areas of The City and Docklands, and experiencing extreme levels of housing demand across the income scale. At the time of DICE many of the estates had not been refurbished since construction, with the Council lacking resources to improve the neglected housing stock. Despite targeted state funding across subsequent governments, in 2000 it still ranked as the most deprived Local Authority in England. Nonetheless in the late 1980s Tower Hamlets became notable for applying innovative forms of neighbourhood management. When the Liberal Democrats took control of Tower Hamlets Council in 1986 they initiated a radical process of restructuring and decentralisation with both management and decision-making devolved to a semi-autonomous neighbourhood level. In a precursor to the current localism agenda, they established seven neighbourhood management areas each delivering a comprehensive housing service from a Neighbourhood Office. Of the seven neighbourhoods, Bethnal Green, Isle of Dogs, Bow and Globe Town were notably more successful than Stepney, Wapping or Poplar (Hall, Murie et al., 2004). Unusually for a local authority, this local leadership structure successfully established a culture that fostered new ideas and

fresh approaches to housing management and attracted innovative-minded staff. One of these was Steve Stride, the neighbourhood manager for Globe Town Neighbourhood in Bethnal Green.

Yet innovation required funding. As the national economy recovered following the recession of the 1970s, more government funding for housing and regeneration became available. However this money was funnelled into targeted programmes which required particular expertise to identify and access (Hall, Murie et al., 2004; Wilcox and Perry, 2014). Katrin Sporle⁶⁶ recalled;

“This was an era where people were used to competing for pots of money. There was a skills base in Local Authorities to look and compete for money. The investment wasn’t going to come through any other source....It’s a very funny thing for Local Authorities to say ‘my estate is the worst’. But they put the estates forward on the basis that there was genuine need and that getting this kind of money was going to be well worthwhile. They were also going to benefit from the evidence base that we would provide them. So that would inform their own policies” (Interview Sporle, 2011).

Stride felt that the neighbourhood culture of innovation was a factor attracting DICE to Globe Town, but that competition for money was fierce. The nearby Boroughs of Islington and Newham devised equally innovative housing interventions as Tower Hamlets. Stride recalled that bids needed to stand out, and was open about his policy of pursuing any sources of regeneration money available, even when their objectives were not entirely aligned (Guest, 1990; Interview Stride, 2011).

“Ironically that meant that if you were innovative and you knew how to catch the agenda that they [the DoE] were dictating and you could link up with people like Anne Power, who had their ear, you could get money and Estate Action..... I was always on the lookout. Whatever the money was, I was going to get it. And Globe Town got an unbelievable amount of money. DICE comes along, we hear about Alice Coleman and we think, slightly strange. I am not an advocate of environment determinism and clearly she was. And obviously I met with her and she gave me... she put a shiver up my spine in one sense” (Interview Stride, 2011).

⁶⁶ Katrin Sporle, one of the Price Waterhouse evaluators.

Sam McCarthy⁶⁷ echoed Stride's views on the competitive drive to secure funding for estates without asking "too many questions" (Interview with McCarthy, 2011).

6.2.2 Rogers Estate: Pre-DICE

Constructed in 1949, Rogers Estate was the smallest and oldest of the seven DICE schemes. 124 flats were split between two well-defined five-storey 'U' shaped blocks⁶⁸. Flats were accessed from long open decks. Entrances to communal stairs were dark, doorless and tucked away out of sight. The site was relatively shallow and open, with large ungated grassed areas leading uninterrupted from the street up to the windows of ground floor flats.

In the bid submitted to the DoE nominating Rogers, the estate is unsurprisingly painted in unflattering terms, portraying it as a deserving case for investment:

"The Estate suffers from a number of endemic problems common to many inner city environments, namely litter, waste tipping, vandalism, graffiti and crime. All of these worse than average for the locality and all contributing to an atmosphere of environmental degradation and social malaise" (Price Waterhouse, 1995, p.19).

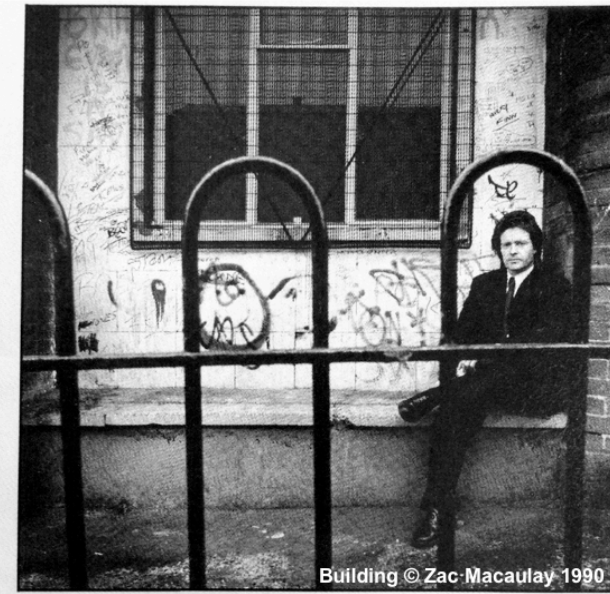
While the problems listed are typical, the use of 'social malaise' as a phrase is telling, as it strongly echoes Coleman's terminology in *Utopia on Trial*. McCarthy softened this description, attributing the general air of tired neglect to a widely prevalent lack of maintenance. Rogers was in a bad, but not unusual, condition:

"It was typical of a number of estates within Globe Town. It was very rundown, there'd been a lack of expenditure on it. The amount of funding that the Council and the neighbourhoods had just wasn't enough to sustain the buildings. And also the fact is you get used to a design and think it works and then you don't realise it's not working until something like DICE comes along. You know, a lot of communal buildings, rat runs, there was no defensible space, there were cut-throughs on the estate. And so it was in a very rundown condition and in need of attention" (Interview McCarthy, 2011).

⁶⁷ Sam McCarthy was project manager coordinating the delivery of the Rogers scheme.

⁶⁸ Both Newman and Coleman cite the size and height of individual blocks as significant variables. But Newman's definition of large estates ranged between 750 to 1000 homes and his threshold for high rise seven or more storeys. While far smaller than any studied by Newman, Ranwell East was the largest of the seven DICE estates and Rogers the smallest.

Figure 6.3 Rogers Estate: Pre-DICE



Building © Zac Macaulay 1990

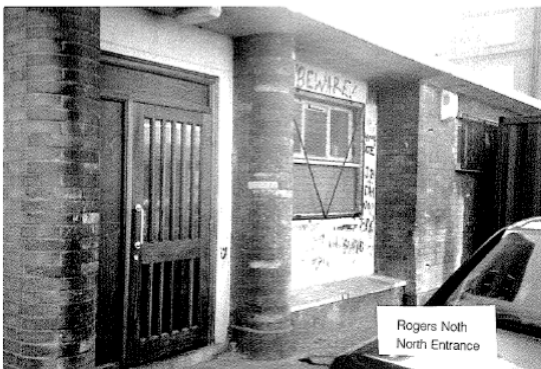
Rogers Estate project manager Sam McCarthy: only obscene graffiti is removed.



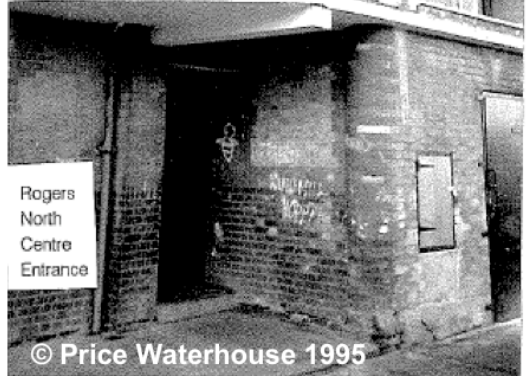
Graffiti at Rogers Estate © Silver 1995



Rogers North
Globe Road



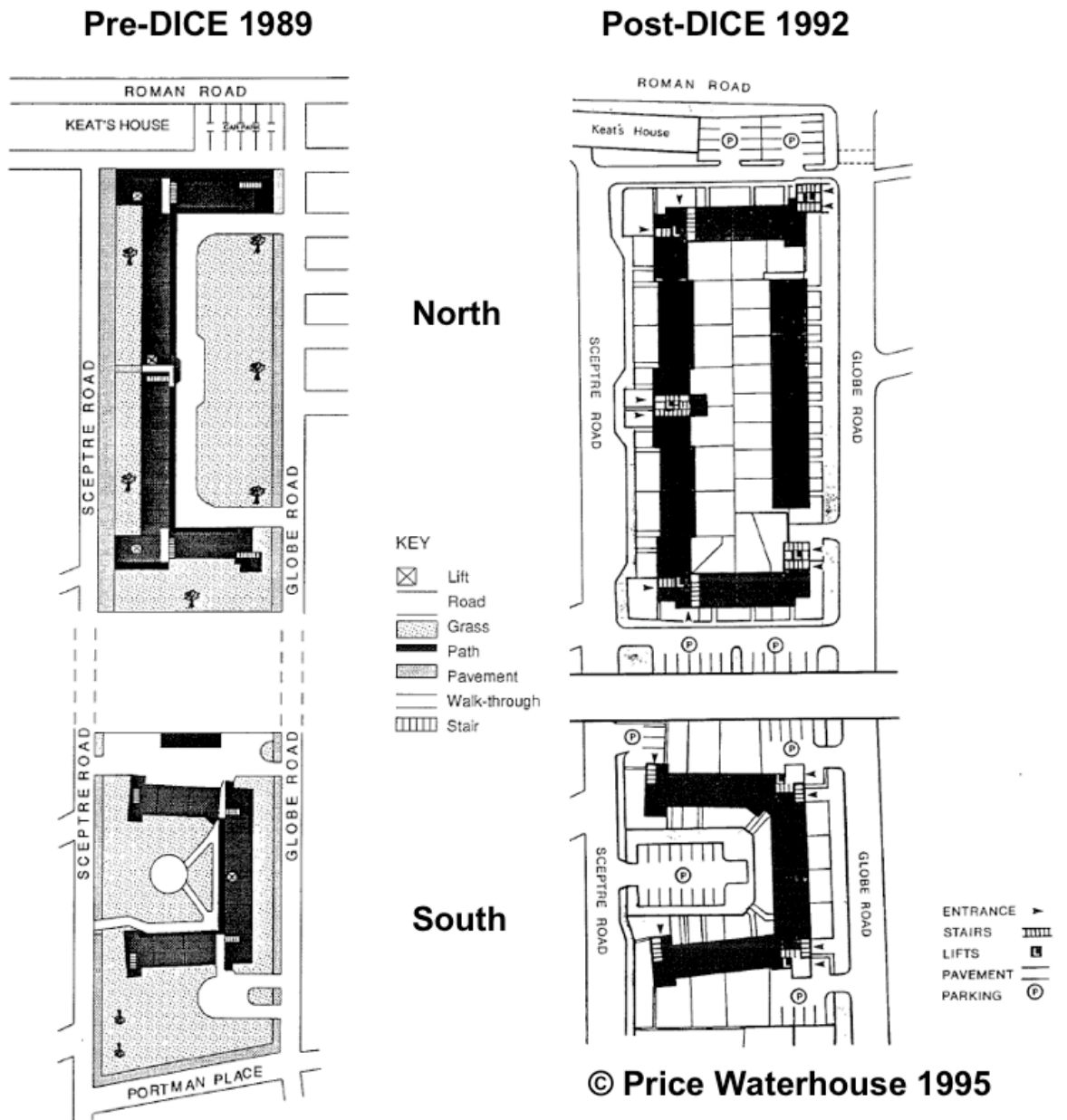
Rogers North
North Entrance



Rogers
North
Centre
Entrance

© Price Waterhouse 1995

Figure 6.4 Rogers Estate site plans: Pre- and Post-DICE



Unsurprisingly this poor environment meant evaluative surveys undertaken by MORI found the Rogers Estate was not particularly popular amongst residents (Price Waterhouse, 1995). However residents made clear at consultation sessions that they wanted to stay.

The KCL DICE team identified design defects such as too many homes per block or per entrance, with high numbers of people sharing the common areas creating a sense of anonymity. In *Utopia on Trial*, the mean Design Disadvantage Score for all the Tower

Hamlets homes had been assessed at 8.3, slightly greater than those in Southwark, but that Tower Hamlets had a substantially worse 'abuse' score.

Table 6.1 Design disadvantage and abuse scores in *Utopia on Trial*

Area	Mean Design Disadvantage score (out of 15)	Mean Abuse score (out of 8)
Blackbird Leys	4.5	0.9
Southwark	8.0	2.5
Tower Hamlets	8.3	3.7
Total of 4099 blocks	8.1	3.0

(Adapted from Coleman, 1985a, p.149)

By 1989 Coleman had altered the abuse score scale to a score out of 16. When surveyed pre-DICE both scores for Rogers were far higher than the Borough average, with the average Design Disadvantage Score for the Rogers estate at 11.5⁶⁹ and the abuse score measured as 12.

“Such scores inevitably spell social breakdown, so DICE proposed changes to remodel the defects in ways that would render them harmless. The final average [following remedial work] would have been 1.5, but a last-minute fiat by councilors raised it to 2.4.” (Coleman and Silver, 1995?a)

Changes were proposed at the scale of the site, to communal areas, and for the redesign of individual homes. The site was cut in half by a short road creating two distinct bounded 'island sites' redirecting pedestrians, particularly school children, around the estate. Ground floor flats were re-orientated with new front doors opening onto gardens with waist-height brick walls facing the street. Car parking was removed from the North courtyard, which was divided up into individual back gardens. A terrace of eight new bungalows were built fronting Globe Road, completing the street frontage. The new gardens abutted back-to-back avoiding

⁶⁹ The preciseness of the Design Disadvantage Scores (DDS) mentioned (particularly any weighted average score) should be treated with caution. Coleman's own reports quote an inconsistent range of scores. For example Rogers is cited as having a Pre-DICE DDS of 11.5 or 11.6 and an intended DDS of 1.5 or 2.4, or Ranwell East a pre-DICE DDS of 11.8 or 11.9. (Coleman and Cross, 1994; Coleman and Silver, 1995?a, 1995?b)

alleys. On the smaller South block the open courtyard was kept for parking but ground floor flats were given a front garden buffer zone. A long-term North block resident whose ground floor flat overlooked Scepter Road (he termed it the 'the back' of the estate) recalled the earlier movement and use patterns through the communal spaces facing on to Globe Road;

"You could drive in one side and out the other. Kids played in the front [Globe Road]. There was no play space but kids played there, everyone was out there" (Interview Rogers Resident A, 2011).

He still associated the old 'front space' as a collective shared space and was dissatisfied with the experience of living facing a street, complaining that before the 'flats turned back-to-front' he used to know everyone, but not now.

This is highly pertinent as Coleman's aim was to reduce anonymity and foster a sense of community by decreasing the density of occupation of shared spaces. Less people circulating on each corridor and entrance would enable better recognition of intruders. So the blocks were split internally into smaller sub-blocks, cutting access balconies so that they served only one or two dwellings. Nine new entrances were formed and four additional lift towers built with well-lit, glazed entrance doors. All entrances faced onto roads to encourage surveillance. In addition to the DICE works the Local Authority took the opportunity to carry out other repairs and improvements. These consisted of adding a pitched roof, installing double-glazing and new heating systems, as well as replacement kitchens and bathrooms. The DoE and Coleman were reluctant to fund the new roof as it was not critical to the DICE experiment. But it was felt to be essential to resolve damp and condensation problems in top flats and a 50% contribution was negotiated (Guest, 1993).

Overall the DICE contract costs for Rogers were £3.5M. This had reportedly reduced dramatically by a million pounds from the tender stage budget of £4.5M (Guest, 1990; Warman, 1991). McCarthy attributed the saving to competitiveness rather than the market downturn, although Warman ascribed it to compulsory competitive tendering (CCT)⁷⁰. The

⁷⁰ CCT was a Thatcherite market innovation introduced in the 1980 London Government Planning and Land Act when it covered highways, building maintenance and minor building works. Subsequent Acts

Price Waterhouse evaluation focused on the value for money aspects of the programme, yet this remarkable cost saving was not mentioned. McCarthy regarded the Rogers scheme delivery for £3.5M as good value and that he “got a lot done for that amount” (Interview McCarthy, 2011). See Appendix E for cost summary.

6.2.3 Ranwell East Estate: Pre-DICE

Ranwell East Estate was a distinct but rambling estate, covering an area of five and three quarter hectares with internal roads, paths and green spaces separated from the surrounding street network. Constructed in 1974 it provided 474 homes within 21 four and six storey slab blocks, 14 of which were linked by overhead walkways. The blocks had maze-like internal corridors interconnecting all the homes. Any entrance could lead to all other exits via the walkways and lift/stair towers. The enclosed spine corridors were dark and unobserved by either homes or outside spaces. Each block had a distinct individual layout caused by a wide variety of flat or maisonette plans. Six of the blocks were designated for elderly residents, but the overall unit mix of mainly single-bed flats and maisonettes was misaligned to Tower Hamlets housing policy, which aimed to allocate houses to families. In addition the maisonettes suffered from poor sound insulation.

For the Ranwell East DICE scheme, the Local Authority relied less on external consultants than at Rogers, forming a team from existing council staff and at least five temporary architects. Michelle Smith was administrator for the project team, eventually returning to Ranwell East in her current role as housing manager. Smith remembers the local area as rundown and Ranwell East as a harsh “concrete jungle”, despite being well looked after by residents (Interview Smith, 2011). The public spaces were bland unfenced expanses of grass with little planting. One central space contained a childrens’ play area above the roof

extended this framework to cover most local government services and by the early 1990s, Globe Town Neighbourhood would have contracted out cleaning and maintenance, using CCT for technical services such as surveying and architecture, but still be maintaining aspects of housing management under their control.

of a large underground carpark. There were complaints that the communal refuse bins were too small and overflowing with rubbish⁷¹.

Figure 6.5 Ranwell East Estate: Pre-DICE



Unsurprisingly, due to the extensive post second-world-war residential construction in the borough, Tower Hamlets had a large number of estates with either walkways or high-rise towers typical of 1970s design. The Ranwell East blocks were joined by link bridges at first, second and fourth floor levels. Smith identified these as areas where groups of youths congregated, who were reported as causing disturbances and muggings (Interview Smith, 2011). Coleman identified this as Ranwell East's worst defect:

“The complex was a maze of escape routes for hooligans and criminals and because anyone could go through all other blocks, tenants could not get to know everyone frequenting their territory and a spirit of anonymity and alienation prevailed” (Coleman and Silver, 1995?a).

⁷¹ Although one of Coleman's key abuse indicators was litter the DICE principles did not address the problems of refuse stores or chutes in mass housing.

Figure 6.6 Ranwell East Estate site plan: Pre-DICE

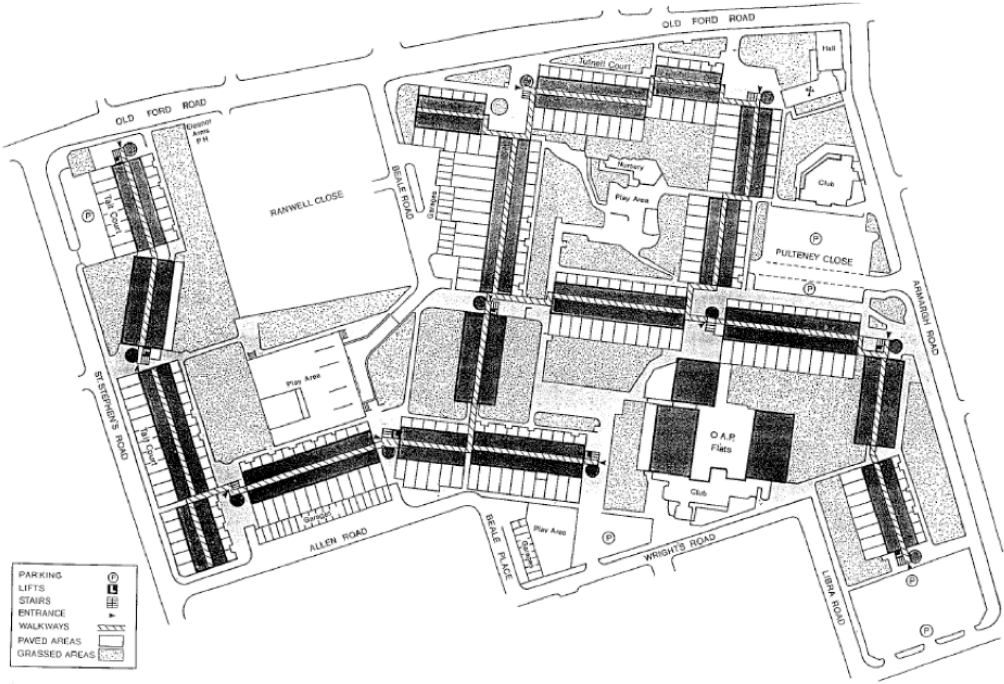


Figure 6.7 Ranwell East Estate site plan: Post-DICE

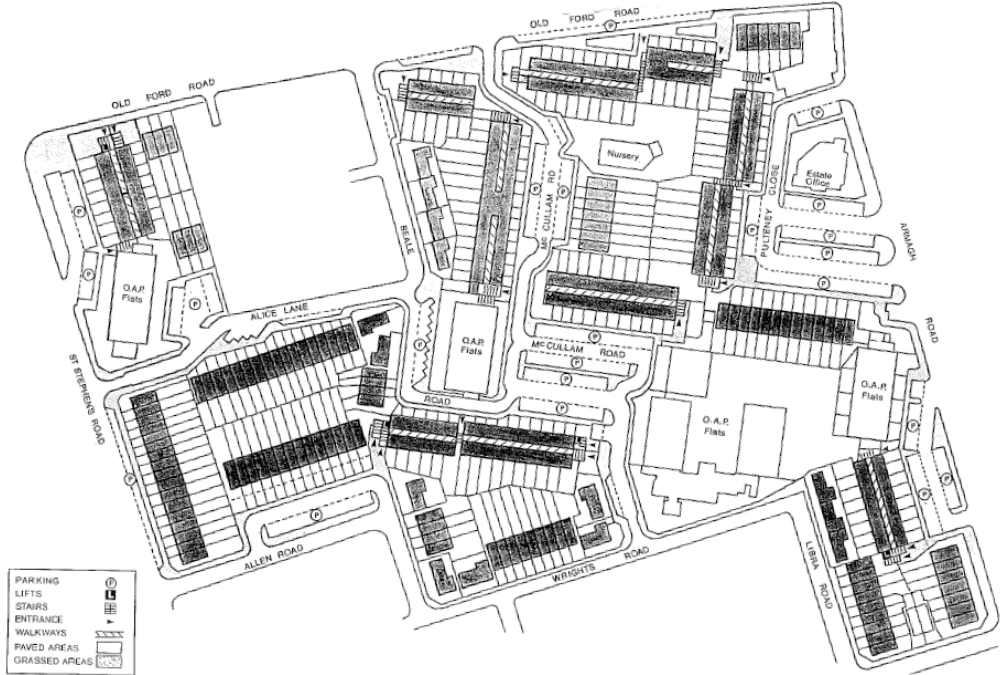


Figure 6.8 Walkways at Ranwell East Estate



Ranwell East was one of 18 estates where the Safe Neighbourhoods Unit (SNU) ran practical crime reduction projects between 1981 and 1986. Their 1988 report records two design problems: a significant lack of security to individual blocks and poor heating resulting in very high bills. Both were accentuated by inadequate cleaning and an unresponsive repair service. SNU identified two main crime and anti-social behaviour issues to address: vandalism and noise nuisance. SNU recorded high child densities and suggested that anti-social behaviour was aggravated by the lack of social and play facilities. The number of children on both estates exceeded Wilson's (1980) recommended threshold for child density, which she linked to high levels of vandalism. But both estates also had large numbers of elderly residents and it was this mix of young and old which exaggerated the generational conflict. Youths congregating was a frequent complaint at both Rogers and Ranwell East (see Appendix F for a discussion of residents demographics including child densities before and after DICE). These population characteristics will have had a practical impact on factors affecting the application of defensible space principles, such as density of occupation, likely presence during the day to provide 'natural surveillance', or whether someone was likely to intervene if they see criminal or anti-social behaviour. SNU were disappointed with the lack

of sustained impact from their interventions which consisted of deploying youth workers and small scale security improvements; “despite being one of the Unit’s earliest projects, it is the one in which least progress has been made” (SNU, 1988, p.25).

Coleman had surveyed the estate for *Utopia on Trial* noting its notoriety as a failing estate. Her assessment visit in 1988 identified an average design disadvantage score of 11.9 placing it amongst the worst 10% that Coleman had surveyed (Coleman and Naylor, 1993?). Substantial alteration would be necessary to reduce this score and the proposals made by the KCL DICE Unit were extensive. Costing over £18M in 1991 the Ranwell East DICE works were the largest estate improvement contract in the country at that time (Interview Silver, 1995) and the scale and complexity of the scheme resulted in the highest cost per unit of all seven DICE schemes. It was also one of the more sensitive selections, having already received substantial improvement grants.

The scheme demolished the walkways and three link blocks so no interconnecting entrances remained. Full-length external balconies were installed at first and third floor level of the larger blocks, doubling as a secondary means of escape for upper floors. The gaps left by the demolished slab blocks and underused garages were infilled with 108 new traditional terraced houses. Pre- and post-DICE the overall number of homes remained similar, but funding the new housing proved problematic. DICE funding paid for 234 new-build houses across the seven schemes, but there was a waning of DoE support for these which Coleman attributed to the removal of Thatcher’s personal support after her resignation (Coleman and Silver, 1995?a).

In fact Thatcher’s housing policy was one of the barriers to the construction of new housing. By the mid 1990s Councils were unable to retain funds received from right-to-buy and were:

“saddled with a housing policy which didn’t allow them to build houses. Alice just couldn’t understand, building a house is very different to putting up a fence” (Interview Stride, 2011).

New housing could be paid for by HIP but was to be run and managed by a housing association such as Old Ford which later took ownership of the Ranwell East⁷², so the KCL DICE Unit had little practical involvement in the specification of the new housing (Interview McKeown, 2013). Coleman used the construction of new houses not only to increase the type of housing she believed to be most beneficial, but also to remove 'confused' public green spaces or amenities such as vandalised play areas she perceived as undesirable. These included the residents' social club which was appropriated for a site office and estate office (Interview Smith, 2011). Removing the social club was welcomed by some residents (Interview Ranwell East Residents A, and B, 2011). But the failure to reinstate play areas was unpopular; "they didn't accommodate the kids at all when planning DICE" (Interview Smith, 2011) with post-DICE photographs of children playing amongst cars parked in the new streets (Price Waterhouse, 1997).

The KCL DICE team had suggested removing the upper floors of several blocks, leaving ground floor maisonettes as 'quasi-houses', but existing structural defects made demolition and replacement with new build houses a cheaper option. Within the retained blocks the upper floors were sub-divided in two ways. Stair towers broke up the four-story blocks (two stacked maisonettes) forming sub-blocks of four to eight homes. The top floor maisonettes on the higher blocks required lifts as well as stairs and as costs only allowed one lift per block, these had to serve the whole upper floor, often above Coleman's ideal threshold of six homes per corridor. As with the Rogers Estate, some internal modernization was undertaken in parallel with DICE. Replacement central heating systems were installed, along with new kitchens and bathrooms and UPVC windows.

Site layout changes were made to channel traffic and pedestrians in front of homes. The existing stub roads were extended to connect to a narrow, new road winding north/south

⁷² This shift is illustrated by Local Authority housing completions falling from 30,422 in 1985 to 1,535 in 1997, while Housing Association home completions increased from 13,648 in 1985 to 28,357 in 1997 (DoE/DCLG Housing stats/Live tables quoted in Wilcox and Perry, 2014, Table 192, p.114)

through the estate⁷³. However several former pedestrian desire lines were blocked by the incorporation of semi-public space into individual gardens. The reworking of the estate's layout, re-orientating flats so front doors overlooked the new roads, plus inserting new entrance stair towers resulted in extremely complicated and confusing house numbering. One block had three road addresses, with unsequentially numbered flats. An attempt to reallocate numbers in 1993 only made matters worse (Interview Smith, 2011). Housing staff mentioned other unforeseen negative consequences, requiring later adaptation: erecting metal screens on the fire escape balconies to prevent unwanted access and preserve privacy and rectifying sound penetration from the modified ventilation. Coleman had resisted any relaxation of the DICE principles to meet fire regulations and when the resulting loose interpretation of the regulations was discovered they had to be retro-fitted with acceptable solutions.

6.2.1 Physical or symbolic deterrents

Coleman disliked door entry phones, which she described as “a siege exercise, accepting the criminal presence and trying to keep it out” (Bar-Hillel, 1986a, p.17), arguing that suitably designed entrances were a sufficient deterrent so made them irrelevant. The DICE adaptations at Rogers' resulted in sixteen entrances, a substantial number for two small housing blocks. However following pressure from residents, entry phones were installed (Price Waterhouse, 1995). The current estate managers complained about the excessive number of entry controls required and the disproportionate maintenance burden they had inherited (Interview Choudrey, 2011).

At Ranwell East, Coleman argued for the removal of the existing door entry phones:

“Unfortunately, that didn't work, because no sooner did the new stairwells go up with the doors removed, than youths on the estate would congregate on the stairwells once again, which is what obviously the project wanted to get rid of. So the door entry systems did go back” (Interview Smith, 2011).

⁷³ One of the new roads was named Alice Lane.

A *Building Magazine* article describes this removal of existing entry phones as illogical, noting that the Council replaced them two years after DICE completed (Spring, 1997). Despite this reinstallation in response to tenants' demands, the housing managers interviewed were sympathetic to the significance Coleman placed on symbolic over physical thresholds (Interviews Smith and Williams, 2011).

6.2.5 Responding to residents concerns

The Borough's restructuring and creation of local neighbourhoods coincided with an increased interest in tenant consultation. However the commitment to consultation appears to have varied between the two estates. A great deal of tenant consultation was undertaken on the Rogers estate with door to door surveys as well as open forum meetings. Stride described as the prototype for the approach his team still aims for; "the consultation was the forerunner of where we are today and it was really quite extensive":

"It was going to be a big change to the residents. This just going in and doing new windows and a bit of landscaping, we were changing the whole of the design, the layout of the blocks. We were splitting friends up...So the old makeup, the dynamics of the block were being changed, which for some residents was a big problem, but quickly settled down once it was in place. They got used to it. Many of them understood the principles behind it, what was trying to be achieved, because obviously they'd been screaming and shouting prior to that about the problems that they were encountering and we were saying we *can* alleviate these problems" (Interview Stride, 2011).

McCarthy also recalled residents' concern that the greater privacy would turn into isolation. Residents believed that shortening balconies to access two to three flats would mean them being cut off from their neighbours (Interview McCarthy, 2011). This anecdote of a tenant having to exit the block and re-enter to visit an old person in an adjacent flat was repeated in the mainstream press (*The Times* and *Daily Express*), as well as architectural publications (Warman, 1991; Kaniuk, 1991; Guest, 1993). Rogers residents were concerned about being displaced or moved away, but as with most DICE estates there was no decanting during the remodeling. This may have been an effect of Coleman's ambition for DICE to be a controlled experiment requiring the resident population to remain unchanged, but is more likely to be a result of improved housing practices and that the costs and disruption involved by large scale decanting programmes had made them unpopular with Local Authorities.

Coleman attended the initial meeting where tenants voted on participation, but few other consultation events which Stride reported were “an operational matter” and that Coleman did not value community empowerment as “part of the experiment” “Wherever possible we kept her away from residents” (Interview Stride, 2011). Similarly staff on Ranwell East recalled Coleman’s attitude as less ‘engaging’ than ‘informing’ residents (Interview Smith, 2011). Ranwell East Residents were more involved during the works, with a steering group made up of leaseholders and residents meeting with the contractors every fortnight, but residents’ memories of the consultation process show they were less content with the process and outcomes;

“There were leaflets saying what was going to happen and a woman who did consultation. But they didn’t consider what we’d already done. We’d paved the garden and the scaffolding cracked them... We’d already done the brick wall and they put in another wall. It was all very stressful. If we’d been around more in the day maybe it’d have been better. Maureen used to go to meetings but it was typical, loads of people shouting, mayhem. You’d have to go to have your say even if they didn’t listen. Some people were pleased with the result, those who’d moved from the tower into the houses. Maureen used to talk with the contracts manager. He’d say yes to anything to keep you quiet. But something happened and he was moved off and there was another person so nothing came of it” (Interview Ranwell East Residents B and C, 2011).

6.2.6 The impact of personnel changes on knowledge sharing

Coleman closely monitored the site works, ensuring adherence to her specified changes. She was scathing about architects’ inability to interpret her principles, “I do have to be firm. One particular architect on a different project [not Rogers] kept changing my plans and I’m afraid I had to shout at him - I was told later he was quite scared” (Guest, 1990, p.21). However the DICE consultancy leaflets are far more complementary, praising the architects for the Rogers, Kingsthorp and Bennett Street schemes by name (Coleman and Silver, 1995?a). In some cases, Coleman sought to implement her version of defensible space beyond the agreed programme. At Rogers, community architects Hunt Thompson Associates were quickly replaced by Stanford Eatwell Partners, when it became apparent that Thompson and Coleman (who knew each other having appeared on television together

in 1985⁷⁴) were agreeing alterations beyond the scope of the project (Interview McCarthy, 2011). Following this rearrangement the construction contract ran smoothly.

Ranwell East though, suffered from a more significant series of personnel changes. In 1994, towards the end of the programme, *The Observer* reported an investigation by Scotland Yard's Fraud Squad into accusations of maladministration of a tender for design work in Tower Hamlets⁷⁵. Uncovering this earlier professional impropriety resulted in the removal of the contract manager (Interview Smith, 2011). However, the selected designers' contract had already been terminated when Coleman saw their proposed plans. In her opinion "they weren't up to the job, that was obvious" (Dodd, 1994, p.6). This resulted in the scheme being designed by temporary architecture staff employed by the council.

This incident may seem an entertaining but irrelevant 'local government waste of public funds' scandal, with an investigation instigated by an incoming Labour housing committee, to blacken the reputation of their Liberal Democrat predecessors' decisions (Interview Williams, 2011). It does, however, illustrate several relevant points that distinguish academic from professional practice. It is not unexpected that the KCL DICE Unit did not have the skills or capacity to undertake a feasibility study for a £18M refurbishment, but it illustrates the vagueness around the KCL Unit's role as 'research' consultants. Codes of professional ethics for design/construction are justifiably different from researchers' codes of ethics but the KCL DICE Unit should have obtained Professional Indemnity Insurance to cover any negative consequences of the advice they were providing. Similarly the disparity of investigation required to inform academic research against practical implementation is

⁷⁴ See Jacobs and Lees (2013) for a description of the Estate tour that Coleman and Thompson arranged for the Prince of Wales in 1986.

⁷⁵ In September 1989, a design consultancy had won the tender for the Ranwell East feasibility study. Because of its size it was the only DICE scheme where a full feasibility study was commissioned independent of the KCL DICE unit. The 'feasibility study' evolved into a design commission. Councillors awarded the work on the advice of council officers despite the tender price being dramatically below that of their competitors. A further £1.5M of work was awarded without tendering a month later. McKeown had become concerned about the architects' appointment on discovering that under the guise of pressure to proceed rapidly, the Tower Hamlets' officer had not followed RIBA codes of practice, but selected a personal contact rather than follow strict council procurement procedures (Interview McKeown, 2013).

obvious, however the blurring of academic practice into commercial/professional activities required an understanding of multiple forms of 'good practice' particularly where it was impacting on highly procedural activities such as public sector procurement. Both the research and construction projects suffered from similar constraints, such as the time and delivery pressures from within London Borough of Tower Hamlets as well as the DoE. But whereas construction project management is founded on dealing with these types of challenges, the less onerous financial penalties or consequences found in research resulted in a tension between the two communities of practice. And, finally it is an example of Coleman's significant power and influence achieving the design consultants dismissal from the job. It is not clear whether the poor original architects or the change of staff can explain the arbitrary and off-kilter design decisions visible on the estate. Unsurprisingly this incident is not referred to in any of Coleman's publications nor mentioned in the Price Waterhouse evaluation (and is rightly excluded from their assessment of value for money). And yet it is the kind of messy real world problem that should be discussed in the more rigorous form of evaluation suggested by the SNU framework (see Chapter Seven) or a transparent examination of 'what works' in policy terms. Thinking of informal social mechanisms of dissemination, this is also the kind of event gossiped about by architects, quantity surveyors or Local Authority housing staff. So is likely to have contributed to shaping the narrative of Ranwell East as an [un]successful regeneration case study.

Figure 6.9 Construction of Alice Lane



6.3 Outcomes post DICE

Coleman's list of predicted outcomes from the remodelled estates was extensive and ambitious (Price Waterhouse 1997). I have not attempted to re-examine in detail outputs related to the mass of data collected at the time, such as decreased estate management costs, resident turnover, or reported crime. I have however collated the change in Coleman's main indicators, her design disadvantage and abuse scores.

