THE PSYCHASTHENIA OF DEEP SPACE



Evaluating the 'reassertion of space in critical social theory'

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Abstract

The aim of this work is to question the notion of space that underlies the claimed 'spatial turn' in geographical and social theory. Section 1 examines this theoretical literature, drawing heavily on Soja as the self declared taxonomist of the genre, and also seeks parallels with more populist texts on cities and space, to suggest, following Williams, that there is a new 'structure of feeling' towards space. Section 1 introduces two foundational concepts. The first, derived from Soja's misunderstanding of Borges' story *The Aleph*, argues for an 'alephic vision', an imposition of a de-materialized and revelatory understanding of space. This is related to the second, an 'ecstatic vision', which describes the tendency, illustrated through the work of Koolhaas and recent exhibitions on the experience of cities, to treat spatial and material experience in hyperbolic and hallucinatory terms.

Section 2 offers a series of theoretical reconstructions which seek to draw out parallels between the work of key theorists of what I term the 'respatialization' literature (Harvey, Giddens, Foucault and Lefebvre) and the work of Hillier et al in the Space Syntax school. A series of empirical studies demonstrate that the approach to the material realm offered by Space Syntax is not only theoretically compatible but can also help to explain 'real world' phenomena. However, the elision with wider theoretical positions points to the need for a reworking of elements of Space Syntax, and steps towards this goal are offered in section 3.

In the final 'speculative epilogue' I reopen the philosophical debates about the nature of space, deliberately suppressed from the beginning, and suggest that perhaps the apparent theoretical and empirical versatility of Space Syntax, based upon a configurational approach to space as a complex relational system, may offer an alternative approach to these enduring metaphysical debates.

for Sasha

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Chapter 1 Introduction

1.1 Pasmore's Predicament



"By what geometry must we construct the physical world now that Euclid's gone and Newton dead?" [Victor Pasmore, Word and Image, 1974, etching and aquatint]

Since Victor Pasmore voiced this provocative question in 1974, much has been written on the subject of space. Indeed, it has been claimed that we are living in an era of space, that 'spatialization reigns supreme', and many theorists, prominent among them Ed Soja, have written of the 'reassertion of space in critical social theory' [Foucault, 1980, 1984; Bertens, 1995; Soja, 1989].

This 'space' of contemporary theoretical concern has been christened 'deep space' by Smith, and his definition is worth returning to. "By deep space", he argues,

I refer to the relativity of terrestrial space, the space of everyday life in all its scales from the global to the local and the architectural in which...different layers of life and social landscape are sedimented onto and into each other. Deep space is quintessentially social space; it is physical extent fused through with social intent, Henri Lefebvre's 'production of space' in its richest sense [Smith, 1990; p 160-61].

This thesis will seek to problematize this apparently effortless elision between 'physical extent' and 'social intent', and will re-examine the role of material space, 'physical extent', in the 'quintessentially social space' of those I shall dub the 'respatialization theorists'. For it appears that despite the overwhelming attention given to questions of space, and the apparent theoretical latitude of 'deep space', the status of space remains contentious. As Smith argues, "there are very different understandings of space afoot", characterized by the fault-line between material and metaphorical understandings which he aims to overcome. He argues that for those approaching space as metaphor, the materiality of space, "is so unproblematic ...that it raises few if any worthwhile questions". By contrast, "[f]or those of us trained in geography, the materiality of space (socially as well as physically constituted) is such a central assumption...that it goes virtually unchallenged" [ibid.; pp 167-9].

It is just these unchallenged assumptions that I wish to revisit, questioning the place of the material in the dominant socially-constructed understandings of space. Rather than see this as a distinction between material and metaphorical space, however, I wish to follow Crang and Thrift's loose distinction between 'real world', 'theoretical' and 'actual' spaces $[2000; p 1]^1$. While they argue that the meanings of these 'spaces', "run into each other before they have been properly interrogated", I wish to make a related, though slightly different argument; that the theoretical space of contemporary social theory is conceptually removed from the physical, 'actual' space of a shared common experience (of say, Paris, Berlin or Naples, to follow Crang and Thrift). I wish to suggest, therefore, that the blurring that Crang and Thrift identify conceals at base an inadequate set of theoretical tools through which to approach 'actual space', and link it to the 'spaces of theory' by anything more than simply allusion. This is not to argue for a 'true' or a 'real' space, nor to deny that all conceptions of space are inherently culturally specific constructs. And yet, within the cultural domain of the discourse on space and social theory (predominantly a Western academic tradition) there is undeniably a common consensus, at least a common intuition, that space concerns a material experience, that it relates to physical things, and is more than a theoretical tool by which to 'question materiality' – more than simply "a representational strategy" [ibid.].

¹ Thrift gives the examples of 'real world' as referring to changes in "the space of communications", leading to the compromise of geographical distance, the "spaces in theory" such as the assumption of mobility, as opposed to 'actual space' such as the cities of Paris, Berlin or Naples. This is a distinction to be borne in mind, as my own empirically based enquiry into 'actual spaces' will also focus predominantly on writing about, and the experience of cities.

My argument aims to re-ground this 'theoretical space' which, I will argue, has 'lifted off' from a material understanding. Pasmore's question is in some way still relevant, therefore, for we are left with the enduring problem of how to approach 'material space'. My aim will be to explore the possibility for the approach of Hillier and others within the Space Syntax 'school' to offer an alternative approach to the socio-spatial problematic, which can open the possibility for an integration of a materialist perspective with contemporary approaches.

While it is not my intention to begin with the customary discussion of approaches to space, it is necessary to make clear what this thesis is not, particularly in relation to the heritage of ideas on space. Of critical importance are two 'moments', temporal and theoretical turning points in the genealogy of contemporary approaches, which continue to have a powerful influence.

The first is now a distant event, but one whose echoes still resound within socio-spatial theory, underpinning subsequent debate and, according to Cloke, Philo and Sadler, setting many of the parameters within which contemporary research is conducted [1991; p 4]. This was the rejection of the environmental determinism of the early twentieth century, epitomized by authors such as Semple and Ratzel, and the social Darwinism upon which it was based. The implications of this rejection will be examined later in the context of the Space Syntax approach (see chapter 5).

The second moment develops from the rejection of the ideographic approach of regional geography, characterized in the work of Vidal de la Blanche and Sauer among others, which offered a more nuanced approach to the man-environment problem based in the notion of the 'pays' and its relation to particular 'genres de vie'. Peet argues that after the collapse of environmental determinism, "geography turned inwards avoiding topics which were obviously not 'geographical', drawing little from and contributing less to, contemporary scientific knowledge", until the salvation of the 'quantitative revolution' [Peet, 1992; p 72]. Burton dates what became known as 'the quantitative revolution' to between 1940 and 1960, noting that in the sense of a revolution it was over by the 1970s, having itself "become part of the conventional wisdom" [Burton; 1972; p 143]. The revolution was founded upon an increasing interest in epistemological questions and on applying the technical and conceptual apparatus of modern science in a turn from the idiographic to nomothetic concerns with spatial order [Davies, 1972]. Key texts in that revolution which sought to reverse the "disastrous situation" of geography's alienation from 'modern science' were Bunge's *Theoretical Geography* [1962], Chorley and Haggett's *Models in Geography* [1967] (including an essay by Harvey), and ironically Harvey's

own *Explanation in Geography* [1969]. Harvey's inclusion is ironic because he himself was a key player in my second critical moment, the rejection of this 'spatial science' that the quantitative revolution promoted.

Indeed, Harvey's 1969 text is already prefaced by reservation, and he argues that his aim is to open the field of play rather than to establish the basis of a new orthodoxy. By 1989 he was more critical, arguing that despite the work modeling spatial behaviours which represented "no mean achievement", the positivism of 'spatial science' led to a restriction of the questions to be asked, and had proved incapable of tackling the 'big questions', such theoretical and conceptual developments as had been advanced adding up to, "the proverbial hill of beans" [Harvey, 1989b; pp 212-3]. Ley's criticism is more melodramatic. "[I]n an era of social unrest and experimentation, analytic spatial models did not speak the language of the protests against the Vietnam war, the passions of civil rights or environmental movements" [Ley, 1989; p 227].

Gregory has offered a dual critique of spatial science, firstly in his *Ideology, Science and Human* Geography [1978], returning to the subject in Geographical Imaginations [1994], the latter drawing upon Smith's notion of 'deep space' and so bringing this genealogy to the present. Between the two works his critique remains the same. Firstly, that strategies of representation that treat discourse as an unproblematic reflection of the world should be rejected in favour of a recognition of the constitutive, creative function of theory, and that the subject of enquiry should be those spatial structures that are both the conditions and consequences of human action. Secondly, that reflexivity was lost in spatial science to an estrangement from people, places and landscapes, and thirdly, that spatial science denied the situatedness of geographic knowledge within moral and political structures [1994; pp 75-6]. What changes between the two critiques, however, are his aspirations for future directions. While in 1978 he appealed to the rise of historical materialism and humanism as informing the turn away from spatial science, in 1994 he recognizes that these too represented an attempt to replace one set of orthodoxies with another, advocating rather the more polyvalent positions of 'deep space', associated more with feminism, post-structuralism and postcolonialism, which reject even the notion of a restrictive 'canonical grid' [ibid.; pp 75-76].

It must be clear, therefore, what this thesis is not. Firstly, I wish to emphasize that in arguing that 'deep space', with its evident links to wider theoretical perspectives, lacks a critical formulation of material space, I do not wish to construct a reactionary argument, nor to advocate a return-

swing of the theoretical pendulum back to the abandoned positivist approaches of the 'spatial science' of the 1950s and 60s, still less its antecedent determinism. At the heart of this project, therefore, lies the important distinction between positivism and empirical science, which, as Christensen argues, are frequently misunderstood as synonymous. She characterises the difference between them as follows;

The sole essence of an empirical science is that it yields a precise, exact and certain truth *limited from the perspective of a defined theoretical framework*. On the other hand, positivism and scientific realism accord science the status of the most privileged form of knowing which makes all other forms superfluous and meaningless and which yields absolute truths [1982; p 54, emphasis added].

She makes it clear that it is erroneous to describe those who engage in empirical research as positivists and argues that indeed, while phenomenological perspectives involve a rejection of realist and empiricist beliefs, they *do not* imply a rejection of empirical science [ibid; pp 42 and 54].

My concern, therefore, is to demonstrate the shortcomings within contemporary approaches, and the possibility for an understanding of material space derived from Space Syntax's 'configurational' and empirical approach to add to, rather than detract from, that body of discourse. I aim to show that this is not a reactionary argument, for the superficial understanding that many critics have of Space Syntax as 'spatial science' and deterministic are unfounded. Indeed, Space Syntax exhibits many fundamental theoretical similarities with more widespread approaches, which provide a basis for common ground.

Secondly, I do not seek to present a historiography of geography. Such projects, both 'traditional' and revisionist, already exist [see among others, Glacken, 1967; Stoddart, 1986; Cloke, Philo and Sadler, 1991; Livingstone, 1992; Smith, 1992; Gregory, 1994]. Neither do I wish to restrict myself to the confines of any one identified 'discipline'. To follow Gregory, it is the discourse of space, rather than any one discipline claiming a privileged association with space that is my concern [see Gregory, 1994; p 11]. Indeed, Space Syntax, by its theoretical and empirical concerns at the urban and architectural scale, inherently subverts the traditional boundaries between the 'spatial disciplines' of geography and architecture. The critical 'moments' in the development of contemporary approaches are exhibited equally within architectural discourse, for example in the turn from 'scientific' approaches such as Alexander's of the 1960s to current debates (similarly antithetical to my own intentions) which argue that architecture's traditional

association with physical substance needs to be extended in a reworking of the 'subject - matter' of architecture to include bodies, telecom networks, computer programs [Hill, 2001].