Table 6.2 Design disadvantage and abuse scores for Rogers⁷⁶ and Ranwell East Estates: Pre- and Post-DICE

DICE Estates		Design Disadvantage Score /16	Intended Design Disadvantage Score	Achieved Design Disadvantage Score	Abuse Survey for <i>Utopia on Trial</i>	Pre DICE Abuse Survey /16	Post DICE Abuse Re-Survey	2nd Post DICE Abuse Re-Survey
Rogers Estate (2 blocks)	Survey date	1989		1993		1989	1992	1993
	North walk-up block	12.0		1.4		13.0	1.4	3.4
	North lift block			2.3			2.3	4.0
	South walk-up block	11.0		2.8		11.0	2.8	4.8
	South lift block			4.0			4.0	7.5
	New bungalows			0.8			1.4	1.1
	Weighted Average	11.6	1.5	1.8		12		
Ranwell East (21 blocks)	Survey date	1991		1994	1988	1991	1994	
	Blocks of Flats	13.0		2.0			4.3	
	Walk-up blocks	10.0		4.1			4.1	
	New houses			1.0			0.7	
	Weighted Average	11.8	n/a	2.2	6.1	6.4	4.1	

(Adapted from Coleman and Cross, 1994; Coleman, Cross and Silver, 1994)

These scores were used to select sites, as predictive design tools and as assessment mechanism for the schemes. As such they measure and record the extent that the physical blocks were remodelled. Whether these changes led to Coleman's predicted effects is more questionable. So this section considers several more diffuse outcomes, based on the professionals' perceptions of the schemes. Most of the outcomes are non-monetary: more

⁷⁶ Coleman noted the high pre-DICE abuse scores at Rogers as indicative of "other forms of social breakdown" and blamed the worsening abuse scores in the 2nd post-DICE survey on the shallow forecourts that collected litter. Alternative explanations, the unpredictability of litter as a measure particularly for a site with a shop on the corner on route to a nearby school were not considered.

attention for Globe Town Neighbourhood, establishing an experienced team, or gathering knowledge and learning about defensible space. Nonetheless a handful of significant outcomes were financial; receiving more funding than usual for refurbishment, for these and other projects.

6.3.1 Rogers Estate: Post DICE

Chapter Seven will describe the evaluation findings in detail. The Price Waterhouse evaluation attributed the reduction of crime levels on the Rogers Estate after the DICE project to the general gentrification of the wider area rather than the works themselves. Yet those involved in the Globe Town Neighbourhood team stressed the contribution made by their improved local management of the neighbourhood (Interview Wright, 2011)⁷⁷. As a controlled experiment, Coleman and Price Waterhouse attempted to separate out the impact of a single initiative, to isolate and measure one amongst a range of complex interconnecting activities and changes (Harrison, 2000); whereas Stride and his team saw the works to Rogers as a small part of the jigsaw of improvements to be made in the neighbourhood they were responsible for. Whether this improvement could be sustained was also uncertain. Revisiting the Rogers estate, McCarthy spoke with a original resident of the bungalows, reporting “she loves it, she absolutely loves it.” Nonetheless his professional assessment of the long-term upkeep was less positive, with lack of funding limiting maintenance of a reasonable standard (Interview McCarthy, 2011). One resident, still annoyed about the revised parking and the consultation process, bitterly recalled; “the only thing I got from the works was a back garden” (Interview Rogers Resident A, 2011), implying that any benefits had been outweighed by the fuss.

Discussing the need for continued investment to maintain housing estates Sporle suggested that funding allocation was self-reinforcing for many housing or urban policies. That is, reinforcing the ability to align with the aspirations of funding regimes and so attract attention and money, highlighted further what needed to be done:

⁷⁷ Kevin Wright was the property services manager for Globe Town Neighbourhood.

“The outcome of having a DICE project was that you got investment and you got attention. My experience of housing estates is that it doesn't matter how good or bad the design, although of course ‘poor design’ will make it worse much quicker, the fact is that if you don't invest and if you don't give people attention, it's going to go wrong. So in a way, Alice Coleman's approach was an entirely appropriate approach, because there were all these bloody awful estates that something had to be done about. If nobody is going to let you have money unless you can tick certain boxes, then nothing is going to be done about them” (Interview Sporle, 2011).

Figure 6.10 Rogers Estate: Post-DICE



Shorter access decks, new stair/lift tower, entrances visible from the street, enclosed gardens. Non-DICE works included new roofs and central heating



Rogers Estate, Tower Hamlets 2008 Photo Author

The Globe Town team also used the DICE project to justify the need for increased levels of Estates Action funding for subsequent projects:

“Earlier we did a straightforward Estate Action improvement, which at the time people went, wow! But once we were doing DICE and then moved onto Greenways after that, we were able to say to Estate Action, look anything after DICE we need to do at that level. So we were able to use it to get higher funding....And they didn't give us it all, but they definitely upped the figures” (Interview Stride, 2011).

Not only was Stride proficient at attracting grant funding, he was adept at publicizing his achievements and attracting attention. The newly completed Rogers Estate, visibly improved and easily accessible from Westminster was a powerful good practice case study, a showcase for urban regeneration and a transfer mechanism for spreading the concept of defensible space.

“George Young⁷⁸ loved it. He came down and brought hundreds of civil servants down, loads of times. There was him and me at the front walking

⁷⁸ Sir George Young then Minister of Housing and Planning

round Rogers with about 200 civil servants. We had coach loads. He loved Bow Town anyway..So it's surprising he [George Young] didn't make sure it [the DICE evaluation] got out there. He saw us as a model and loved us" (Interview Stride, 2011).

6.3.2 Ranwell East Estate: Post DICE

As with the Rogers' resident, gaining private external space was valued by the Ranwell East occupants:

"The best thing about DICE was they closed the landings and we got extra bit of garden" (Interview Ranwell East Resident B, 2011).

Even when residents noticed the reduced public space, they were not critical of this change:

"There's less open public space. It is much denser but to be honest there's less vandalism and less congregating" (Interview Ranwell East Residents A, 2011)

Contemporary opinions on the outcomes at Ranwell East varied. Some were not particularly favourable: "Ranwell East's tawdry, 1980s spec-built image that will date as quickly as did the estate's original 1960s vintage housing" (Spring, 1997, p.50: Guest, 1993). However three years after completion of the scheme, interviewed for *Building*, Michelle Smith reported:

"It's definitely a nicer place to live. Before the whole layout and feel of the estate was dull and dingy and people were moving out. Now, groups of residents sit in their gardens or on their balconies in summer and have drinks together. There's a community spirit slowly growing up" (Spring, 1997, p.50).

Figure 6.11 Ranwell East Estate: Post-DICE



New connecting road, infill housing, enclosed entrances to four storey blocks, and blocked off desire lines



Ranwell East Estate, Bow 2008 Photo Author

New stair towers, entrances and infill housing



Ranwell East Estate, Bow 2008

New entrances, blue fire-escape balconies, and enclosed front gardens



6.3.3 Transferring the DICE legacy to other estates

All the Rogers project team interviewed described DICE as an influential period in their lives and that this unique experience had supplied insights and practical lessons which they continued to apply (Interviews McCarthy, Stride and Wright, 2011):

“It was very, very difficult to secure money of that ilk, three or four or five million pounds worth of money to do Estate Action programmes. Our capital programme up to that time was pretty low-level stuff, very much scratching the surface of estate renewal. A new roof, windows, doors but nothing that was able to transform a complete estate. DICE was definitely a one off opportunity to be honest with you. Something we wanted to migrate to other estates but that wasn't going to be possible. That doesn't mean we didn't take the ideology behind Rogers with us” (Interview Stride, 2011).

McCarthy described the experience of the DICE project as “totally changing my thinking”.

“They're [the defensible space principles] taken for granted now really, and our design briefs automatically take them as first principles really now” (Interview McCarthy, 2011).

Prior to the scheme some participants only had a basic understanding of defensible space. Yet both Stride and McCarthy described the process of 'breaking up the blocks' as predating Coleman's principles. Stride remembered as a junior estate officer in 1981, persuading the repairs maintenance contractor to erect fences across balconies to reduce their length and “break the box up” (Interview Stride, 2011).

McCarthy was so confident with the transferability of the DICE principles' positive impact, that by mid 1993 he was planning to implement the best aspects, spending £6.5M of Estate Action funding to apply DICE principles to nearby Bethnal Green Estate. In retrospect he ranked creating private front gardens as the simplest, most wide-spread and successfully repeated feature. In addition to Coleman's claims for the improved territoriality and neighbourliness it was inexpensive and had an additional benefit of reducing Local Authority costs of upkeep for communal grassed areas (Interview McCarthy, 2011). Stride identified three other DICE legacy projects; Bancroft, Leopold and Burdett Estates in Poplar. He recalls that Burdett was most closely a DICE scheme which 'broke the whole estate up' but at a high

cost of £55,000 a unit at 1998 prices, now over £100,000 a unit. Few subsequent Estates Action projects were as generously supported, so the DICE elements replicated tended to be the cheaper ones: erecting fences, better lighting of public areas and only providing additional stairs to upper floors where this could be achieved cost effectively (Interview Stride, 2011). Those ideas that could be replicated more easily became widespread. These were mixed with familiar ideas like 'breaking up the box' or reducing circulation as well as interventions such as removing refuse chutes that were additional to the DICE principles. These design changes mutated and were adjusted to fit the new sites, cross-fertilizing with other improvements that the team wanted to apply.

Asked which aspects of the DICE scheme they would reapply, the current Ranwell East housing manager described a 'shopping list of ideas to try':

"We'd do bits and pieces. One of the things we've recognised quite quickly is there is not one solution, that what we mean by defensible space will vary from area to area. Our recognition is that it has to be treated by a block and by an estate type solution" (Interview Williams, 2011).

Williams is more outspoken about those elements they would not repeat. He questioned the use of high level-fencing that was recommended automatically as "turning it into Colditz", regardless of particular boundary requirements in specific locations. Williams also identified poorly maintained private gardens as a challenge (Interview Williams, 2011). Coleman's urge to build additional houses on every parcel of public green space, increasing site densities, limited the future adaptability of the estates. Once communal space has been transferred over to private ownership there is little chance of reversing this.

This reinforces my hypothesis that the concept of defensible space moved not as a whole, but as a cluster of concepts. Peck and Theodore (2012) identified that a process of fragmentation prioritizes certain aspects (those that practitioners see to work). By breaking the concept of defensible space, (and of DICE) into manageable/relevant elements and applying only those aspects that are felt to be useful to the context that they worked in, each practitioner devised their own version of defensible space. Thus defensible space has been shown to function not as comprehensive theory, only at the level of a cluster of interacting

ideas. Finally this clustering of fragmented concepts also reinforces how DICE fits to Hogwood and Gunn's (1984) characterization of policy as multi-faceted and mutable (see Chapter Two). At some point in the story DICE conforms to each of their five categories with each policy fragment achieving differing degrees of embeddedness.

Table 6.3 DICE conforming to multiple definitions of policy

Policy as -	How did DICE conform to this classification of policy?
- aspiration, or a mission statement	DICE (alongside PEP and other regeneration or crime reduction policies) aimed to improve residents' lives, and reduce levels of crime.
- a set of proposals	<i>Utopia on Trial</i> as manifesto, or the <i>DICE Disadvantage Reports</i> setting out the DICE principles for the design of flats and housing.
- formal authorisation that legitimises proposals	Margaret Thatcher authorising funds to be provided for DICE. The inclusion of the DICE principles in the Audit Commission report (1986) or British Standards (BSI 1986; 2000) (see Chapter Eight)
- a programme	DoE's ring-fenced funding for the DICE programme
- as process or field of activity	Defensible space resisting a fixed, permanent or immutable formation with the DICE principles being reshaped during their implementation across different estates.

Recognizing and reapplying the lessons learnt on DICE, required reflection on what had been learnt. Schön believed designers/practitioners take spontaneous and intuitive actions, then continuously revise these in response to feedback. Learning is a series of incremental steps with pauses for reflection, with practitioners operating through a continual process of self-adjustment (Schön, 1983). An objective and unbiased evaluation can act as a catalyst for this reflective activity (Palfrey, Thomas et al., 2012). However as the following Chapter will show, the evaluations of DICE were neither objective nor unbiased.

The project team at Rogers was unaware of the DICE evaluation when the report was published in 1997:

“We never really had anyone come back and look at it. Even within the Council there was a lack of knowledge flow between departments or neighbourhood areas. I didn’t know much about the Ranwell scheme, to be honest, I knew where it was, but not more. Rogers started before Ranwell which ran on for a number of years but there was very little publicity about the success or otherwise, or information on value from sources such as Council Audits” (Interview Wright, 2011).

Wright attributes this to organisational decentralisation as well as the perceived lack of significance of formal knowledge transfer at the time. Other staff either had no recollection of the evaluations (Interviews McCarthy and Stride, 2011), or echoed Wright’s perception that the scheme had not undergone ‘proper evaluation’ (Interview Stanford, 2011).

Conclusion

This chapter has concentrated on the micro-practices and decisions made within these two case studies. Both case studies prompted insights into related, but less significant themes and Appendix F sketches out material warranting further investigation. Examples were chosen that informed the three key research questions: how ‘defensible space’ as an idea was mobilized into practice; how its mobilizing mechanisms affected the successful transfer and application on the two sites; and what practitioners recognized and used as ‘evidence’. It is clear that these daily micro-practices were as important in the overall successful embedding of the concept or implementation of a policy as the large scale moves.

Ekblom (2011) emphasises the central role of mechanisms and context in the transferability of good practice. Rather than a universal version of ‘what works’, he suggests we should consider “innovation based on generic and generative principles, distilled from site-specific mechanisms” (ibid., p.10). This Chapter has exposed both formal and informal mechanisms (Thatcherite housing policy, DoE funding regimes, the *DICE reports*, face-to-face meetings with residents, Coleman’s personal interventions with other participants and so on.) Site-specific mechanisms emerge to address the local challenges. Where one mechanism fails, another may compensate. So in Tower Hamlets, the loss of institutional knowledge through poor record keeping, or lack of feedback loops, placed greater emphasis on the continuous individual presence of particular staff. This meant that the recommendations of Mark Jones

who was the Architectural Liaison Officer at Ranwell East throughout DICE carried great weight. 'Best practice' case studies have been shown to be a very powerful transfer mechanism. The recommendations included in the DoE's evaluation were irrelevant to the Rogers team as they were unaware of the report as a transfer device. Stride was able to publicize Rogers as 'successful good practice' but I have shown that there is as much to learn (if not more) from the failure at Ranwell East.

Many of the examples discussed in this chapter reinforce the impossibility of testing an urban policy with any experimental rigour. DICE was not operating in a policy vacuum and the project's aims were influenced by/interacted with other housing or economic policies of the time as well as the urban fabric it set out to improve. Some constraints were intangible (tendering policies affecting management or repairs services, or the policies funding new housing) others physical (structural defects, or existing road layouts). The recurring example of Coleman's rejection of entry phones as diluting the symbolic sense of ownership illustrates the conflict between her abstract theoretical position, residents' wishes and the practical experience of housing staff⁷⁹. To practitioners such as McKeown, with experience in management and maintenance of large housing estates, the DICE principles failed to get to the causes of the physical deterioration on the estates, let alone beginning to address the social problems. She questioned the ethics of not addressing basic refurbishment issues:

"I looked at the DICE estates with windows falling out and wondered what we were doing just changing the outside spaces. I had a maintenance background, used to surveying for dampness and rot. I could see that the problems weren't going to be solved with some fences" (Interview with McKeown, 2013).

Occasionally practical experience won out, as the practitioners rejected Coleman's ideas regardless of the evidence she presented.

⁷⁹ This was a contrary position for Coleman to take. Around 1984/5 she had added a 16th DICE principle, recommending glazed doors over open door apertures. The security technology of the time, entry keypads or key fobs was basic and easy to vandalise. Despite this entryphones (and CCTV) were high on residents' lists of desired improvements.

I argued in Chapter Four for the importance of a suitable 'landing site' for policies or new ideas. This chapter shows that these suitable conditions can be very localized. Tower Hamlets at the neighbourhood scale may have proved a favourable experimentation site, but more successful outcomes occurred at Rogers than Ranwell East. Interviewees also agreed that the Rogers alterations had a more positive and lasting impact not only compared to Ranwell but on other regeneration projects (Interviews Jones, Stride and Wright, 2011). One obvious explanation may be the size and spatial arrangement of the estate. The compact scale of the Rogers and its less diverse and intense social problems (Price Waterhouse, 1996), meant that a smaller variety of design changes were implemented. However, I would argue that the success was due more to the people involved in Rogers, their keenness for innovation, willingness to absorb new ideas and the ways that they applied Coleman's principles. This openness to innovation was occasionally stronger than their commitment to DICE. This enabled the team to cut and paste those aspects that suited them, or they felt would work; for example the Globe Town Neighbourhood team's desire for resident consultation was a stronger driver than Coleman's 'telling residents' resulting in a very inclusive consultation process; or pragmatically retrofitting door entry phones once Coleman's involvement on site was ended.

In contrast at Ranwell East, due to the reallocation of the design contract and use of temporary architects, there was no established design delivery team. These and other factors conspired so that the designs seemed half-baked, appearing to have applied the DICE rules rigidly and unquestioningly – with uncomfortable contrived results and an insufficient specificity of response to the variety of flat types, differing block sizes and forms that Ranwell East estate contained. The regeneration of the Mozart Estate (comparable in size to Ranwell East) described in Chapter Eight, used an equally broad palate of responses, but each adaptation varied slightly over each phase and adjusted depending on how the previous designs had been received. The Rogers team was also able to reuse the most successful ideas, reapplying them both on the control estates, but also subsequently on the large-scale schemes for Poplar HARCA, suggesting that the scale of an estate is not a definitive explanatory factor.

This chapter has described the processes and outcomes from practicing DICE on two estates and started to consider the questions “What works?” “Where?” and “At what scale?” The following chapter will explore this in far greater depth by discussing two evaluations of the DICE initiative: the Price Waterhouse evaluation (which was highly cautious about which elements of the DICE programme were successful) and to Alice Coleman’s own more favourable evaluation. Just as policy evaluation cannot be limited to asking “What works?” but must address the alternative “Why didn’t this work here?” these two assessments will be scrutinized for what they say, and critically what they omit to say, about the DICE project.

Chapter 7: Evaluating DICE

Introduction

Just as Chapters Five and Six showed that politics was central to the funding and implementation of DICE, the assessment of its success was an equally politicised activity. One consequence of the supremacy of political authority was the distortion of the evaluative process, as Flyvbjerg wryly noted:

“The result seems predetermined and the evaluations...become more ritual than real” (Flyvbjerg, 1998, p.15).

This chapter considers two varied evaluations of DICE. It establishes the perspective on policy and performance evaluation within the DoE in the early 1990s. Building on Judith Littlewood's⁸⁰ 1992 report *Policy Evaluation: the role of social research* (Doig, Littlewood et al., 1992) the DoE research group began to undertake widespread evaluation of policy as part of the public sector quest for effectiveness, efficiency and economy. One example was DoE commissioning an evidence review and evaluative framework for crime reduction initiatives from the Safe Neighbourhoods Unit (SNU) (1993). This advised on the forms of evidence required for a fair and robust evaluation of a policy intervention.

The chapter continues with the highly-charged politicised selection of consultants Price Waterhouse to oversee the DICE evaluation. Chapter Five described the DoE's resistance to DICE and from the outset it appears the evaluation was intended to suppress Coleman's ideas. With no acceptable way to curtail the project without directly countermanding the personal authorization of the Prime Minister, the tortuous relationship between the evaluation team, the DICE Unit and the DoE continued until the Prime Minister left office. The ambitious quasi-experimental evaluation design devised by Price Waterhouse resulted in an increasingly convoluted process of data collection and analysis to address the practical

⁸⁰ Littlewood was then Head of the DoE's Research Division.

challenges of urban policy research. The report's key findings are summarised, but in the light of various omissions I speculate on what the report actually represents.

Next, I describe Coleman's far more modest evaluation. The relative resources and costs of the two are compared, considering the process of professional consultancy against academic evaluation. The chapter concludes with the subdued launch of the Price Waterhouse report in 1997 and how this indicated its irrelevancy to the DoE's opinion of the programme. As the civil servant responsible recalled "DICE was just a little bubble that got punctured" (Interview Riley, 2011).

7.1 The Safe Neighbourhoods Unit meta-analysis

In 1993 the DoE published a significant and comprehensive evidence review *Crime Prevention on Council Estates*. Commissioned from the Safe Neighbourhoods Unit (SNU) under the supervision of DoE research manager David Riley, it gathered examples of crime reduction interventions in housing estates. These were categorized as: design-led, management-led, security-led, social development-led or policing-led interventions. A section titled *Urban design and deviance*, describes Newman's pioneering New York research, *Utopia on Trial* and the redevelopment of the Mozart Estate. DICE is included as a design-led example and various case studies of PEP and EA funded schemes are included in the sections on estate based/management-led and estate improvement sections (SNU 1993).

The report's tone was pessimistic, acknowledging that despite extensive practical crime prevention activity throughout the 1980s, crime rates continued to rise into the 1990s⁸¹. There were reservations over the quality of information available, use of guarded vocabulary ("appears", "seems") and cautious caveats about evidence which "does not allow for judgments one way or the other" (ibid., p.3) with long sections on the "scope of the report

⁸¹ The British Crime Survey 1984 identified three high risk residential areas; inner city high status non-family areas (rich homes/privately owned buildings in multiple occupation), inner city multi-racial areas and the poorest council estates (BCS, 1984, cited in SNU, 1993, p.8)

and its limitations” (ibid., p.2). A (self-evident) conclusion is that assessing the effectiveness of a crime prevention scheme hinges on the validity of observers’ interpretations (ibid., p.3). Yet these observers rarely include the full range of community stakeholders, or undertake what commentators such as Patton would consider “utilization-focused evaluation”, that is, focusing on “how real people in the real world apply evaluation findings and experience the evaluation process” (Patton 2002, p.2 cited in Palfrey, Thomas et al. 2012, p.49). The report referred to the experience of living in an area suggesting that residents must be the ultimate judges of the success, or not, of crime reduction schemes. Crime prevention is only one aspect of a resident’s quality of life and one of many aims of estate regeneration schemes. Nonetheless, it can dominate thinking, particularly amongst (design or evaluation) professionals and it is misleading not to incorporate judgments of the community on this issue.

Pertinent to this thesis, the report proposed a framework for evaluating crime prevention initiatives (SNU, 1993, pp.31-32). Conceding that evaluations can be expensive (in time and resources) SNU argued that when constrained costs preclude a fully comprehensive evaluation, applying a consistent rigorous basic framework becomes *more* essential to highlight the boundaries and limitations of an evaluation’s findings and provide credible explanations. The framework suggests four forms of evidence are required: i) evidence that crime had actually reduced, in addition to residents thinking the problem had reduced; ii) evidence that the initiative was responsible for any alterations; iii) evidence of which individual measures accounted for any changes; and iv) evidence of the permanence and replicability of the effects. As one DoE civil servant, David Riley, managed both the SNU review and DICE evaluation it is justifiable to read across these objectives and expectations from one project to the other. Thus later in this chapter, I assess both of the DICE evaluations against this SNU framework, assessing the strength or weakness of the evidence each provides.

The SNU meta-analysis highlighted difficulties identifying which factors contributed to success. They noted that successful schemes share common elements with less successful

ones. Referring to the opportunistic model of crime which focuses on individuals rather than societal causes (Herbert, 1982; Kitchen and Schneider, 2005) the report notes that initiatives may have applied certain approaches not because of their proven efficacy but merely because they were fashionable;

“This reflects the existence of a kind of orthodoxy of approach, a general acceptance of a particular model of crime prevention, which emerged in the late 1970s and 1980s and which meant that many initiatives have adhered to or at least paid lip service to certain ideas or principles such as multi-agency working or resident consultation” (SNU 1993, p.3).

The authors were disappointed to identify only eight design-led evaluations (including the SNU’s own appraisal of the Mozart Estate remodelling - see Chapter Eight). Given this lack of evaluative evidence, they were surprised by the number of expensive remodelling projects that “at least partly” followed design-led principles. In response, the SNU were looking to the Price Waterhouse DICE evaluation to clarify the value of design interventions. SNU anticipated that the DICE evaluation, which was publicly announced in a 1991 newspaper article (Baillieu, 1991b), would provide definitive explanations:

“It is hoped that the Department of the Environment’s *Design Improvement Controlled Experiment* currently underway settles at least some of the arguments about the impact and cost effectiveness of design measures” (SNU 1993, p.103).

There is another reference to the DICE evaluation in the penultimate concluding paragraph, where SNU argues for evaluation becoming a condition of funding, to foster greater collaboration between practitioners and researchers. This added to the weight of expectation for DICE to be thoroughly and honestly evaluated (ibid., p.165).

7.2 The DoE’s (Price Waterhouse) Evaluation

It was imperative for the DoE to demonstrate the impact of its £50M investment, with Coleman’s funding conditional on her participation in an impartial evaluation. The DICE evaluation was to be an independent, in-depth assessment of the impact, costs and benefits of the initiative. It became a complicated, costly exercise combining data gathered from multiple sources, such as police and social services, as well as large-scale longitudinal

surveys of estate residents. David Riley, the Government client, was a social research specialist having worked at the Home Office (HO) before moving to the DoE. At the time of DICE, he was a relatively junior civil servant, but progressed rapidly managing significant joint Department evaluations including the SNU report (1993) and PEP evaluation (Foster and Hope, 1993)⁸². Evaluation of some form was a typical expectation for most publicly funded programmes (Wells, 2007), and co-operating with the evaluators was a precondition of selected Local Authorities receiving DICE funding. Yet Riley felt Coleman agreed to the evaluation “very dismissively without any intention of paying attention to it” (Interview Riley, 2011). Riley’s original involvement was commenting on early correspondence between Alice Coleman and Sir George Young. He felt that Coleman’s evidence for such design-led interventions was rather weak. This led to the Head of Division for Research, Judith Littlewood, advising the DoE Permanent Under Secretary Terry Heiser that the proposed research was inappropriate. Riley summarised his briefing to Littlewood as “basically say, you do it over my dead body but if you do it then it’s got to be properly evaluated” (Interview Riley, 2011). The DoE’s lack of confidence in Coleman’s ideas even prior to the evaluation was mentioned by several interviewees (Interviews Riley, Sporle and Wiles, 2011).

“It was nonsense to start with. You knew perfectly well what the evidence would be. Our concern was to cover all the bases so we couldn’t be accused of overlooking something. It seemed such an improbable mechanism to produce any benefit, especially since you managed to piss the tenants off enormously in the process” (Interview Riley, 2011).

One of the Price Waterhouse evaluators, Katrin Sporle, reinforced that a key concern was that such an iconoclastic concept might proliferate and “to ensure that Coleman could not run away with public money and start doing this all over the place” (Interview Sporle, 2011). This appears to have been an unintended consequence of Coleman establishing the KCL DICE Consultancy Unit and trialing the DICE approach on the Mozart Estate. Despite describing DICE as a full-scale pilot, the DoE did not intend it as a trial run for extensive roll out.

⁸² On leaving the DoE, Riley built a career around evaluative research, later becoming Head of Profession for Government Social Research and then Chief Social Researcher at the HSE.

“I don’t think there were discussions about the longer term future of these kinds of interventions, because they’re quite expensive. I don’t think anyone was anticipating the benefits would be commensurate with the amount of investment” (Interview Riley, 2011).

As Chapter Five showed, Coleman’s derogatory comments about the DoE in *Utopia on Trial* and the poor fit of her proposals alongside other regeneration approaches being promoted added to the suspicion of DICE within the Department. This negative DoE view of Coleman’s work may not have been communicated formally to the evaluation team, yet Sporle recalls that they were aware of the project’s origins with the Prime Minister as well as the departmental political tensions surrounding it. They were also aware, via John Harvey, of how enthusiastically Local Authorities were applying for the DICE funding and the hostility this caused within the Estate Action team (Interview Sporle, 2011). Thus the expectation from the outset was to contain Coleman’s recommendations, rather than objectively test or verify them.

7.2.1 Evaluators’ personalities, expertise and bias

In June 1989, having commissioned Coleman’s research, John Harvey moved from the DoE to Price Waterhouse Management Consultants. Acting as a ‘transfer agent’, he passed on his knowledge of the project’s background and the policy context into this commercial setting. Once there, Harvey helped a young project manager, Katrine Sporle, draft the tender proposal for the DICE evaluation. Price Waterhouse competed for the tender, were appointed, and brought together a sizeable team of evaluators. Given the long timeframe for the project and the nature and degree of staff turnover of private consultancy, the number of evaluators involved in the project and listed in the report is not unusual (Price Waterhouse, 1997a). Sporle led the day-to-day project management of the evaluation until she left to become Director of Administration at Basingstoke and Deane Borough Council in 1992⁸³. Residents’ surveys and physical mapping of estates were subcontracted out to the market research firm, MORI.

⁸³ In 1994 Sporle became Chief Executive at Basingstoke and Deane Borough Council, before becoming Chief Executive of the Planning Inspectorate for England and Wales in 2003.

Forming a steering group was a sensitive first step in shaping the evaluation, with Coleman an essential member to secure her agreement to the evaluation design and outcome measures. Riley remembers cannily selecting the steering group members:

“I was mindful of Alice Coleman’s rather slippery use of stats. So I invited an eminent statistician. Not letting her wriggle off the hook as it were. It had to be open and transparent and done in her presence. Having this steering group with independent experts on it turned out to be the right way forward. She did cavil at a number of the findings, but they were validated by independent experts” (Interview Riley, 2011).

These experts were: a statistician, Sir David Cox from Nuffield college; Tim Hope, a criminologist and “astute methodologist” from Keele University⁸⁴, Chief Inspector Brian Hewitt of the Stafford Crime Prevention Centre and Paul Wiles, then Professor of Criminology at Sheffield University. Representatives from the DoE, Department of Health and the HO also contributed. Professor Wiles, who later spent nine years as the chief scientific adviser at the HO, becoming chief government social scientist in 2007, was a particularly combative and outspoken critic of the DICE programme and Coleman’s research from the start. Nonetheless, the evaluators appreciated his expertise, finding him “a marvellously knowledgeable expert, able and sensible” (Interview Sporle, 2011).

Coleman was displeased with the set up for the evaluation. An article in *Building Design* sensationally described her as “seething” at the imposition of Price Waterhouse as external monitors for the programme (Baillieu, 1991b). Coleman was suspicious of the report’s impartiality as its authorship was attributed to John Harvey. Coleman fumed “We will do it, it will be a great success; they [Price Waterhouse] will write it up and say it is a great failure” (ibid., p.1). Harvey later relocated within Price Waterhouse to minimise conflicts of interests and accusations of bias arising from his involvement evaluating a project that he had commissioned. However he still retained a significant role in the project liaising with Coleman on behalf of the evaluators:

“Poor John, every week he’d take Alice down to The Savoy for afternoon tea. Go and bloody buy her tea. That was his job. He was the kind of man

⁸⁴ Also an evaluator of the PEP (see Foster and Hope, 1993).

whose maiden aunts loved him, so he was dispatched to do that while we tried to get on top of what on earth was going on” (Interview Wiles, 2011).

In the early 1990s there were weaker civil service/governmental mechanisms for assessing the progress and continuing relevance of research studies. The first Treasury guidance on appraisal and evaluation of programmes was published in 1988 (HM Treasury, 1988). This was eventually replaced by the Treasury *Green Book* (2003), which promoted economic evaluation and a few minor non-monetary approaches. In parallel, the Treasury published *The Magenta Book* (Government Social Research Unit, 2003), a practical guide to action research and evaluation techniques. Thus formal guidance on integrating evaluation into government level decision-making was relatively slow to evolve, although it had been an implicit element of policy-making for several decades (Doig, Littlewood at al. 1992; Strategic Policy Making Team, 1999). However there were powerful drivers for participants to continue with the initiative, regardless of their opinions of it.

“We went on for months and months because we had to. It was one of those situations where Price Waterhouse weren’t going to blow the whistle on it, they were making a fortune out of it. Later on, there were some mechanisms that might have got you out of that. In other words, if one year in to DICE, somebody was in the position to go to the Minister and say ‘this is barking frankly, we’re throwing money at this and it’s not going to work’, then the whole thing might have been derailed. David Riley was a fairly junior research officer at that stage, was managing it. Judith [Littlewood] was quite influential but there were many other things that she was trying to do. In any case, the problem with Judith is that everybody knew that she was a great supporter of an alternative answer to this problem [PEP] and that kind of discounted the advice she was giving if she weren’t careful. The fact was everybody was bloody terrified of the Prime Minister” (Interview Wiles, 2011).

Despite the steering group’s opinion that the DICE refurbishment schemes were unlikely to achieve their intended aims, scoping continued to select potential estates and define the evaluation process. Designing a suitable evaluation methodology was itself challenging. The basic design was to collect information at two points: prior to start on site, returning a year after completion of the works. Similarly analysis was planned on two levels: first, analyzing the impact on an individual estate relative to its own neighbourhood (comparing each estate with its local control estates); second, a comparison of the overall pattern of outcomes against a pool of all the control estates. Yet even with these multiple comparisons, assessing the altered DICE estates against control estates was a poor evaluation design rather than a

more randomized selection. Finding suitable matches might be possible for one or two variables, but these might not prove to be the significant factors. This simplistic matched evaluation design controlled poorly for bias, particularly as one selected variable was an arbitrary geographical one, such as all the controls being from the same Local Authority. As Chapter Six showed, one Local Authority may have very different management structures at a neighbourhood level, restricting the pool of comparators to that neighbourhood. The title 'Design Improvement *Controlled* Experiment' (DICE) illustrates Coleman's aspiration for a pseudo-scientific comparative approach, dictating both the use of estate controls and controlling for as many variables as possible (Interview Coleman, 2013). However as Chapter Six showed, her selection of potential estates was based on a preconceived idea of the extent that they could demonstrate the success of her DICE principles. As such the trial was the antithesis of a randomized controlled trial (RCT), commonly considered the gold standard of trustworthy evidence. Recent Government evaluation guidance favours the use of RCTs (Government Social Research Unit, 2011), but Cartwright and Hardie (2012) raise three serious criticisms relevant to DICE: There can be very few RCTs in social and urban policy as it is extremely difficult, if not impossible, to randomize selection at an area level; RCTs are vulnerable as diversity across a single variable can undermine the whole experimental design⁸⁵; and it is impossible to control for variations other than for the variables being evaluated⁸⁶. In the face of these practical difficulties, limiting policy evaluation to RCTs would be paralyzing, ignoring the mass of qualitative, subjective evidence that good practitioners rely on in the field (Palfrey, Thomas et al., 2012). So while the DICE evaluation relied on control estates, it could not aspire to the rigid experimental criteria of RCT's, merely more natural controls arising from pre-existing groups (such as the existing populations present on housing estates) resulting in a 'quasi-experimental design'. By the 1990s this use of experimental-control design was generally considered unsuitable to investigate social groups in a community setting (ibid., p.209). Thus the Price Waterhouse

⁸⁵ Particularly if this variable is as diverse as the 'design' features Coleman was tracking.

⁸⁶ Such as a Local Authority's tenant allocation policy.

approach was little more than a structured case study comparison, particularly as Coleman's influence choosing which estates to remodel negated any suggestion of a rigorous selection.

“So purity of experimental design was almost impossible, given Alice was in charge of the actual implementation and choosing the areas she's going to implement it in. You had the whole thing contaminated right from the beginning” (Interview Wiles, 2011).

Riley was very concerned about the inherent weaknesses of the experimental design and the increasing complexity of the analysis attempting to control for the many variables, that emerged in response (Interview Riley, 2011). For both evaluation design and analysis, the aim is simplicity:

“A good experimental design is a simple one, not complex. It's the same as statistical analysis. If you have to do all sorts of fancy statistics, you've got bad data. If you've got really good data, good strong experimental design, the stats are easy. You only get into fancy modelling and stats when your basic design is not very good” (Interview Wiles, 2011).

Price Waterhouse's original tender recommended a single control for each of the five DICE estates evaluated. However they found it impossible to identify a single closely corresponding site nearby and Riley insisted that there should be three controls for each of the evaluation sites. The control selection process was based on matching design features, aiming first for a similar block form (regardless of estate size) plus a very rough match of socio-economic classification of the residents. The increased number of controls added substantially to the costs and undermined the analysis in other ways; for example, MORI undertook 1200 interviews with residents from control estates and only 800 on the five DICE ones, spending a greater proportion of their fees on the controls (Interview Taper, 2013). Local Authorities agreed not to undertake major improvements other than normal maintenance, on the controls between 1991 and 1995, so that environmental conditions remained unchanged. Local Authorities were not held to this as two of the Globe Town control estates had improvements in parallel to DICE; Greenways Estate which received £6.5M and Wellington Estate £13M from the last round of the Estate Action programme in 1993/94 (HC Deb, 2002).

7.2.2 Too much data, too broad-brush findings

Riley described Coleman's measurement parameters (graffiti, cigarette butts and litter) as "rather trivial" (Interview Riley, 2011). While these might act as diagnostic indicators, he felt trying to measure the impact of building design changes with such inconsequential outcome measures was ineffectual, particularly when the project was interested in crime, fear of crime and social behaviour. Coleman's measures would not be sufficiently explanatory of any benefits, so the evaluation needed to cover a greater range of behavioural and attitudinal variables (Interview Riley, 2011).

One weakness of defensible space as a concept and Coleman's application of it in practice, was the breadth of influence she claimed for it. The Price Waterhouse analysis tried to identify effects against eight broadly defined areas of impact and gathered data for all these areas:

- Crime and incivilities (which included locational analysis of crime incidents as well as fear of crime and incivilities),
- Housing management (assessing resident satisfaction with management and repairs),
- Social fabric and community (which included indicators for social control, such as the presence of strangers on the estate),
- Upbringing and control of children (based on parents awareness of their child's activities and locations for play),
- Socio-economic conditions,
- Health of residents,
- Environmental conditions (This most closely echoes Coleman's measures but assessed the *extent* (not only presence) of graffiti, litter and damage and also residents' general satisfaction with the environment),
- Desirability of the estates (which included satisfaction with the dwelling as well as its surrounding area).

Applying a more sophisticated mapping approach than either the Design Disadvantage study, or the DICE reports, the evaluation recorded the location of anti-social behaviour and

criminal incidents, as well as Coleman's graffiti or littering variables. However, in a pre-GIS, pre-computer era, the techniques used were basic, with data collated as coloured stars stuck onto large-scale drawings, sellotaped to A1 sheets of paper.