Finally, there is no intention to argue for a meta-theory of space. My aim is to advance an approach to material space, which by avoiding the difficulties of spatial science and determinism can relate theoretical, 'real world' and actual spaces. The aim is complementary rather than contradictory. It is important, therefore, to distinguish between theoretical extent and epistemological intent. Peattie has characterized the scope of geography as follows:

This treating of cabbages and Kings, cathedrals and linguistics, trade in oil, or commerce in ideas makes a congress of geographers more or less a Committee on the Universe [Peattie, 1940; quoted in Lowenthal, 1961].

However, it is important to stress that such a congress (perhaps of 'spatial theorists' in the current context) should not imply a consensual perspective, but nor does such polyphony deny a theoretical common ground. This distinction is critical to the aims and structure of this thesis. Section 1 will aim to uncover the common perspective towards space which underlies contemporary approaches, while section 2 aims to offer a series of contextual re-constructions across a range of scales (from cabbages to kings) using a material conception of space derived from Space Syntax. However, both sections themselves stand as 'evidence' supporting the more philosophical propositions of the 'speculative epilogue', section 3. There I wish to re-examine the advances made in the previous sections towards understanding 'actual' and 'real world' spatial problems, and to ask what this might imply for our theoretical outlook on space. It is for this reason that I have not begun my argument with a conventional discussion on approaches to space. For throughout this work I wish to conform to the proposition that philosophical speculation should be made responsible to reality (even a positional reality) [the phrase is Smith's; 1990; p viii]. This is not, however, to argue for a 'true space', but rather to argue [following Lefebvre, see chapter 9] for 'a truth of [material] space'; that is to say not that we can say everything of cabbages and kings, but that we can say something of both cabbages and kings, indeed of material things, that has social and theoretical significance.

Section 1 examines a range of sources dealing with 'real world' spaces and excavates their implicit theoretical positions. Moving from the academic work of Soja on Los Angeles [chapter 2], to the more populist understandings of contemporary cities in the recent Cities on the Move exhibitions [chapter 3], two common traits are identified which relate discourses on 'real world'

and theoretical space. The first I term the 'alephic vision', derived from Soja's misreading of Borges' story of the same name. The alephic vision refers to the tendency of seeing the world as fragmented, chaotic and unintelligible, a spatial dogma that will be shown to be rooted in imposed theoretical preconceptions. The second trait is termed the 'ecstatic vision' and refers to the characteristically hyperbolic style in which a supposed common experience of such real world spaces is presented. The final, pivotal, chapter of the first section aims to extend these two tropes across a range of literature, and examines the origins of these positions towards theoretical and 'real world' spaces. I argue that it is with the engagement of 'deep space' with post-structuralism and postmodernism identified by Gregory that the alephic and ecstatic visions merge and come to define contemporary approaches to space.

Although dealing in the currency of 'theory' I do not wish to overburden this argument with additional theoretical apparatus. However, this first section resounds with Williams' idea of a 'structure of feeling', here directed towards space. Certainly, I will seek to justify the most superficial understanding in terms of 'the culture of a period', and further that the change is wider than simply the 'institutional or formal'. Furthermore, the idea of the alephic and ecstatic visions are consistent with a "change of style which also turns out to be a change of content", related to an [assumed] experience with [claimed] palpable effects, what Williams describes as "meanings and values as actively lived and felt"². However, I am interested by Thrift's emphasis on 'structure of feeling' as a process, and note that he turns to the "social and cultural conditions of academe out of which this structure of feeling has arisen", commenting that, "we have now reached a point where western cultures have become increasingly self-referential" especially in relation to "sources and horizons of meaning... which are based in hybrid images of machine and organism, especially images based on speed, light, and power" [Thrift, 1994; 192-3]. Likewise, Harvey uses the 'structure of feeling' concept in a similarly suggestive manner, arguing that, "[t]hemes of creative destruction, of increased fragmentation, of ephemerality...have become much more noticeable in literary and philosophic discourse in an era when the restructuring of everything from industrial production to inner cities has become a major topic of concern" [1996; p 245].

Central to my argument will be the assertion that academic and populist approaches have become increasingly self-referential, and show an unparalleled 'lifting off' from everyday experience. The

² These qualifications relate to Thrift's summary of the structure of feeling concept [1994]. See also Williams, 1977; p 132.

alephic and ecstatic visions blur as the 'academic flâneur' has become a parody of the academic air-traveller. Chambers argues that;

It [being simultaneously everywhere] is a condition typical not only of the contemporary traveller, but also of many a contemporary intellectual. Viewed from 35,000 feet, the world becomes a map. Recently some of the views brought back from the high flying have arrived at the conclusion that the world is indeed a map. At that height it is possible to draw connections over vast distances, ignoring local obstacles and conditions. At that height certain common sense objections ('down-to-earth' views) to a reading of the terrain can be ignored. When further height is gained, the flight plan only needs to consider the relation between the plane (undergoing rapid transformation into a spaceship at this point) and the flat referent beneath its fuselage. At this point, the meanings of events elsewhere are incapable of penetrating the space we have put between ourselves and them. Meaning contracts into the pressurized cabin. Life inside the plane, with the observation it affords, becomes more 'real' than the 'reality' we presume to observe. Knowledge of the social, political and cultural globe becomes the knowledge of a second-order reality, a 'simulacrum' [1987; p 1-2]³.

Section 1 will argue that such 'theoretical highflying' is as detached from common understandings of material space as the 'viewing platforms' of spatial science ever were. I wish to propose, therefore, that the 'spatial structure of feeling' uncovered in Section 1 can be seen at a counter level as a 'spatial pathology', perhaps as a form of 'psychasthenia'. The psychasthenic is unable to distinguish between their own body and the surrounding space; it is a pathology of spatial relations in which the perception of material relations and spatial representation breaks down. "To these dispossessed souls, space seems to be a devouring force. Space pursues them, encircles them, digests them in a gigantic phagocytosis", until the ties of material experience are lost as represented space and the material body become indistinguishable - the familiar mantra of the supposed common experience of "being in all places while not really being anywhere" [Olalquiaga, 1992; Callois, 1984].

Although deliberately hyperbolic and provocative, the idea of psychasthenia and a spatial pathology is useful for three reasons. Firstly, it reflects the targeting of my critique not at 'real world' phenomena, conversely the basis for my reworking, but rather at the self-referential discourses of spatial theorists, the 'psychasthenics' detached from the material. Secondly, the idea of a pathology is important, for it signifies more than a blindness. My argument is not that theorists are unaware of the importance of the material realm, indeed quite the converse as we find continual oblique assertions to its importance. Rather, there is a pathological inability to deal

³ I note in my own department the prominent posting of an article on "Overcoming jet-lag".

effectively with the material realm for fear of returning to the rejected spatial science and antecedent determinism. Psychasthenia, finally therefore, captures the idea of a crisis of representation [developed in chapter 4], not in Jameson's sense relating to an inability to articulate the supposedly fragmented 'real world', but in the sense of a crisis in the theoretical representation of material space, which in turn drives the hallucinatory representations of the 'real world'.

Section 2 offers a resolution to this representational crisis, developing the configurational approach of Space Syntax while simultaneously broadening and strengthening the argument of section 1 with a series of detailed analyses and reworkings of the positions of a number of key theorists in the 'respatialization' literature. In so doing, the scale of analysis deliberately moves from the urban (with the work of Harvey) to the community (Giddens) to the individual scale (Foucault), thereby stretching the contributory potential of Space Syntax to its limit. The proposed elision between contemporary theory and the material approach of Space Syntax itself will be offered in the final section, in the context of a consideration of what impact the empirical advances achieved have on our theoretical approaches towards space.

1.2 Prologue - of cabbages and kings

Although I have made clear above my commitment to making philosophical speculation responsible to reality, and my intention to approach the inevitable discussion of the nature of space circuitously, using the evidence of (I hope) a renewed understanding developed in sections 1 and 2, it is nonetheless necessary to say something of my own starting position, my own innate prejudices, if for no other reason than to stand as counterpoint to what I hope will be a more substantiated position in the final section. It is for this reason that the conventionally more personal 'prologue' follows the orienting argument of the introduction.

Of primary importance, naturally, is my own approach to space. Again, I would wish to draw upon a characterization of Hillier, who describes his approach as 'WYSIWYG'; what you see is what you get⁴. This formulation captures a 'strategic naivety', for as will become apparent in the course of this argument (particularly chapter 5 which introduces the principles of Space Syntax in greater depth), there is no suggestion that material space is unproblematic. Rather it asserts both a

commitment to empirical enquiry, as distinct from the reduction of empiricism [see above, Gregory, 1994; p 74 and Christensen, 1982], and that our understanding must be accessible to common discourse and relevant to material experience, that is, to 'actual spaces' as well as theoretical spaces.

Although sensitive to its now reactionary character, I sympathize to an extent with Lowenthal's description of geography, again standing in here for a broader a-disciplinary approach to space.

Beyond that of any other discipline, however, the subject matter of geography approximates the world of general discourse; the palpable present, the everyday life of man on earth is seldom far from our professional concerns [Lowenthal, 1961; p 241].

Lowenthal's characterization, expanded from geography to a wider concern with space, articulates two facets of the WYSIWYG approach. Firstly, the concern with the 'palpable' and the 'everyday', with the attendant recognition that the critique of 'spatial scientists', who "strive to stand far above their material, for a view from nowhere, with the hope that they will thereby be able to plunge well below the surface of reality" is ironically as applicable to today's 'spatial flâneurs' who see their own projects as antithetical to spatial science [Tuan, 1979; pp 234-40]. I wish to 're-activate' Tuan's attention to the superficial, to "living at the surface", developed from his perceived need to "open ourselves up to the minutiae as well as to the grand scaffoldings" of an abstracted theory. Secondly, although many of the 're-spatialization theorists' would themselves concord with Tuan's advice to stand only a little above their material, "and move only a little below the surfaces, where all human joys and sorrows unfold", and would support the theoretical primacy of the minutiae of 'everyday life', they do so in contravention of Lowenthal's appeal to 'the world of general discourse'.

Just as my argument concerns the linkages between the discourse on space, 'real world' and actual spaces, so I see the idea of WYSIWYG as relating in some sense to the character of my own discourse. The critique of the ecstatic vision similarly addresses this linkage between the character of language used to structure theoretical ideas and the character of the real world that these theories address. My critique [of some, it must be emphasized] spatial theorists, from academic and traditionally 'non-academic' fields, reflects Magee's concerns with the writing of contemporary philosophy. He argues that there are observable fashions in the character of

⁴ Personal communication.

philosophical writing, a post-war period of clarity (exemplified by the likes of Popper and Russell, themselves reacting to a prior tradition) giving way to contemporary traits of hyperbole and obfuscation. I would not wish to go so far as Magee and return to Schopenhauer's assault on the philosophy of Weisse and others who, "[t]o conceal a want of real ideas, many make for themselves an imposing apparatus of long compound words, intricate flourishes and phrases, new and unheard-of expressions, all of which together furnish an extremely difficult jargon that sounds very learned. Yet with all this they say - precisely nothing" [Schopenhauer, commenting on Weisse, quoted in Magee, 2000; p 23]. However, I find sympathy with Magee's assertion that much contemporary writing on the experience of cities and space follows in the pseudo-Kantian tradition of "writing in an oracular, incantatory way designed to spellbind their readers into taking the simple for the difficult"⁵. As he argues, difficult of ideas does not presuppose unclarity; "[t]o suppose that if a problem is tortuously difficult it needs to be addressed in prose that is tortuously difficult is to make a logical error - one parodied by Dr Johnson in his remark: 'Who drives fat oxen should himself be fat'" [ibid.; pp 25-6].