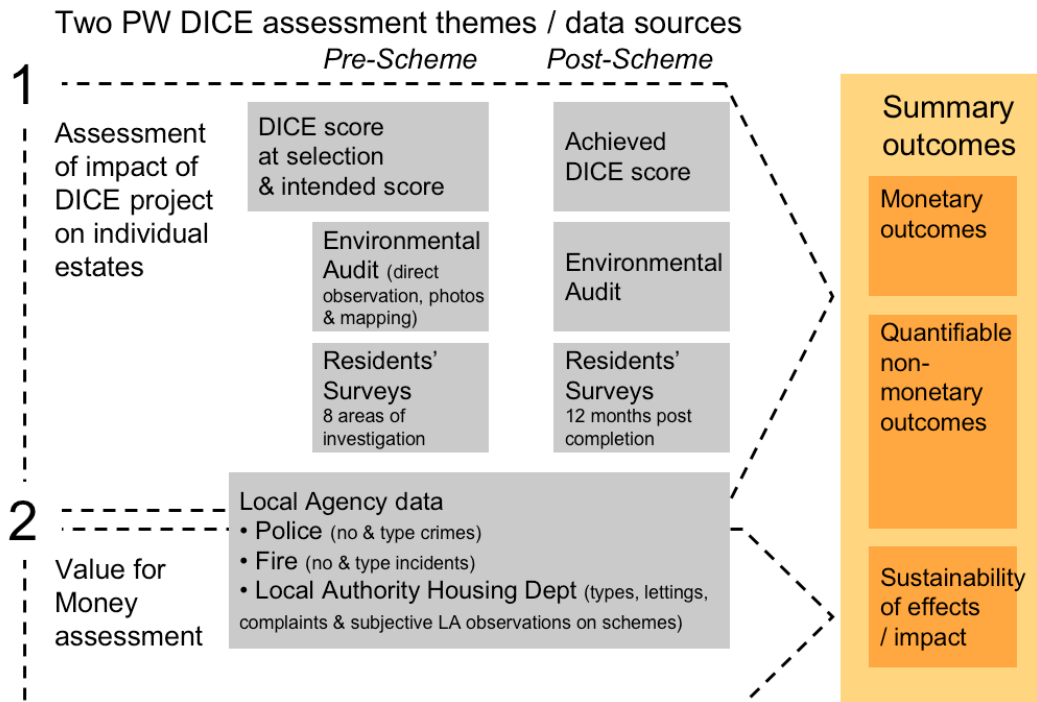
"We had to send mappers out. Every part of the estate had a number attached to it. When we asked an interviewee, 'What had happened to you on the estate?' They had to say precisely where on the estate it happened to them and the interviewers had to record on the questionnaire these numbers, so that everything had to be taken down. So not only were the dog turds themselves subject to quality control; size and density but everything that happened anywhere was assigned to these location numbers. What would we do with all this data? It was madness" (Interview Taper, 2009).

None of this spatial investigation was used in the final report and it appeared to play little part in the analysis. There was consensus amongst the evaluation team that too much data and information was collected, with much of it unused (Interviews Sporle, 2011, Taper, 2009, Riley, 2011):

"I suppose the number of issues covered in the evaluation were probably more than strictly necessary. But it was belt and braces. There'd got to be no stone left unexamined. I think genuinely there was interest in unintended benefits. Because a lot of money had been spent on these estates. They did look different afterwards. There may have been issues that weren't predicted by Coleman that were genuine outcomes of the intervention" (Interview Riley, 2011).

This extensive body of data gathered by Price Waterhouse was analyzed and modelled in a variety of ways and finally presented under two themes: the impact of DICE on individual estates and a value for money assessment. The report supplied a detailed evaluation of five estates with calculations of a wide range of variables reporting on both monetary and non-monetary outcomes and the long-term sustainability of the effects.

Figure 7.1 Evaluation themes used by Price Waterhouse



Sporle recalled Riley as an exacting client who “micromanaged the micromanagement of the project” (Interview Sporle, 2011) to ensure the evaluation met his rigorous research standards:

“Because this had its provenance in the Prime Minister, whatever you said, you had to be very sure of yourself. It was David Riley being ahead of his time saying, ‘Whatever the conclusions are, they have to be evidence-based’” (Interview Sporle, 2011).

The evaluation report listed the objectives of the DICE programme:

“In particular the evaluation assessed the extent to which the wide range of objectives predicted by Professor Coleman to flow from the remodelling of poorly-designed design estates were actually achieved. These were expected to include;

- substantial reductions in maintenance costs,
- easier and more efficient estate management as a result of fewer complaints,
- easier and cheaper estate management through a lower tenant turnover rate,
- reductions in rent loss as a result of shorter vacancy periods and more satisfied residents,
- up to 90% reduction in crime,
- improvement in children’s behaviour and improvements in the physical and mental health of residents” (Price Waterhouse, 1997a, p.2)

McKeown recognized the majority of these objectives (with the exception of the immense predicted reduction in crime) but doubted they were Coleman's drivers to the extent attributed in the report. McKeown recalls that hypotheses such as more efficient estate management resulting in fewer complaints or reducing repairs and maintenance expenditure, were discussed during selection visits, but she felt these were not considered significantly subsequently (Interview McKeown, 2013). While Coleman argued that her interest was in wider social interaction, not solely crime or ASB (Interview Coleman, 2013), Sporle also recalled Coleman's expectations as more straightforward.

"I didn't think Alice was claiming health improvements. I think it was David Riley who insisted that health was an offshoot of reduction in crime and fear of crime. I think some of her concepts were blown up into something different, because of the difficulty of actually coming to a decision of what had made an impact and what hadn't. So every time we said 'well, we'll do a before and after survey with the residents and ask them whether or not they feel better', David Riley would say 'and how are you going to measure that and how are you going to isolate that from gravity?' So actually that's why the research took on a life of its own, because you not only had to measure outcomes, you had to measure what might be the potential impact on the outcomes. So I'm not sure it was Alice. I think she may well have said that it could make people feel better. But I don't think she was being scientific to the nth degree in terms of the actual impact. She dealt much more in generalities, the sort of common sense approach that she and Margaret Thatcher would have had, which is if that if you've reduced crime then, yes, life is going to be better" (Interview Sporle, 2011).

Price Waterhouse had access to local crime data provided by the police, but this proved problematic to interpret, with no consistent effects found across the five DICE estates. The most reliable crime reduction impacts were found on the Ranwell East and the Nottingham estates. This was similar for experienced incidents or witnessed crimes and incivilities. Fear of crime had also reduced on Ranwell East. Areal affects caused by changes in crime levels in the surrounding areas confused the picture, with the evaluation stating that the crime reduction analysis:

"was least supportive of the Rogers Estate results, suggesting a particular local effect involving a general improvement of the whole locality" (Price Waterhouse, 1997a, p.69).

While the analysis for social control (considering indicators such as ease of being able to identify strangers) revealed considerable variation with no clear pattern emerging, there was slight evidence of improvements in community control occurring on almost all the estates.

The exception, having a negative effect on levels of social control, was found at Ranwell East Estate, suggesting that the design changes had increased permeability and numbers of non-residents accessing the site (ibid., p.71).

This inconclusive pattern of findings and the struggle to interpret localized crime levels is not unusual. There is a widely held view that crime can only be managed not reduced permanently (Schneider and Kitchen, 2007; SNU, 1993). There is a need for repeated interventions, over long timeframes to achieve a sustained impact. Favouring Sampson's (1997) model of community collective efficacy as an explanation for the slow process of building informal community control, Wiles described his subsequent experience with crime reduction projects. A crime reduction campaign may be unsuccessfully implemented on an estate, failing immediately. However a repeat project in the same location a couple of years later, might succeed as participants built on their earlier experience of failure and learned how to exploit interventions. Alternatively, Wiles described schemes where a significant crime reduction was measured immediately after a physical intervention. This can be attributed not to any alteration in the building other than the process of decanting the resident population, disturbing the (anti)social networks before reintroducing tenants (Interview Wiles, 2011).

7.2.3 Cautiously worded outcomes

Five estates, each with three controls were assessed pre- and post- refurbishment between 1991 and 1995⁸⁷. The following two years were spent analyzing the considerable quantity of information gathered, resulting in a short final report and even shorter research summary, published in 1997.

A frequent criticism of regeneration projects is that interventions have only short-term effects not long-term permanent improvement (Palfrey, Thomas et al., 2012). SNU (1993) provide

⁸⁷ The five of the seven DICE estates evaluated were Rogers and Ranwell East in Tower Hamlets, Kingsthorpe Close, Nottingham, Avenham Estate, Preston and Bennett Street, Manchester. Nazareth in Birmingham and Durham in Sandwell were excluded but for no clear reason other than cost and programming.

six explanations for the transient nature of any changes: A time-limited project will have targeted, fixed resources that may be withdrawn later; A very local project may have little influence on wider socio-economic circumstances; Local interventions are not always able to influence the way borough-level or national agencies deliver services; A project might receive special services (such as additional neighbourhood policing) which later return to normal levels; Successful but novel methods are not always disseminated within organizations beyond the initial project and transfer of positive lessons are affected by staff turnover; Projects aiming to empower and educate local people often only minimally engage with residents and hence achieve less sustained impacts than hoped. The Price Waterhouse report failed to account for these wider explanatory factors, overlooking operation changes in Local Authority agencies, such as reduced levels of grounds maintenance, frequency of police patrols or altered allocation/tenure policies. It also ignored broader economic and social changes, such as the right to buy discussed in Chapter Four. A re-evaluation a year after the completion of building works, as for DICE, would pick up the immediate and significant outcomes. But gathering a more representative, informative picture of sustained impacts would ideally require a delay of at least 36 months or more to indicate any permanence (SNU 1993, p.157).

Both monetary and non-monetary aspects were assessed, but despite the breadth of data gathered on non-monetary aspects (community instability, social behaviour, actual crime, fear of crime, tenant perceptions and satisfaction), greater prominence was given to the more easily measurable economic factors. The DICE programme was reported as costing somewhere between £50M and £43M for the research and the capital funding of the seven projects (Building Design, 1988; Price Waterhouse, 1997a). This £50M covered capital funding for the seven projects, architects, consultants and Local Authorities' fees (see Appendix E). The KCL Unit calculated unit costs for each of the projects that appear adequate, but not overly generous to cover capital costs with the proportion of each Local Authority's contributions varying (Coleman and Silver 1995?a, 1995?b, 1995?c). These costs differ slightly from those reported by Price Waterhouse (1997b), but the overall costs roughly correspond, with inconsistencies due to the inclusion/exclusion of professional fees, or mis-

allocation of payment between new construction/non-DICE refurbishment works (Local Authorities contributions paid for many of the new infill houses as well as additional works such as new roofs).

Even the longer Price Waterhouse report (1997b) fails to communicate a rounded picture of the estates or the experiences of their inhabitants. Riley felt that the tenants' views were overlooked and would have liked to incorporate more qualitative analysis (Interview Riley, 2011). Findings from hour-long, 40 page interviews with thousands of residents were compressed down to a mere six pages (Interview Taper, 2013). But more critically, the report lacks the depth of material and basic facts that would be needed to interest either policy makers or practitioners, enticing them to replicate the ideas. In contrast, the DICE consultancy leaflets were written as enticing, extremely positive case studies (Coleman and Silver 1995?a; 1995?b).

The final Price Waterhouse report contains surprising errors; unsophisticated site plans lacked essential information (North points or scales). Photos are poorly located and uninformative, are mis-attributed to incorrect estates or blatantly not matching the post-scheme plan. All these indicate a lack of care given to the final editing of the report:

“It was a fairly sketchy summary report. It doesn't stand up. It's not a piece of science. My test when I worked in government was that any research, any evaluation report that was published, that wasn't capable of being published in a major peer review scientific journal, shouldn't be published. Now I'm not sure that the final report for DICE would have met that standard, but I think it was because by then we were all fed up with the whole thing. I think we just agreed 'oh for God's sake lets just write a report'” (Interview Wiles, 2011).

Any evaluative discourse needs to convince its intended audience that its recommendations have weight derived from a credible, authoritative source. In *Utopia on Trial*, despite using the rhetorical structure of accused, evidence and conclusion, Coleman's tone is personal and accusative, haphazardly targeting individuals, government departments, industry practice or blaming the nature of bureaucracy itself. Yet there is a flamboyant energy and bravado to her accusations, reminiscent of a barrister in eloquent persuasive flow. In comparison (and continuing the courtroom metaphor), the Price Waterhouse report can be read as the defence response, taking a more impersonal, definitive tone. There is little individual agency

behind it, deferring to the department as a voice of authority. The material is presented as self evident, consensual truth. It is focused, responding only to points it can address and ignoring intriguing diversions. Much of this bland tone was intentional, to discredit Coleman's findings (Interview Riley, 2011). The executive summary was a measured and carefully worded rejection of Coleman's methods and claims.

"None of the DICE schemes can be judged to have been effective in meeting the (admittedly ambitious) objectives set for it by Professor Coleman. Compared with the early Estate Action schemes (the most relevant policy alternative), the evaluation suggests that DICE was not a more successful regeneration initiative (nor, at best does it appear to have been markedly less successful)" (Price Waterhouse, 1997a, p.1).

Asked whether it was a difficult task to craft a credible, rigorous evaluation of concepts he had little faith in, Riley disagreed:

"The language was 'this was a really silly idea and we evaluated it thoroughly and showed that it was a silly idea'. I think the best thing was to have covered all the bases. The evaluation was 'respected', not the claims that were being made for intervention. It was brushed under the carpet" (Interview Riley, 2011).

7.3 A muted reception to the Price Waterhouse Evaluation

The DoE coasted through the mechanics of the report's launch. The report appeared on the DoE website, but none of the interviewees remember any dissemination activities or publicity (Interview Wiles, 2011). A defensive press release was prepared but was an unnecessary precaution as the press reception was subdued, due in part to the guarded way the report was written.

"We thought when it came out that she [Coleman] was going to explode and we were told 'Have a press release ready to say that it was all done through the most rigorous scientific method. We've got all the evidence, it's all been collected and collated and so forth.' But it just didn't get any coverage at all. I mean partly because there's no highly quotable stuff in there. There's nothing that lends itself to that, is there? There's nothing that makes it tabloid or even *Inside Housing* kind of stuff. I think she was ill when it came out to tell you the truth. I think she just didn't have the energy or the wherewithal to do it and it just passed by" (Interview Harvey, 2009).

The exact publication date is unclear but Coleman recalls it as being early summer 1997 (Interview Coleman, 2013). The press purdah period prior to the general election in May that year would have restricted publication of DoE reports during the spring and as soon as the

election had been announced, there would have been fierce internal competition to prioritize those projects with the most political support. Post the election and following the switch from a Conservative to a Labour government, the report might also have been tainted with negative connections to the previous regime. Surprisingly, only one article in the construction press during 1997 mentioned the evaluation. The *Building* article from November 1997, featured a revisit to the Ranwell East estate, evaluating the design changes and reported the headline figures from the Price Waterhouse evaluation (Spring, 1997). The housing press (*Inside Housing* included) and architectural journals, even those that had sustained earlier disputes into the mid 1990s were silent about the evaluation.

In private Coleman was as displeased as Harvey had expected. Sanford reported that:

“Alice was furious at that report. Really livid. It was just trumped up by DoE to say that they'd done something” (Interview Stanford, 2011).

In the light of this Coleman's public silence is surprising. Having been such a dynamic force and so capable and tireless in her promotion of *Utopia on Trial* it seems odd that she took so little involvement in promoting or countering the evaluation. Coleman's alleged illness may have been an opportune reality or a convenient excuse, but it would have been more in character for her to fearlessly and outspokenly defend her opinions if she disagreed with the evaluation's findings⁸⁸. Silver recalled the timing of the launch coincided with two other events that greatly concerned Coleman: confirmation that the funding for the consultancy was not going to continue – “the plug was to be pulled”; and that her chair at KCL was ending. He felt that following the lack of external interest in the DICE findings, Coleman was beginning to spend time working on her other eclectic interests; graphology, children's education and teaching reading and spelling (Interviews Macaskill and Silver, 2013). Coleman herself confirms this. On her retirement from the Geography Department in 1995 her intention had been to continue to work on the DICE research in an emeritus position with

⁸⁸ Coleman's failure to comment on the evaluation is particularly unexpected, as during this period she maintained a recognizable media profile being mentioned both in the mainstream and construction press. In 1996 and 1997 Coleman had a letter published in *The Times* (1996), was cited as a 'housing guru' in the *Evening Standard* (1997) and advised the London Planning Advisory Committee to increase residential density (*Building Design*, 1997).

a desk in College for a further five years. This reduced to two years and with working conditions consisting of a small desk in a shared room, Coleman found it easier to drop the 'Thatcher project' and to turn her attention to other projects (Interview Coleman, 2013). Despite Coleman's advancing age during the project (she was 61 when *Utopia on Trial* was launched and had reached her 70's when the evaluation was finally published), she was described as full of energy and enthusiasm (Interviews McKeown and Macaskill, 2013).

7.4 Coleman's own evaluation of DICE

Coleman viewed the Price Waterhouse evaluation as unscientific and intended to undermine her research. She had reached a state of exhaustion with the process and the DoE:

“They slowed it down. It was to have been a five-year project. In fact, it was nearly six, but they kept slowing it down and we never were able to look at these 70 other estates that we wanted to survey. Then they said, 'Yes, we'll give you some extra money for that... no, we won't...' And it was just such a mess. Finally, I just wanted to get out of the whole thing” (Interview Coleman, 2013).

Her own reports state that the KCL team was “denied scope for systematic assessment of the results of our work” (Coleman and Cross, 1994, p.3). Coleman was devastated that money for monitoring was unavailable from the DoE and the Local Authorities were unwilling to pay (Interview Silver, 2013). Despite this lack of funding the KCL DICE team undertook their own parallel evaluation of the project. They planned to map 'environmental abuse' scores four times. First, through a survey of design features during the selection of potential sites, before residents on the estate were aware of the possibility of an improvement scheme. Second, once the estate had been selected and a conversation with the residents started, but before any works began. This second mapping was to test whether engaging with residents had any effect on levels of graffiti etc. Coleman claimed that she found very little change following the initial conversation with residents. Third, a mapping immediately after the refurbishment scheme finished; with fourth, a final survey a year after completion, to assess whether there was any lasting impact. However this plan was severely hampered by the lack of resources. The *Design Improvement Reports* for Rogers and Ranwell East, show that both estates were assessed only three times (see Table 6.2). Although Coleman interviewed some residents informally to gather their views on the changes these weren't

written up or systematically included in the final reports (Coleman and Cross, 1994: Coleman Cross and Silver, 1994).

The mapping recorded the occurrence of litter and graffiti (scored either as 'absent', 'slight' or 'severe'), urine and faeces (scored as 'absent' or 'present'). Occurrence of vandalism was noted on ten locations (fences, sheds, windows, doors, stairs, lifts, electrical fittings, refuse facilities, garages, building fabric) and scored as 'undamaged', 'damaged' or 'target not present'. The total abuse score was reported on a scale of 0-16 regardless of whether 10 or less vandalism targets were present. Thus a small-walk up block with no associated lifts, garages, sheds, or fences would still be reported on the same 0-16 scale as a large multi-story slab block raised above a row of disused garages with a far greater potential area for damage. Calling this process 'a mapping' overstates the geographical granularity achieved as, unlike Wilson's vandalism research (Sturman and Wilson, 1976, Wilson, 1978b), the location of damage was not recorded. Other influential factors were overlooked, such as whether damage occurred in an occupied space, or the proximity of void flats (Wilson (1978) found that ground floor empty flats were most likely to be subject to vandalism). This means one occurrence of a damaged rain water pipe, a single broken light fitting and one broken garden gate would give the same abuse score as a block where every door-entryphone had been systematically broken, several lifts had been maliciously damaged, or with frequent instances of arson in refuse bins⁸⁹. Coleman's evaluation method aimed to make comparisons at a block level. To do this she hoped to alter the design of 100 blocks across the seven DICE estates. She then planned to calculate a disadvantage score for each block, and compare a large number of blocks with similar scores to unaltered ones. Crime levels distinguished by block would be essential to compare altered and non-altered blocks. This was a fundamental different use of 'controls' to the Price Waterhouse approach who believed it was important to try to match both built form and social-economic factors, within a

⁸⁹ The Price Waterhouse (1995) report mentioned the flimsy internal light fittings in communal areas at the Rogers scheme. So the increase in abuse scores that the KCL unit evaluation notes for the Rogers North block, which rose from an average of 1.4 in 1992 to 3.4 in 1993, could be explained by the 3 instances of damage of electrical fittings that are recorded in the KCL report tables (Coleman and Cross 1994, Table 9, p.26, Tables 10 & 11, p.27)

tight geographical location; hopefully still identifying the fluid and mobile neighbourhood component of crimes and displacement. The inability to obtain crime statistics was a serious difficulty and undermined Coleman's aspirations to replicate the detail of Newman's New York research.

The architect for the Rogers Estate, Barry Stanford, was keenly aware of the insufficient data available to Coleman. Interestingly, he blames the delivery pressures of a large regeneration programme and government payment cycles, as much as the lack of resources.

“There should have been baselines created on the estates we were looking at in terms of the behaviour of the people, in terms of the crime statistics and so forth. Not enough of that was done before we started. That was due to the fact that we had a fairly substantial chunk of money and we had to spend it. The department wouldn't let us go on year in, year out, holding it. They were going to take it away. So we had to get on spending it. I think that we concentrated more on spending it and persuading the people that we were doing the work for it was the right way to go, than we did on setting up a base for research” (Interview Stanford, 2011).

When Coleman's *DICE Improvement reports* were drafted in 1994, Ranwell East was still onsite, and while the Rogers works were complete, the team had moved on to a similar project at nearby Greenways Estate. Given the financial criticism contained within the Price Waterhouse report and the DoE's concern that DICE did not constitute value for money, it is particularly surprising that these teams, many with a professional interest in the financial lessons from the project, as they were subsequently implementing lessons from DICE, were oblivious of either evaluation (Interviews McCarthy, Stride and Wright, 2011).

Coleman's evaluations were not made publicly available, which she felt demonstrated the DoE's dismissive attitude to the project:

“I think they did that [the Price Waterhouse evaluation] afterwards because we were supposed to be producing a report, which of course, we did, but they didn't want to publish it. They didn't want to know what we thought about it. They thought it would be more objective if they had their own kooky thinking instead” (Interview Coleman, 2013).

7.4.1 Comparing the evaluations

The SNU *Crime Prevention of Council Estates* report identified the “tensions between scientific and pragmatic approaches to evaluation” (SNU 1993, p.15) and as Stanford's

quote above shows, as a practitioner he was looking for direct persuasive evidence of a permanent positive effect. As the table in Appendix G (which applies the SNU evidence framework to both evaluations) shows, the Price Waterhouse evaluation provides the majority of the evidence that the SNU recommend, while Coleman's evaluation lacked important material. Assessed against the SNU framework the Price Waterhouse evaluation can be considered to have taken a detailed, professional approach to data gathering and analysis. It covered the full range of evidence types recommended, with instances of meticulously applied methodological best practice. The DICE residents survey was comprehensive with extremely detailed, thorough questions, some of which formed the basis for future national housing surveys. As a census it gathered a representative view, not only that of the vocal minority of typically engaged tenants (Interview Taper, 2013). Far weaker were the thin accounts of external influencing factors (changes in management routines, or policing approaches), poor descriptions of the implementation process or any consideration of alternative explanations. The evaluation assumed that all the building alterations were equivalent and that their conformity to the DICE principles implied comparability. However as Chapter Six showed, at a detailed level Coleman's DICE vision was achieved in a variety of practical ways, with the principles interpreted differently to address the context on each estate; reducing corridor length using either openable metal gates or constructing solid walls; segmenting vertical circulation with additional external staircases leading only to the first floor, or constructing separate stair towers. At a micro-level these apparently minor differences would have had greatly variable impacts. In contrast, the quality of evidence gathered for Coleman's evaluation measures up poorly against the SNU framework. The crime data gathered was poor or non-existent. The reports were highly dependent on subjective assessments and relied on unsupported statements from the evaluation team such as highly partial reports of residents meetings⁹⁰. No data was gathered to establish whether the estate population or demographics had changed.

⁹⁰ The Ranwell East report contains accounts of tenants meetings "plagued by disruptive behaviour by left-wing Militants who were rigidly against design improvements on principle. These did not hesitate to

The SNU's final form of evidence (evidence of replicability) is relevant to this thesis by exploring how selected evidence influences the mobility of a concept. Yet the framework suggested that only two factors - discussion of local circumstances and cost benefit analysis - are required to assess replicability. Neither evaluation provided detailed accounts of the implementation process. Coleman's accounts were limited to the physical design alterations with little descriptive comparison to the other DICE estates plus speculation on applying the DICE principles in future. However other than a short summary of capital costs no cost benefit analysis was attempted. The Price Waterhouse evaluation has an equally weak qualitative consideration of external factors, but the value for money analysis carefully tried to identify any additionality attributable to the DICE intervention rather than background changes. So both evaluations provided, unbalanced, partial pictures, but it is less clear whether the Price Waterhouse assessment was a reasonable presentation of the findings, or the extent that it was subject to political and ideological pressures. Assessed against the SNU framework, Price Waterhouse had the opportunity to gather the right sort of data to make a solid evaluation that Coleman was denied. This is not to imply that they would have reached the same conclusions contained in the report even if the answers hadn't been pre-ordained for political reasons.

Comparing the costs of each evaluation explains the imbalance in data collection. The DICE evaluation was a prestigious and potentially lucrative commission for Price Waterhouse to have won. Sporle recalls:

“At the time, it was a big, big project. It was a million pound evaluation project. In those days, that got you noticed by partners, working on a million pound project” (Interview Sporle, 2011).

The Permanent Under Secretary's undertaking to properly and fully evaluate DICE meant that the resources for the evaluation were extremely generous. Ridley recalls the resources

tell any lies they felt might influence the residents to vote against DICE”. Coleman however believed that “their unpleasantness proved useful” in persuading the Ranwell West residents to vote against the scheme. As there was insufficient money to fund both parts of the estate “the Militants’ influence was a fairly painless way of getting the tenants themselves to decide against it instead of feeling DICE had deprived them” (Coleman Cross and Silver, 1994, p.2).

“weren't artificially constrained, because he [Heiser] was as interested in killing this off as anyone else” (Interview Riley, 2011). Eventually the total payment to Price Waterhouse was over £1.5M, with about £600,000 of this going to MORI (Interviews Harvey and Taper, 2009). However both organisations were using consultants charging high consultancy rates in comparison to university research staff. Ironically for an evaluation with value of money at its heart, and despite Sporle’s memory of the “extraordinary degree of micro-management” (Interview Sporle, 2011) by Price Waterhouse and the DoE, the evaluation itself increased in cost. It quickly exceeded the set budget and became apparent to Price Waterhouse that it was a loss-making project. This lack of resources impacted on the practicalities of data collection:

“We were told that the budget wasn’t enough for this job. Next time you're in Preston for another job go and take your camera and count dog turds on the estate. Because of the rigour, it had to be done at the same time of year, more or less. It had to be matching comparisons. It was matching thousands of items” (Interview Harvey, 2009).

Coleman was aghast at the amount paid to Price Waterhouse for the evaluation (Interview Coleman, 2013). In comparison the research costs for the KCL DICE unit were extremely modest. Coleman reported that her salary was twice as much as she’d ever been paid before, but still the total salary bill for the team (which at its largest consisted of Coleman, five staff (not all full time) plus part-time students) would have been moderate. Silver remembered:

“I don't know how Alice paid for all the hours that she did. Nobody was being paid a huge amount. It was all run on students. I was on a four-year research associate contract, which is slightly lower than a research assistant’s wage” (Interview Silver, 2013).

Overheads for travel, office space and other expenses such as computers were low. It is unclear if any of Coleman’s salary was being paid for by KCL as she was not teaching in the Geography Department at this point. Yet the output of the team over five years (40 initial reports, numerous site visits and at least seven detailed evaluations), constituted a substantial body of work.

The incompatibility of ‘commercial’ consultancy evaluation with academic ‘objective’ research influenced all aspects of the two evaluations. Coleman’s ambition was that the KCL DICE

team would continue after the DoE money ceased, funded via design consultancy activity. Awareness of the potential brand strength is visible soon after the publication of *Utopia on Trial* with references to *The Coleman Design Disadvantage Survey* almost as a trademark process (Bar-Hillel, 1986b). The KCL Unit is referred to as the DICE consultancy in press articles from 1994 onwards. Promotional leaflets summarizing the DICE principles, the seven schemes and initial cost analysis were written by Silver (Coleman and Silver 1995?a, 1995?b 1995?c). A number of Local Authorities and Housing Associations commissioned the KCL Unit to provide design briefs for estate improvement schemes and the consultancy work on the Mozart estate undertaken for Westminster City Council suggested that this might be the basis for a plausible business model (Interview Silver, 1995). Yet, in academic circles, more than designation separates a 'research unit' from a consultancy. This prompts comparisons between the KCL DICE unit and the Space Syntax consultancy that Coleman is likely to have been aware of. The Space Syntax design assessment of the Mozart Estate described in Chapter Eight was undertaken by Hillier and Penn in 1986 when they were part of the (still academic) Unit for Architectural Studies but three years later in July 1989 University College London established Space Syntax Limited as a separate commercial entity.

In terms of recognition, Alice Coleman and DICE was a memorable brand, used in numerous headlines such as *An unlucky throw for the DICE projects* (Baillieu, 1991b). Coleman commented on the potentially negative associations associated to the DICE acronym for Design Improvement Control Experiment: "Most words beginning with DI have bad connotations such as dismal, dire or dim" (Guest, 1990, p.21). She reportedly (Interview McKeown, 2013) became uncomfortable about using the term 'experiment' after residents at a consultation meeting complained that they were being used as guinea-pigs (Kaniuk, 1991). There is evidence of several attempts to replace both 'experiment' and 'control' and to tone down the scientific emphasis, while retaining an established, snappy acronym. *Building* magazine refers to the DICE consultancy (Design Improvement Concern for the Environment) (Spring, 1994). This version is repeated in a paper by Coleman and Cross (1995) on applying DICE principles in Canada, which refers to Coleman director of *DICE*

Design. Coleman herself referred to DICE as Design Improvement *Care* for the Environment (Coleman, 2009).

Conclusion

The Price Waterhouse evaluation was beset with difficulties. Unpopular from the outset with those who had commissioned it, accused of lack of transparency or objectivity, the evaluation was impeded by the fundamental challenges of urban policy evaluation. Located within an ontology of hard 'scientific' assessment, it ambitiously attempted a quantitative assessment of the physical environment. The evaluators were inundated by the bewildering quantity of information gathered and confused by the growing complexity of the analysis to try to address these methodological constraints. As the costs of the evaluation grew, the staff resources to deliver it reduced. The final drafting of the report passed from author to author as staff moved on to other jobs. The Price Waterhouse report accused Coleman of ambitious aspirations for her principles, but falls into the same trap itself. A vast amount of data was gathered, but only a small proportion analyzed or released to a wider audience. Riley and Wiles stated that the slender provisional conclusions are the only ones that the team could deduce (Interviews Wiles and Riley, 2011), but even a cursory reading of the report must notice omissions in the report. One could ask who gained from such a slight discussion? Interviewees provide two alternative explanations: that the evaluation had run its course, "it just ran out of steam" (Interview Riley, 2011), or a more premeditated political reason that the DoE "smothered it to death by over-evaluating it" (Interview Sporle, 2011).

Flyvbjerg warns that this form of political obscuring/concealment is a frequently problematical obstacle to objective social science research into policy, describing how in his study of the Aalborg project "the evaluations became mere rationalizations of a political decision made in advance" (Flyvbjerg, 1998, p.19). Despite endeavouring to professionalize evaluation processes, and the mass of theoretical literature justifying it as worthy of intellectual and academic concern, evaluation is still treated as "a servant and not an equal of politicians" (Palfrey, Thomas et al., 2012a, p.29). The Price Waterhouse evaluation was subject to the

same pre-judgment Flyvbjerg warned against, with the unspoken, but keenly felt political direction to kill the DICE project⁹¹. As Riley succinctly recalled, the aim of the evaluation was:

“putting the lid on the coffin and nailing it shut” (Interview Riley, 2011).

Yet, the report’s cautious almost tentative tone fails to do this definitively. Even more cynically than Flyvbjerg, Suchman (1967, p.168) identified a typology of ‘pseudo-evaluations’ explaining the failure of some evaluations to have any lasting impact. He distinguishes superficial and shallow ‘eyewash’ evaluations from ‘whitewash’ ones intended to cover up programme failures, or those which are merely posturing lip-service or a diversion to postpone any practical action. His final typology (which it is not too harsh to suggest occurred with DICE) is the ‘submarine’ evaluation undertaken with the predetermined aim of undermining and sinking a project.

In comparison, the KCL DICE team evaluation may seem lightweight, but suffered from constrained resources and methodological weaknesses as well as the critical lack of access to crime data. The central survey technique relied on a visually subjective mapping of the occurrence environmental ‘abuses’ which has been roundly discredited. There is no discussion of the sensitivity of the abuse or design thresholds that the scores were derived from. With such approximate quantitative measures anything more than the basic analysis undertaken (weighted adjusted averages) would have been a spurious attempt at statistical accuracy. But a more fundamental flaw was the way in that the evaluation was approached; relying on a positivist scientific methodology to reveal facts. The KCL evaluation was setting out, not to openly evaluate the success or impact of the DICE schemes, but to continue the process of ‘proving’ Coleman’s theories.

Evaluation theorists such as Pawson and Tilly (1997) argue that current schools of ‘realist evaluation’ dismiss the possibility of theory-driven evaluations which presume to generate or

⁹¹ Tellingly the Price Waterhouse report (1997a) only refers to the first, extremely uncomplimentary to the DoE, 1985 edition of *Utopia on Trial*.

confirm theories, except at an individual project or programme level. They claim the prospect of building a larger theory, that is applicable to multiple projects and could be used to assess large-scale national policy or public reforms, is unlikely. Yet, perhaps this Government suppression of unfavourable outcomes on the one hand, and promotional simplification of evaluation on the other, should not be unexpected. The SNU report concluded that the nature of evaluation is defined by not just the availability of data, but evaluators' professionalism and awareness of multiple interpretations.

“In fact, as a general rule, the *best* evaluated initiatives produced the worse results and vice versa. This in itself is not surprising. The more thorough evaluations are often carried out by researchers who, as we have said, tend to err on the side of caution. The least thorough evaluations tend to be carried out by practitioners, who may not have the time or inclination to search for further evidence and for whom least is often best” (SNU 1993, p.99).

The two alternative evaluations of the DICE project illustrate these circumstances well. One evaluation was overcome by excess data and analysis, one evaluation limited by incomplete sketchy data and the evaluator's one-dimensional intent. With these constraints any assessments will always be partial and simplistic, yet often the harder you look for clear solutions, the more murky and confused the picture may seem.

Chapter 8: Defensible space mutates into Secured by Design and beyond

Introduction

Preceding chapters described ways that the concept of ‘defensible space’ was mobilised into research, policy and practice, and demonstrated that the mechanisms used to affect this transfer (texts, press, individual interactions, formal and informal encounters) affected its reach and lasting impact. This final empirical chapter concentrates on my third key research question, addressing what this mobility of defensible space can tell us about how the participating communities of practice *use* evidence. Aristotle’s three forms of knowledge are applied as a structuring framework with his concepts of *episteme*, the universal knowledge derived from “analytic rationality”; *phronesis*, experiential knowledge; and *techne*, the “technical knowledge and skills...[derived from] pragmatic instrumental rationality” (Flyvbjerg, 2001, p.56) illustrating the preferences for evidence/Aristotelian knowledge form shown by the academic, practice and policy communities respectively.

This chapter addresses how each of these communities appropriate and apply evidence in turn; starting with Coleman’s *episteme*-derived DICE principles being incorporated into construction industry advice in the form of a British Standard (an example of *techne*) only for later revised versions of the Standard to revert to a broader (less prescriptive) version of defensible space. It traces the responsibility for residential crime prevention advice shifting between the DoE, the Home Office (HO), then back to the DoE, and how despite finally becoming fixed into planning policy, it was the HO who practically operationalised defensible space principles into the *Secured By Design* (SBD) award scheme. The importance of *phronesis* (professional judgment) in a specific context is reinforced by the practice-based views of an Architectural Liaison Officer (ALO), which echo the more theoretical criticisms of SBD.

The interaction of *episteme*, *techne* and *phronesis* is explored as researchers, architects and crime prevention advisors promoted often-contradictory views of how design shapes

behaviour and its causal relationship to crime. The weaknesses and limitations of *episteme* (particularly Coleman's positivist, scientific construction of evidence) in selecting suitable solutions for poorly designed insecure housing estates emerge, empirically showing that practice and professional judgment deal with spatial and territorial ambiguity in a more incremental and pragmatic way than the research or policy communities. This emphasizes that *phronesis* moves beyond both analytic scientific evidence and technical know-how, merging skill with questions of value.

Following McCann's (2011) identification of policy mobilities as a process of assemblage, a final case study of the Mozart Estate in Westminster acts as a landing site, bringing together many of the issues discussed earlier. It is also a location where all of the communities considered in this thesis - researchers, architects, crime reduction specialists (and indirectly policy makers) - have tried out their ideas and theories. As such it illustrates the divergence between theoretical and practical modes of hypothesizing and deriving guidance. The Mozart can also be considered one of Flyvbjerg's (2006) paradigmatic cases, selected to establish characteristics for a school of similar cases, but also playing a significant role highlighting more general characteristics of society. The Mozart exemplifies many themes explored in this thesis (it was subject to conflicting academic investigation, politically motivated evaluation and waves of practical design changes common to the 'school' of estate regeneration projects) as well as illustrating wider lessons about society's expectations for remaking housing estates (for example the media's demonisation of ghettoized estates, regeneration fashions for physical alteration versus community management, or the unrealistically rapid policy responses required by governmental election cycles).