My argument develops therefore from what may seem a naïve, even arcane, starting point. To return to Tuan;

Appreciation for nature or landscape [perhaps 'actual space'] is a principal reason for becoming a geographer. The aesthetic impulse and experience are not, however, confined to any class of individuals. They are a universal human trait, and we find evidence of it in all areas of human life. Satisfaction with life consists largely of taking pleasure in form and expressiveness - in sensory impressions, modified by the mind, at all scales from the smile of a child to the built environment and political theatre [op Cit.; p 233].

I begin, therefore, from an intention to address an intuitive 'actual space' through 'general discourse'; a deliberate provocation and one which runs as an undercurrent through my [at times perhaps polemical] argument. Ultimately, I hope to demonstrate that rather than being naïve, it might in fact form the basis for the reassertion of [material] space in critical social theory.

Finally, Tuan's confessional statement serves to introduce the importance of my own academic trajectory, which is of particular importance in the selection of authors for more detailed analysis

⁵ Magee develops this argument from Macaulay's comments on reading the first translation of *The Critique of Pure Reason*, that "I tried to read it, but found it utterly unintelligible, just as if it had been written in Sandskrit". Magee argues, following Schopenhauer, that contemporaries mimicked the impenetrable Kantian style to 'pass off' less original work.

through sections 1 and 2. This similarly confessional 'prologue' is of strategic importance to the structure of the project as a whole, which remains defiantly personal. My intention has been to return to the questions and misgivings that I had as an undergraduate geographer, particularly with the theoretical treatment of space in relation to the experience of built environments. It is to these questions, which stimulated my engagement with the more analytical and architectural perspective of Space Syntax, that I now return, unashamedly revisiting the 'key players' of my earlier concerns; Soja, Harvey, Giddens, Goffman, Hägerstrand, Foucault and Lefebvre. This is far from an exhaustive list of those who have been at the forefront of the 'reassertion of space in social theory'. However, for me this project is concerned with revisiting old ground from new perspectives, and like the frog crawling out of the well, in sliding one step back to leap two forward. In the more speculative epilogue, 'towards a spatialized ontology?', that bookends this prologue, I wish to return to Tuan's model of a more inclusive geography of form and expressiveness in the light of the new perspectives on material space gained through tackling the socio-spatial problematic, and to reopen the dormant problem that lies at the heart of this argument; the nature of space itself.

Section 1 - Deconstruction

Chapter 2 The re-assertion of 'space' in social theory?

2.1 "The Aleph" - Soja and Borges' double trap

Ed Soja's work provides a convenient vehicle for approaching the wider 'respatialization literature' for a number of reasons. Firstly, although there have been numerous books published within the last two decades dealing with the relationships between society and space, as any library search would attest, it is Soja who is the self-styled taxonomist of the school, with the publication in 1989 of his *Postmodern Geographies*, subtitled "The Reassertion of Space in Critical Social Theory" [Soja, 1989]. It is a theme that he has consistently pedalled since the late seventies (eg Soja and Hadjimichalis, [1979]), producing a considerable volume of work developing similar synthetic arguments. It is this synthesising approach which is the second reason for using Soja as a starting point. His work draws heavily on other theorists, most notably Lefebvre, but also Foucault [Soja, 1989 and 1996], Poulantzas and Lipietz [Soja, 1984], hooks and White [1996] and many others, making him a convenient bridging link to these other 'spatial players'. Thirdly, and most importantly, it is the style of argument that makes him an appropriate starting point. As Moss notes, "After finishing [Thirdspace] and reflecting on its contents, I was vexed by his approach to writing theory and grew disdainful of his textual claims to authority" [Moss, 1999; p 249]. She continues;

He makes some enormous claims, grandiose in scale, to get his point across in his attempt to make what he says more important, more credible, as for example, likening the preservative modernization of Amsterdam's core to the Dutch conquest of the sea (page 283) and in describing himself as standing "nearly two meters high" and weighing "more than an eighth of a ton" (page 283). In response, I wondered how comparing scales of colonialism and knowing Soja's dimensions help me understand the geohistory of Amsterdam. I am not saying that such comparisons cannot; what I am saying is that his rendition does not. [ibid; p 250]

What Moss has identified is a persistent over-extension of Soja's arguments, often in association with "what he considers empirical demonstrations" but which are in reality unsubstantiated anecdotal asides, "autobiographical snippets to claim authority" [ibid]. Another related stylistic

tendency is the exuberant coining of new terms, "Thirdspace' being a case in point. In his enjoyment of wordplay he seems to throw caution to the wind however, and it is the tentative minting of a new term, the awful 'LA-leph', which provides an entry point into a more theoretical discussion of his ideas.

Essentially then, Soja makes easy pickings while introducing important themes that run throughout this first section, connecting with other key theorists on the way. I start, then, with Soja's treatment of Borges' *Aleph*, which in its superficial glibness fails to engage with the real significance of the Borges story. I hope that this re-reading will provide a window into Soja's ontological and epistemological positions to be unearthed in the following section. The analysis of *The Aleph* provides a window into Soja's work and a mirror of, and vehicle for, my critique: an Aleph within *The Aleph* – to parody Soja.

Soja and 'The Aleph'

Soja uses Borges' 1949 story *The Aleph*, "to provoke new ways of looking at and understanding contemporary Los Angeles" [1996; p 54] both in *Postmodern Geographies* and in its successor, *Thirdspace*. He finds himself "drawn once more to 'The Aleph'" for two reasons, captured in his choice of opening quotations for the relevant chapter in the earlier work [1989; p 222]. Firstly, it captures the idea that the Aleph, and by extension Los Angeles, contains all other places.

'The Aleph?' I repeated. 'Yes, the only place on earth where all places are – seen from every angle, each standing clear, without any confusion or blending' [Borges, 1970; p 23, quoted in Soja, 1989; p 222; 1996; p 55]

The theme is picked up immediately. Soja declares, "Its [Los Angeles'] spatiality challenges orthodox analysis and interpretation, for it too [like the Aleph] seems limitless and constantly in motion, never still enough to encompass, too filled with 'other spaces' to be informatively described" [ibid]. We are encouraged to invoke the Aleph in Los Angeles, in classic Soja rhetorical style;

What is this place? Even knowing where to focus, to find a starting point, is not easy, for, perhaps more than any other place, Los Angeles is everywhere. It is global in every sense of the world. Nowhere is this more evident than in its cultural projection and ideological reach...making Los Angeles perhaps the epitomizing world-city, une ville devenue monde. [sic][1989; pp 222-3].