The narrative of the Mozart Estate regeneration started in the early 1970s and continues to the present day, 'bookending' the story of DICE told in earlier chapters. This not only brings this research up to date, it also reflects on the declining role of evidence in the current Government's deregulatory strategies (Jacobs and Manzi, 2013), considering the removal of support for SBD (amongst other housing design standards), despite the evidence base that has been gathered on its positive impact. Reflecting on this cyclical growth and decline of

policy support, I conclude that the application of defensible space functions as a 'soft theory' sitting more easily with the practice of designers, housing managers and those who are able to contextualize and locate generic guidance, situating theoretical analysis in the particularities of a place.

8.1 Episteme, techne and phronesis

Academic science (social scientists included) asserts that *epistemic* knowledge is the most fixed, pure and valuable of Aristotle's three forms of knowledge (Flyvbjerg, 2001). Yet earlier Chapters showed that within academic circles, defensible space was not a universally agreed set of principles, but influenced by disciplinary or epistemic positionality. This over-reliance on the *epistemic* view also underrates the significance of the two forms of knowledge that direct action: *techne*, knowing how to do something and *phronesis*, knowing what to do in particular circumstances. *Phronesis*, the blend of knowledge, judgment, experience and reasoning that forms the basis for practice, relies on immersion in the decision-making context; "Knowledge claims arise out of actions, situations and consequences rather than antecedent conditions" (Cresswell, 2003, p.11). This essential step to becoming an experienced practitioner requires the individual to carefully separate the application of heuristics, the rules of thumb used as professional shortcuts, from an interpretive process of hermeneutics, a more recursive deciphering of what principle/approach might work on this occasion (Schön, 1983). Hajer and Wagenaar (2003) believe *phronesis* is best able to handle conflicting values but "evolves slowly, often tentatively and haltingly, through mutual inquiry and mutual discourse" (ibid., p.23). Nonetheless, this hesitant exchange is a corrective to institutional assumptions that policy works by exerting a top-down, one-way effect on actors.

8.1.1 The limits of episteme: Over generalization of research into theory.

An important question emerging from the literature was defensible space's status as 'theory'. Theories and theorizing can be perceived either as a way of loosely gathering and formulating concepts into plausible patterns, or a rigorous technical model for explanation, then prediction. Thomas and James (2006) distinguish the latter as the formal, positivist,

functionalist mode of theorizing common to the physical sciences. These 'hard' theories should be distinguished from 'soft' theories (often associated with induction arising out of empirical field work). At first sight defensible space only accords to the term 'theory' in its loosest meaning of theory as an idea, account or description. It is clearly 'soft' theory, if it can be considered a theory at all. It fails to attain Kuhn's (1970) premise of theory as a testable model of the interactions and effects capable of predicting future observations. And it certainly does not conform to the Popperian tradition (Popper, 1963) of a refutable, falsifiable unified theory (Thomas and James, 2006). As Chapter Seven demonstrated, the 'theory' of defensible space could only be evaluated inconsistently, failing to predict outcomes or repeat occurrences over time. Causal links between weak observations and multiple explanations were attempted to account for the observations made. Early criticisms of defensible space honed in on this lack of internal consistence and theoretical rigour, but while critics referred to its ontological and epistemological basis only indirectly (Hillier, 1973; Bottoms, 1974; Ley, 1974b; Baldassare, 1975; Mawby, 1977; Poyner, 1983; Ekblom, 2011), it is not an issue that has been directly addressed until this thesis.

The significant distinctions that exist between theories, hypotheses and models can be dictated by epistemological positions. To positivists like Coleman, a theory is explanatory as well as descriptive. More generally a hypothesis is held to be a provisional statement that requires testing. But the epistemological position of the investigator will dictate how this testing is undertaken. So for positivists a hypothesis is an unaccepted truth which they strive to validate through empirical research, yet for critical rationalists hypotheses must either be refuted or falsified (Gregory, 2000, cited in Hoggart, Lees et al., 2002, p.309). An example of Coleman's positivism was devising DICE as an empirical programme to test the many hypotheses she held about Design Disadvantage. These multiple hypotheses extended beyond fundamental individual responses to social or collective interactions. For example, she held that the absence of contained gardens for children to 'invite friends to play under supervision' encouraged delinquency, while the lack of external buffer spaces such as front gardens, denoting owned territory but where one could observe and interact with neighbours, stifled community (Coleman, 1985a). All of these assumptions imply a particular world view,

of mothers at home watching over their children playing safely in the front garden, either through windows unobscured by net curtains, or while chatting to people passing by in the street. Architects and urban designers promulgate this equally idealised vision of community (Talen, 2000; Ely, 2005), but the more reflective practitioner recognises the many constraints to desired outcomes (Schön, 1983). Coleman's positivist determinism led her to make stronger, more forceful claims.

While several hypotheses can be bound together into a theory (so dealing with broader issues and unifying hypotheses), Coleman, like Newman before her, relied on defensible space as the main explanation for how the design of homes and the spaces around them influenced inhabitants' behaviour. The case studies show that Coleman's 'theory' of defensible space might explain some of the positive improvements that residents experienced, but equally so might other actions (better management practices, improved employment opportunities, changes in tenure or housing allocation). Interviewees believed that the design interventions themselves might prove sensible, regardless of whether the effects claimed for them could be demonstrated (Interviews with McCarthy, Stride and Smith, 2011, Darbyshire, 2012). So it became less pertinent to this thesis that defensible space, particularly in the format of DICE, could not be deemed a theory in scientific terms. It became apparent that an inaccurate 'soft' theory could still be applied; hence the success of defensible space over more complex (but equally tentative) explanations for how space affects crime levels. And while there is no reliable universally agreed predictive model for how defensible space works, it has proved a helpful diagnostic model for explaining failure in existing situations (Pasco, 1992; Armitage, 2004; Kitchen and Schneider, 2005).

8.1.2 The limits of techne: Codifying learning into guidance or policy

Another issue explored in the literature was the extent that defensible space could be considered 'policy', regardless of its inclusion in guidance documents such as British Standards and Secured by Design. The term 'policy' is even more loosely and broadly applied than the term 'theory'. To contain this a little, this thesis followed Fischer and

Forester's advice (cited in Hajer and Wagenaar, 2003, p.13, p.19) to locate the "policy argument within the context of practice". The nature of practice has been at the heart of this research, which has specifically searched out the views of practitioners, the defining characteristics and views that distinguish communities of practice and mechanisms used for passing on 'best' practice. Best practice itself is an extensive topic (see Moore, 2005); a crucial mechanism of policy transfer/mobilities (Stone, 2012) and source for evidence based policy (Davies, Laycock et al., 2000), able to provide a useful agreed upon orthodoxy to bind a group together (Wenger, 1998). Yet it cannot be assumed to be inherently benign or value free. Price Waterhouse's evaluation in Chapter Seven followed 'best practice', but with the intent of stifling the implementation of DICE. Best practice is at risk of being perceived as only 'what worked' in the past (the polar opposite from adaptive innovation) fossilizing it into the belief that there is one right way to do things. Coleman's absolute certainty that her single approach was the only route to delivering defensible space was a terminal weakness in maximizing its application. Concepts may become 'popular or common practice' rather than 'best practice'. While the DICE programme was underway, numerous other architects were making similar design changes (building additional stair-towers, remodeling entrances to blocks) to estates for very different reasons. Hillier and Shu (2000) concluded from this rapid reproduction of such design changes that Newman's version of defensible space was merely a "'fashionable consensus' rather than a set of empirically robust concepts that effectively prevent crime" (ibid, p.27). The reproduction of design features will always involve an element of copying but labeling this as unthinking 'fashion' not only limits the relevance and popularity to a particular period, but implies expendability which undermines the piece-by-piece way that shared practice builds up within a discipline. It is informative to quote Hajer and Wagenaar's (2003) description of this practitioner experience in full. Worldviews and individual agendas are;

"shaped incrementally and painfully, in the struggles of everyday people with concrete, ambiguous, tenacious, practical problems and questions...People in such situations tell stories and formulate arguments to get a handle on this world of complexity and uncertainty...Their validity and feasibility are assessed in communities of people who are knowledgeable about the problem in hand, and who are all too conscious of the political, financial and practical constraints that define the situation

for which they bear responsibility. These are people who realize that stories and arguments are always provisional, never the last word on the situation” (Hajer and Wagenaar, 2003, p.14 paraphrasing Fisher and Forester 1993, pp.1-3).

This promotes a model of practice arising from the shared creation and evaluation of knowledge, depending on the context, available resources or values. The challenge is codifying and communicating the learning extracted as a shared corpus of knowledge that is replicable and usable in practice. Architectural practice also promotes a model of collective learning where the professional context is structured by codes of conduct intended to improve individual judgment. This is a long way from the individualistic experimental theories and hypothesis testing of the academic researcher and accentuates the obvious “gap between the theoretical rationality of the policy sciences and the practical rationality of the practitioner” (Hajer and Wagenaar, 2003, p.19).

8.2 Defensible space codified into British Standards and Secured by Design

The abstract concept of defensible space has managed to jump this gap between theoretical and practical knowledge and successfully embed itself into British construction industry guidance. Chapter Four described the HO and the DoE research interests underpinning housing and crime policy and Chapter Six the prominent role of the Safe Neighbourhoods Unit (SNU) as researcher–practitioners gathering lessons from their practical interventions to influence policymakers in both departments. The policy context for built environment crime prevention during the DICE period was shaped by growing inter-departmental exchange, reassigning the HO’s promotion of crime prevention as detection of offenders, towards a preventative deterrent outcome of housing/planning policy at the DoE. Yet the primary policy instrument for embedding crime reduction in housing, the *Secured by Design* (SBD) initiative, emerged from the HO’s Crime Prevention Unit and it was the HO who initiated the longest lasting form of ‘pseudo-policy’ which still remains the most current codification of defensible space - the British Standards (BS).

The British Standards Institute (BSI) is an independent national standards body, so while not a formal governmental policy-making agency, nonetheless BSI exerts considerable influence on government thinking as well as shaping industry activities. The BS form a normative corpus of quality standards for products or services, referred to by the majority of architects using the National Building Specification (NBS) and thus can be considered an highly familiar form of policy advice. Following the inner city riots in the early 1980s, the HO asked the BSI to form a new committee to write a standard for securing homes against crime (Anson, 1986). As justification, it cited HO crime statistics on homes as most subject to burglaries, criminal damage and vandalism (BSI, 1986). Given the extensive debate over her research, it was unsurprising that the committee considered Coleman's findings⁹². In the conclusion of *Utopia on Trial*, Coleman positively reports the inclusion of ten of her twelve design recommendations for houses within the *British Standard BS8220-1:1986 Guide for security of buildings against crime* (Coleman, revised 1990 edition). This overstated the case. A close reading of the BS finds several general points corresponding to the DICE principles and only selected principles for houses and communal blocks, without the quantified parameters dictated by Coleman.

The intended audience was unusually broad for a technical document, targeting residents as well as architects, builders and crime specialists. Despite this accessibility, the guide emphasized the need to consult experts, including insurers, locksmiths, fire prevention officers or police officers with crime prevention experience (this was just prior to the formal designation of Architectural Liaison Officers within police forces). It stressed that judgment was required to interpret the guidance and to assess acceptable levels of risk against cost effectiveness and whether the measures might impact negatively on residents' quality of life. Balancing all these concerns made a simple generic solution unlikely:

⁹² The Audit Commission's (1986) report *Managing the crisis in council housing* which incorporated the DICE principles was also published in the same year, and it was highly likely that two high profile government supported committees would have had common participants.

“Often there will not be a single clear cut answer to a security problem, because many of the factors involved in the assessment of the risk are themselves known imprecisely” (BSI, 1986, p.1).

Local contextualization of advice was critical, with all “measures chosen according to local circumstances” (BSI, 1986, p.4).

As well as guidance on the layout of new estates and multiple dwelling blocks (such as avoiding communal entrances concealed from public view), the BS advised on improving the security of existing estates. The standard endorsed the general principle of defensible space providing territorial control for residents,

“as a general principle space in communal areas, whether inside blocks of flats, or around groups of dwellings, should have its purpose defined and allocated, so that residents may supervise and exercise some control over their environment” (BSI, 1986, p.4).

It reiterated that physical security measures alone were an ineffective solution on existing estates and that good locally-based management, improved staffing and maintenance were an essential component of estate security. The BS was concerned with construction and product specification, the fixing of doors, locks and security shutters, but critically also emphasized the detailed design of elements that the DICE principles failed to mention such as: location of car parking; external lighting, (particularly to entrances, garages and communal areas); access controls or entry phones; vandalism targets other than lifts or door closures; rainwater pipes, fences, or sheds which might aid unauthorised access to windows; and the detailed design of open spaces, particularly planting and fencing.

Between 1986 and 2000, when it was heavily revised (see later in this chapter), this BS provided the technical background for all practical decisions for the DICE schemes. Further construction and design guidance emerged 3 years later with the launch of the *Secured by Design* (SBD) standard in 1989. SBD was a secure property labelling system for homes encouraging the building industry to consider designing-out-crime at the earliest planning stage. The SBD concept was owned by the Association of Chief Police Officers (ACPO) but was delivered on the ground by a network of local police Architectural Liaison Officers (ALO) or Crime Prevention Design Advisors (CPDA) located in local police or planning authorities. New housing developments that followed the guidance were awarded SBD approval and

allowed to use the logo in promotional literature. While not a mandatory regulation, SBD had status as a frequently used, well-respected tool by architects, planners, builders and housing managers. SBD was administered by ACPO who operated a two-tier financial franchise model where money raised from the certification of security products (door locks, alarms, windows, etc) was used to pay for ALOs.

In terms of achieving a rapid dissemination the wide application of SBD can be considered a successful policy initiative. The SNU report (1993) mentioned SBD as an example of how widespread and accepted design-led crime reduction interventions had become. By 1994 almost all British police forces had ALOs, or CPDAs. A HO manual described their role, reinforcing the physical environment's significant influence on criminal behaviour, via an offender's reliance on opportunity, anonymity, easy access and quick escape routes (Home Office Crime Prevention Centre, 1994). DoE circular 5/94 recognised the planning component of the role, being the first planning guidance that cited crime prevention as a material consideration in determining planning applications. The circular set out four principles for designing-out-crime: considering crime prevention from the outset; providing mixed uses while avoiding those that could cause conflict; careful layout design to reduce the risk of criminal activity; and encouraging consultation with trained specialists - the ALOs.

The concept of police providing advice on housing design was not novel. In fact earlier in 1985, Coleman had recommended to the Commissioner of the Metropolitan Police, Sir Kenneth Newman, that police officers should give design advice to planners and housing developers to aid crime prevention.

“The second practical application of the research results would be the introduction of a right for the police to vet plans for new housing similar to that exercised by the Fire Brigade. Unlike fire vetting, however, crime vetting could be exercised in a preventative sense. Objections could be raised to any and every design variable that breaches its threshold, so that disadvantagement scores are kept down to zero, at a level where crime is absent or very low” (Coleman and Brown, 1985, p.54).

On the basis of her report and this recommendation, Sir Kenneth Newman asked Coleman to provide training on mitigating crime through design to a group of police officers who would become an early version of the ALOs. Coleman gave 28 training sessions across England

and Scotland, but recalled “the moment Thatcher had gone, they stopped. It was a pity because they [the police officers] quite liked them” (Interview Coleman, 2013). So Coleman’s version of defensible space was a foundational premise for the establishment of SBD and the ALO taskforce.

Although robbery and violent attacks on individuals often have an environmental component, both *Crime Prevention Through Environmental Design* (CPTED) and *Secured by Design* (SBD) concentrate on burglary, vandalism and crimes against property, promoting both physical solutions such as target hardening (fitting locks, alley gating) or neighbourhood watch schemes. The literature review established CPTED’s origins in Newman’s defensible space (Jeffrey, 1999; Ekblom, 2011) and similarly Newman’s principles underpin SBD (Armitage, 2000). The five main themes of the SBD award scheme are: physical security, surveillance, territoriality, access/egress, management and maintenance. However SBD’s primary focus on the physical security of individual properties reduces the scale of intervention below the design of estates. The second and third themes more closely follow Newman, aiming to achieve social control by optimizing natural surveillance and territoriality and maximizing private and minimizing public space (Armitage, 2013). The final two themes reiterate Coleman’s concerns: limiting the number of access points onto estates, deterring non-residents and potential offenders and requiring a programmed management system to maintain a clean and orderly environment as a signal to offenders that crime will be noticed and not tolerated.

Secured by Design was devised for new dwellings and updated several times since 1989, with the latest version published in 2014 (ACPO and Secured by Design 1989; 2004; 2010; 2014) The first explicit guidance for refurbishment was a scant page and a half published in 2004. This extremely high-level summary acknowledged the difficulty of retrofitting the SBD principles to existing buildings, estates or listed buildings. The final paragraph (quoted in full below) describes applying SBD to major refurbishment projects (such as DICE on Rogers, Ranwell East, or the Mozart Estates).

“The involvement of existing residents should feature in the implementation of SBD guidelines. The residents will have first-hand experience of the crime risks and the practicality of any proposed security improvements. Also, their approval and co-operation is crucial in ensuring newly installed security hardware is properly used when the project is completed. Where such property improvements involve central government funding, the ALO's report for SBD approval (which may include a crime profile of the area) can be used to support a local authority bid for resources” (ACPO and Secured by Design, 2004, p.2).

Regardless of this brevity SBD was, and still is, universally referred to in refurbishment specifications⁹³. It would have been the required criteria for the *Form B* submission to the DoE, the application for central government regeneration funding for the Mozart Estate described later in this chapter.

8.2.1 Criticisms and limitations of Secured by Design

Several studies assessing the effectiveness of SBD (Brown, 1999; Pascoe, 1999; Armitage, 2000, 2004; Armitage and Monchuk, 2011), concluded that the scheme provided a cost-effective (or at least cost neutral) way to reduce crime in housing. Yet Cozens et al. (2001a) argued that the advice SBD practitioners were passing on was not based on unequivocal evidence. An early evaluation of SBD by the Building Research Establishment (BRE) found that it was already highly proscribed, recommending "returning to the greater flexibility shown by some of the designers at the creation of the scheme" (Pasco, 1992, p.114). This detailed critique of SBD mentioned several issues familiar from the critiques of DICE, including: the fixed format of SBD; that SBDs foundational rationality assumed universal behaviour in specific places despite the unpredictability of individuals; that SBD paid little attention to who lived in the housing development, needing greater consideration of socio-economic context; and that there were fundamental uncertainties about the criminal or social problems SBD was trying to address, for example whether it targeted preventing burglary, auto theft, or youths hanging around estates. Like DICE, SBD attempted to address too diverse a breadth of problems. Pasco (1992) questioned the theoretical basis of SBD, as

⁹³ This is hard to confirm empirically as SBD is not mandatory, and comprehensive records are not maintained by DCLG of numbers of new homes that use the SBD standard let alone for refurbishment projects (HC Deb, 21 Jan 2013, col.76W).

recent criminological models of offender perspective differed substantially from the SBD fixation on simple layout and target hardening measures. Planners were accused of endorsing a simplistic concept of SBD as cul-de-sacs surrounded by high fences. Practically there was uncertainty over the target 'customers' for SBD: planners, developers, purchasers, tenants, or their neighbours, each of these groups wanting distinct outcomes rather than a generic desire for 'feeling safer'. The timing of ALO's engagement providing advice was found to be critical; and most significantly, the inconsistency in the interpretation and application of SBD principles resulted in an uncertain appraisal process.

An unpredictable appraisal process may result from erroneous formative principles or more practically, poor training of those implementing it. Despite her involvement in the training of the early version of ALOs, Coleman disapproved of SBD as it emerged. In the 2nd edition of *Utopia on Trial*, Coleman's criticism of the DoE was transferred to the HO.

"When *Utopia on Trial* was written the DoE was the villain of the piece; its powerful bureaucracy had subsidized and dragooned public housing into a monolithic Utopian conformity which it refused to recognise as a disaster. Secretary of State Nicolas Ridley changed that when he set up the DICE project specifically to undo some of the damage perpetrated by the DoE's design misguides...Just as the DoE is moving away from counter-productive design dictatorship, the Home Office has stepped in to reinforce it with an advisory video and seal of approval system [*Secured by Design*] urging all the design defects. These are to be offset by locks, bolts and other security devices" (Coleman, 1990, p.183).

In her opinion SBD "shows up the things that cause crime and makes them secure by locking them in place rather than designing them out...People may feel happier but they're just imprisoned" (Coleman quoted in Baillieu, 1991a, p.24). In the same article Coleman argued that any resultant crime reduction would be temporary and by following SBD, Government money was being wasted displacing crime rather than curing it.

SBD was promoted as design for community safety, yet it downplayed the role of the community in creating a safe environment, ignoring the idea that active inhabited public places create natural surveillance and ownership. Target hardening and CCTV was seen as a panacea, placing too great a reliance on technology for surveillance. Other non-physical interventions such as shared maintenance, concierges or Neighbourhood Watch schemes

could address these issues more successfully. Community architect Ben Darbyshire⁹⁴ concluded that the contribution of these social mechanisms outweighed those of physical design, particularly when remaking existing places.

“The basic rules of defensible space are robust and sensible to apply but it’s not always possible to retrofit estates successfully. [One should] acknowledge that more often a sensitively managed relationship of residents and community with the estate managers is needed to overcome some shortcomings of the physical surroundings” (Interview Darbyshire, 2012).

8.2.2 Expert opinion based on experience rather than evidence

Darbyshire’s questioning of the design supremacy within SBD reinforces the importance of considering on-the-ground practitioners’ opinions to validate or counter Coleman’s and others more academic criticisms. The *Building* article (Spring, 1997) on the DICE changes to Ranwell East Estate extensively quotes Mark Jones, then Local Crime Prevention Officer for Tower Hamlets Council. He suggested that social mix and intergenerational conflict remain a problem post-DICE despite improvements to the physical layout. Jones, who at that point had worked in crime prevention for 15 years, continues to work as a CPDA based in the Borough. Over this 30-year period his personal definition of defensible space has evolved:

“Initially, for me, defensible space would have been very rigid; railings, tall fences, grilles on windows, barbed wire, perhaps, very naively thinking that big is beautiful and will solve a problem. Over the years, what’s changed, partly because of working with planners or architects, is the realisation that you have to look at who’s going to live there, what impact it has on them. It’s becoming more socially aware. Now it’s the smaller things like putting up a row of prickly bushes or a little knee high fence to designate private, semi-private, semi-public space” (Interview Jones, 2011).

Jones’ critique of SBD echoes the academic ones of excessive fixity and overall rigidity. He notes that he was prepared to compromise or to depart from the official line on elements where his experience had taught him an alternative response was workable;

⁹⁴ The architect Ben Darbyshire has worked on many regeneration schemes including the Mozart Estate.

“If you showed me an estate 15 years ago, and said what’s your opinion? I would have said do this, do this. Now I would say well, you could do this and this, but you could also do this, this and this...*Secured by Design* is like that as well, it can be very black and white. There are certain things I won't compromise on, but most of the things in *Secured by Design* are up for compromise...It has to be local. You can't legislate in any way, shape or form, for everything. And you need to be able to say to the local representative, whether it's a planner or a Secured by Design officer or a builder, you're local, you know the area, what is appropriate for you? We've got the principles, but we need to be able to adjust and change depending on where that estate is” (Interview Jones, 2011).

Jones' perception is that sites which incorporate SBD principles generally have lower crime than non-SBD sites, but this is based on experience not empirical evidence. His own analysis of sites he has advised on, suggested a 4% reduction in crime, which he acknowledges is a small improvement, but sufficient to make a difference to residents' lives:

“But we just know in our hearts and our heads that *Secured by Design* does work, even if it's just putting the right doors and glass in and nothing else” (Interview Jones, 2011).

He sees improved crime statistics as only one measure of success. Jones described his “flowerpot test” as an indicator of multiple effects: whether a crime prevention intervention was working, or the cycle of regeneration and decline was moving in a positive direction; or the way that the least expensive regeneration aspects that were easily repeated could make a worthwhile contribution to feelings of ownership:

“When additional money became available, the cheaper, easier to do parts of what happened at Rogers and Ranwell were used in other estates. It didn't give as big an impact, because it wasn't all shiny, new, instant. I don't know that it helped with a marked reduction in crime or anti-social behaviour, but it certainly improved what was there, which is really important. If you give something a fresh coat of paint, then some people will react differently. I always use the flowerpots as a measure. If you make somewhere nice, then flowerpots and all the deckchairs start to appear and people start taking ownership. I'm on estates all the time. I walk down the corridor to visit somebody who's reported a crime and I think 'flowerpot, some nice mats, someone's got a bead curtain up which is actually still there'. And then you walk down another corridor and it doesn't smell very nice and there's marks on the wall and bits of old string where someone's put a washing line up and you think 'people don't really want to live here'. Yet, you could do something minor to that and it would make it different” (Interview Jones, 2011).

The immediacy of this qualitative feeling for what makes a good place to live suggests that Coleman's attempts at visually assessing environmental quality were not too far from the

mark. Coleman's mistake was to believe that she could quantify this effect to such an extent that it could become a predictive indicator; to interpret his flowerpot test Jones is relying on his 30 years of experience as an ALO (Interview Jones, 2011). This illustrates experience being applied to overcome the limits of *episteme* and *techné*.

8.3 Defensible space practised on the Mozart Estate.

When completed in 1974, the Mozart Estate was a large estate of 25 medium rise blocks of 737 houses and flats. Designed by the Westminster City Council's Architects Department, it was heavily influenced by Darbourne and Dark's award winning Lillington Gardens in Pimlico, with similar dark red bricks set within concrete frames and tightly packed blocks connected by high-level walkways and 'picturesque' pedestrian routes segregating people from vehicles. It followed the design criteria of the time with block orientation dictated by solar paths, departing radically from the adjacent historical street patterns. Phase 1 received a DoE *Good Design in Housing* award and the Mozart was considered an exemplar of modern social housing, a more human and accessible residential response than the high-rise tower blocks of the preceding decade. Yet where its precursor Lillington Gardens was designated as a conservation area in 1990 and continues to be held up as a desirable place to live, the Mozart Estate has had a less positive history, its reputation declining from a design exemplar to a problem estate in less than a decade.

Despite this common perception of it as a failed scheme, or 'bad design practice', the Mozart Estate is worth considering as a site where diverse urban and housing theories for remaking estates were played out. The Mozart was where Coleman piloted her DICE approaches prior to receiving funding from Thatcher, seeing the estate "first as a theoretical example and later as a laboratory" (Lowenfeld, 2008), but also the DoE's first national Estate Action improvement scheme. It has subsequently become an influential example of practical community architecture regeneration, subject to rolling waves of rebuilding led by the community architects Hunt Thomson Architects (HTA) and Abbey Hansom Rowe (now AEDAS) and recently an exemplar for community participation in estate management (Queen's Park Forum, 2008).

Figure 8.1 Mozart Estate Walkways 1982



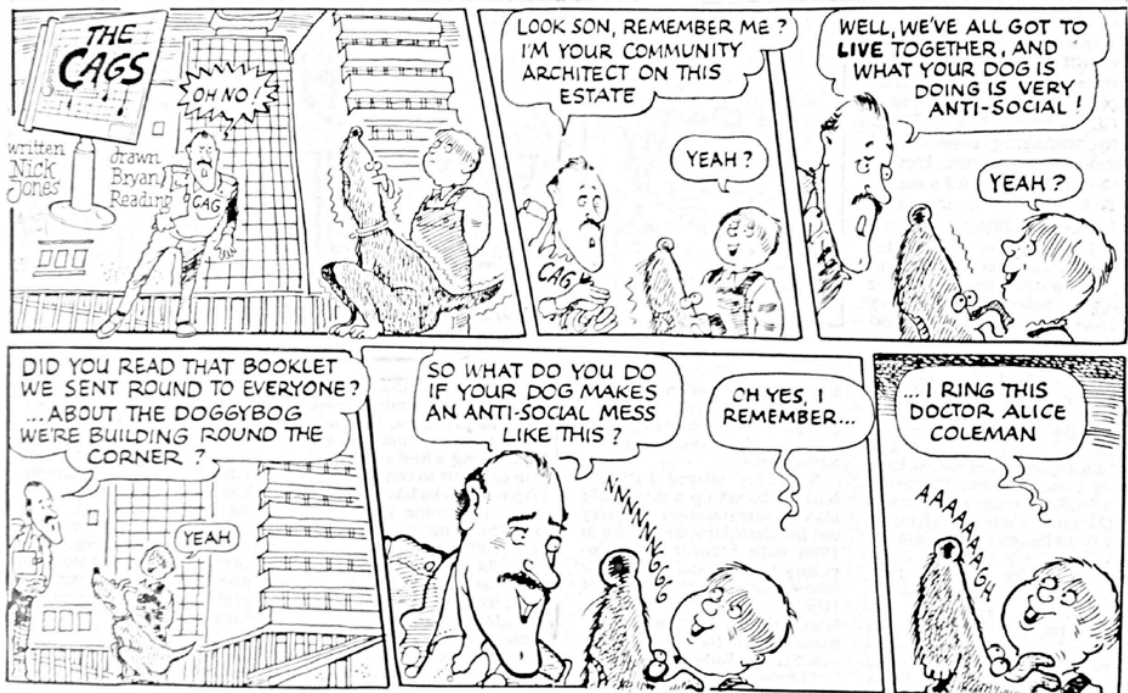
8.3.1 Colemanization versus community architecture

A recurrent theme has been communities' ownership of design changes, estate management, crime prevention or the spaces on their estates. During the 1980s the Estate Action and Priority Estates Programme were the principal public funding routes for council housing renewal delivered through collaborations between Local Authority architecture/housing departments and architectural practices, including a growing number of community architects. Community architecture was becoming a formalized movement in Britain following Charles Knevitt's early use of the term in the early 1970s. The premise was for community members (estate residents) to take control of decision-making and the design process, as those most familiar with the neighbourhood's specific problems and potentially which solutions were likely to succeed. The architect's role was one of listener and facilitator, guiding a design process that evolved from community consensus and residents' shared vision for the design of a place.

“Our role as community architects was responding to what people wanted ...and people wanted things they knew, streets and perimeter blocks” (Interview Darbyshire, 2012).

This rationale for community architecture was discussed during the *Rehumanizing Housing* conference, with its emergence from the rise in local tenants' management of estates establishing a more natural alignment to the theoretical position of Anne Power than Alice Coleman, whose engagement with tenants was less in-depth participatory collaboration than perfunctory consultation (see Chapter Six).

Figure 8.2 Coleman vs. the community architects



Building Design 14 March 1986

As early promoters of community participation in designing-out-crime, Hunt Thompson Architects (HTA) relied on evidence gathered through community consultation, making novel use of opinion research to uncover the causes of residents' dissatisfaction with their estate, then incorporating responses into design solutions. Their remodeling of Lea View Estate, Hackney, became a template for working with residents, with architects living on the estate, with estate coordinators ensuring co-operation between the architects, residents, builders and the local authority. HTA applied these approaches during their later project at Mozart. Stylistically, community architecture was as anti-modernist as Coleman (Interview Darbyshire, 2012), but this is an insufficient argument for why they came up with a comparable version of Defensible Space. Both were proposing a more traditional street format, more legible routes signposted by more easily identifiable, distinctive looking blocks,

better street lighting and landscaping creating safer paths to individual front doors. This suggests that the disparity was not about design as style, but more about design as process. The two processes were very different: Coleman's radical surgical intervention in the external physical form, versus the architects' community-led exploration of design solutions resulting in a gradual reworking of the buildings and spaces.⁹⁵

Darbyshire acknowledged architects' and planners' tendencies to over-promote the catalytic effect of altering buildings and spaces to achieve social outcomes such as increased community cohesion. Despite describing defensible space as a straightforward robust orthodoxy he played down the ability of physical redesigns to reduce the rate of serious crime such as substance abuse, believing the problems to be as much social as technical and environmental and as such needing a multi-agency approach (Interview Darbyshire, 2012). But coordinated approaches were hard to achieve despite early attempts at 'single pot' funding such as the Single Regeneration Budget programme (see Figure 4.3). It was not until New Labour's strategy to join-up both policies and agencies within a targeted focus on local neighbourhood renewal via the Social Exclusion Unit that the wider regeneration benefits were recognized (Wells, 2007). So during the period of both DICE and the earlier stages of the Mozart renewal, physical and spatial interventions tended to be perceived as separate activities from social ones, with separate central and local departments allocating budgets to individual outcomes despite implementation being delivered by multi-disciplinary teams.

The estate's 30-year regeneration story is complicated; some decisions and design changes appeared contradictory; piece-meal interventions were trialled and alterations resulted in unexpected consequences that before long required remedial work. At several points there were calls to rethink the whole design strategy. There were also consequences from the

⁹⁵ The overlap of Coleman's approach with that of community architects and how these commonalities fuelled the contention over the design/crime link is explored in greater detail in Warwick (Forthcoming 2014).

allocations policy. Intended to house the displaced population from slum clearances caused by the construction of the Westway motorway, delays meant that the motorway was completed before the Estate which became home for people with few links to the surrounding area (City of Westminster Council, 1993). The glowing praise for the architectural design quickly faded, as complaints increased, initially about the environmental quality and construction; flats suffered from damp and poor heating, requiring structural repairs within five years (Paddington Times, 1977). Reports of vandalism, neglectful management and criminal activity increased. Within seven years of being built, the Mozart had become an undesirable and unpopular 'sink estate' (Lowenfeld, 2008), a reputation which deteriorated still further during the early 1980s. Media reporting of growing crime levels exacerbated the poor perception of the estate. Much of this was sensationalized and exaggerated accounts of drug dealing, with the architectural press dubbing the estate 'Crack City' (Spring, 1994). The vigorous Residents Association complained to the Press Commission on the grounds that these articles stigmatized the families who lived there, but by 1993 residents' rejection of the estate was demonstrated by the high turnover and number of void properties and by the fact that 63% of residents were on the transfer list to move away from the estate (City of Westminster Council, 1993, p.ii).

A maze of overhead walkways led to interconnecting entrance lobbies and dark stair towers. Unrestricted access to the blocks and extremely poor levels of natural surveillance resulted in ad-hoc retrofitted attempts to control access. Ground level garages below the walkways were poorly used despite inadequate car parking spaces. The external spaces were harsh and unwelcoming, neglected and litter strewn, with shadowy stairways, hidden corners and confusing dead ends. Alan Blyth and Peter Oborn from AEDAS Architects recall the estate's notorious reputation when they started work there in 1994, it was "virtually a no-go zone" (Interviews with Oborn and Blyth, 2011).

8.3.2 Testing Coleman's solutions

Initiatives to improve living conditions on the estate began in 1983 when the Council, Residents' Association and police set up a working group. In 1984 Patricia Kirwan, the

Conservative chair of housing at Westminster City Council, asked Coleman to apply her concept of design modification to the Mozart Estate (Coleman, 1985c). Coleman was then drafting *Utopia on Trial* (which subsequently included a chapter on the Mozart Estate) and from her Design Disadvantage research devised a design brief. Coleman's brief recommended: removing the walkways; reinstating continuous streets with pavements and waist height walls creating private gardens; providing individual access to most flats and subdividing blocks by blocking corridors; separating blocks with boundary fences around each one; and removing green spaces and children's play areas to outside the estate. Coleman's analysis focused blame on the circulation routes:

“The walkways are the most vicious ‘open sesame’ making the block vulnerable to outsiders... All these things add up to the undesirability of anthill designs riddled with walkways, passages with exits, lifts, staircases and ramps. Fortunately, however the worst excesses of all these variables can be cut by a single solution; the removal of overhead walkways” (ibid., pp.137-138).

The Mozart walkways provided multiple escape routes for muggers and groups of youths on mopeds, raising fears that the separated circulation might encourage other dangerous confrontations. During the riots on the Broadwater Farm Estate in October 1985, missiles were thrown from the high-level walkways to ambush the police and emergency services (Knevvitt, 1986). Oborn recalled similar attacks at the Mozart: “there were people being shot, there were fridges being dropped on people from walkways” (Interview Oborn, 2011). The Council used Coleman's recommendations to plan a five-year reconstruction project and in 1986 spent £4M to demolish four of the high-level walkways. Kirwen also wrote to the Home Secretary, Douglas Hurd, suggesting the removal of walkways from all similar modernist estates (Coleman, 1986c).

Coleman was adamant that the demolition of all remaining walkways was essential. However in 1986, a group of Mozart residents asked Bill Hillier and Alan Penn of University College London to assess the effects of their removal⁹⁶. Hillier and Penn (1986) believed removing

⁹⁶ From the mid-1980's Hillier, Penn and other researchers at UCL's Institute of Advanced Architectural Studies used the newly evolving Space Syntax method to undertake analyses of the relationship between crime and spatial layout of housing estates for both the Home Office Crime Prevention Unit

the walkways would have a negative impact, diverting residents to less overseen, more insecure routes.

“Coleman’s design proposals would create a labyrinthine village layout with a number of cul-de-sacs which would force pedestrians to use routes adjacent to garages rather than adjacent to the front doors of dwellings. The proposals would divide the estate into isolated, segregated areas which are cut off from the surrounding area” (SNU, 1993, p.45).