We are to see Los Angeles in all places, therefore, and all places in Los Angeles, "Everywhere seems also to be in Los Angeles" - it is only surprising that Soja did not pick up on Borges' later passage, "I saw the Aleph from every point and angle, and in the Aleph I saw the earth and in the earth the Aleph and in the Aleph the earth" [Borges, 1970; p 28].

The story also gives Soja a clue as to how to approach the understanding of Los Angeles, for he argues that "[Borges'] distinctive version of the rich Latin-American tradition of 'magical realism' resounds so well with Lefebvre's fascination with concrete abstractions, his paradoxically materialist idealism, and his adventurous explorations into the simultaneous worlds of the real-and-imagined" [1996; p 54].

The second quotation that Soja uses concerns just this idea of simultaneity, and the restriction that sequential language systems place on the description of the synchronous.

...Then I saw the Aleph...And here begins my despair as a writer. All language is a set of symbols whose use among its speakers assumes a shared past. How, then, can I translate into words the limitless Aleph, which my floundering mind can scarcely encompass? [Borges, 1970; p 26, quoted [sic] in Soja, 1989; p 222; and 1996; p 55].

Again, he draws out the parallel, "appeal[ing] to Borges and the Aleph for appropriate insight", and blending Borges' and his own text seamlessly. He continues, (quoting),

Really, what I want to do is impossible [...]. What my eyes beheld was simultaneous, but what I shall now write down will be successive, because language is successive. Nonetheless, I will try to recollect what I can.(Soja quoting Borges)

I [Soja] too will try and recollect what I can, knowing well that any totalizing description of the LA-leph is impossible [Soja, 1989; p 223].

He defends his analytical approach, therefore, with an appeal to the appropriateness of the Borgesian style to deal with a supposedly Aleph-like phenomenon such as Los Angeles. "What follows then is a succession of fragmentary glimpses, a freed association of reflective and interpretative field notes which aim to construct a critical human geography of the Los Angeles urban region" [ibid]. What is notable here is the way that Soja 'appeals' to Borges and the Aleph in relation not only to his ontological position (The Aleph as Los Angeles), his epistemological stance (the use of Borges as authority for his 'fragmentary glimpses') but also his methodological approach (the resonance identified between Borges and Soja's mainstay Lefebvre). It is worth returning to Moss's criticism cited above; she was "vexed by his approach to writing theory" and "grew disdainful of his textual claims to authority". She ends, "[f]or it was Soja's use of text that overrode any critical engagement with his ideas..." [Moss, 1999].

This is undoubtedly true, not only for the reader, but perhaps for Soja himself. A closer reading of the Aleph reveals that his repeated enthusiastic use of that text has perhaps overridden a critical engagement with his own ideas. In engaging with Borges, notorious for his labyrinths, Soja has fallen into a trap which should help to reveal some of the weaknesses in his theory as a whole.

The Borgesian Trap

Soja's appraisal of The Aleph is revealing – and wholly wrong. "'The Aleph'" he states, " is an invitation to exuberant adventure as well as a humbling and cautionary tale, an allegory on the infinite complexities of space and time" [1996; p 56]. This is, paradoxically, not only a misunderstanding of the story but a perfect illustration of both Borges' intentions and one of my principal criticisms of Soja.

The subject of the story is hardly 'the Aleph' at all, at least not in Soja's sense of a material object. For, as Lindstrom notes, "The treatment of the Aleph directs attention away from this phenomenon and towards the two characters who find it" [Lindstrom, 1990; p 55]. The object itself is unmentioned in the first part of the story, where attention is focused on the two central characters, Daneri and Borges himself. This leads Lindstrom to conclude that, "the magic sphere is brought into being by force of desire [of these two characters and, by extension, all who seek the Aleph] and enjoys no existence unless sought" [ibid; pp 55-6].

There is plenty of evidence from the text to support such a reading, evidence that Soja cites in his own work but appears not to understand.

Firstly, after the title there are the "two classical quotations to amplify his intentions" [Soja, 1996; p 54], an understanding typical of Soja's taste for appeals to authority. Soja, having re-cited the

texts, does not comment, and seems to think they are referring to the Aleph, rather than the perceiver of the Aleph.

The first, important in this context, is from Hamlet;

O God! I could be bounded in a nutshell, and count myself a king of infinite space....[Hamlet, II,2; quoted in Borges, 1970; p 15; and Soja, 1996; p 54].

The context, unmentioned by Soja but surely familiar to Borges, is the re-encounter between Hamlet, en-route to Denmark, and Rosencrantz and Guildenstern. Hamlet compares Denmark to a prison, Rosencrantz protests, "We think not so, my lord", to which Hamlet replies;

Why then 'tis none to you; for there is nothing either good or bad, but thinking makes it so. To me it is a prison.

Rosencrantz relates this 'thinking' to Hamlet's ambition, ("Why then your ambition makes it one"), which prompts the line from Hamlet used by Borges, which in fact ends, "- were it not that I have bad dreams", which Guildenstern in turn picks up on, rejoining,

Which dreams indeed are ambition, for the very substance of the ambitious is merely the shadow of a dream.

In this exchange it is Hamlet's outburst, chosen (deliberately?) by Borges, that is perhaps the most expressive, although the least important in developing the central ideas of the passage. It is not the idea of infinite space (a kingdom) within a finite space (a nutshell) that is important. Borges uses this to mirror his idea of The Aleph, and Soja is fooled. What Borges is pointing to, as in his own story, is the power of dreams, the force of ambition, which is illustrated by Hamlet's outburst but is only apparent within the context of the scene as a whole.