Unlike Hillier’s earlier condemnation of Coleman’s research methods (see Chapter Five), this critique was based on his essay *Against Enclosure* (1988) and the detrimental effects of limiting accessibility and restricting pedestrian movement patterns by removing the walkways. Overhead walkways were not characteristic to the New York housing projects studied by Newman, and while his eight design variables contributing to poor defensible space included the presence of multiple alternative escape routes, it was Coleman who identified elevated walkways as one of her ‘design suspects’ of architectural features (along with flats raised on pilotti or above garages) that contributed directly to crime. But the evidence for and against walkways was undecided. Evaluating the demolition of seven walkways from the nearby Lisson Green Estate three years earlier, Poyner (1986) found that removing them did have a positive but limited effect on crime, but that similar improvements in burglary levels did not materialize. Poyner suggested that other alterations, such as the installation of entry phones, might have had a similar effect. When the Council commissioned the SNU to survey households on the estate they found support evenly split for removing or retaining the walkways with 42% of tenants believing removal was positive and 47% believing that it was a bad idea or had made little difference. The main cause of dissatisfaction had little to do with the alterations but with the Council’s poor maintenance and clearing regimes (SNU 1988b).

and SNU. These included Studley Estate and Stockwell Park Estate in Lambeth, and Maiden Lane Estate in Camden (SNU 1993).

Figure 8.3 Demolishing the walkways



Despite the debate about the walkways and unpopularity of some of the design changes⁹⁷, in 1993 Westminster Council decided to roll-out ‘Colemanisation’ (AJ, 1990) across the rest of the estate. The strategy document for the second phase demonstrates the extent that Coleman’s version of defensible space had been accepted, stating its main aim was:

“to design out crime and provide a safer, more congenial environment for the residents of Mozart Estate...By creating defensible space for individuals, restoring traditional vehicular and pedestrian circulation to street level, removing the dark, secluded areas which assist criminals; and limiting movement from block to block through the estate” (City of Westminster Council, 1993, p.7).

This was to be achieved by removing the remaining walkways, converting garages to flats and providing private front gardens bringing activity to formerly isolated routes. Following residents consultation the scheme was further modified to meet the DICE principles. Internal circulation was reconfigured, subdividing blocks to accommodate Coleman’s threshold number of flats sharing entrances.

⁹⁷ On an estate with little green space, Coleman’s insistence on building over the only football pitch to stop local youths congregating was unpopular. Coleman claimed childrens’ playgrounds were “schools for vandalism” that “erode controllability by attracting hooligans who vandalize them and make them unsafe for neighbouring tenants” (Coleman, Faith et al. 1992, p.2).

Coleman's appointment for the second phase was justified by her claim that the initial interventions "according to the beat police, resulted in a sudden 55% drop in the burglary rate, which has remained low ever since" (Coleman, 1990, p.144) This unsubstantiated figure was widely used in the press (Franks, 1990; Hawkes, 1991), in architects' handouts about the estate (AEDAS, 2004) and by Coleman herself in the proposals for Phase 3 (Coleman et al., 1992). The local Metropolitan Police had been enthusiastic about the initial changes:

"The first phase of development has from a police perspective made our job easier. It appears to have reduced all aspects of crime and rowdyism and removed the escape routes for rovers. The buildings have taken on a more individual appearance, provided residents with defensible space and encouraged a greater community spirit" (City of Westminster Council, 1993, p.4).

Yet a second SNU survey in 1993 found that burglary had doubled since 1988, with 74% of estate residents believing that crime remained an extremely serious problem (SNU, 1993). Compared to other Westminster estates the Mozart suffered the greatest incidence of all types of reported crime with endemic drug dealing and substance abuse (Floyd Slaski Partnership, 1993)

8.3.3 Applying the DoE's version of Defensible Space and Secured by Design

Mozarts' £27M regeneration cost was partially funded through £12.6M of Estate Action grants with cross subsidy from the houses built for sale. Application for the Estate Action programme required completion of *Form B*, a mandatory option appraisal process which Darbyshire scathingly recalled "purported to be an analytical process" (Interview Darbyshire, 2012). Similar to Coleman summarizing a complex series of design factors into a Design Disadvantage Score for each block, the whole of an estate masterplan was evaluated against ten variables: the numbers of units each option would provide and how it performed against nine, mainly quantitative, criteria. The order of this standard set of criteria, opening with safety and concluding with defensible space as a separate measure, again

demonstrates that defensible space was now integrated into mainstream DoE practices⁹⁸. For the *Form B* appraisal, defensible space was defined as providing homes in a defensible environment. This was assessed by counting the number of homes/or routes where the following criteria had been achieved: pedestrian only routes were closed off, ground floor entrances faced a house or a public through road; homes had a private front garden and/or a private rear garden; garden abutting a garden without rear alleys; blocks were separated from other blocks; reduced dwellings per staircase; parking was overlooked; and public and private spaces were defined. The appraisal counted as positive the number of units experiencing each criteria with no qualitative assessment. Unlike Coleman's design disadvantage score, no thresholds for desirable levels were set. So where Coleman's Design Disadvantage Score recommended a maximum of six dwellings per secure entrance or stair, *Form B* counted as positive any reduction on the number of flats per stair.

Yet it was neither the academic argument about the impact of walkway removal, nor the conflicts between fire regulations and Coleman's tightly quantified thresholds for dwellings per corridor/entrance that finally resulted in her removal from the project. As the Price Waterhouse DICE evaluation report was eventually to warn, Coleman's proposals were expensive and as Lowenfeld notes in his essay on the Mozart, the increasing costs of the physical changes to the estates were becoming unpalatable.

“From 1993 to mid-95 you got a developing sense that applying Coleman's principles in their undiluted entirety to the development was unworkable” (Mozart Housing Manager Dave Bowler quoted in Lowenfeld, 2008, p.170).

The per-unit refurbishment costs were now comparable to the cost of building anew, but with residents experiencing the discomfort of living through disruptive onsite works, without the final outcome of improved internal living accommodation.

⁹⁸ The nine criteria in addition to numbers of dwellings were (in order): Improve safety and security; More suitable family accommodation; Better located family accommodation; Diverse tenure and management; More traditional living environment; Reduced number of one bed dwellings; Reduced management and maintenances; Numbers of permanent decant; Defensible space (Floyd Saski Partnership 1993).

8.3.4 A gradual community-led solution

In 1997, with Coleman now taking only a minor advisory role, the scheme was again re-evaluated. Alan Blyth of AEDAS was part of the team assessing the effect of Coleman's alterations, deciding which should be repeated and how to engage residents more in the design process:

“The early phases brought some lessons learned in practice, so our briefing process involved reconsidering some of the physical measures which had proved to be disproportionately disruptive to residents in occupation or were undiscussed [with residents] or designed by professionals, like the Secured by Design measures” (Interview Blyth, 2011).

Figure 8.4 Community consultation



As part of a long process of resident consultation on a new masterplan, AEDAS were commissioned to review the estate layout with HTA designing the homes and spaces. The key concepts behind the revised masterplan were a further attempt to recreate traditional streets patterns with more legible routes, reintroduction of local shops on the estate, as well as application of the Lifetime Homes and SBD standards. This altered street layout followed

Hillier's broad approach, creating a series of smaller through roads, tied back into the surrounding street network, providing on-street parking overlooked by the refurbished blocks.

Figure 8.5 The remodelled Mozart estate



On completion of the final new homes in 2004 the architects reported that tenants showed guarded optimism about the improvements:

“I think I’m going to feel safe when the new door entry system is fully functional.” (Mozart Resident cited in AEDAS Architects, 2004).

“People round here are really pleased with the way the place has changed. ... The whole mood of the area has changed - there’s definitely less crime and it has quietened down a lot” (Queen’s Park Resident cited in AEDAS, 2004).

However, eight years on, a resurgence in drug related crime, including raids on crack-houses and cannabis factories on the Mozart estate, was reported in the London press (Hunter-Tilney, 2012, Davenport, 2012). It is questionable if this indicated a recurrence of the serious problems of the 1990s, or was merely salacious reporting. An alternative corrective view was provided by the estate newsletter, which covers more prosaic and less dramatic headline-grabbing issues, such as parking restrictions, the planned redecoration of the estate office and community events. The newsletter depicted a strong partnership between the Residents’ Association and the local Safer Neighbourhood police team. Community safety, ASB and crime are mentioned, but amongst news of children’s art competitions, advice on housing services or dog training events (CityWest Homes, 2012). A visitor to the estate today will see no indication of the estate’s violent past. It no longer feels like a failing

place, but is tidy and carefully maintained, with maturing well-looked after landscaping and a diversity of residents enjoying the open spaces.

8.4 Post DICE deliberations on evidence in policy

The Mozart Estate was a continuous building site for two decades between 1986 and 2004, at an overall cost of over £30M. Some alterations to the estate were extremely invasive to the residents and when the changes failed to deliver the promised sustained improvement, their effectiveness was questioned. Yet research evaluation into why these failures occurred was sporadic and far from impartial; for example Coleman's own evaluation used to support her proposal for Phase 3 (Coleman, Faith, et al. 1992), the data used in the *Form B's* which unsurprisingly portrayed the Estate in a poor light requiring further investment (Floyd Slaski Partnership, 1993), or SNU's critical commentary on Hillier and Coleman's investigations (SNU 1988a; 1993). During the long regeneration timeframe, crime on the Mozart evolved and new forms of antisocial behaviour emerged. The social malaise that Coleman and subsequent design teams were trying to address was a constantly shifting target and the crimes that the design changes were responding to adapted faster than the far slower process of consultation and the even slower process of redesigning and rebuilding a housing estate.

The crime reduction and urban policy context also evolved with the rise of community-centred over design-led intervention strategies (McLaughlin and Muncie, 1996). This filtered through into the technical guidance. In 2000 a dramatically rewritten *BS 8220-1:2000 Guide for security of buildings against crime: Dwellings* was published, again at the request of the HO. The revised BS opened with the following realistic, if pessimistic, statement.

“Crime problems are caused by a multiplicity of factors, family, social groups, education, moral culture, drug and alcohol abuse etc. The influence of the layout of neighbourhoods and the design of buildings on these factors is limited” (BSI, 2000, p.1).

This indicates a swing away from physical determinism and towards the HO's model of crime being caused by opportunistic individuals, with the built environment influencing guardians, victims and offenders' behaviour. Illustrating the growing professionalisation of crime

prevention in the intervening 14 years, residents were no longer an intended audience with the BS reiterating the standard should not be regarded as a substitute for expert advice (BSI, 2000). Design tactics such as small, defined clusters of homes were expected to maximize territoriality to such a tangible extent that occupants would be encouraged to challenge potential offenders:

“One common method of achieving this [territoriality] is by the application of ‘defensible space’ concepts i.e. classifying space into four different kinds of spatial areas, public space, semi-public space, semi-private space and private space” (BSI, 2000, p.4).

It highlighted the blurred boundaries between semi-public/private spaces in multi-occupier developments and the BS warned against offenders’ practiced familiarity assessing the deterrent quality not only of physical barriers such as fences and gates, but also of symbolic ones (signage, archways, textured surfaces). A section titled *Defensible space for ground floor dwellings* was limited to the use of plants to screen windows without blocking natural surveillance, with no indication how to achieve these sometimes contradictory design requirements in practice. However the overall message was that design, either of the layout, or of the security products specified, was not a sufficient solution on its own.

Post DICE, under the New Labour Government, planning policy started to take a more holistic assessment of what made a good place and what was required to create “safe, sustainable, liveable and mixed communities” (ODPM, 2005, para 5.). Policy, which had until then focused on housing provision as a separate entity, started to portray housing as a way to establish communities and social cohesion. Kitchen and Schneider (2005) attribute this broadening interconnectedness of crime to other urban policy issues as a response to the perceived failure of more traditional isolated approaches to crime reduction. They describe the extensive policy agenda and “plethora of initiatives at both national and local level” (ibid., p.276) but with politics and ‘political reaction’ distorting the interaction of the factors (recall Flyvbjerg’s (1998, 2001) comments in Chapter Two and Seven on this).

Armitage, Colquhoun et al’s. (2010) meta-review of post 2000 national and international crime reduction and housing design policy found conflicting issues as well as areas of

commonality. A foundational tenet was that the design of homes and surrounding spaces influenced crime levels. The basic principles behind defensible space (appropriate levels of surveillance, clearly defined ownership of spaces, comprehensible layouts and maximizing the presence of individuals) were recommended in all of the documents. Two areas of policy disagreement covered issues that Coleman omitted from her DICE principles: parking and ease of through movement. Unlike earlier guidance, policy since *By Design* (DETR and CABE, 2000) placed greater emphasis on the impact of cars in a domestic setting. There was agreement that certain car parking solutions attracted crime, but less concurrence on the appropriate location for parking.⁹⁹ There was significant variation in guidance documents around desirable levels of through movement and connectivity. This ranged from encouraging high levels of connection, emphasizing the benefits of walking and cycling networks and integration to the surrounding areas (ODPM and Home Office, 2004; DfT and DCLG, 2007; CABE, 2009) to limiting excessive permeability from layouts based on through routes (ACPO, 2010). “The desire for connectivity should not compromise the ability of householders to exert ownership over private or communal ‘defensible space’” (DfT and DCLG, 2007, p.47). The difference here is one of emphasis rather than significance; all the guidance acknowledged that through movement was an important factor, requiring localized decisions on appropriate levels of permeability dependent on the context. What constitutes excessive permeability remains unquantified. This need to consider specific circumstances, using professional judgment to assess appropriate levels of movement, is an example of policy and guidance’s reliance on *phronetic* knowledge to decide suitable actions on a case-by-case basis.

In another example of the transience of policy fashions (for evidence-based policy, as well as guidance derived from evidence), the current status of design and security guidance in British planning and housing policy is uncertain. Two recent Government reviews of housing and planning policy indicate that the present Coalition Government view design and planning

⁹⁹ The *Manual for Streets* (DfT and DCLG, 2007) criticizes parking spaces directly in front of the property as it breaks up frontages and reduces surveillance, while SBD favours this type of in-curtilage parking wherever a secure garage cannot be provided (ACPO and Secured by Design 2010).

guidance as an unnecessary hindrance on the housing market. Lord Taylor's (2012) *External Review of Government Planning Practice Guidance* recommended the deletion of a major proportion of DCLG's guidance, including planning statements, circulars and design guides. Taylor (2012) proposed that it was not the role of government to provide 'best practice' guidance. He based this on two arguments: that practice is continually evolving and so guidance dates quickly (some of the 200 deleted documents were over 50 years old) and that the various 'practitioner bodies' or industry organisations were better placed to provide more relevant and accessible web-based research and resources (Carmona, 2013). Taylor (2012) believed that the urban design advice contained in cancelled guidance such as *Safer Places: The Planning System and Crime Prevention* (ODPM and Home Office, 2004) or *Better Places to Live By Design: A Companion Guide to PPG3* (DETR and CABE, 2001) were now part and parcel of mainstream planning, urban design and architecture practice. In Taylor's view *phronesis* had incorporated *techne* to the extent that only the high-level designing for security principles needed to be retained in government guidance.

The *Housing Standards Review* underway in the autumn of 2014 leaves the future of national housing standards in doubt. The principles of housing standards such as the Code for Sustainable Homes, the Merton Rule and Secured by Design are to be incorporated into a simplified compliance regime for the Building Regulations¹⁰⁰ (DCLG, 2014a; Williams, 2014). These two reviews, amongst other outcomes of the Government's Red Tape Challenge such as the National Planning Policy Framework (DCLG, 2012) have resulted in the most comprehensive review (some say upheaval) in planning/urban/housing policy since the 1948 Town and Country Planning Act. This has been justified by the requirement to stimulate construction of greater numbers of *new* homes, but as the history of SBD has

¹⁰⁰ The expectation is for security to be covered by a new two-tier standard with Level 1 equivalent to current industry practice (NHBC PAS 23 – PAS being Publicly Available Specifications, an industry sponsored version of a BS published by BSI) and Level 2 (for crime sensitive locations) equivalent to part 2 (the technical section) of SBD, implying that the current SBD is too onerous.

shown there is policy read-across from the expected quality of new housing to refurbishment direct and regeneration standards.

Following Governmental cuts in the 2010 Budget the capacity for departments to provide the analytical or research evidence for policy formation was decimated. DCLG's budget was reduced more severely than other departments and in 2011/12 their budget for external research and consulting was 64% smaller than for 2008/09. Between March 2009 and March 2011, DCLG's headcount of all research professionals reduced by 30-40%, losing 25-32% of its statisticians (Fenton, 2012). The expectation is that under devolved Localism powers, Local Authorities or even industry will step in to fill the void by gathering their own data and evidence. But reductions in budgets have affected industry capacity as well. Use of SBD has only ever been voluntary, but its former inclusion in the Homes and Community Agency's housing design standards (HCA, 2007), or the GLA's *London Housing Design Guide* (2010) exerted extensive pressure for its application. At its most popular, mandatory SBD use and a national ALO service had been suggested (most recently in September 2008) making the comparison to CPTED establishing itself as an international professional discipline (CABE, 2008). However resource intensity was used as an argument against this, as with only 13% of ALOs in 2008 working fulltime, the police service would have been under-resourced to address the number of compulsory assessments (Armitage, 2013). Yet as a parallel consequence of the budget cuts, Police ALOs/CPDAs have reduced in number from 347 across England and Wales in January 2009 to approximately 196 in 2012 (ibid., p.208). So regardless of any need to maintain, or extend the existing evidence base, the numbers of experienced professionals able to interpret the guidance has plummeted.

The era of DICE with its interdepartmental cooperation and collaborating crime reduction and housing research units now seems to have been a golden age for evidence-based policy. Occasional research studies appear (HO's (2014) *Creating Safe Places to Live by Design* for example¹⁰¹) but future government-led research on the topic from either DCLG or the HO

¹⁰¹ Tellingly the research was undertaken in 2009-2010 but publication and dissemination was drawn out and delayed due to reduced resources and disinterest from the HO.

looks unlikely. Barnes (2004) described the struggles to incorporate research into government policy formation, but these difficulties increase as departments no longer look to their internal research units to provide an evidence base, but to industry, commentators or compliant academics in line with Young, Ashby et al.'s (2002) elective affinity model of influence. In a situation where the research and policy interaction divide has become impassable, the result can only be ideology-driven policy.

Conclusion

This chapter shows how defensible space was mobilised via (repeatedly questioned) research into (provisional/transitory) policy to be firmly embedded into practice, with the Mozart Estate acting as a canvas for the range of individuals and communities of practice (industry groups and standards committees, community architects/activists, professional advisors) to implement their individual conceptualization based on a variety of 'evidence' for defensible space in their own fields. Even within the academic field similar evidence was used to promote a common practical approach but justified divergent explanations of causality. At the Mozart Estate, Lowenfeld (2008) identified that:

“Hillier and Coleman proposed the same general means – architectural modification – to achieve the same general end - reducing social malaise and crime. The methodological and ideological differences between them – Hillier was an architectural scholar with a modern sensibility, Coleman was a social scientist with a radically conservative bent – are clear” (Lowenfeld, 2008, p.167).

This is perhaps unsurprising, as Coleman and Hillier's shared concern for similar issues resulted in a common palette of solutions to draw from (described in Chapter Five, see Appendix D). Where Hillier and Coleman disagreed was the extent of the physical changes necessary and in predicting the resultant outcomes. Coleman felt it was sufficient to change the external form of the blocks and remove walkways to fundamentally alter the behaviour of the inhabitants, whereas Hillier believed this would unhelpfully reduce the permeability/accessibility and numbers of people legitimately walking through the estate and that radical surgery was needed to reintegrate the estate back into the grain and scale of the surrounding urban fabric. This lack of dependable predictability undermined any claim for a universal theory of defensible space. Coleman also took the uncompromising position that

all aspects of her design solutions needed to be implemented together to be effective as an example of her theory's consistency. The DICE programme was set up to demonstrate the experimental rigour of Coleman's theories, yet it only reached ambiguous and tentative conclusions. One explanation may be that Coleman's design rules and thresholds were too prescriptive and operated at too high a level of abstraction.

This illustrates the risk that *episteme* generalizes or simplifies too much in the pressure to formulate theory. The high level principles of defensible space which are now embedded in SBD and the BS remain at an abstract theoretical level and require interpretation to a specific physical and social context.

"Once turned into that epitome of certainty, a standard or guideline, the rationale, the reasoning and the careful qualifications tend to get lost" (Jenks, 1988, p.55).

This codification of understanding into guidance, omitting the more fluid and emergent uncertainties may reduce practitioners' confusion, but insufficiently reinforces the necessary contribution of professional judgment. As Jones explains, reliance on *techné* stifles experience.

"We're going back to black and white again, aren't we? It isn't black and white, it's grey. It's grey and it's cream and it's silver. And I think that we do tend to have a problem with writing things down and saying this is the way to do it" (Interview Jones, 2011).

The debate over the exact effect of the walkway removal on reducing crime showed the extent that outcomes from the design interventions were uncertain. So Defensible Space is not a 'hard theory' because while it starts to explain a situation, the experience of the Mozart shows it fails to predict future behavior. Perhaps its usefulness is as a 'soft theory' and in *testing* propositions or hypotheses. And testing sits more easily with the practice of designers, or housing managers, who seem more relaxed about taking a 'pick and mix' approach, selecting and trying a range of changes, even if this means undertaking work that needs to be adapted or revised at a later stage. The nature of large scale, long drawn-out regeneration and rebuilding programmes provides the opportunity for later phases to reflect on and learn from what was successful (sustained, cost effective, popular, etc) in a particular context. This is a far more evolutionary 'trial and error' approach than it is a single

transformative controlled experiment. Another benefit of this pragmatic approach is the ability to start small, start cheap and start local. The ALO Mark Jones recommends small-scale interventions, sensitively selected and applied as needed, if necessary returning time and again with alternative remedies, until a satisfactory solution is achieved; suggesting that experienced practitioners, with a wide repertoire of techniques, still favour a bit-by-bit approach.

“We are hung up on the idea that you need big sums of money and big projects to make a difference. Making wholesale design changes, the big transformations, can be a way of catalysing residents support, but there is an alternative approach, a ‘sense of small nurturing’. It’s much more effective if you’re doing lots of little things, it means that you’ve got to be there long term and be committed to a place” (Interview Jones, 2011).

The failure or success of the various design changes to improve the Mozart Estate can be seen as either compromised responses or opportune reactions, that fitted a particular time and set of circumstances. Both Coleman and the community architects shared a utopian vision and faith that the changes they were proposing would benefit residents. Both promoted a series of practical actions based on varied evidence and practical experience. But praxis knowledge can be gained in a number of ways. It can be learnt through analytical experimentation, reflection on experience, or (more uncomfortably in a professional context) through trial and error. Architectural education emphasizes an incremental evolution of rules of thumb, based on what has been seen to work before. ALOs follow a similar professional process of deriving rules through experience. These both rely on a clear-sighted understanding of what actually worked, unpacking the causality of complex social and physical variables.

“I give the advice that I know works. The practical; it’s been done, it’s worked, we know it’s going to work” (Interview Jones, 2011).

The consequences of these interactions are far from simple and the application of best practice or heuristics (be it in housing design, management or resident consultation) sits uneasily as part of an evolutionary learning process. So not only may the historical, social or political context have altered, but also the evolution of a solution may make it an inappropriate response to the altered context. It’s instructive that many of the design

solutions proposed to remodel Mozart were responding to failures of earlier design ideas - high rise housing, or segregated pedestrians and vehicle movement. The story of the Mozart attempted to balance physical and social interventions, but became mired in a debate about walkways and early academic attempts to understand the impact of permeable estate layouts on crime. This essential professional judgment of appropriate levels of permeability is an example of the extent that policy and guidance still rely on professional knowledge and expertise to assess solutions on a case-by-case basis rather than 'hard' predictive theory, or explicit policy guidance.

Yet the Mozart provided the opportunity for each community of practice to reflect and learn. For researchers, the Mozart was a chance to explore the robustness of a complex theory, particularly how that theory responded to the pragmatic constraints of design interventions. For policy makers it was an instructive example of an estate subject to waves of regeneration policy - an illustration in concrete of policy and guidance. For the community architects, the Mozart was an iterative learning process testing heuristics for designing-out-crime and a chance to implement their localized particular version of defensible space principles. This chapter has used the Mozart case study and the shifts in the policy guidance that informed the rebuilding of the estate to show that in the search for understanding and evidence to inform decision and action, *phronesis* wins out over *techne* and *episteme*.

Chapter 9: Conclusions - Valuing experience

Introduction

“The important thing about housing is not what it *is* but what it *does* in people’s lives” (Colin Ward, 1976, in Coleman 1985a, p.182, italics by Coleman).

As this quote reminds us, housing is far too often reduced to a homogeneous ideal, rather than an assemblage of numerous complex interwoven influences, experienced by its inhabitants in diverse ways. Similarly, defensible space embodies a series of contested propositions about social processes and behaviours, explaining only one partial aspect of what housing ‘does in people’s lives’. An alternative thesis might have examined the social processes or behaviour changes that residents experience when defensible space design principles are applied on their housing estate (echoing if not fully repeating the experimental testing of DICE or the social analysis within the Price Waterhouse evaluation). However, the social processes my empirical research has followed are those of *doing* research, *making* policy, *practising* estate regeneration and *undertaking* policy/research evaluation. In attempting to understand these processes, the intent was to re-normatise defensible space as an academic and a practical concept, by unpicking the debate that surrounded both it, the personalities, politics and views of the participants; delving deeply to uncover their value systems and the obscured agendas behind their actions.

In spite of extensive re-examination, defensible space and the explanatory models for how it works are still only partially understood (Poyner, 1983; Cozens, 2005; Ekblom, 2011). Multiple investigations have tested the concept to an extent that the constituent elements are taken as a given (Merry, 1981; Moran and Dolphin, 1986; Cozens, Hillier et al., 2001a), strengthening its hold on the imagination of the various disciplines who have adopted it. This resilience, despite the doubt and controversy surrounding it, argues for the continuing salience and pertinence of the topic, echoing Bill Hillier’s (1973) and others’ (Ley, 1974b; Reynald and Elffers, 2009) belief that defensible space was, and remains, a very important issue. Thus the gap this study tried to fill was not merely what is known about defensible space, but more the gap in understanding how this knowledge was/can be used and applied.

So asking whether the DICE programme was a success or failure became more a question of policy analysis than scientific proof of theory. Yet, while not aiming to definitively refute or verify defensible space as a theory, investigation of theory was still important; in tracing the movement from theory to evidence-based practice, and how theories can provide frameworks for action for the communities and individuals that I interviewed. I was unusually fortunate to be part of all three communities of practice under investigation¹⁰². This research provided a unique opportunity to reflect on the contrasting modes of enquiry, the practitioner's value-laden culture of certainty and professional decision-making that I encounter/ed day-to-day within my usual professional operating environment.

9.1 An evolving conceptual framework

By using policy mobility to frame this thesis I followed a disciplinary tradition of policy analysis/evaluation as much as a geographical one. Chapter Two noted that both bodies of knowledge have shortcomings; particularly in how the mobility of policies might differ from the movement of concepts into research or into practice. So, to consider how research was called on to provide 'evidence' for both policy formation and practical action, I focused on the use of evidence to support the five policy roles described by Hogwood and Gunn (1984) as: i) an aspiration or mission statement, ii) a set of proposals, iii) formal authorisation that legitimises proposals, iv) a funded programme and v) a process or field of activity. That DICE - and by inference defensible space - fitted this multifaceted definition of policy, justified treating it as mutating pseudo-policy¹⁰³. Uncovering this more nuanced idea of what constituted policy and the resultant more fluid relationship between policy and evidence altered the initial conceptual framework.

¹⁰² Many of my insights have emerged from an instinctive form of deep ethnography, with all the attendant challenges of oblique participant observation over an extended period (rather than overt study with consent), or the experimental detachment described in the methodological chapter.

¹⁰³ In Gustaffsson's (1983) definition, pseudo-policy lacks the key knowledge needed to implement it. I am arguing that knowledge about defensible space is not as much missing as used in such a fluid way as to undermine its ability to form what Gustaffsson would consider real policy rather than symbolic or pseudo-policy.

Figure 9.1 shows that I intended to look at the interaction of research and policy and their respective impacts on practice, through the lens of policy, assuming (with the policy mobilities literature in mind) that all three positions shared a partial viewpoint on defensible space. However, examining the material gathered has yielded insights on the contrast between design as an emergent process against the fixed nature of policymaking. So although this common ground did exist, it was less defined; each position having their own subtly different reading of the concept. This meant that the relationships were more implied and less direct than the notion of evidence-based policy might suggest, and that the interaction with practice (particularly when considering *phronesis*) was only partially permeable, resisting or accepting evidence and policy pressures depending on opportunity and circumstance.

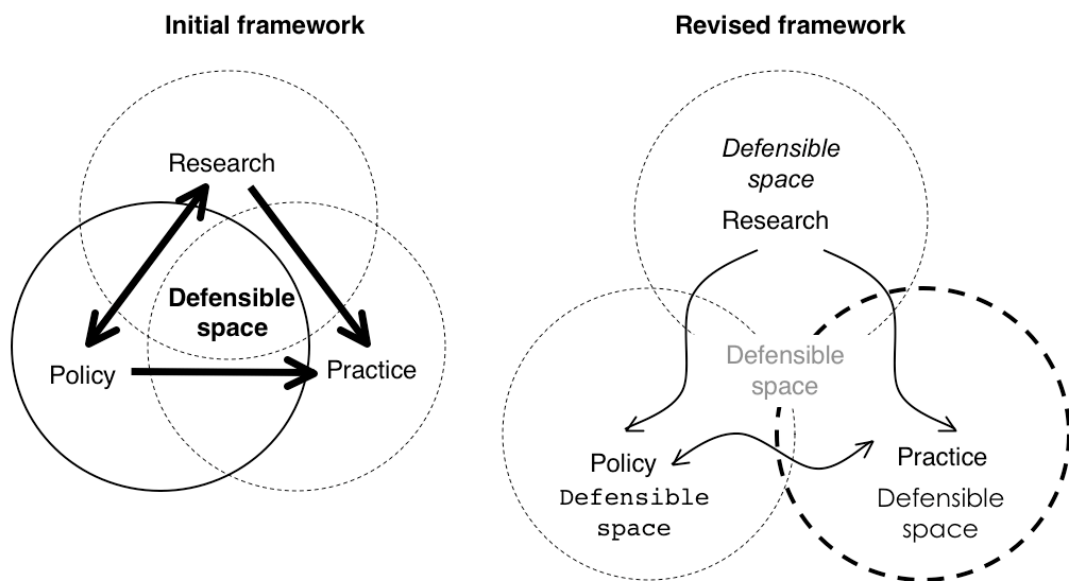


Figure 9.1 Initial and revised conceptual interrelationship between research, policy and practice

This definitional framework clarified the certainty, strength and directional nature of the tripartite relationship when answering the three research questions: How did defensible space move, what was the role of transfer mechanisms, and what were the varied disciplinary opinions on the value of evidence?

9.1.1 How was defensible space mobilised into research, policy and practice?

The narrative curve of the story of DICE opened with the foundation myths created by Newman's research taken up by Coleman; then the struggle to obtain funding to experimentally test Coleman's redevelopment ideas, showing the problematic translation from academic research into policy influencing research. As both research and policy formation DICE reached a disappointing conclusion following the Price Waterhouse evaluation which attempted to close down the avenues for defensible space within national housing regeneration policy. Defensible space (or Coleman's version of it) was described as an idea out of time, too anti-modernist and outmoded (Lipman and Harris, 1988; Interview Wiles, 2011). Yet it resiliently re-emerged, exploiting not one, but multiple policy windows. Coleman's principles were temporarily more successful in other pseudo-policy formats such as the *British Standards or Secured by Design* (SBD) with elements still appearing in policy documents today¹⁰⁴ (GLA, 2014). However, as shown, the movement of defensible space into practice had a longer, more erratic trajectory. Starting with Newman's relatively simple recommendations for architects, the practical application mutated as it spread, via the DICE Design Guides for Housing Associations (Coleman, Cross et al., 1995?) or Sheena Wilson's advice for housing managers, evolving into the form recognisable in SBD, or many policies of local planners (LB Tower Hamlets, 2009). Yet more than written documents, the movement of the concept into practice is visible in the constructed examples; the growing numbers of buildings by community architects and others applying and reapplying the approach (such as

¹⁰⁴ It is worthwhile quoting the GLA's Policy 7.3 Designing-out Crime from the 2014 Draft Alterations to the London Plan in full to show that selected defensible space principles are incorporated alongside generic recommendations on permeability into London's current planning policy. "Planning decisions: Developments should reduce the opportunities for criminal behaviour and contribute to a sense of security without being overbearing or intimidating. In particular: a) routes and spaces should be legible and well maintained, providing for convenient movement without compromising security, b) *there should be a clear indication of whether a space is private, semi-public or public, with natural surveillance of publicly accessible spaces* from buildings at their lower floors, c) design should encourage a level of human activity that is appropriate to the location, incorporating a mix of uses where appropriate, to maximize activity throughout the day and night, creating a reduced risk of crime and a sense of safety at all times, d) *places should be well designed to promote an appropriate sense of ownership over communal spaces*" (GLA 2014, p.239 emphasis added). The detailed policy refers to the deleted *Safer Places* as well as the soon to be cancelled *Secured by Design*.

Lea View in Hackney, or the estate regeneration schemes of Poplar HARCA during the 2000s). Coleman's DICE schemes - particularly the Rogers Estate - did play a part here, leaving a concrete legacy that was visited by professionals and written about in trade journals.

9.1.2 Did the way in which the concept was mobilised affect its impact?

Unsurprisingly, considering the extensive discussion of impact in the policy mobilities and the idea-to-policy literature, I found that the impact of defensible space was affected by the mobilisation mechanisms applied. These mechanisms, particularly transfer agents, can act and influence uptake of a concept in positive or negative ways. Concepts can follow convoluted routes and may mutate or alter during translation. The receptiveness of practitioners is a critical aspect of successful embedding, as much as the adaptation or alignment of the policy to the new context. Alignment implies not just a single process, but that several favourable co-existing conditions are needed: persuasive mechanisms, unobstructed routes, timeliness and potential to fit.

Freedom for a concept to move is controlled by the nature of the transfer mechanism; be that an individual, a book or an event. The opinions of individual transfer agents (or policy entrepreneurs) often coalesce into 'boundary objects' (artefacts, documents, policy ideas or terms) whose historical emergence and take-up are occasionally easier to trace than the concepts themselves (Wenger, 1998). Alice Coleman finding Oscar Newman's book in Canada reveals the book as a boundary object standing in for and transferring his opinions. More anonymous objects, such as the National Audit *Report on Council Housing* (which should have synthesized a range of stakeholders viewpoints and hence a rounded view of what defensible space might be) relied on their organisational (or legislative) weight for their convincing influence.

Chapters Four and Five have described the diversity of transfer mechanisms, international and intra-national leaps and degrees of influence on the intervention sites. The parallel attempts to transfer defensible space from America to Britain demonstrated multiple routes towards adjacent locations and audiences. At the governmental level, Newman's version

moved (via his meetings with Wilson and others) from an American housing agency (HUD) to a British security department, the Home Office. Coleman similarly acted as an international carrying agent¹⁰⁵ to the DoE, whose broader urban and housing concerns should have been more receptive than the Home Office. Yet her timing was inopportune as the suitable DoE niche was already filled with an alternative response to the problem: the Priority Estates Programme. The practical and political conditions within the Home Office and DoE acted to constrain rather than stimulate collaborative inter-departmental research. It took two transfer agents (Sheena Wilson and David Riley) moving between departments to fully mobilise information within these disparate organisations. Notwithstanding that Riley acted as a resistive agent/barrier, it was the *practice* of interpersonal connections that produced a network of relations conducive to information flow, not just geographical co-location. This practice of connections and flows, with mechanisms following pre-activated networks, was repeated in the Tower Hamlets case studies. The conditions at the sites and within the teams working on the estates were more (Rogers) or less (Ranwell East) receptive to Coleman's version of defensible space. These examples suggest that mobile policies and concepts need more than an empty niche to move into and that the 'readiness' of the landing place and the adopters is as critical as the mechanism.

There is a high risk of failure from trying to mechanistically impose or translate an idea onto a misunderstood site. Kitchen and Schneider (2005) summarise this insight:

“When looking at ideas from other places that may appear to be attractive, it is important to understand the context in which they have been applied and also whether or not robust evaluation has taken place. The failure to study both context and outcome can all too easily lead to ideas being imported which are imperfectly understood from the outset, and as a consequence can increase significantly the likelihood of failure when they are attempted elsewhere. In a world where knowledge in all its forms is not only constantly growing but is able to be moved around ever more rapidly, the risk of this is probably growing, especially where a ‘quick fix’ or ‘something different’ is being sought” (ibid., p.279).

This identifies two further issues to consider: first the implications of looking for ‘something different’ to transfer and second the speed of transfer. Healy (2010) noted the importance of

¹⁰⁵ Subsequently re-exporting her version of the concept at many international conferences.

novelty of practice as a stimulus to transfer, over reinterpreting a familiar idea, but by the 1990s defensible space could not be considered a novel concept. An alternative explanation is that it was upheld by its strength as a common sense idea:

“The language of broken windows, CPTED and defensible space has become so prevalent as to appear commonsensical...this may be because it has at its roots in certain taken-for-granted notions of space and property” (Blomley, 2004, p.633).

The term policy mobilities also implies a swiftness of transfer. Societal context has shifted rapidly from the 1970s when the idea of defensible space gained credence with planners and policy makers. Equally trends and ‘fashions’ in crime have evolved rapidly, far faster than the policing response and certainly faster than the slow adaptation of the built environment. Housing and urban regeneration programmes are extremely long drawn-out processes, hindering a speedy evaluation of the policies that initiated the changes. A persistent problem is the mis-match of timeframes for cause, intervention and impact. Decision makers have notoriously short attention spans, looking for rapid policy effect rather than sustained long term assessments of impact. Unlike housing initiatives such as Decent Homes, which began with modernizing the interior of flats, Coleman was trying to work from the outside in. DICE relatively rapidly improved the exterior of the estates, transforming them in a highly visible way. Such obvious physical alterations may be politically desirable, principally by benefiting the wider neighbourhood and ‘tidying up’ undesirable estates. However, as the Mozart Estate shows, building the community capacity to deal with social problems takes time, and slow steady phases of incremental change provide the time to ensure a sustained improvement.

Yet the failure of defensible space to evolve from a diverse and loosely defined concept to ‘hard’ theory was as much about how the concept was constructed as how it was communicated. Understanding defensible space as a cluster of concepts explained the positive and negative consequences; the fluid toolbox of concepts provided resilience for the overall idea but the lack of any integrated model meant it became easy to unpick each fragment. The transfer mechanisms applied to each concept fragment altered that piece, helping it to align better into the unique context:

“Approaches need to be tailored to specific circumstances and to the people whose daily lives are framed by these circumstances, because the likelihood that there are standard formulae that can be universally applied with a guarantee of success is remote. The role of theoretical ideas and of experiences from elsewhere is to prove some starting points for this process, rather than to predetermine it” (Kitchen and Schneider, 2005, p.278).

This is a key insight that the theory or borrowed concept is the beginning of a process of local contextualisation.

Further constraints on impact were identified from Coleman’s role as a researcher attempting to influence evidence-based policymaking. Research often needs to be mediated in some way to gain traction and influence, for example in this case the National Audit committee report. It is essential to take a realistic view of the capacity of research to influence policy directly. Successful policy influencing is all about timing, being in the right place, catching the eye of the powerful and having a zeitgeist-matching proposal. Influencing can take time and be achieved via unexpected routes. It is possible that Coleman had greater impact through her pithy, but timely suggestion to Sir Kenneth Newman that the police could provide a crime-preventive assessment of proposed housing designs (Coleman and Brown 1985). Establishing the idea of advisors (proto-ALO’s) proactively considering planning applications may have improved housing quality more significantly than all her other research and writing.

9.1.3 What does this mobility of defensible space tell us about how these different communities of practice use evidence?

An informative excerpt from the 1993 Safe Neighbourhoods Unit (SNU) report *Crime prevention on council estates* summarised the fundamentally different kinds of information needed to generate action by those researching crime prevention from those implementing the advice in practice.

“Research into the relationship between design and crime is rooted in ideological assumptions and has often led to tentative conclusions with numerous qualifications attached. Unfortunately, when practitioners are considering design changes on estates, or in areas with high crime levels, the assumptions and qualifications are often forgotten. Publicity can turn specific research conclusions into an accepted common sense quite

removed from a single study or drawing from a number of different, if not contradictory, theories” (SNU 1993, pp.157-158).¹⁰⁶

What a researcher finds to be tentative contingent evidence, a policymaker may precipitately present as persuasive implementable facts, or a practitioner generalise into ‘common sense’ accepted principles.

The diverse responses across disciplines (see Chapters Two and Five) highlighted a challenge inherent to a multi-disciplinary concept like defensible space; that it is exposed to unbalanced professional scrutiny focused on specific areas of expertise. Criminologists welcomed the introduction of novel (to them) spatial thinking but attacked Coleman’s analysis of crime data, while architects dismissed the same spatial understanding as crude, revealing the distinctive ways that researchers, policy-makers and practitioners interpret evidence. It is important not to consider these communities of practice as homogeneous or fixed, but to note that individuals move between disciplines and connect networks. Like myself, the main protagonists played several roles: Newman was an architect, planner and researcher; Wilson, a psychologist, criminologist and policymaker; and Coleman a geographer with aspirations to influence both policy and practice.

The case studies of the Rogers, Ranwell East and Mozart estates illustrated how the practitioner community is better than academia or policy circles at dealing with ambiguity in spite of the daily pressure for clear-cut decision making¹⁰⁷. This shows that *phronesis* is more than a superior form of practical knowledge, but is able to account for the choice between ends (the value rationality) and interests (power). Particularly illuminating here were the examples of ALO Mark Jones applying expert experience to interpret the codified *Secured by Design* guidance, or Steve Stride¹⁰⁸ tailoring regeneration approaches to local

¹⁰⁶ The SNU, then the foremost practice-focused crime reduction research team, were commissioned by the DoE’s David Riley, who was simultaneously managing the DICE evaluation so it is reasonable to take this quote as reflecting the department’s position.

¹⁰⁷ Familiar as Schön’s (1983) ‘wicked’ problems in the swampy lowlands of practical decision-making.

¹⁰⁸ Having been neighbourhood manager for Globe Town Neighbourhood during DICE, Stride became CEO of Poplar HARCA and is currently President of the Chartered Institute of Housing.

circumstances (the local contextualisation of a national policy) by cherry picking those approaches which might work based on practical knowledge and local familiarity.

The case studies also show that selected defensible space principles might work in some places, but that design can only ever offer a partial answer. The ability of even a straightforward design to consistently deliver the solution promised is highly variable and subject to limitations; the management and maintenance of estates are now acknowledged to have an equal role to design in the process of sustained regeneration. The suspicion of design determinism demonstrates the widely-held view that design alone is unable to provide definitive solutions, however good or careful the designer. Despite Coleman's faith in permanent design changes, just as design can not be seen as the only cause of housing problems, it can not provide the only solution. Coleman's design primacy has been reassessed to a more realistic formulation: that some housing problems are intractable and can only be managed over time. Consequently, as there is no such thing as a permanent, generic solution to retrofitting housing, any proposed interventions need to evolve to match the shifting problems and situations.

The vocabulary of design problems and solutions is itself deeply problematic, implying the ability to identify and implement an optimal one-off, permanent answer rather than a complex contingent response to the dynamic situation that exists. As Ravetz (1988) suggests: "the remedy of the problem estates is political and dynamic, rather than physical and mechanistic" (*ibid.*, p.162). Roberts (1988) ascribes the conditions that Coleman attributes to the breakdown of society and social malaise as merely failures of "municipal housekeeping" (*ibid.*, p.123). The inability to keep an estate clean, in good repair and rubbish or disturbance free, points more to poor management than failed design or 'problem' tenants. There is a role for sensitive design interventions, yet a recent study has shown that urban design characteristics such as integrated parking, a coherent street layout and well-structured wayfinding are not good predictors of crime levels (Armitage, Colquhoun et al., 2010). Pease and Gill (2011) conclude, that as well as contributing to the overall quality of the housing

development, design does influence security, but designing-out-crime cannot be reduced to good design.

9.2 Mobile concepts: Lessons for academia and policy

If the case studies illustrate architects', planners' and housing professionals' tactical ability to function within a fluid local context, McCann and Ward's (2013) criticisms of current geography policy mobilities writings argue that academia is less adept at the multi-perspective, detailed immersion in localist policies that this requires. Contemporary policy mobilities literatures remain very abstract and theoretical. This methodological immaturity is hampered by the weak interest shown in how to apply these ideas in practice and the lack of experience within academia in how policy making works. Policy mobilities thinking provides a helpful model to track the movement of ideas and concepts, but is far too weak an explanation to establish any predictable model. The literature concentrates on specific issues, such as neo-liberal globalisation, which limits their reapplication (see Jacobs and Lees 2013). Stone (2012) complains that to date policy mobilities studies have concentrated on the accessible, formal high-level state actors and 'hard' transfer mechanisms of policy statements and less on the slippery intangible processes, the informal meetings and interactions (Freeman 2012). This reiterates Stone's (2012) belief that policy mobility merely repackages the ideas of policy transfer. I found that policy mobility thinking shares many of the criticisms directed at evidence-based policymaking. The discussion of evidence-based policymaking similarly concentrates on what constitutes sound evidence; creating tools or models of 'what works' rather than understanding 'why this works' (or doesn't work) in this particular case. Rather than ignoring the softer value-led conditions required for evidence to influence and persuade, policymaking needs to be recognised as malleable and interpretative. Other gaps in policy mobilities thinking for further consideration include:

- Writings on policy mobilities usually look to examples of successful transfer (Ward, 2007; Healey, 2010; Peck and Theodore, 2010). In this thesis I have learnt from the occasionally unsuccessful transfer of defensible space, reinforcing the value of looking at 'poor practice' not just 'best practice'.

- Existing policy mobilities studies often lack long-term temporal analyses. Here I have tracked the evolution and application of defensible space over 40 years.
- Processes of mobility and transfer are not simple linear progressions, but messy and contingent with multiple routes. Therefore rather than focusing only on single routes for mobility I have examined competing transfer mechanisms and how they are used in combination. Similarly it was important to look at interlocking networks and to track how mobility is affected as it traverses these domains (Larner and Laurie, 2010).
- Policies move as sub-policy fragments, or as pre-policy pieces (Peck and Theodore, 2010; Jacobs and Lees, 2013). Practitioners are practiced at identifying, taking and reusing only those pieces that work. So it is unsurprising that these were the pieces that moved. These fragments get translated only in situ, reinforcing the importance of the landing site.

My contribution (in addition to re-constructing the story of DICE) is extending this critique of policy mobilities to suggest new practical approaches derived from policy mobility/transfer mechanisms. This starts from the multiple mechanisms, routes, and interpretations of defensible space that exist, noting how practitioners deal with these diverse versions of a concept within a particular context. These insights have traditional theoretical implications (questioning whether positivist scientific theoretical unity is achievable in practice) but also I argue, useful practical implications towards greater trust in practitioner experience based on a looser form of middle-range theory building.

9.3 Practitioners develop a ‘middle-range theory’ about defensible space

Stephen Marshall (2012) criticises Urban Design theorists’ inability to scientifically test their ideas, identifying four ways that a theory can be pseudo-scientific. Coleman’s fiercest critics accused her of the first two ways: being disingenuously fraudulent, deliberately manipulative (Lipman and Harris, 1988; Hillier, 1986b) or fundamentally implausible (Hillier,

1986a). Even her less vociferous critics (Ravetz, 1986; Herbert, 1986) would agree that Coleman's positivism accords to Marshall's third situation:

“where the treatment appears to be scientific, where it may involve a method, approach or general mindset that ‘appeals to observation and experiment’ but which nevertheless does not come up to scientific standards” (Popper 1963 p.4; cited in Marshall 2012, p.259).

Yet most relevant to understanding how practitioners theorise defensible space is Marshall's fourth way of acting pseudo-scientifically “as a sort of post-hoc justification for a form of practice that could proceed even without the theory” (Marshall 2012, p.259). This post-hoc justification is visible in the DICE-like design changes applied to other estates (for example the ‘control’ estates described in Chapter Six) and which were seen to work regardless of the theories associated with them. Marshall continues that while urban designers do recognise and use evidence, the sector's inability to ensure that the “scientific empirical evidential bases for its theories underpinning assumptions are correct, consistent and up-to-date” (ibid., p.246) undermines the extent that evidence is valued. This failure is as true for housing design and management as a sector, as it is for urban design. So it should be not surprising that the practitioners interviewed repeatedly reported that whilst they valued evidence, they placed greater trust in experience (Interviews Jones and Stanford, 2011, Darbyshire and Hammill, 2012).

9.3.1 Practitioners recognise the concept: academics dismantle it

The SNU quote in Section 9.1.3 reinforces how practitioners create a recognised ‘common sense’ whole from separate (occasionally opposing) theories, with elements valued because of their communal acceptance – that they are ‘held in common’ (Wenger, 1998). To practitioners, a fragment of the concept seemed valid if it chimed with their experiences, regardless of its source. Despite not having encountered defensible space during their studies, architects Mary McKeown and Peter Silver attributed their pre-knowledge of its principles to their practical housing experience¹⁰⁹. So when they eventually read *Utopia on*

¹⁰⁹ Un-acknowledged ideas pre-existing is similar to Merton's scientific “pre-discoveries”.

Trial, their reaction was one of recognition and that the book articulated familiar aspects of their practice within housing. Pragmatically they tended to agree with the points of greatest overlap with their practical experience, even if this alignment of ideas was only partial. Both were less concerned with the political implications (or theoretical explanation) of Coleman's arguments. As a young community architect working on the Mozart, looking for practical guidance, Alan Blyth was tolerantly open to the advice in *Utopia on Trial* (which he had "lapped up" as a student, unconcerned by any controversy). He incorporated those of Coleman's principles that his clients and residents responded to, alongside other approaches such as Bill Hillier's, fitting them into the SBD framework as required (Interview Blyth, 2011).

This openness to selected aspects of Coleman's theories by practitioners contrasts with how many of the academics interviewed remembered their introduction to her research (Interviews Cooper and Woolley, 2013). By the time they encountered *Utopia on Trial* they were highly familiar with (or had contributed to) the debate around Newman and determinism, and were aware of the established enmity towards her (or at least the gulf between the popular reception and that of the academy). The academics came to the work to critique or analyze, so rightly their focus was on the internal rigour of Coleman's ideas, the legitimacy of her use of data, as well as interpreting Coleman's overall propositions and political stance. Their interpretations were also more overtly shaped by how this matched their own professed position and disciplines. As academics they were less tolerant of Coleman's inconsistent thinking. Academic critique can be seen as more black and white, and less compromised than the views of practice who can accept the grey, cream and silver spectrum that ALO Jones perceived. As Schön (1983) recognised, academic novelty is valued more than utility with "those who create new theory thought to be higher in status than those who apply it" (ibid., p.37). If theories are to be seen as boundary objects (transfer mechanisms) crossing the boundaries between researchers and communities of practitioners, Green and Schweber (2008) suggest that to be *useful* and to bridge the gap between these groups, theories need to have "some degree of face validity, or a recognition by all of the potential utility of the theory" (ibid., p.625). Middle-range theory building aims for

just this practical utility; examining the local processes and problems, and explaining the significant dynamics within a particular system, but with a relaxed acceptance of multiple and hybrid viewpoints (Green and Schweber, 2008).

9.3.2 Accepting conflicting interpretations

Marshall (2012) described the simplification of urban design theories as a process of declining scientific clarity and influence: “the original theories have ‘worn smooth’ with time, losing some of their original nuance and purchase” (ibid., p.268). The opposite happened with defensible space, which became more baroque and convoluted as it was called on to solve more and more complex problems. Clarity was lost due to this growing complexity resulting in a “rats nest of intertwining hypotheses” (Rubenstein, 1980, p.6). As a conceptual framework, defensible space was based on several unresolved debates: territoriality as a positive or negative, open or closed layouts and resultant permeability, residential spaces as distinct from other types of public realm and the degree to which environment influences behaviour. As a theory (if it can be considered one) it is inherently contradictory, with inconsistent effects dependent on context and inter-dependence of other features. A design may reduce crime levels but also reduce contact between neighbours; private gardens with stout fences may create defended buffer zones, but also provide shelter for potential burglars. Yet this thesis shows that situated ambiguity can be a positive. Defensible space retains its resilience because it is so fluid and ambiguous:

“It is useless to try to excise all ambiguity; it is more productive to look for social arrangements that put history and ambiguity to work” (Wenger 1998, p.84).

Anyone encountering such a loosely defined concept can find some element they recognise, accept and apply, and can manipulate it to reflect their worldview. Thus the idea becomes more complicated, incorporating later understanding and alternative interpretations. So Peter Silver’s view of defensible space was highly influenced by Bill Hillier’s principles for movement through spaces. Silver sees spaces not as something that can be statically mapped (or definitely defined as semi-private, semi-public etc), but as a fluid and relative condition, affected by permeability (Interview Silver, 2013). Regardless of any theoretical

difficulties this presents, Herbert (1983) and later Reynald and Elffers (2009) questioned if the multiple versions of the concept are really a problem. Does it matter that the process of how defensible space operates is not well understood, if it appears to work? This is what seems to occur outside academic and policy circles. Co-existing conflicting interpretations of defensible space are accepted by practitioners, who are more prepared to follow the 'force of example' without much explanatory rigour.

9.3.3 Purity of theory is pointless in practice

With such a confused and ambiguous concept as defensible space, beginning with the points of alignment and correspondence is perhaps more helpful than restating where they conflict. The conceptual basis of Newman's and Coleman's enclosed residential "defensible enclaves" policed by occupants recognising and excluding strangers is far from Hillier's shared residential spaces integrated within wider movement networks where strangers represent safety and opportunity for positive encounters (see also Jacobs, 1961). Nonetheless, these contradict each other less than their authors might argue, and there are common characteristics where the detailed operational recommendations could potentially co-exist (see Appendix D).

All saw physical design as a method of fostering urban civility, even if devising the design features to combine vitality, sustainability and security is challenging. A harder theoretical challenge is unpicking the deeply held assumptions beneath each of these versions. So Hillier's 'safety in numbers' findings undermine assumptions that a large-scale high density residential development is inherently more crime prone, or that community formation is an essential intermediary step in the creation of safe environments. He argues that "simple human co-presence, coupled to such features as the presence of entrances opening on to a space, are enough to create the sense that space is civilised and safe" (Hillier and Sahbaz, 2008, p.27). Hillier and Sahbaz (2008) observe that the divergent principles that each side hold to be certain are all part of a larger more complex picture. And as the complexity of a concept like defensible space is revealed, these principles need to be rethought. The

ongoing arguments around defensible space provide another example that theoretical principles can only be the building blocks in constructing a stable concept¹¹⁰.

9.3.4 The role of experience interpreting guidance

In Chapter Eight, the Mozart is described as an example of *phronesis* winning out over *techne* and *episteme*. To paraphrase the ALO Mark Jones, practitioners are adept at taking what they need from a theory. They “start small, start cheap, start local and consider the context” (Interview Jones, 2011). But sensitivity to context can coexist with weakly evidenced decision-making based on heuristics or rules of thumb:

“Context-dependence does not just mean a more complex form of determinism. It is an open ended, contingent relation between context and action and interpretation. The rules of a ritual are not the ritual, a grammar is not the language, the rules for chess are not chess, as traditions are not social behaviour” (Flyjvbjerg, 2001, p.43).

This thesis found that failures often arose from unquestioningly following defensible space, DICE, or SBD principles; potentially undermining confidence that learning can be codified into best practice guidance applicable by expert or lay person alike (Wenger, 1998). Jones pointedly distanced himself from sources of guidance believing his experience as an expert ALO held more power to convince than referring to others, regardless of their credibility.

“You have planners and policy and you have the ideas people, the gurus, the people whose books everyone reads. Realistically I think most practitioners of crime prevention and designing-out-crime would say they ignore those. They may read them initially when they’re learning, but they don’t go back and say ‘Alice Coleman said.’ And I don’t say ‘this is what Alice Coleman did’ or anything to do with DICE or with anybody else when I’m giving practical advice. I give the advice that I know works” (Interview Jones, 2011).

¹¹⁰ Echoing here Forscher’s metaphor for accumulating scientific knowledge as a wall constructed from the interlocking blocks of individual studies. In *Chaos in the Brickyard* Forscher (1963) warned that concentrating on amassing these building blocks was not enough, paraphrasing Henri Poincaré “Science is built up of facts as a house is built of bricks; but an accumulation of facts is no more a science than a heap of bricks is a house” (ibid.,p.339). I would extend this metaphor further, with academic theory building being seen as a form of knitting, interlinking interdependent facts in an additive and highly controlled process weaving in new strands into a useful theory. Whereas practitioner theory building is closer to a game of Jenga; constructing an edifice of all the currently accessible knowledge, then applying experience to dismantle this piece by piece, discarding those elements that are deemed unnecessary, inappropriate, or unlikely to succeed in these circumstances. The skill here is knowing when to stop.

The same is true of policy. It is only in its interpretation and its application that its power is manifested. So we need to carefully distinguish between policymaking acts (the persuasive power needed in the moment of its writing and agreement) and the actions arising from the implementation of that policy (with their own convincing justifications) (see Freedman 2012). A strength of this research is my attempt to examine the gulf/space/tension between a statement of policy and its physical, embodied manifestation - the physical remnant that actually remains on a housing estate.

Conclusion

Throughout this research, the strongest transfer mechanism for defensible space has been individuals, accentuating the power of personality. Chapter Four introduced Coleman's role as anti-guru to counter Peck and Theodore's (2010) idea of persuasive gurus. Yet the strong and polarized memories of Coleman, a response to her 'marmite' personality, belie the impact and influence she had. Many interviewees commented on the force and abrasiveness of Coleman's personality, but Steve Stride identified the organisational challenge that she and her 'countercultural ideas' represented to the DoE establishment:

“There are these vested interests that will try and crush innovation. That's what happened with her. And Alice, they couldn't crush her because she was Alice Coleman and she had Thatcher backing her and she had £50 million and she had willing players like us. But directly they got the chance to snipe at it, they did” (Interview Stride, 2011).

Ideas generated by outsiders are frequently ignored or suppressed by the establishment either through fear of novelty or because of the threat they represent. Although aligning to the political Right establishment then in power, Coleman can be characterised as a disruptive, maverick outsider as much as a welcome innovator with privileged access to decision-makers. This unprecedented access (plus being foisted on DoE as an interloper) undermined the established experts' organisational authority.

Coleman was not alone in questioning the emerging evidence base on the interaction of housing design and behaviour. Bill Hillier, described as “challenging conventional thinking since the late seventies” (Hillier, 1998, p.1) was also perceived as a pioneering yet disquieting influence. In 1987 Newman petulantly criticized Hillier's attacks on Coleman's

and his own books as 'self-aggrandisement', accusing Hillier's dismantling of the concept of defensible space as a professionally irresponsible act. By encouraging housing professionals to disregard the concept, he felt Hillier facilitated the construction of many substandard and crime riddled estates over the subsequent 15 years (Heck, 1987)¹¹¹. This is a sharp accusation, and blaming Hillier not only for the de-stabilising of a theory, but also the subsequent poor decision-making, is harsh, while emphasising that the cut and thrust of academic debates have long-term practical consequences. In contrast, Anne Power's work, being located closer within Government, and perceived to have a broader social-economic coverage and wider effect has had a more sustained impact.

Considering the whole story, one striking observation is the extent to which the debate around defensible space and DICE stimulated the searching out of alternative interpretations. Kuhn (1970) argued that the continuing evolution of knowledge is reliant on periods of scientific revolution and paradigm shifts overturning existing theories. Flyvbjerg (2001, p.27) optimistically saw this theoretical disagreement as a prompt for alternative action, with divergent opinions pushing debate forward faster than agreement, ensuring that the field develops in a knowledge driven manner.

So Coleman's success was to maintain interest in defensible space under immense critical scrutiny and attempts to discredit it. Her abrasive persistence promoting the concept was the 'grit in the oyster' that stimulates it to make the pearl. Tom Woolley, one of the conveners of the *Rehumanising Housing* conference, reflected on her usefulness as a catalyst for forming consensus and agreement in a fragmented and argumentative sector. He gratefully recalls her acting as a cross-disciplinary rallying point for housing researchers, theorists and practitioners stimulating a united response against the rise of the New Right:

"In a way, Alice Coleman was helpful. If she hadn't existed, we would have had to invent her" (Interview Woolley, 2013).

¹¹¹ Newman's low opinion of housing professionals' critical faculties might be countered by Marshall's (2012) dream of urban design professionals with the scientific training and skills to interrogate the validity of academic evidence for themselves.

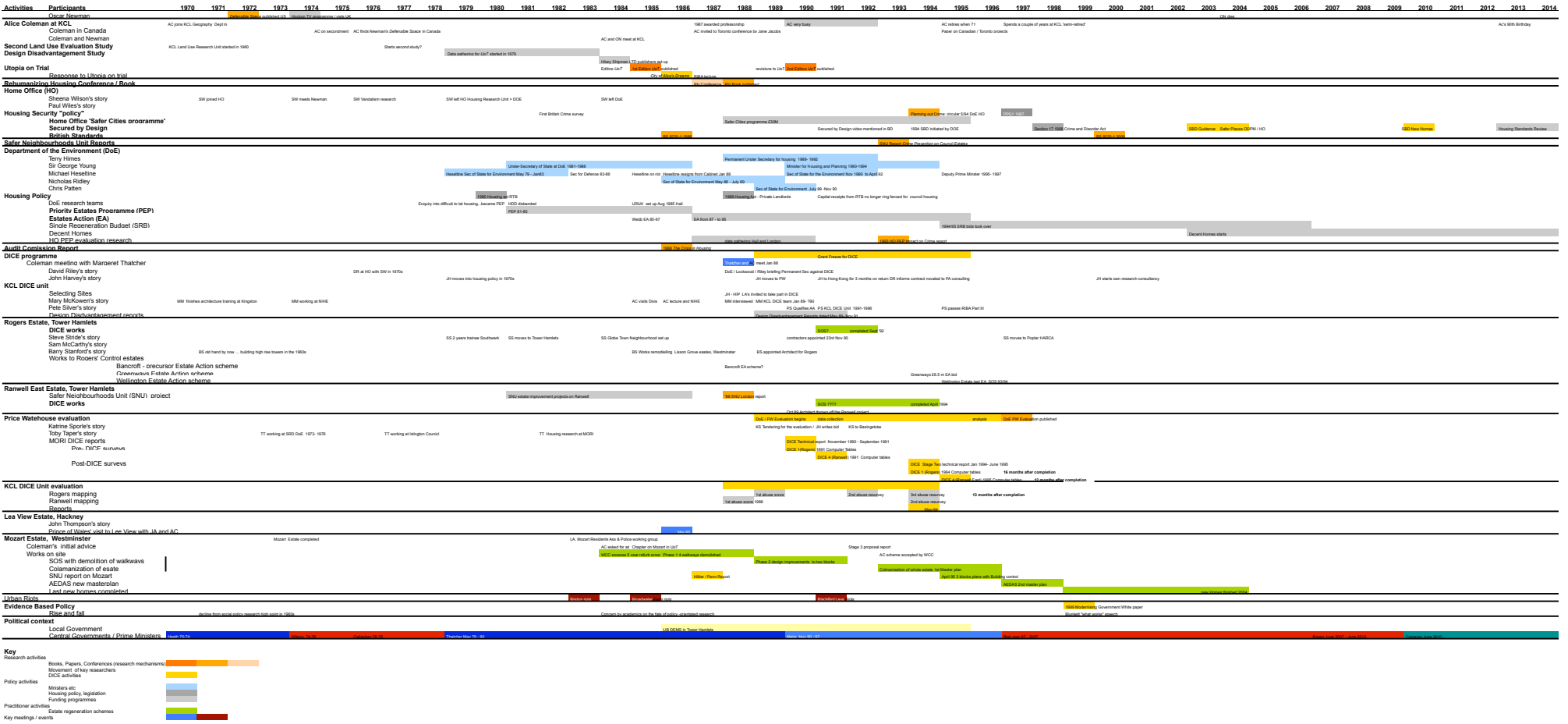
Other historical examples exist of thinkers who initiated or reinvigorated a paradigm changing debate, despite it later becoming clear that their views were almost certainly incorrect or perverse¹¹². Coleman and DICE should be included in this category.

The strongest cross-disciplinary consensus was a shared distrust of Coleman's design determinism - a charge she refuted (Jacobs and Lees, 2013). Arguments over the relationship of design to behaviour (specifically here antisocial behaviour and crime) have been extensive and, as yet, inconclusive. Defensible space remains an ambiguous slippery concept, with Coleman and DICE one heated tributary of this discussion. Whether or not her participation has long-term impact, Coleman's contribution to the debate was valuable, at least as a provocation to others; predominantly her belief that it provided a universal panacea to many trying symptoms of "social malaise". That defensible space has moved into the mainstream, without definitive proof or consistent Government support, is due in no small part to Coleman's research. And for all the uncertainty surrounding it, defensible space continues to be a powerful and influential way of salvaging problem estates, making good failed housing designs and mistakes of the past.

¹¹² For example the biologist Lamarck who in 1809 developed the concept of evolution as the inheritance of acquired characteristics. At the time this raised controversy and disagreement from clerics and geologists as well as biologists. It was however taken seriously and was discussed and refuted within the scientific community. Nonetheless, by 1857 Darwin and Wallace had devised what is accepted as the correct theory of evolution by natural selection.

Appendix A: Timeline of individuals' stories, key events and political/policy context

Timeline of activities, events, and participants roles



Appendix B: Examples of the mechanisms of policy transfer used within DICE

Narrative Element	Mechanisms for transferring the concept	Literature	DICE example, and how the mechanism promoted the idea
Who?	Key actors / persuasive gurus	Rydin, 2003 Stone, 2004 McCann, 2010 Peck and Theodore, 2010 McCann and Ward, 2011 Stone, 2012	<ul style="list-style-type: none"> • Alice Coleman – promoting defensible space (but an anti-guru) • Bill Hiller – against defensible space, but recognizing design significance. • Anne Power - promoting management over design • Judith Littlewood at DoE against DICE • PW Evaluation team and DOE advisory committee – against • Sheena Wilson moving from HO to DoE promoting defensible space
What?	Books		<ul style="list-style-type: none"> • <i>Defensible Space</i> Newman, 1972 • <i>Utopia on Trial</i> Coleman, 1985 • <i>Rehumanizing Housing</i>, 1988
	Academic papers / Research Studies and Reports		<ul style="list-style-type: none"> • Criminology papers more fulsome, • some Architecture / Planning including <i>Against Enclosure</i> • DoE Difficult to let estates research • HO Vandalism research
	Evaluation studies	Palfrey, Thomas et al., 2012	<ul style="list-style-type: none"> • PW DICE evaluation report • MORI interim reports • Coleman’s DICE evaluation reports
	Guidance Documents	Hogwood and Gunn, 1984	<ul style="list-style-type: none"> • Secure by Design guidance • Tower Hamlets SBD publications
	Government funding documents	Hogwood and Gunn, 1984	<ul style="list-style-type: none"> • Mozart Option Appraisal Documents 1997 • Estate Action guidance documents - ‘Form B’
	Case studies / site visits	Flyvbjerg, 2006 Ekblom, 2011	<ul style="list-style-type: none"> • Mozart Estate, Westminster Iconic, well known • Rogers Estate, Tower Hamlets, used post -DICE as example of neighbourhood planning, bringing ministers / local politicians • Professional use of comparative case studies

	Media, Architecture / Planning / Housing Trade press, Television		<ul style="list-style-type: none"> • Extensive coverage in mainstream press • Mixed support or criticism in trade press • Horizon 'Writing on the Wall' • Lea View TV programme
Where?	Conferences / gatherings of experts		<ul style="list-style-type: none"> • Rehumanizing Housing Conference • RIBA / RGS lectures • International conferences such as Ontario / Amsterdam conferences
	Networks of teaching and learning	McCann and Ward, 2010	<ul style="list-style-type: none"> • Academic institutions (AA, UCL, LSE, KCL) • Professional training / peer learning • Professional institutions
	Networks / Communities of practice / Models of Practice	Wenger, 1999 Stone, 2004	<ul style="list-style-type: none"> • ALOs (also an example of a model of practice) • Planning or architecture networks • Community Architecture groups • Housing management professionals

Appendix C: List of Interviewees

Note: Where indicated with an* interviewees were interviewed more than once. All individuals named signed an ethics consent form agreeing to the use of their name and job title in the thesis.

Interview number		Role during 1980s / 1990s	Current Role / Role when Interviewed
1	John Harvey*	Head of the Estate Action Team at the DoE. Management Consultant, Price Waterhouse	Director, IRIS Consulting
2	Professor Toby Taper*	Housing researcher, MORI	Visiting Professor, University of Bristol
3	Dr David Riley	Research Manager / Team Leader at the DoE Housing Directorate	Chief Social Researcher, Head of Analytical Services Division, Health and Safety Executive.
4	Professor Paul Wiles CB	Professor of Criminology at the University of Sheffield	Chief Government Social Scientist and Head of Government Social Research Service
5	Katrine Sporle CBE	Management Consultant, Price Waterhouse	Chief Executive, Planning Inspectorate for England and Wales
6	Keith Kirby	Researcher, Social Research Division DoE	Research Directorate, DCLG
7	Robert Williams		Regeneration Manager ,Old Ford Housing Association
8	Michelle Smith	Housing Assistant Ranwell Estate, London Borough of Tower Hamlets	Housing Manager, Ranwell Estate, Old Ford Housing Association
9	Barry Stanford	Architect for DICE projects, Stanford Eatwell and Associates	Director, Stanford Eatwell and Associates
10	Peter Oborn	Architect for Mozart Estate, Abbey Hanson Roe	Deputy Chairman, Aedas Architects LTD
11	Alan Blyth*	Architect for Mozart Estate, Abbey Hanson Roe	Regional Director, Aedas Architects LTD
12	Sam McCarthy	Project manager for the Rogers DICE scheme, London Borough of Tower Hamlets	Project manager, Breyers LTD
13	Steve Stride	Neighbourhood Manager,	Chief Executive, Poplar

		Globe Town Neighbourhood	HARCA
14	Kevin Wright	Technical Manager, Globe Town Neighbourhood	Director of Technical Resources, Poplar HARCA
15	Jamie Carswell		Director of Investment, Tower Hamlets Homes
16	Kobir Choudrey		Neighbourhood Housing Officer for Rogers Estate, Tower Hamlets Homes
17	David Thompson		Head of Housing Investment, Tower Hamlets Homes
18	Mark Jones	Police Architectural Liaison Officer London Borough of Tower Hamlets	Crime Prevention Design Advisor, London Borough of Tower Hamlets
19	Patrick Hammill	Architect at Levitt Bernstein	Divisional Director Urban Renewal Levitt Bernstein
20	Ben Derbyshire	Architect at Hunt Thompson Associates	Managing Director at Hunt Thompson Associates
21	Sheena Vernon (nee Wilson)	Senior Research Officer at the Home Office and the DoE Housing Directorate	Retired
22	Ian Cooper	Attendee of the <i>Rehumanising Housing</i> Conference	Eclipse Research Consultants
23	Tom Wolley	Convener of the <i>Rehumanising Housing</i> Conference	Consultant, Rachel Bevan Architects
24	Mary McKowen*	Architect in KCL DICE Unit	Architect (Retired)
25	Pete Silver	Architect in KCL DICE Unit	Lecturer University of Westminster
26	John Thompson	Architect / Director at Hunt Thompson Associates	Chairman, John Thompson and Partners, Honorary President The Academy of Urbanism
27	Hilary Macaskill*	Partner, Hilary Shipman Ltd	Partner, Hilary Shipman Ltd
28	Laura Howard		London Borough of Tower Hamlets
29	Alice Coleman*	Professor KCL	Emeritus Professor KCL
30	Rogers resident A		

31	Ranwell East resident A		
32	Ranwell East resident B		
33	Ranwell East resident C		

Appendix D: Table comparing Newman's and Coleman's design variables, Hillier's rules of thumb and Power's list of design and construction issues that make living conditions for residents difficult

Guidance which is contradictory is marked *in italics*

Theme	Newman (1972)	Coleman (1990, p.33, p.179)	Hillier (1987, p.86)	Power (1998, Table 5.7 p.96)
Block size	Number of dwellings per block (size and scale of the block)			The collective structure of the estates made individuals and families feel overwhelmed; (scale)
	Number of dwellings using the same entrances			Common entrances to blocks used by many households made it hard to keep out strangers or feel secure; (design, surveillance)
	Number of stories in a block (significant effect being the large number of neighbours rather than additional height)			
		Stories per dwelling (flats being preferable to maisonettes which Coleman perceived as a proxy for children living above ground level)		Family size units created high child densities.
Density of occupation				Shared services(rubbish disposal, postal delivery boxes, entrance bells, access routes), could be damaged thorough irresponsible behaviour and difficult to control due to their communal location; (design, territoriality)

Circulation within the block	Avoid interconnected vertical routes, with each block or section of block served by only one stair or lifts.			
	Avoid interconnected exits providing multiple alternative escape routes			
	Limit the number of dwellings on a corridor. Provide open visible balconies, or single loaded corridors rather than enclosed internal corridors.			Lack of sense of privacy arose from noise transmission, shared corridors and other internal spaces; (design, territoriality)
Circulation in estate		Avoid all overhead walkways		Corridors, decks, and landings on many levels led to a strong dilution of numbers of people at ground level and loss of social contact
		Avoid blocks raised up on pilotti or above garages where entrances aren't visible		
Entrance characteristics	Entrance position location and form of the entrance (flush entrances on the street preferable to those set back or entrances facing away from the street)		Orientation of facades and entrances to clarify the lines of sight and to 'mark important moments in the spatial structure'	
		Type of entrance. Individual entrance to ground floor preferable, then communal entrances to separate parts of block rather than a single communal entrance		

			All spaces, however small should have building entrances opening on to them.	
			Avoid clustering too many entrances on too few spaces, distribute them throughout the scheme	
Features of the grounds	Spatial organisatio: reduce the degree that grounds and common areas are shared by different families. Infill or enclose leftover pieces of confused space		Avoid over enclosing spaces, except where this reflects the place of the space in the over spatial syntax of the scheme	Open spaces were too exposed for small groups of residents to control
			Avoid spaces too small to have entrances	
			Avoid over-hierarchization of space; provide a range of more integrated (busier) or more segregated (quieter) zones. Avoid creating space that is empty most of the time	Dark and secluded areas created a sense of fear and anonymity; (design, surveillance)
Connection to the surroundings		Each of block should have its own grounds, enclosed by a wall or a fence	Avoid over enclosing spaces, except where this reflects the place of the space in the overall spatial syntax of the scheme	
		Number of access points onto the site should be limited to one. If more required for fire reasons,	The scheme should be linked visually and directly to its	The clear physical separation of the estates from the surrounding areas by virtue of their location, construction and

		entrance/exit not located opposite each avoiding a cut through.	surroundings.	tenure evoked the notion of a ghetto; (milieu)
			Access routes shouldn't be too deep into the scheme (more than two steps deep from the outside or an integrating core)	
			Access routes should lead to an important destination without too many deviations.	
Legibility and wayfinding			Encourage local differences in wayfinding, avoid repetition	
Social mix				Different types of households shared intensely communal buildings;
		Removal or restricted access to play areas.		
			Analyse surroundings for existing patterns of space use, movement, and encounter rates. Use this to generate schemes that relate to the wider spatial structure.	
			Preparatory studies should involve a cyclical process of design generation and systematic evaluation.	