There are other clues that Soja misses, or even deliberately ignores. He picks up the story at the point of discovery of the Aleph. Daneri tells Borges that,

One day when no one was home I started down [the cellar steps] in secret, but I stumbled and fell. When I opened my eyes, I saw the Aleph [Borges, 1970; p 23; quoted in Soja, 1996; p 55].

Again, it is the preceding context, which Soja crops out, that is crucial. Borges writes,

I discovered it when I was a child, all by myself. The cellar stairway is so steep that my aunt and uncle forbade my using it, but I had heard someone say that there was a world down there. I found out later that they meant an old-fashioned globe of the world¹, but at the time I thought they were referring to the world itself. One day...[continues as above].

The focus of Borges' story is not the Aleph, but the dreams and ambitions that bring the Aleph into existence. As a child Daneri enters the cellar expecting to see the world. He falls, and sees the world as revealed by the Aleph. As Daneri continues, arguing against the fictional Borges' own scepticism, "Truth cannot penetrate a closed mind". Again, this is quoted by Soja, but he seems to miss the significance in his enthusiasm for the LA/Aleph ('LA-leph') metaphor. The Kerrigan translation might be even more appropriate, "Really," Daneri responds, "truth does not penetrate a rebellious understanding" [1968; p 147, "recalcitrant understanding" in the Hurley version, Borges, 1999; p 281].

The story is not "an allegory on the infinite complexities of space and time" as Soja would have it [1996; p 56]. Rather it is a comment on, "the determination of human beings to master some absolute form of knowledge" [Lindstrom, 1990; p 56]. The irony is that in his dogged reading of space into the story, Soja has fallen exactly into Borges' trap. Soja has seen his LA-leph within *The Aleph*, just as Daneri (and of course Borges) do within the cellar, because all three desired to do so, not because it was there. Soja would have done well to read Borges a little more widely, particularly a conversation at the University of Chicago in 1980 where he states;

I think that time is the one essential mystery. Other things may be mysterious. Space is unimportant. [transcribed in Barnstone, 1982]

The Aleph is in fact spaceless; it is both dimensionless and contains no space, for rather than conceiving it as a window to the world, as Soja does, it is in fact a mirror. As Alazraki argues, "Mirrors are a constant in Borges' poetry, but long before becoming a major theme or motif in his works, mirrors had been for Borges an obsession that goes back to his childhood years"

¹ This is translated variously as 'globe' [Borges, 1970, translated by Norman Thomas di Giovanni], 'trunk' [Borges, 1968a, translated by Anthony Kerrigan] and 'steamer trunk', [Borges, 1999 translated by Andrew Hurley]. The word makes little difference because it stands in each case as a metaphor for the world itself. I have used the 1970 version throughout, firstly because it is the text used by Soja, and secondly because the translation was made in co-operation with Borges himself. As Borges writes in the preface, "Perhaps the chief justification of this book is the translation itself, which we have undertaken in what may be a new way. Working closely together in daily sessions, we have tried to make these stories read as though they had been written in English" [Borges, 1970; p 9]. Borges is well aware of the differences in metaphorical possibility offered by the two languages [see Borges in Barnstone 1982] and it would seem that the translation to 'globe' in the 1970 text is deliberate.

[Alazraki, 1998; p 107]. Again, there are clues in the story itself. In the middle of Borges' recollection of the Alephic vision he lists;

I saw my empty bedroom; I saw in a closet in Alkmaar a terrestrial globe between two mirrors that multiplied it endlessly;

In Borges' own 1970 translation this seems to echo the globe in the cellar, and all three translations studied use the image of the globe between mirrors (though not in the cellar, see footnote above). In his own comments on the story, Borges says that his "chief problem in writing the story lay...in the setting down of a limited catalog of endless things", where "every apparently haphazard element has to be linked to its neighbor either by secret association or by contrast" [Borges, 1970; p 264, sic.].

The secret association here is between the vision of Borges' own (childhood) room and the mirroring of the globe. He recalls that as a child he had three full length mirrors in his bedroom and that, "I felt before large mirrors that same horror of a spectral duplication or multiplication of reality" - "I always stood in fear of mirrors" [Borges, 1968b, quoted in Alazraki, 1998, reprinted Borges, 1999; Barnstone, 1982].

Alazraki explains the significance of the mirror to Borges, "That illusory reality that mirrors produce becomes in turn a profound mirror of our own universe since our image of the world is just a fabrication of the human mind". We return therefore to the central theme identified above, the power of fabrication of the human mind, which Borges points to before the story begins with his reference from Hamlet and which Soja totally misses. Alazraki unwittingly makes the same connection back to scene two of Hamlet and Guildenstern's comment on dreams; "[M]irrors and dreams have for Borges an interchangeable value" [Alazraki, 1998; p 109].

The Aleph-as-mirror reveals, therefore, not the world but Soja himself reflected in his own endless series, his "succession of fragmentary glimpses" [Soja,1989; p 223]. As Borges says, a writer starts out to describe a kingdom of castles and horses, but ends by tracing the lines of his own face [in Barnstone, 1982; p 74].

The double bind

Soja is caught doubly in Borges' trap, however. Not only has he misunderstood the Aleph and revealed his own desire to find it, he also opens up the results of his 'appeal to the Aleph' to Borges' scorn, for the Aleph is far from the oracle for "appropriate insight" that Soja hopes [1989; p 223].

In his appeal to Borges the author, he ends up identifying with Borges *the character*, not realising that not only are the two not the same, but that the former is full of contempt for the latter - Borges' double trap! Although Daneri is scorned by the fictional Borges, the parallels between the two characters are strong. Daneri attempts to use the Aleph to construct a complete vision of totality, expressed in his poem, 'The Earth'. "Borges, too, would like a vision of totality, though not of the world but solely of his Beatriz", the lost love for whom he grieves [Lindstrom, 1990; p 54]. Lindstrom notes the passage where Borges is captivated by the photographs of Beatriz on Daneri's walls, each a fragmentary image of the whole reality he seeks, and although the incomplete representation forms the motivation for appealing to the Aleph for the revelation of the desired whole, it is the fragmentary representation which lays hold of Borges' imagination.