Appendix E: Reported costs for DICE

Capital costs reported by Coleman		Retained houses flats, maisonettes			New houses and bungalows			All homes		
Local Authority Area	Estate	No. of units	Spend per property (£)	DICE spend (£M)	No. of units	Spend per property (£)	DICE spend (£M)	Total No. of units	Total spend per property (£)	Total spend per estate (£M)
Tower Hamlets	Rogers Estate	120	36,933	4.4	8	35,000	0.30	128		4.7
Tower Hamlets	Ranwell Estate	350	29,431	10.3	129	55,550	7.20	479		17.5
Preston	Avenham Estate	136	16,397	2.2	15	48,066	0.07	151		2.3
Manchester	Bennett Street Estate	372	18,941	7.1	15	23,533	0.35	387		7.5
Nottingham	Kingsthorpe Close Estate	185	22,502	4.2	21	33,904	0.71	206		4.9
Total / Average cost per unit for five estates				28.2			8.6	1,351	27,261	36.8
DICE Estates excluded from Price Waterhouse Evaluation										
Birmingham	Nazareth	121	21,149	2.6	32	46,466	1.50	153		4.1
Sandwell	Durham	257	5,778	1.5	14	20,285	0.30	271		1.8
				4.1			1.8			5.9
Total / Average cost per unit for seven estates		1541	21,590	32.3	234	37,543	10.4			42.7

(Adapted from Coleman and Silver, 1995?, p.1)

Capital costs reported by Price Waterhouse						
Local Authority Area	Estate	No. of Council owned units	DICE spend (£M)	Non-DICE spend (£M)	Total spend per property (£)	Total spend per estate (£M)
Tower Hamlets	Rogers Estate	124	3.7	0.6	34,000	4.3
Tower Hamlets	Ranwell Estate	474	18.4	1.3	41,500	19.7
Preston	Avenham Estate	139	1.5	0.3	13,200	1.8
Manchester	Bennett Street Estate	399	6.8	0.9	19,250	7.7
Nottingham	Kingsthorpe Close Estate	206	4.9	3.0	38,600	7.9
Total / Average cost per unit for five estates		1342	35.3	6.1	30,849	41.4

(Adapted from Price Waterhouse 1997a Table 2.1 p. 7)

Appendix F The experimental impact of resident churn

Introduction

As the methodology chapter subsection 3.3.3. described, semi-structured interviews were conducted with four long-term residents on the two Tower Hamlets Estates, plus more informal conversations with a variety of occupants during site visits. From these pilot interviews the main research moved away from gathering material related to residents and their responses to the alterations to their estates, to focus on the views of academics and professionals.

The purpose of this appendix is therefore to outline related lines of enquiry beyond the scope of the main body of the thesis. One criticism that there was not space to explore fully, was that defensible space is insufficiently sensitive to individual and cultural perceptions of space, territoriality and ownership (Hillier, 1973; Smith, 1986a; Malpass, 1988; Ravetz, 1988). Yancey's (1971) paper on Pruitt-Igoe which introduced the term 'defensible space' discussed the varied relationship between social class and social networks, and in particular levels of informal social control. He found that stability of economic occupation and social interaction were key determinants of lifestyles amongst lower and working classes. Similarly, the British Crime Survey highlighted ethnicity and income as indicators of high crime risk residential areas, singling out inner city multi-racial areas and the poorest council estates (BCS, 1984). Ravetz (1988) also highlighted the mistaken gender and class assumptions operating in the design of post-war mass housing that defensible space principles were attempting to counter; misplaced attempts to recreate working-class neighbourliness through 'streets in the air' or placing play space out of sight of the home (Ravetz, 1988, p.160). She noted the difficulties of separating design from tenure factors in housing satisfaction arguing for consideration of two significant further factors; allocation policies, plus appraising the functioning of an estate within the context of its wider neighbourhood. Neighbourhoods that grow up over time will have differing dynamics than large estates where tenants may have

moved in together *en mass*, with less mobility or opportunities to move, or with cohorts of children of similar ages.

F.1 Population characteristics pre- and post- DICE.

An unanswered question in the original Price Waterhouse DICE evaluation was the impact of population difference on the outcomes. Coleman's scientific premise was based on the estate populations remaining the same pre- and post- DICE, but she was less interested in the actual make-up of these populations. Population changes were monitored, but the published evaluation report contains little analysis by population segment, or commentary on the impact of population changes, other than finding only a weak relationship between tenant turnover and changing levels of crime (Price Waterhouse, 1997, p.57). However archive resources consulted included the original MORI survey reports and data sets (MORI 1990, 1991a, 1991b, 1994, 1995a, 1995b) which record significant shifts in age, child density and ethnicity on both the Rogers and Ranwell East Estates. This suggests that Price Waterhouse's shallow consideration of the effects of these changes in their published report was a telling omission.

F.1.1 Ethnicity and employment

One noticeable variation between these two DICE estates was ethnicity and inward migration. However, the respective ethnic mix was echoed in the control estates, suggesting this difference was a neighbourhood effect rather than an anomaly of the individual estates. The 1991 census recorded the population of the surrounding Globe Town neighbourhood as about 20% Bangladeshi and 10% other-non-white (Price Waterhouse, 1995). Rogers had a majority (48%) of Bangladeshi residents (recorded by MORI as Indian/Asian), rising slightly to 52% after DICE, with a similar slight reduction of white residents (38% dropping to 33%). On Ranwell East the changes were far greater. Prior to DICE, Ranwell East was overwhelming white (82%) with small percentages of Indian/Asian or African/Caribbean families (4% and 9%). Both of these groups increased substantially after the works, measuring 10% and 14% respectively. A similar growth in Indian/Asian residents was

reflected in the control estates, but not for African/Caribbean residents whose numbers in the surrounding areas dropped slightly (Price Waterhouse, 1995, p.32, 1996, p.34).

An unsurprising effect of the 1990s recession was that post-DICE there was a noticeable drop in the number of residents in full-time employment on both estates, with the proportion of Rogers residents in work falling by almost half (from 21% to 12%), echoed on the control estates. A similar drop was also seen at Ranwell East with employment dropping from 24% to 15%. Conversely, the Ranwell East control estates fared better with a smaller reduction (from 26% to 20%) of those working (Price Waterhouse, 1995, 1996).

F.1.2 High child densities mixed with older residents.

The age profiles at Rogers and Ranwell East were also similar to the surrounding control estates. Of the 360 Rogers residents in 1991, 14% were over 60 and 37% under 16 years old. This proportion stayed static during and after the DICE works, and while the eight new bungalows at Rogers were allocated to older residents, this did not alter the percentage overall. On Ranwell East, there was a slightly smaller proportion (25%) of school children. The percentage of children rose to 31% after DICE, due to the number of new family sized houses built. Both estates had more than a third of their population under 16, greatly exceeding Wilson's (1980) desirable child density threshold where more than three children per ten dwellings signified 'high child density' blocks.

Data for older Ranwell East residents was categorized slightly differently from the Rogers estate, clustering the population into 45-64 year olds and over 65's. At 16% pre- and 14% post-DICE the proportion of over 65's was close to the proportion of over 60's at Rogers (Price Waterhouse, 1995, 1996). Nonetheless, the unspecified number of additional 60-64 year olds, and their physical concentration in a few blocks, had a perceptible impact. During the 1980s Ranwell East was unusual in having an allocations policy segregated by age, with six blocks designated for elderly people. This policy ceased in the 2000s, with the removal of the resident warden, but continued to have a legacy effect, and Ranwell is still characterized as having a preponderance of elderly residents (Interviews Smith and Williams, 2011). Post-

DICE the local Crime Prevention Officer Mark Jones suggested that this demographic mix at Ranwell East was as much as a problem as the design, and that the combination of a large number of elderly residents and noisy young people would inevitably lead to conflict (Spring, 1997).

F.1.3 Shifting Tenures

Coleman (1985a) had a simplistic ideological belief in the free-market, the positive impact of housing ownership, and the perceived autonomy and responsibility provided under Right to Buy (RTB):

“Dweller satisfaction is not necessarily related to the imposition of standards, and people find deficiencies in housing infinitely more tolerable if they are their own responsibility than if they are someone else’s” (ibid., p.182).

This naively and restricted perception of public housing as a flawed alternative to owner-occupancy illustrated Coleman’s poor understanding of the restructuring of the post-war housing markets, implying as Malpass notes, “a great disservice to both council tenants and large numbers of hard pressed home owners” (Malpass, 1988, p.152). She expected that the DICE improvements would encourage residents to want to buy their homes (Coleman and Silver, 1995?a). In 1991, leasehold numbers on the Rogers blocks were very low, with only 4 of the 120 flats not owned by the council. There was some interest in RTB as the project progressed and a further four properties were sold by 1994. Rogers project manager Sam McCarthy attributed the large scale demand for the eight Rogers Bungalows, either to rent or buy, to the minimal amount of new homes being built in Tower Hamlets in the early 1990s, let alone those specifically for elderly residents (Interview McCarthy, 2011). After the DICE works there were increased enquiries about moving onto the Rogers Estate, although these did not always convert into realised moves as the internal conditions of the flats were still perceived as poor (Price Waterhouse, 1995). At Ranwell East, pre-DICE, 40 of the 470 residents were leaseholders - almost three times as many as at Rogers. Post-DICE 16

further sales under RTB occurred at Ranwell East, with sales concentrated amongst the new houses built as part of DICE (Price Waterhouse, 1996). This would suggest that the image of the estate had improved, but whether this contributed to the tenure diversification was not explored in either of the DICE evaluations.

F.2 Significance of these changes and implications for further research

Coleman's determination to discount environmental and social factors was balanced to some extent in the qualitative data gathered by the MORI residents' surveys. This extensive evidence was surprisingly underplayed as part of the policy argument, although the housing staff and practitioners interviewed repeatedly referred to the social mix and the gentrification of the surrounding neighbourhoods. This thesis was not able to unpick this issue further, but the following points would be worth investigating (possibly based on a re-examination of the historic baseline data that the MORI surveys provided):

- During DICE, the ethnicity of residents on the two estates altered inline with their local areas. This change was more distinct with Ranwell East becoming more mixed which may have impacted on the popularity of the estate. While the varied cultural usage of public and shared spaces in multi-ethnic areas such as Roman Road have been investigated (see Dines, Cattell et al. 2006), how this impacts on the perception of defensible space is yet to be explored.
- At Rogers, the age profile stayed relatively static, while at Ranwell East numbers of school children rose through the construction of new family sized housing, increasing already high child densities. There has been general acceptance of Wilson's (1979) concerns over child density, but the distinction between concentrations of children and young people, the inter-generational consequence of defensible space principles and ways of ensuring 'child and young person friendly environments' (see GLA, 2008) could be extended to residential areas.
- A significant number (23%) of Globe Town residents have had tenancies longer than 20 years, with a large proportion of residents from the early 1990s still living on the

Rogers estate (Interviews Carswell, Choudrey and Thompson, 2011). This stable and ageing group continues to exert a disproportionate impact on the estate's character and its Tenants Association. Resident consultation processes should be sensitive to these population biases and the dominant voice of established populations, yet Coleman's theoretical approaches inevitably overrode the residents wishes. The role of participatory processes during regeneration projects, or the stability/churn of resident populations on establishing Newman's communities of participation' or Sampson's (1997) residents' collective efficacy in enabling/limiting defensible space effects could be investigated.

- At Ranwell East, tensions were reported between leaseholders and Council tenants and continue to date (Interviews Ranwell East Residents B & C, 2011). The long-term impact of policies such as Right to Buy are under consideration (see Meek, 2014) and a related research area would be the role of tenure mix on residents expectations of the management, and maintenance of large housing developments.

Conclusions

Defensible space has been shown to impact on residents lives in many complex and interacting ways. Factors such as levels of occupation, cultural norms/expectations for the use of private and public spaces, as well as social networks interrelate to influence territoriality, and may interact in alternate ways for other three Newman's dimensions. These factors in addition to the transient and dynamic changes to the resident populations during the five years of DICE. Residents' satisfaction with changes to their estate is a combination of their experience of the process (how effectively the works programme was managed, how disruptive it was, how much they were involved in the decision-making process) as much as the outcomes from the changes themselves. These process-influenced perceptions can be long lasting and dominant; residents' memories are long when they are disappointed, but they rapidly accept and become accustomed to positive improvements.

Appendix G: Table applying the SNU framework for evaluation of crime initiatives to the Price Waterhouse and the KCL DICE Unit evaluation reports

Evidence required to show:	Types of data:	Comments from SNU	Price Waterhouse Evaluation	KCL DICE Unit Evaluation
<p>Evidence of reduced crime, plus confirmation that this means a reduced problem.</p> <p>What is a suitable way to measure whether crime has reduced? Surveys, crime statistics or Local Authority data on vandalism?</p>	Subjective assessments	Should only be used as supporting data.	<i>Acceptable.</i> Subjective assessments by evaluation team and local authority, on the post evaluation conditions and sustainability of the effects.	<i>Poor.</i> Reports occasionally contain short unsupported statements from the evaluation team.
	Recorded crime statistics	Needs to be supported by other crime related data – so has the initiative displaced crime or encouraged other forms of crime?	<i>Acceptable.</i> Crime statistics recorded in two ways; Residents' reporting incidents of crime, and police / fire service recorded incidents. Impossible to trace whether crime was displaced even to control estates.	<i>Crime statistics not available.</i>
	Crime survey data	Altered severity and impact on different groups.	<i>Excellent.</i> Residents' surveys asked about impact of a range of crimes. Findings controlled for age, gender and social class.	<i>Poor.</i> Visual survey of vandalism damage (approximating to crimes against property) used as a proxy for other crimes.
	Cost of crime data	Funders usually mainly concerned with this issue.	<i>Good.</i> Police / fire incident data related to standardised policing costs to calculate	<i>None gathered</i>

			cost of police response to crime. Costs of the incidences of crime based on data from residents surveys.	
	Qualitative data including on fear of crime	Survey residents asked whether crime reduced.	<i>Excellent.</i> MORI residents surveys covered a range of crime incidents: crime experienced or witnessed, fear of crime and incivilities. Asked if crime had reduced, and if crime was less on their estate than elsewhere in the area.	<i>Poor.</i> Opinions gathered from occasional informal conversations with residents, and from residents consultation meetings.
Evidence of initiative's effect Was the initiative responsible for the changes?	Control group data	Was the same information gathered from control areas?	<i>Good.</i> Three estates identified per DICE Estate, slightly smaller survey population in controls, but same data collected.	<i>None gathered</i>
	Demographic data	Evidence that the makeup of population not altered.	<i>Excellent.</i> Slight demographic changes inevitable, but decanting of residents avoided and controlling of data for slight changes judged unnecessary as pre-and post populations considered to be a good match.	<i>None gathered.</i> Evaluation methodologies hoped that estate population should remain the same, but no data gathered to verify this
	Sampling data	Confirmation from surveys that difference not due to	<i>Good.</i> MORI surveys careful to follow best practice for	<i>Poor</i> Visual environmental abuse surveys taken pre

		make up of two samples or response rate, controlling for non-replies.	census approach, with as high a follow up response rate as possible. Findings controlled for changes in population.	and post works.
	Descriptive accounts of the implementation	To show no external factors (including policy activities) could account for the change.	<i>Poor.</i> Descriptions limited to physical changes. Building changes described in terms of DICE principles, insufficiently detailed. External factors such as increased consultation, local policing or housing management services not noted.	<i>Poor.</i> Descriptions only limited to physical changes. No external factors such as local policing described.
	Significance testing		<i>Varied.</i> The MORI survey data was subject to robust statistical analysis. Yet the evaluation acknowledges that other data was subject to 'relatively less challenging tests of simple net effect' (Price Waterhouse, 1997 p.49)	<i>Poor</i> No detailed statistical analysis undertaken of design values or environmental abuse scores.
Evidence of the effect of individual measures Which measure led to the change?	Continuous monitoring data	When did the crime reduction take place?	<i>Poor.</i> Crime reduction data gathered at two survey snapshot points.	<i>Poor.</i> Three to four snapshot surveys.
	Descriptions of implementation - when and how changes were made		<i>Poor.</i> Limited descriptions of timing of physical changes. Consultation and other	<i>Acceptable.</i> Descriptions of implemented design changes and constraints

			management processes not described.	arising from tenants' consultation, staff and management changes or Fire officers intervention are listed.
Evidence of permanence Does the effect last?	Follow up study a minimum of 12 ideally 36 months later.		<i>Acceptable</i> but variable depending on programme. Rogers revisited 16 months after completion of works, Ranwell East only 12 months later.	<i>Variable</i> . Follow up abuse survey for Rogers undertaken 13 months after completion of works. Ranwell East's final survey before works were finished.
Evidence of replicability Is initiative replicable or generaliseable?	Descriptive accounts	Identifying any specific local circumstances.	<i>Poor</i> . Very short (3 page) general description on context, specific estates and their controls. Descriptive qualitative data gathered from residents but not used.	<i>Poor</i> . Some descriptive comparison to other DICE estates, how the changes might be implemented differently in future.
	Capital and revenue costs and cost benefit evidence		<i>Excellent</i> . Careful Value for Money analysis attempted to identify additionally attributable to DICE rather than background changes.	<i>None provided</i> . Short table of capital costs included in separate DICE leaflet.

Bibliography

- ACPO, 2014. *New Homes 2014*. London: Association of Chief Police Officers.
- ACPO and Secured by Design, 2004. *Refurbishment of homes*. London: Association of Chief Police Officers.
- ACPO and Secured by Design, 2010. *New Homes 2010*. London: Association of Chief Police Officers.
- AEDAS, 2004. *Mozart Handout: Mozart Estate - Building the Vision*. [leaflet] London: AEDAS Architects
- Anon., 1985a. Report of speech given by Sir Keith Joseph to the Geographers' Association *The Geographical Magazine*, August 1985 [No page]
- Anon., 1985b. Review of 'Utopia on Trial'. *The Alternative Bookshop Broadsheet*, July 1985 p.1.
- Architects' Journal, 1985. Coleman's utopia goes on trial. *Architects' Journal*, 182(51/52), p.8.
- Architects' Journal, 1986. Coleman rules ok? *Architects' Journal*, 183(4), p.25.
- Architects' Journal, 1988. Trial or error for Coleman? *Architects' Journal*, 187(46), p.9.
- Architects' Journal, 1990. Colemanisation goes on trial. *Architects' Journal*, 192(4), p.9.
- Ardill, J., 1986. Ministers bow to vision of utopia for cities. *The Guardian*, 17 Mar. [No page]
- Armstrong, J., 1985. Doctrinaire gimmickry denied peoples' dreams. *Town and Country Planning* 54(7), July / August 1985. p.242
- Ash, J., 1985d. Polemic with statistics. *Building Design*, 765, 18th Oct. p.38.
- Ash, M., M. Burbridge, Hillman, J., Hollamby, E., Law, S., Lyons, E. and Newman, O., 1975. *Architecture, planning and urban crime*. London: National Association for the Care and Resettlement of Offenders (NACRO).
- Anson, B., 1986. Don't shoot the graffiti man. *Architects' Journal*, 184(27), pp.16-17.
- Antaki, C., Billig, M., Edwards, D. and Potter, J., 2003. Discourse analysis means doing analysis: a critique of six analytic shortcomings. *Discourse Analysis Online*, 1. [online] Available at: <http://www.shu.ac.uk/daol/articles/v1/n1/a1/antaki2002002-t.html> [Accessed 10/06/14]
- Armitage, R., 2000. *An Evaluation of Secured By Design Housing within West Yorkshire – Briefing Note 7/00*. London: Home Office.
- Armitage, R., 2004. *Secured by design - An investigation of its history, development and future role in crime reduction*. Ph. D. University of Huddersfield.
- Armitage, R., 2013. *Crime Prevention Through Housing Design: Policy and Practice*, Basingstoke: Palgrave Macmillan.
- Armitage, R., Colquhoun, I., Ekblom, P., Monchuk, L., Pease, K. and Rogerson, M., 2010. *Residential Crime and Design Final Report for CABE and HO*. Huddersfield: Applied Criminology Centre University of Huddersfield.
- Armitage, R., Monchuck, L., Sustaining the Crime Resuction Impact of Secured by Design 1999 to 2009. *Security Journal*, 24(4), pp.320-343.
- Audit Commission, 1986. *Managing the crisis in council housing*. London: Audit Commission for Local Authorities In England And Wales

http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/consultations_and_legislation/barker/consult_barker_index.cfm

- Barker, K. 2004. *Delivering stability: securing our future housing needs*. London: HM Treasury [Online] Available at: http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/consultations_and_legislation/barker/consult_barker_index.cfm [Accessed 04/09/14]
- Baillieu, A., 1991a. Planning system calls in police. *Building Design*, 1052, 11th Oct. p.1.
- Baillieu, A., 1991b. Unlucky throw for DICE Projects. *Building Design*, 1052, 11th Oct. p.1
- Baldassare, M., 1975. Review 'Human Identity in the Urban Environment', 'Defensible Space: Crime Prevention through Urban Design'. *Contemporary Sociology*, 4(4), pp.435-436.
- Banham, R., 1973. Review 'Defensible Space'. *New Society*. 66, 18th Oct. pp.154 -156
- Bar-Hillel, M., 1986a. Boost for scourge of the ghettos. *Chartered Surveyor's Weekly*, 27th Apr. [No Page]
- Bar-Hillel, M., 1986b. Coleman's progress. *Building Design*, 813, 21th Nov. p.14.
- Bar-Hillel, M., 1986c. Coleman slams DoE crime package. *Chartered Surveyor's Weekly*, 11th Dec. [No page]
- Bar-Hillel, M., 1997. Cut back on parking spaces to squeeze in more housing. *London Evening Standard*, 14th Nov. p.15.
- Bar-Hillel, M., 1998. Letter: Road rage. *Building Design*, 1423, 20th Nov. p.10.
- Bar-Hillel, M., 2014. Unsafe as houses. Review of All that is solid: The Great Housing Disaster by Danny Dorling. *Literary Review*, 420, May 2014, p.46.
- Barnes, T., 2004. Placing ideas; genius loci, heterotopia and geography's quantitative revolution. *Progress in Human Geography*, 28(5), pp.565-95
- Bentley, I., 1999. *Urban Transformations: Power, People and Urban Design*, London: Routledge.
- Berman, M., 1983. *All that is Solid Melts Into Air: The Experience of Modernity*, New York / London: Verso.
- Birtchnell, J., Masters, N. and Deahl, M. 1988. Depression and the physical environment: a study of young women on a London Housing Estate. *British Journal of Psychiatry*, 153, 56--64.
- Blomley, N., 2004. Un-Real estate: Propriety Space and Public Gardening. *Antipode*, 36(4), pp.614-639.
- Blunkett, D., 2000. Influence or Irrelevance: can social science improve government? *ESRC, and Department for Education and Employment, [Speech at conference]* Swindon. 2nd Feb. 2000.
- Booker, C., 1985. The chilling legacy of Utopia. *The Daily Mail*. [No date]
- Bottoms, A. E., 1974. Review of 'Defensible Space'. *The British Journal of Criminology*, 14(2), pp. 203-206.
- Boudon, R., 1991. Review: What Middle-Range Theories Are. *Contemporary Sociology*, 20(4), pp.519-522.

- BSI, 1986. *BS 8220-1:1986 Guide for security of buildings against crime. Part 1: Dwellings*. Milton Keynes: British Standards Institution (BSI).
- BSI, 2000. *BS 8220-1:2000 Guide for security of buildings against crime. Part 1: Dwellings*. 2nd ed. Milton Keynes: British Standards Institution (BSI).
- Broadly, M., 1966. Social theory in Architectural Design. *Arena: The Architectural Association Journal*, 81, pp.149-154.
- Brown, J., 1974. High rise flats are nurseries of crime. *Sheffield Morning Telegraph*, 4th May 1974. [No page]
- Brown, J. 1999. An Evaluation of the Secured by Design Initiative in Gwent, South Wales MSc. University of Leicester.
- Building Design, 1973. Review of 'Defensible Space'. *Building Design*, 114, 3rd Aug. p.8.
- Building Design, 1985a. [Editorial comments]. *Building Design*, 740, 2nd Aug. p.2.
- Building Design, 1985b. Preview of World in Action television programme. *Building Design*, 765, 15th Nov. [No page]
- Building Design, 1985c. Review of 'When we build again: Let's have housing that works' by Colin Ward. *Building Design*, 755, 6th Sep. p.17.
- Building Design, 1986. Patten hard on crime. *Building Design*, 778, 14th Mar. p.4.
- Building Design, 1988. Coleman's ideas win backing. *Building Design*, 870, 29th Jan. p.1.
- Building Design, 1997. Is this the Future? *Building Design*, 1370, 14th Nov. p.1.
- Building Design, 1998. Coleman can't cut the mustard. *Building Design*, 1422, 12th Nov. p.7
- Bulos, M. and Walker, S., 1988. A call for intensive management: The UK experience. In: Teymur, N., Markus, T. A. and Woolley, T. (eds.) *Rehumanizing Architecture*, Oxford: Butterworths.
- Burbidge, M., 1973. *Vandalism: A constructive approach*. London: Department Of The Environment.
- Burbidge, M., Kirby, K. and Wilson, S., 1980. *An Investigation of Difficult to Let Housing*. London: Department Of The Environment.
- Burawoy, M., 2009. *The Extended Case Method. Four Countries, Four Decades, Four Great Transformations, and One Theoretical Tradition*. Oakland, CA: University of California Press.
- CABE, 2008. *Minutes of meeting between CABE / ACPO 20/09/2008* [unpublished] Commission for Architecture and the Built Environment (CABE).
- CABE, 2009. *This Way to Better Residential Streets*. London: Commission for Architecture and the Built Environment (CABE).
- CABE, 2010. *Mapping space standards for the Home*. London: Commission for Architecture and the Built Environment (CABE). [Online] Available at: <http://webarchive.nationalarchives.gov.uk/20110118095356/http://www.cabe.org.uk/publications/housing-standards> [Accessed 04/09/14]

- CABE, 2014. *Creating safe places to live through design*. London: Design Council CABE. [online] Available at: <http://www.designcouncil.org.uk/knowledge-resources/report/creating-safe-places-live-through-design> [Accessed 18/09/14]
- Cabinet Office, 1999. *Modernising Government White Paper*. London: Cabinet Office.
- Campkin, B., 2013. *Remaking London: Decline and Regeneration in Urban Culture*, London / New York: I.B. Tauris.
- Carmona, M., 2013. By Design – bye bye. *Design Matters*. 37. [Online] Available: <http://www.bartlett.ucl.ac.uk/cross-faculty-initiatives/urban-design/latest/design-matters/urban-design-matters-pdfs/design-matters-37.pdf> [Accessed 04/08/13].
- Cartwright, N. and Hardie, J., 2012. *Evidence-Based policy: A practical guide to doing it better*, Oxford: Oxford University Press.
- Chakraborty, A. and Robinson-Tillett, S., 2014. *The truth about gentrification: regeneration or con trick?* The Guardian, 18 May 2014.
- Charmaz, K., 1996. The Search for Meanings - Grounded Theory. In: Smith, J. A., Harre, R. and Van Langenhove, L. (eds.) *Rethinking Methods in Psychology*. London: Sage Publications.
- Cisneros, H. G., 1996. Defensible Space: Deterring Crime and Building Community. *Cityscape: A journal of policy development and research*. 49, Dec.1996. [Online] Available at: <http://www.huduser.org/Periodicals/CITYSCPE/SPISSUE/ch2.pdf> [Accessed 14/07/09]
- City of Towers*, 1977. [TV programme]. BBC, BBC2. Directed by Booker, C. Available at: http://www.youtube.com/watch?v=EY_YuXf8ZU8 [Accessed 29/08/13]
- City of Westminster Council, 1993. *Director of Housing's report to Housing Committee: Mozart Estate - Estate Action Bid*. London: City of Westminster Council.
- CityWest Homes 2012. *Mozart Estate newsletters*. Spring 2011 / Winter 2012, [Leaflets] London: CityWest Homes [Online] Available at: <http://www.cwh.org.uk/locations/mozart/local-newsletters/> [Accessed 06/07/12]
- Cochrane, A. and Ward, K., 2012. Editorial. *Environment and Planning A*, 44(1), pp.5-12.
- Cole, I., 1996. *Residents' views of housing association estates: Housing Research Findings 198*. York: Joseph Rowntree Foundation.
- Colebatch H K (Ed.), 2006. *The Work of Policy: An International Survey* Lanham: Lexington Books,
- Coleman, A., 1980. The death of the inner city: cause and cure. *London Journal*, 6(1), pp.3-22.
- Coleman, A., 1984. Trouble in Utopia: Design Influences in Blocks of Flats. *The Geographical Journal*, 150(3), pp.351-358.
- Coleman, A., 1985a. *Utopia on Trial: Vision and reality in planned housing* London: Hilary Shipman.
- Coleman, A., 1985b. Indefensible space. *Building Design*, 738, 5th Oct. p.14.
- Coleman, A., 1985c. Refurbishing the housing stock: Mozart estate. *RIBA Journal*, 92, June 1985, pp.50-52.
- Coleman, A., 1986a. Design improvement: Utopia goes on trial. *Town and Country Planning*, 55(5), pp. 138-140.

- Coleman, A., 1986b. Utopia debate. *Architects' Journal*, 184(32), pp.16-17.
- Coleman, A., 1988. Home is home. *Architects' Journal*, 187(43), p.31.
- Coleman, A., 1990. *Utopia on Trial : Vision and reality in planned housing*. 2nd ed. London: Hilary Shipman.
- Coleman, A., 1996. Letter to the Editor: Three-strikes policy. *The Times*, 15 Oct. [No page]
- Coleman, A., 2009. The psychology of housing. *The Salisbury Review: The Quaterly Magazine of Conservative Thought* 28(2), pp.10-12.
- Coleman, A., 2013a. *The curse of modernism*. [unpublished]
- Coleman, A., 2013b. *The Planning Travesty: Part 1*. [unpublished]
- Coleman, A. and Brown, S., 1985. *Report to A2(3) Branch Metropolitan Police*. London: DICE Design Research Unit, King's College London.
- Coleman, A. and Cross, D., 1994. *Rogers Estate: Design Improvement Report*. London: DICE Design Research Unit, King's College London.
- Coleman, A. and Cross, D., 1995. A cross-national comparison of harmful housing design: DICE design potential in Canada. *Land Use Policy*, 12(2), pp.145-164.
- Coleman, A., Cross, D. and Silver, P., 1994. *Ranwell East Estate: Design Improvement Report*. London: DICE Design Research Unit, King's College London.
- Coleman, A., Cross, D. & Silver, P., 1995?. *DICE Design Guide for New-Build Houses Mozart Estate*. London: DICE Design Research Unit, King's College London.
- Coleman, A. and Naylor, P., 1993?. *Ranwell East Estate: Design Improvement Report*. London: DICE Design Research Unit, King's College London.
- Coleman, A. and Silver, P., 1995?a. *Methods of estate improvement: DICE Consultancy Leaflet No 4*. London: DICE Design Research Unit, King's College London.
- Coleman, A. and Silver, P., 1995?b. *The DICE Project: DICE Leaflet No 5*. London: DICE Design Research Unit, King's College London.
- Coleman, A. and Silver, P., 1995?c. *The DICE Project: DICE Consultancy Leaflet No 6*. London: DICE Design Research Unit, King's College London.
- Coleman, A., Faith, P., Cross, D., Silver, P., Harvey, A. & Furtado, R., 1992. *The Mozart Estate, Design Improvement Proposals Stage III*. London: DICE Consultancy, Kings College London.
- Cooper, I., 2006. *Sustainable construction and planning: the policy agenda. LSE SusCon Project*. London: LSE Centre for Environmental Policy and Governance.
- Cornish, D. and Clarke, R. G. V., 1986. *The Reasoning Criminal: Rational Choice Perspectives on Offending*, New York: Springer Verlag.
- Cowan, R., 2005. *The Dictionary Of Urbanism* Tisbury: Streetwise Press.
- Cozens, P., 2005. *Designing out crime. From evidence to action. Delivering Crime Prevention*. Sydney: Australian Institute of Criminology.

- Cozens, P., Hillier, D. and Prescott, G., 2001a. Crime and the design of residential property - exploring the theoretical background - Part 1. *Property Management*, 19(2), pp.136-164.
- Cozens, P., Hillier, D. and Prescott, G., 2001b. Crime and the design of residential property - exploring the perceptions of planning professionals, burglars and other users: Part 2. *Property Management*, 19(4) pp.222-248.
- Cozens, P. M., Saville, G. and Hillier, D., 2005. Crime prevention through environmental design (CPTED): a review and modern bibliography. *Property Management*, 23(5), pp.328-356.
- Cresswell, J. W. 2003. *Research Design. Qualitative, Quantitative and Mixed Methods approaches*, Thousand Oaks, California: Sage.
- Crossman, R., 1975. *Diaries of a Cabinet Minister: Volume 1 Minister of Housing 1964 - 1966*, London: Hamish Hamilton / Jonathan Cape.
- Davidson, R. N., 1981. *Crime and environment*, London: Croom Helm
- Davie, M., 1984. We were all wets when we were building Utopia: Interview with Sir Hugh Casson. *The Observer* 2nd Dec. [No page]
- Davie, M., 1986. It's hell for tenants in the bureaucrats' utopia. *The Observer*. [No Date / page]
- Davies, H. T. O., Laycock, G., Nutley, S. M., Sebba, J. and Sheldon, T., 2000. A strategic approach to research and development. In: Davies, H. T. O., Nutley, S. M. and Smith, P. C. (eds.) *What works? Evidence based policy and practice in public services*. Bristol: The Policy Press.
- Davies, P., 1999. What is Evidence-Based Education? *British Journal of Educational Studies*, 47(2), pp.108-121.
- DCLG, 2012. *National Planning Policy Framework*. London: Department for Communities And Local Government [Online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf [Accessed 04/09/14]
- DCLG, 2014a. *Housing Standards Review: Summary of Responses*. London: Department for Communities And Local Government [Online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/289144/140225_final_hsr_summary_of_responses.pdf [Accessed 04/09/14]
- DCLG, 2014b. *Live tables. Table 254 Housebuilding: permanent dwellings completed, by house and flat, number of bedroom and tenure, England*. [Online]. London: Department of Communities and Local Government,. Available: <https://www.gov.uk/government/statistical-data-sets/live-tables-on-house-building> [Accessed 04/09/14].
- Deakins, E., 1988. *What future for Labour?* London: Hilary Shipman
- DETR and CABE, 2000. *By Design; Urban Design in the Planning System: Towards Better Practice*. Tonbridge: Thomas Telford.
- DETR and CABE, 2001. *By Design: Better Places to Live: A comparison Guide to PPG3*. Tonbridge: Thomas Telford.
- DfT and DCLG, 2007. *Manual For Streets*. London: Department for Transport and Department for Communities and Local Government.

- Dines, N., Cattell, V., Gesler, W. and Curtis, S., 2006. *Public spaces, social relations and well-being in East London*. York: JRF
- DoE, 1972. *Design Bulletin 25: The estate outside the dwelling*. London: Department of the Environment.
- DoE, 1976. *Research Report 6: The value of standards for the external residential environment*. London: Department of the Environment.
- DoE, 1984. *More Than Just A Road*. London: Department of the Environment.
- DoE, 1994. *Planning Out Crime: Circular 5/94*. London: Department of the Environment.
- Doig, B., Littlewood, J. and Mason, S. 1992. *Policy Evaluation: the role of social research*. London: Department of the Environment.
- Downes D., 1974. Review: Vandalism edited by Colin Ward. *The British Journal of Criminology* [No page]
- Economist, 2006. Field of Dreams. *The Economist*. 27th July
<http://www.economist.com/node/7226156>
- Edmunds, L 1984. Doing the Ground works to improve inner-city living *The Daily Telegraph*, 26th April pp.16-17.
- Edwards, M. and Evans, M., 2011. *Getting Evidence into Policy-making*. Canberra: ANSOG Institute for Governance, University of Canberra.
- Eisenhardt, K. M., 1989. Building theories from case study research. *The Academy of Management Review*, 14(4), 532-550.
- Eklom, P., 2011. Deconstructing CPTED... and reconstructing it for practice, knowledge management and research. *European Journal on Criminal Policy and Research*, 1(17), pp.7-28.
- Ely, A., 2005. *The Home Buyer's Guide: What to look and ask for when buying a new home*. London: CABE.
- Evening Standard, 2012. Eight arrested in west London Mozart Estate dawn swoop to smash gang's violent drug war. *London Evening Standard*, 02 May.
- Fairclough, N., 1992. *Discourse and Social Change*, Cambridge: Polity Press.
- Fenton, A., 2012. Reduced Statistics: Housing and Communities in England. In: Cohen, R., Greig, A. and Brownstein, L. (eds.) *Mis-measurement of health and wealth*. London: Radical Statistics Group.
- Fischer, F. and Forester, J. 1993. Editors Introduction In: Fischer, F. and Forester, J. (eds.) *The Argumentative Turn in Policy Analysis and Planning*. Durham and London: Duke University Press.
- Floyd Slaski Partnership, 1993. *Mozart Estate: Form B programme for Regeneration, Estate Action Submission for Westminster City Council*. [Form B proforma and report] London: Floyd Slaski Partnership
- Flyvbjerg, B., 1998. *Rationality and power: Democracy in practice*, Chicago and London: The University of Chicago Press.
- Flyvbjerg, B., 2001. *Making Social Science Matter: Why social enquiry fails and how it can succeed again*. Cambridge: Cambridge University Press.

- Flyvbjerg, B., 2006. Five Misunderstandings about Case-study research *Qualitative Enquiry* 12, pp.221-229.
- Forty, A., 2000. *Words and Buildings: a vocabulary of Modern Architecture*, London: Thames and Hudson.
- Forscher, B., 1963. Chaos in the Brickyard *Science*, 142, 18 Oct. 1963 pp. 339-341.
- Foster, J. and Hope, T., 1993. *Housing, Community and Crime: The impact of the Priority Estates Project: Home Office Research Study 131*. London: Home Office.
- Franks, A., 1990. Creating close harmony down on the Mozart Estate. *The Times*, 21 August 1990. [No page]
- Freeman, R. 2012. Reverb: policy making in wave form. *Environment and Planning A*, 44(1), pp.13-10.
- Friedmann, J., 1973. Review: The Human Dimension of Housing: 'Defensible Space: Crime Prevention through Urban Design' by Oscar Newman. *Growth and Change*, 4(4), p.49.
- Fujiwara, D., 2013. *The social impact of housing providers*. London: HACT (Housing Associations' Charitable Trust).
- Gehl, J., 1971. *Life Between Buildings: Using Public Space*, Copenhagen: Arkitektens Forlag / The Danish Architectural Press.
- GLA, 2008. *Supplementary Planning Guidance Providing for Children and Young People's Play and Informal Recreation*. [Online] Available at: <https://www.london.gov.uk/priorities/regeneration/publications-guidance/london-housing-design-guide> [Accessed 02/12/14]
- GLA, 2010. *London Housing Design Guide*. [Online] Available at: <http://www.london.gov.uk/sites/default/files/spg-2008-children-recreation.pdf> [Accessed 18/10/14]
- GLA, 2014. *Draft Further Alterations To The London Plan: The Spatial Development Strategy For Greater London*. London: Greater London Authority. [Online] Available at: <https://www.london.gov.uk/priorities/planning/london-plan/draft-further-alterations-to-the-london-plan> [Accessed 18/10/14]
- Glancy, J., 1998. End of the road for Cul-de-sacs *The Guardian*, 27 Nov. p.16.
- Glaser, B. and Strauss, A., 1967. *The discovery of grounded research: Strategies for qualitative research* London: Weiderfeld and Nicolson.
- Gorst, T., 1986a. Alice in Blunderland. *Building Design*, 770, 17th Jan. p.2.
- Government Social Research Unit, 2003. *The Magenta Book: Guidance for evaluation*. 1st Edition. London: HM Treasury.
- Government Social Research Unit, 2011. *The Magenta Book: Guidance for evaluation*. 3rd Edition. London: HM Treasury.
- Green, S. D. and Schweber, L., 2008. Theorizing in the context of professional practice: the case for middle-range theories. *Building Research and Information*, 36(6), pp.649–654
- Gregory, D., 2000. Normative theory. In: Johnson, R. J., Gregory, D., Pratt, G. And Watts, M. (eds.) *The Dictionary of Human Geography*. Oxford: Blackwell
- Guest, P., 1990. Utopia goes on trial. *Building*, 255, p.20-22.

- Guest, P., 1993. Alice proves wonders of looking through glass. *Building*, 258, p.18.
- Gustafsson, G., 1983. Symbolic and pseudo policies as responses to diffusion of power. *Policy Sciences*, 15(3), pp.269-287.
- HM Treasury, 2003. *The Green Book: Appraisal and evaluation in central government* London: HM Treasury.
- Hackney, R., 1987. *Building Communities*. In: Sneddon, J. and Theobald, C., eds. *Building Communities. The first international conference of community architecture, planning and design*. 26-29th Nov. 1986 Astoria Theatre, London: Community Architecture Information Services (CAIS). p.vii.
- Hajer, M. A. and Wagenaar, H., 2003. Introduction In: Hajer, M. A. and Wagenaar, H. (eds.) *Deliberative Policy Analysis: Understanding Governance in the Network Society*. Cambridge: Cambridge University Press.
- Hall, S., Murie, A., Rowlands, R. and Sankey, S., 2004. *Restate: Restructuring Large Housing Estates in European Cities: Good Practices and New Visions for Sustainable Neighbourhoods and Cities. Report 3j: Large Housing Estates in United Kingdom, Policies and practices*. Utrecht: Urban and Regional Research Centre, University of Utrecht.
- Halpern, D. 1995. *More than Bricks and Mortar?: Mental health and the built environment*, Oxford: Taylor and Francis.
- HC Deb, 17 October 2002, col.943W [Online] Available at: http://www.publications.parliament.uk/pa/cm200102/cmhansrd/vo021017/text/21017w10.htm#21017w10.html_wqn13 [Accessed 19/09/14]
- HC Deb, 21 Jan 2013, col.76W [Online] Available at: <http://www.publications.parliament.uk/pa/cm201213/cmhansrd/cm130121/text/130121w0004.htm> [Accessed 19/09/14]
- Harman, J., 2012. *Viability Testing Local Plans: Advice for planning practitioners* London: HBF/NHBC [Online] Available at http://www.pas.gov.uk/viability/-/journal_content/56/332612/5500786/ARTICLE [Accessed 23/09/14]
- Harrison, T., 2000. Urban Policy: Addressing wicked problems. In: Davies, H. T. O., Nutley, S. M. And Smith, P. C. (eds.) *What works? Evidence based policy and practice in public services*. Bristol: The Policy Press.
- Hawkes, N., 1991. Architects try to design crime out of the social-breakdown estate. *The Times*, 29th Aug. [No page]
- HCA, 2007. *Design and quality standards*. London: Homes and Communities Agency. [Online] Available at: http://www.homesandcommunities.co.uk/sites/default/files/our-work/design_quality_standards.pdf [Accessed 10/06/10]
- Healey, P., 2010. Transnational flow of planning ideas and practices. *Royal Geographical Society – Institute of British Geographers Conference 2010*. London, 1st-3rd Sep.
- Healey, P., de Magalhaes, C., Madanipour, A. and Pendlebury, J., 2003. Place, identity and local politics: analyzing initiatives in deliberative governance. In: Hajer, M. A. and Wagenaar, H. (eds.) *Deliberative Policy Analysis: Understanding Governance in the Network Society*. Cambridge: Cambridge University Press.
- Heaven, B., 1986. Comeback on Coleman. *Architects' Journal*, 164(36), pp.32-33.
- Heck, S., 1987. Oscar Newman Revisited. *Architects' Journal*, 185(14), 8 April 1987, p.30.

- Herbert, D., 1982. *The geography of urban crime*, New York, Longman Inc.
- Herbert, D., 1986. First steps to a new science. *Town and Country Planning*, 55(5), pp.144-145.
- Hillier, B., 1973. In Defense of Space. *RIBA Journal*, 80(11), pp.539-544.
- Hillier, B., 1986a. City of Alice's Dreams. *Architects' Journal*, 184(28), pp.39-41.
- Hillier, B., 1986b. Letter: Hard Science or Hard Sell? *Architects' Journal*, 184(33), p.14.
- Hillier, B., 1988. Against enclosure. In: Teymur, N., Markus, T. A. and Woolley, T. (eds.) *Rehumanizing Architecture*, Oxford: Butterworths.
- Hillier, B., 1991. *Lecture notes for post grad architecture course*. [Unpublished, notes taken by E Warwick], University College London.
- Hillier, B., 1998. The word on the street. *Building Design*, 1424, 27th Nov. p.6.
- Hillier, B. and Penn, A., 1986. *The Mozart Estate Redesign Proposals* London: Unit for Architectural Studies, University College London.
- Hillier, B. and Penn, A., 1986. Mozart plan out of tune says report. *Architects' Journal*, 18.
- Hillier, B. and Sahbaz, O., 2007. Beyond hot spots: using space syntax to understand dispersed patterns of crime risk in the built environment. *Crime hotspots: Behavioural Computation and Mathematical Models Conference*. Institute for Pure and Applied Mathematics, University of California, Los Angeles. 29th Jan. – 2nd Feb.
- Hillier, B. and Sahbaz, O., 2008. *An evidence based approach to crime and urban design. Or, can we have vitality, sustainability and security all at once?* [Online]. Available: http://spacesyntax.com/wp-content/uploads/2011/11/Hillier-Sahbaz_An-evidence-based-approach_010408.pdf [Accessed 08/04/10].
- Hillier, B. and Shu, S., 1999. Do burglars understand defensible space?: New evidence on the relationship between crime and space. *Planning in London, Designing for Secure Spaces*, 29, pp. 36-39
- Hillier, B. and Shu, S., 2000. Crime and Urban Layout: The Need for Evidence. In: Ballintyne, S., Pease, K. And McLaren, V. (eds.) *Secure Foundations: Key Issues in Crime Prevention, Crime Reduction and Community Safety*. London: IPPR.
- Hirschfield, A. and Bowers, K., 1997. The Effect of Social Cohesion on Levels of Recorded Crime in Disadvantaged Areas , *Urban Studies* 34(8), pp.1275-1295
- HM Treasury, 1988. *Policy evaluation; a guide for managers*. London: HM Treasury.
- Hoggart, K., Lees, L. and Davis, A., 2002. *Researching Human Geography*, London: Arnold.
- Hogwood, B. W. and Gunn, L. A., 1984. *Policy analysis for the real world*, Oxford, Oxford University Press.
- Home Office, 1996. *Secured by Design*, London: Home Office
- Home Office Crime Prevention Centre, 1994. *Police Architectural Liaison Guidance Manual*. Stafford: Home Office Crime Prevention Centre.
- Hope, T. and Dowds, L., 1987. The use of local surveys in evaluation research - examples from community crime prevention *British Criminology Conference* July 1987

- Horizon: The writing on the wall*, 1974. Directed by Mansfield, J. M., 21:25 London: BBC.
<http://genome.ch.bbc.co.uk/schedules/bbctwo/england/1974-02-11#at-21.25>
- Hunter-Tilney, L., 2012. Architecture: Paradise Lost. *New Statesman*, 12 March 2012. [No page]
- Jacobs, J., 1961. *The Death and Life of Great American Cities*, New York: Random House.
- Jacobs, J., 1986. *Thanks for copy of Utopia on Trial*. [letter] (Personal communication to A. Coleman, 14th March 1986).
- Jacobs, J. M. and Lees, L., 2013. Defensible space on the move: Revisiting the urban geography of Alice Coleman. *International Journal of Urban and Regional Research*, 37(5), pp.1559-83.
- Jacobs, J. M., 2012. Urban geographies 1: Still thinking cities relationally. *Progress in Human Geography*, 36(3), pp.412–422.
- Jacobs, K., 2006. Discourse Analysis and its utility for urban policy research. *Urban Policy and Research*, 24(1), pp.39-52.
- Jacobs, K. and Manzi, T., 1996. Discourse and policy change: The significance of language for housing research. *Housing Studies*, 11(4), pp.543 - 560.
- Jacobs, K. and Manzi, T., 2013. Modernisation, marketisation and housing reform: The use of evidence based policy as a rationality discourse. *People, Place & Policy Online*, 7(1), pp.1-13.
- Jameson, F., 1991. *Postmodernism, or the Cultural Logic of Late Capitalism*, Durham: Duke University Press.
- Jaworski, A. and Coupland, N. (eds.), 1999. *The Discourse Reader*. London: Routledge.
- Jeffrey, C. R. 1971. *Crime Prevention Through Environmental Design*. Beverly Hills, C.A.: Sage.
- Jeffrey, C. R. 1977. *Crime Prevention Through Environmental Design*. 2nd ed. Beverly Hills, C.A.: Sage
- Jeffrey, C. R., 1999. CPTED: Past, present and future. *4th International CPTED Association Conference*. Canada 20-22 Sep.1999.
- Jenkins, S., 2010. London planners must embrace civilised living. *London Evening Standard*, 28th Sep. 2010 [No page]
- Jenks, M. 1988. Housing Problems and the dangers of certainty. In: Teymur, N., Markus, T. A. and Woolley, T. (eds.) *Rehumanizing Architecture*, Oxford: Butterworths.
- Jones, A. and Seelig, T., 2004. *Understanding and enhancing research-policy linkages in Australian housing: a discussion paper*. Melbourne: Australian Housing and Urban Research Institute.
- Kanivk, R., 1991. 'Guinea Pigs' in revolt. *Daily Express*, 4th Jan 1991. [No page]
- Kaplan, T., 1993. Reading policy narratives: beginnings, middles, and ends. In: Fischer, F. and Forester, J. (eds.) *The Argumentative Turn in Policy Analysis and Planning*. Durham and London: Duke University Press.
- Kitchen, T., 2005. New Urbanism and CPTED in the British planning system: Some critical reflections. *Journal of Architectural and Planning Research*, 22(4), pp.342-357.

- Kitchen, T. and Schneider, R. H. 2005. Crime and the design of the built environment: Anglo-American comparisons of policy and practice. *In: Hillier, J. and Rooksby, E. (eds.) Habitus: A Sense of Place*. Hampshire: Ashgate
- Kneivitt, C., 1986. Estate crime cut by removing walkways. *The Times* 17 Jan. [No page]
- Kuhn, T. S., 1970. *The structure of scientific revolutions*, Chicago: University of Chicago Press.
- Larner, W. and Le Heron, R., 2002. The spaces and subjects of a globalising economy: A situated exploration of method. *Environment and Planning D* 20(6), pp.753-774.
- Larner, W. and Laurie, N., 2010. Travelling technocrats, embodied knowledges: Globalising privatisation in telecoms and water. *Geoforum*, 41(2), pp.218-226.
- Latham, I., 1986. Television preview of 'Architecture at the crossroads'. *Building Design*, 770, 17 Jan. p.2.
- Latour, B., 1987. *Science in Action: How to follow Scientists and Engineers through Society*. Milton Keynes: Open University Press.
- Lees, L., 2004. Urban Geography: discourse analysis and urban research. *Progress in Human Geography*, 28(1), pp.101-107.
- Lees, L. and Just Space, In press 2014. Challenging 'The New Urban Renewal': The social cleansing of council estates in London. *In: Campkin, B. and Ross, R. (eds.) Urban Pamphleteer #2 'London: Regeneration Realities'*. London: Urban Lab, UCL.
- Ley, D., 1974a. *Black inner city as frontier outpost: Images and behaviour of a Philadelphia neighborhood*, Washington D.C.: Association of American Geographers.
- Ley, D., 1974b. Review: 'The Social Construction of Communities' - Suttles, Gerald; 'Defensible Space' - Newman, Oscar. *Annals of the Association of American Geographers*, 64(1), pp.156-158.
- Lipman, A. and Harris, H., 1988. Dystopian aesthetics – a refusal from 'nowhere'. *In: Teymur, N., Markus, T. A. and Woolley, T. (eds.) Rehumanizing Architecture*, Oxford: Butterworths.
- Livingston, M., Bailey, N. and Kearns, A., 2008. *People's attachment to place – the influence of neighbourhood deprivation*. Coventry / York: Chartered Institute of Housing / Joseph Rowntree Foundation.
- London Borough of Tower Hamlets (LBTH), 2009. *Creating a Safe Environment: Supplementary Planning Guidance 'Design Out Crime'*. London: London Borough of Tower Hamlets.
- Lowenfeld, J., 2008. Estate Regeneration in Practice: the Mozart estate 1985-2004. *In: Harwood, E. And Power, A. (eds.) Housing the Twentieth Century Nation*. London: The Twentieth Century Society.
- Lynch, K., 1960. *The Image of the City*. Massachusetts: MIT Press
- Macaskill, H., 1985. Best Seller! The difficulties of publishing a book from scratch. *The Guardian*, 28th Oct. 1985. [No page]
- Macaskill, H., 1986. *List of press articles on Utopia on Trial*. [typewritten archive catalogue] London: Hilary Shipman Ltd.
- Maclennan, D. and More, A., 1999. Evidence, what evidence? The foundations for housing policy. *Public Money and Management*, 19(1), pp.17-23.

- Malpass, P., 1988. Utopia in context: state, class and the restructuring of the housing market in the twentieth century. *In: Teymur, N., Markus, T. A. and Woolley, T. (eds.) Rehumanizing Architecture*, Oxford: Butterworths.
- Markus, T. A. 1988. Rehumanizing the dehumanized. *In: Teymur, N., Markus, T. A. and Woolley, T. (eds.) Rehumanizing Architecture*, Oxford: Butterworths.
- Markus, T. A. and Cameron, D., 2002. *The words between the spaces: Buildings and language*. London and New York: Routledge.
- Marsh, D. and Evans, M., 2012. Policy transfer: coming of age and learning from the experience. *Policy Studies*, 33(6), pp.477-481.
- Marsh, D. and Evans, M., 2012. Policy transfer: into the future, learning from the past. *Policy Studies*, 33(6), pp.587-591.
- Marshall, S., 2012. Science, pseudo-science and urban design. *Urban Design International*, 17(4), pp.257-271.
- Massey, D. B., 2002. Don't let's counterpose place and space. *Development*, 45, (1) p.24-225.
- Massey, D. B., 2005. *For space*. London: Sage
- Mawby, R. I., 1977. Defensible Space: A theoretical and empirical appraisal. *Urban Studies*, 14, pp.169-179.
- Mayhew, P., Clarke, R. V., Hough, M. and Sturman, A., 1976. *Crime as Opportunity. Home Office Research Study No. 34*. London: Home Office.
- McCann, E. J., 1995. Neotraditional developments: the anatomy of a new urban form. *Urban Geography*, 16,(3) pp.210-233.
- McCann, E. J., 2008. Expertise, truth, and urban policy mobilities: Global circuits of knowledge in the development of Vancouver. Canada's 'four pillar' drug strategy. *Environment and Planning A*, 40(4), pp.885-904.
- McCann, E. J., 2011a. Urban policy mobilities and global circuits of knowledge: Toward a research agenda. *Annals of the Association of American Geographers*, 101(1), pp.107-130.
- McCann, E. J., 2011b. Veritable inventions: Cities, policies, and assemblage. *Area*, 43, pp.143-147.
- McCann, E. J. and Ward, K., 2010. Relationality/territoriality: Toward a conceptualization of cities in the world. *Geoforum*, 41(2), pp.175-184.
- McCann, E. J. and Ward, K. 2011. Introduction *In: McCann, E. J. and Ward, K. (eds.) Mobile Urbanism: Cities and policy making in the global age*. Minneapolis and London: University of Minnesota Press.
- McCann, E. J. and Ward, K., 2012. Assembling urbanism: following policies and 'studying through' the sites and situations of policy making *Environment and Planning A*, 44(1), pp.42-51.
- McCann, E. J. & Ward, K., 2013. A multi-disciplinary approach to policy transfer research: geographies, assemblages, mobilities and mutations. *Policy Studies*, 34, (1) p.2-18.
- McFarlane, C., 2010. The Comparative City: Knowledge, learning, urbanism. *International Journal of Urban and Regional Research*, 34(4), pp.725-742.

- McKean, J., 1973. Defend your space from vandals. *Architects' Journal*, 158(47), pp.1239-1243.
- McLaughlin, E. and Muncie, J. (eds.), 1996. *Controlling Crime*, London: Sage.
- Meek, J., 2014. Where will we live? *London Review of Books* 31, p.7-16. [Online]. Available at: <http://www.lrb.co.uk/v36/n01/james-meek/where-will-we-live> [Accessed 13/07/14]
- Merry, S. E., 1981. Defensible space undefended: Social factors in crime control through environmental design. *Urban Affairs Quarterly*, 16(4), pp.397-422.
- Minton, A., 2009. *Ground Control: Fear and happiness in the twenty-first-century city*, London: Penguin.
- Moore, S. M., 2005. *New Urbanist Housing in Toronto, Canada: A Critical Examination of the Structures of Provision and Housing Producer Practices*. Ph. D, London School of Economics and Political Science.
- MORI, 1990. *DICE 1 (Rogers) Computer Tables.*, [Unpublished Report] London: MORI.
- MORI, 1991a. *DICE Technical Report London*, [Unpublished Report] London: MORI.
- MORI, 1991b. *DICE 4 (Ranwell East) Computer Tables.*, [Unpublished Report] London: MORI.
- MORI, 1994. *DICE 1 (Rogers) 1994 Computer Tables.*, [Unpublished Report] London: MORI.
- MORI, 1995a. *DICE Stage Two Technical Report.*, [Unpublished Report] London: MORI.
- MORI, 1995b. *DICE 1 (Ranwell East) Computer Tables.*, [Unpublished Report] London: MORI.
- Moran, R. and Dolphin, C. 1986. The Defensible Space Concept: Theoretical and operational exploration. *Environment and Behavior*, 18(3), p.396.
- Mulgan, G. 2003. Government knowledge and the business of policy making. *Conference of the Australian Public Policy Network*. Canberra, Australia. 23rd April 2003.
- Mumford, L., 1938. *The Culture of Cities*, Florida: Harcourt Brace and Company.
- Municipal Journal, 1990. Cash Boost. *Municipal Journal* 9th Mar. 1990 [No page]
- NACRO (National Association for the Care and Resettlement of Offenders), 1975. *Architecture, planning and urban crime*. [Conference papers by Ash, M., Burbridge, M., Hillman, J., Hollamby, E., Law, S., Lyons, E. and Newman, O.] London, 6th December 1974. London: NACRO.
- New Society, 1986. Crime reduction possible *New Society*, 12th March [No page]
- Newman J., 2006, Constituting trans-national governance: spaces, actors and vocabularies of power, paper presented to *4th ESPANET conference*, Bremen, <http://www.zes.uni-bremen.de/ccm/content/veranstaltungen/tagungen/espanet-2006/paper/stream23-newman/>
- Newman, O., 1972. *Defensible Space. Crime Prevention Through Urban Design*, New York: Macmillan.
- Newman, O., 1973. *Defensible Space. People and Design in the Violent City*, 2nd ed. London: Architectural Press
- Newman, O., 1976. *Design guidelines for creating defensible space*. Washington, D.C: National Institute of Law Enforcement and Criminal Justice Law Enforcement Assistance Administration, U.S. Department of Justice.

- Newman, O., 1995. Defensible Space: A new planning tool for Urban Revitalization. *Journal of the American Planning Association*, 61(2), p.14.
- Newman, O., 1996. *Creating Defensible Space*. Washington, D.C.: U.S. Department of Housing and Urban Development.
- Newman, O. and Frank, K., 1982. The effects of building size on personal crime and fear of crime. *Population and Environment*, 5(4), pp.203-220.
- Nutley, S., Walter, I. and Davies, H., 2003. From Knowing to Doing: A Framework for Understanding the Evidence-Into-Practice Agenda. *Evaluation*, 9(2), pp.25-148.
- Observer, 1994. Yard to probe council payouts. *The Observer*, 19th June p.6.
- ODPM, 2003. *Communities Plan (Sustainable Communities: building for the future)*. London: Office of the Deputy Prime Minister.
- ODPM, 2005. *Planning Policy Statement 1: Delivering Sustainable Development*, London: Office of the Deputy Prime Minister.
- ODPM and Home Office, 2004. *Safer Places: the Planning System and Crime Prevention*. London: Office of the Deputy Prime Minister.
- Paddington Times, 1977. Tenants press to move from prize estate. *Paddington Times*, 28th Jan. [No page]
- Palfrey, C., Thomas, P. and Phillips, C., 2012. *Evaluation for the real world: The impact of evidence in policy making*. Bristol: The Policy Press.
- Parsons, W., 2002. From muddling through to muddling up. Evidence based policy-making and the modernisation of British government. *Public Policy and Administration*, 17(3), pp.43-60.
- Pasco, T., 1992. *Secured By Design - A Crime Prevention Philosophy*. M.Sc Cranfield Institute of Technology.
- Pasco, T., 1999. *Evaluation of Secured by Design in Public Sector Housing – Final report*. Watford: BRE.
- Pawley, M., 1985. Why the market likes frills. *The Guardian*, 1st July. p.8.
- Pawson, R and Tilly, N., 1997. *Realistic Evaluation*. London: Sage
- Pease, K. and Gill, M., 2011. *Home security and place design: some evidence and its policy implications*. Perpetuity Research & Consultancy International.
- Peck, J. and Theodore, N., 2010. Mobilizing policy: Models, methods, and mutations. Themed Issue: Mobilizing Policy. *Geoforum*, 41(2), pp.169-174.
- Peck, J. and Theodore, N., 2012. Follow the policy: a distended case approach. *Environment and Planning A*, 44(1), pp.21-30.
- Phippen, P. and Warwick, E., 2003. The Design Challenge *In: The Housing Forum (ed.) Homing in on Excellence: A commentary on the use of offsite fabrication methods for the UK house building industry*. London: Office of the Deputy Prime Minister / Department of Trade and Industry.
- Poincaré, H., 1902, *The Foundations of Science*. Translated by G. Halsted, 1913. New York; The Science Press.

- Popper, K., 1963. *Conjectures and refutations: the growth of scientific knowledge in the sciences of wealth and society*, London: Routledge and Kegan Paul.
- Power, A., 1984a. *Local Housing Management - A Priority Estates Project Survey*. London: Department of the Environment.
- Power, A., 1984b. Rescuing Unpopular Council Estates Through Local Management. *The Geographical Journal*, 150(3), pp.359-362.
- Power, A., 1985. *The development of unpopular council housing estates and attempted remedies 1895-1984*. Ph. D. London School of Economics.
- Power, A., 1986. Home is home. *Architects' Journal*, 187(43), pp.30-31.
- Power, A., 1987. *PEP Guide to Local Housing Management*. London: Department of the Environment.
- Power, A., 1998. *Estates on the Edge: The social consequences of mass housing in Northern Europe*, Basingstoke: Palgrave Macmillain.
- Poyner, B., 1983. *Design Against Crime – Beyond defensible space*. Oxford: Butterworths.
- Poyner, B., 1986. Lessons from Lisson Green: an evaluation of walkway demolition on a British Housing Estate. In: Clarke, R. V. (ed.) *Crime Prevention Studies, Volume 3*. London: Lynne Reinner.
- Poyner, B. and Webb, B., 1991. *Crime Free Housing* Oxford: Butterworths
- Price Waterhouse, 1995. *Evaluation of Design Improvement Controlled Experiment (DICE); Report on Rogers Estate, Globe Town*. London: Price Waterhouse
- Price Waterhouse, 1996. *Evaluation of Design Improvement Controlled Experiment (DICE); Report on Ranwell East Estate, Bow, Final Report*. London: Price Waterhouse
- Price Waterhouse, 1997a. *The Design Improvement Controlled Experiment (DICE): an evaluation of the impact, costs, and benefits of estate re-modelling*. London: Department of the Environment.
- Price Waterhouse, 1997b. *An evaluation of DICE (Design Improvement Controlled Experiment) Schemes: Regeneration Research Summary 11*. London: Department of the Environment.
- Queen's Park Forum, 2008. *Queen's Park Neighbourhood Plan 2008-12*. London: Queen's Park Forum.
- Rains, H., 1988. Defying Tradition: Prince Charles recasts his role. *The New York Times*, 21 Feb.1988. [No page]
- Randell, R., 1998. Letter: Criminal Analysis. *Building Design*, 1423, 20 Nov.1998, p.10.
- Rapoport, E., 2014. *Sustainability in motion: global consultants and the international travels of the sustainable masterplan*, Ph. D University College London
- Ravetz, A., 1986. Review 'Utopia on Trial'. *Planning Perspectives*, 1, pp.279-296.
- Ravetz, A., 1988. Malaise, design and history: scholarship and experience on trial. In: Teymur, N., Markus, T. A. and Woolley, T. (eds.) *Rehumanizing Architecture*, Oxford: Butterworths.

- Reynald, D. M. and Elffers, H., 2009. The future of Newman's Defensible Space Theory: Linking defensible Space and the routine activities of place. *European Journal of Criminology*, 6(25), pp.25–46.
- Reynolds, I., Nicholson, C., Crowther, S., Birley, R. and Bell, A., 1972. *The estate outside the dwelling. Reactions of residents to aspects of housing layout*. London: Department of the Environment.
- Roberts, M., 1988. Caretaking - who cares? In: Teymur, N., Markus, T. A. and Woolley, T. (eds.) *Rehumanizing Architecture*, Oxford: Butterworths.
- Robinson, D. and Wells, P., 2009. Special issue on research methods and methodology: editorial. *People, Place & Policy Online* 3, 75-77.
- Rubenstein, H., 1980. *The Link between Crime and the Built Environment. The Current State of Knowledge*. Washington DC: National Institute of Justice.
- Rydin, Y., 2003. *Conflict, consensus and rationality in environmental planning: an institutional discourse approach*. Oxford: Oxford University Press.
- SNU, 1988a. *Report of the Safe Neighbourhoods Unit's work 1981-86*. London: Safe Neighbourhoods Unit.
- SNU, 1988b. *The Mozart Survey Part 1- A study of Design Modification and Housing Management Innovation*. London: Safe Neighbourhoods Unit.
- SNU, 1993. *Crime Prevention on Council Estates*. London: Department of the Environment.
- SNU, 2009. *Review of Safe Neighbourhoods Unit's work on housing estates 1981-2009*. London: Safe Neighbourhoods Unit.
- Sampson, R. J., 2010. Eliding the theory / research and basic / applied divides: Implications of Merton's 'middle range'. In: Calhoun, C. (ed.) *Robert K. Merton: Sociology of Science and Sociology as Science*. New York: Columbia University Press.
- Sampson, R. J., Raudenbush, S. W. and Earls, F., 1997. Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy. *Science and Public Affairs*, 277, pp.918-924.
- Sanderson, I., 2002. Evaluation, Policy based learning and Evidence-based policy making *Public Administration*, 80(1), pp.1-22.
- Sayer, A., 1984. *Method in Social Science: A Realist Approach*, London: Hutchinson.
- Schneider, R. H. and Kitchen, T., 2002. *Planning for crime prevention: A transatlantic perspective*, London and New York, Routledge.
- Schneider, R. H. and Kitchen, T., 2007. *Crime prevention and the built environment*, London and New York: Routledge.
- Schön, D., 1973. *Beyond the Stable State: Public and Private Learning in a Changing Society*. Harmondsworth: Penguin Books.
- Schön, D., 1983. *The reflective practioner: how professionals think in action*. New York: Basic Books.
- Scott, J., 1998. Letter: Down the line. *Building Design*, 1423, 20 Nov. p.10.
- Sennett, R., 1986. *The Fall of Public Man*, London: Faber and Faber.

- Secured by Design Principles (2004) [online]. Available at: <http://www.Securedbydesign.com/guides/principles/asp> [Accessed 19/09/2008].
- Shaftoe, H., 1995. *A chronology of British developments and key publications in urban security and crime prevention during the last two decades* [Online]. Available: <http://environment.uwe.ac.uk/commsafe/ukcron.asp> [Accessed 21/01/2011].
- Silver, P., 1995. *Case Study: RIBA Part III Examination in Professional Practice*. University College, London.
- Smith, S. J., 1986a. Review 'Utopia on Trial. Vision and Reality in Planned Housing'. *Urban Studies*, 23(3), pp. 224-246.
- Smith, S. J., 1986b, *Crime, Space and Society*. Cambridge: Cambridge University Press.
- Smith, S. J., 1987, Design Against Crime? Beyond the Rhetoric of Residential Crime Prevention. *Journal of Property Management*, 5, pp.146-50.
- Smith, S. J., 2003. Reply to comments on 'Crime, space and society' in 'Classics in Human Geography Revisited' *Progress in Human Geography*, 27, pp.337-9.
- Solesbury, W., 2001. Evidence Based Policy: Whence it Came and Where it's Going. *ESRC UK Centre for Evidence Based Policy and Practice: Working Paper 1*. London: Queen Mary College, University of London.
- South-East Regional Senior Crime Prevention Officers Conference, 1989. *Secured by Design*. Hassocks West Sussex: REA publicity
- Spicker, P., 1987. Poverty and Depressed Estates: A critique of 'Utopia on Trial'. *Housing Studies*, 2(4), pp.283-292.
- Spring, M., 1994. Crime guru in Crack City deal. *Building*, 259(11), p.10.
- Spring, M., 1997. Alice on Trial. *Building*, 262(44), pp.46-50.
- Stenson, K., 2007. Framing the Governance of Urban Space. In: R. Atkinson and G. Helms (eds) *Securing an Urban Renaissance: crime, community and British urban policy*, Bristol: The Policy Press.
- Stone, D., 2004. Transfer agents and global networks in the 'transnationalization' of policy. *Journal of European Public Policy*, 11 (3), pp.545-566.
- Stone, D., 2012. Transfer and translation of policy. *Policy Studies*, 33(6), pp.483-499.
- Strategic Policy Making Team, 1999. *Professional policy making for the twenty first century*. London: Cabinet Office
- Sturman, A. and Wilson, S., 1976. Vandalism Research aimed at specific remedies. *Municipal Engineering*.
- Suchman, E.A., 1967. *Evaluative research: principles in public service and action programs*. New York: Russell Sage.
- Sykes, J. (ed.), 1979. *Designing against Vandalism*, London: The Design Council.
- Talen, E., 2000. New Urbanism and the culture of criticism. *Urban Geography*, 21(1), pp.318-341.
- Lord Taylor, 2012. *External Review of Government Planning Practice Guidance*. London: Department for Communities and Local Government [Online] Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/39821/taylor_review.pdf [Accessed 14/09/13]

- Taylor, L., 1973. The Meaning of the Environment *In: Ward, C. (ed.) Vandalism*. London: The Architecture Press.
- Taylor, R. B. and Harrell, A. V., 1996. *Physical Environment and Crime. NIJ Research Report*. Washington, DC.: U.S. Department of Justice.
- Teymur, N., Markus, T. and Woolley, T. (eds.), 1988. *Rehumanising Housing*, Oxford: Butterworths.
- Thomas, G. and James, D., 2006. Reinventing Grounded Theory: Some Questions about Theory, Ground and Discovery. *British Educational Research Journal*, 32(6), pp.767-795.
- Till, J., 1998. Architecture of the impure community. *In: HILL, J. (ed.) Occupations of architecture*. London: Routledge.
- Tunstall, R. and Coulter, A., 2006. *Progress On Twenty 'Unpopular' Estates, 1980-2005*. York: Joseph Rowntree Foundation.
- Ward, C., 1973a. Review of 'Defensible Space'. *Architects' Journal*, 158(47), p.1243.
- Ward, C. (ed.), 1973b. *Vandalism* London: Architectural Press.
- Ward, K., 2007. Business improvement districts: Policy origins, mobile policies and urban liveability. *Geography Compass*, 1(3), pp.657-672.
- Warman, C., 1991. Facelift for written off estates. *The Times*, 16 Jan. [No page]
- Warwick, E., 2001. *The Designer's Handbook: a best practice reference guide to design standards for architects, construction professionals and contractors*. London: Peabody Trust.
- Warwick, E., 2009. Defensible Space *In: Kitchin, R. and Thrift, N. (eds.) International Encyclopedia of Human Geography, Volume 3*. Oxford: Elsevier.
- Warwick, E. and Lees, L., 2008. Crime prevention and the visible public realm. *Building Research and Information* 36(6). pp. 680-683
- Warwick, E., 2014. Review: Evaluation for the real world. The impact of evidence in policy making. Palfrey, C, Thomas, P. and Phillips, C. *People, Place and Policy*, 8(1), [online] Available at: <http://extra.shu.ac.uk/ppp-online> [Accessed 30/04/14]
- Warwick, E., Forthcoming 2014. Designs on security: Tracing the translation of 'defensible space' from a theoretical concept to a designed reality *In: Chandler, A. (ed.) The Production of Place*. London: RIBA Publications.
- Wells, P., 2007. New Labour and Evidence Based policy making: 1997-2007. *People, Place and Policy Online* 1, pp.22-29.[online] Available at: <http://extra.shu.ac.uk/ppp-online> [Accessed 15/08/13]
- Wenger, E., 1998. *Communities of Practice: Learning, Meaning and Identity*, Cambridge: Cambridge University Press.
- Whyte, W. H., 1956. *The Organisation Man* Garden City: Doubleday.
- Wilcox, S. and Perry, J., 2013. *UK Housing Review 2013*. London: Chartered Institute of Housing.

- Wilcox, S. and Perry, J., 2014. *UK Housing Review 2014*. London: Chartered Institute of Housing.
- Williams, S. (2014). *Stephen Williams announces plans to simplify housing standards*. [online] Available at: DCLG. London. <https://www.gov.uk/government/news/stephen-williams-announces-plans-to-raise-housing-standards> [Accessed 10/08/14]
- Wilson, J. W, and Kelling, G. L., 1982. Broken Windows. The police and neighbourhood safety. *The Atlantic Monthly*, 211(3), pp.29-38.
- Wilson, S., 1978a. Updating Defensible Space. *Architects' Journal*, 11 Oct. 1978, p.674.
- Wilson, S., 1978b. Vandalism and defensible space on London Housing Estates. In: Clarke, R. G. V. (ed.) *Tackling Vandalism Home Office Research Study 47*. London: Home Office Research Unit.
- Wilson, S., 1979. Observations on the nature of vandalism. In: Sykes, J. (ed.) *Designing against Vandalism*. London: The Design Council.
- Wilson, S., 1980. Vandalism and 'defensible space' on London Housing Estates. In: Clarke, R. G. V. and Mayhew, P. (eds.) *Designing out crime*. London: Home Office Research Unit.
- Wilson, S., 1981. Design against crime. *Building Design*, 538, 27th Mar. 1981, p.38.
- Yancey, W. L., 1971. Architecture, Interaction, and Social Control: The Case of a Large-Scale Public Housing Project. *Environment and Behavior*, 3(1), pp.3-2.
- Young, K., Ashby, D., Boaz A, and Grayson, L., 2002. Social Science and the Evidence based Policy Movement. *Social Policy and Society*, 1(3) pp.215-224.