For Soja, Los Angeles becomes his Beatriz, and he turns to the Aleph for the chance of a revelation of her identity. Soja's appeal to Borges is misplaced however, because in leading him to the Aleph, Borges mocks him, for we (Borges the author and we the reader, though obviously not Soja) realise the contents of the oracle "turn out to be worthless" [ibid; p 55]. Soja's mistakes are multiple; he has confused Borges and Borges, and has identified with the character, mistaking him for the author (forgetting Borges' fear of mirrors!). But he makes yet another characteristic slip. Lindstrom identifies three principle examples that Aleph-seeking can take; "Daneri's poem 'Earth', Borges' campaign to preserve all information concerning Beatriz; and the sphere in the underground chamber" [ibid; p 56]. Soja is guilty of all three; he creates the sphere through his own desire (to read a spatial dimension into The Aleph); he attempts to use the Aleph to recover his Beatriz (his appeal to the Aleph) and finally, - here being the double trap – he opens himself to Borges' own scathing criticism, missing the worthlessness of the oracle's inspiration and constructing, like Daneni, a rhetorical 'succession of fragmentary glimpses', - 'Thirdspace'. Borges *the author* is represented by the hidden figure of Dante Alighieri, parodied in Argentino Daneni, who realises that his own Beatrice should remain largely unknown. Borges, the character,

makes the mistake (as does Soja) of seeking knowledge of his Beatriz in the Aleph while trying nonetheless to maintain a symbol of perfection (unknowability in the case of Soja's LA).

However, Borges realises his mistake,

"the vision of Beatriz, far from fulfilling Borges, leaves him feeling assaulted and defrauded...Most significantly the image of Beatriz is so full of information that it is essentially false, even if everything it contains were true. A uniform, indiscriminate, unnuanced spew of data cannot do justice to the complexity of the human being, whose nature is to be now one thing and now another" [ibid; p 55].

Borges the character realises this, and dismisses the Aleph to destruction. He and Daneri are both "fools of the Aleph" [ibid; p 56], but Daneri incomparably the more so because he, like Soja, does not even realise the worthlessness of the revelation. He uses it as the basis for his inspiration and, "loads more and more heterogeneous elements into his monstrous poem 'Earth', (another clear reference to Dante and his divine comedy), in defiance of the common-sense principle that art requires selectivity and the repetition of significant uniformities".

Here lies the significance of the second opening quotation to the story, from Leviathan, which Soja replicates but misreads. Hobbes says,

But they will teach us that Eternity is the standing still of the present time, a Nunc-stans (as the schools call it); which neither they, nor any else understand, no more than they would a Hic-stans for an Infinite greatness of Place. [Leviathan, IV, 46; quoted in Borges, 1970; p 15 and Soja, 1996; p 54].

Soja interprets this as a scene-setter, "to amplify his intentions", which it does but not as Soja thinks. The message contained here is that these totalities, of time, of space, in essence of knowledge are unintelligible, while in the infinities of The Aleph Soja does identify prospects for a renewed understanding. Dante realises this at the outset, Borges too late, only once he has been made the 'fool of the Aleph', but Daneri never cottons on.

While identifying with Borges the author, Soja has fallen into this double bind and instead of seeing Borges as the spectral Dante behind the characteristically mirrored surface of 'The Aleph' he has made the cardinal error of associating with his namesake, Daneri, and mistaking the descent into the cellar as a revelation of knowledge rather than the descent into Hell which it mimics.

This Borgesian labyrinth now wraps around Soja entirely, and it is Borges himself who provides the criticism of Soja's own use of the Aleph through his scorn of Daneri, the bait for all who follow. He says of Daneri, "His mental activity was continuous, deeply felt, far-ranging, and – all in all – meaningless. He dealt in pointless analogies and in trivial scruples" [1970; pp 16-17]. The scorn that Borges reserves for Daneri's style mirrors Soja's rhetorical impulses beautifully. He ridicules the stanza which Daneri reads aloud, and his pompous explanation of the various allusions to literary authority (remember Moss's criticisms), which ends with the verse; "The voyage I set down is...autour de ma chambre "[sic]. Recall Soja's verbose appeal to Los Angeles as a mirror of the Aleph ["What is this place?...quoted above, p 22] which ends, "making Los Angeles perhaps the epitomizing world-city, une ville devenue monde [1989; p 223, sic]. Borges comments on other stanzas of 'The Earth', "There was nothing remarkable about them. I did not even find them worse than the first one" [op. cit. p 19], which mirrors Moss's final assessment that, "[I]f you have read the first versions of Soja's essays, do not read these" [1999; p 250]. Also identified in Borges is Soja's term-coining mentioned above. "He had revised them [stanzas of the Earth] following his pet principle of verbal ostentation. [...] The word 'milky' was too easy for him; in the course of an impassioned description of a shed where wool was washed, he chose such words as 'lacteal', 'lactescent', and even made one up – 'lactinacious'"[op. cit. p 20-21].

The parallel is complete², and although stylistic comparisons between Daneri and Soja may seem glib, in the next section the faults revealed by Borges' trap will become central to the detailed criticism of Soja's work, on ontological, epistemological and methodological grounds. *The Aleph*, and Soja's misunderstanding of it, provides a useful start, because at root the issue is not space but epistemological positions. Lindstrom paraphrases this clearly;

In 'The Aleph', Borges and Daneri make their mistakes through unawareness of basic principles or ground rules for the construction of knowledge. Borges, more intelligent than Daneri, grasps the nature of his mistake and pronounces the Alephic vision false by reason of its senseless amassing of truths. Dante is a wiser figure because he understands from the start that, even in a sweepingly grand project, inclusivity is not worth attempting [1990; p 56].

In contrast to Soja's understanding of *The Aleph* as, "an allegory on the infinite complexity of space and time" [1996; p 56], Lindstrom offers two implications, firstly that,

this story is [a] warning that one should be conscious of Alephs and the human susceptibility to their allure [op. cit.; p 57]

and secondly that,

the story implicitly encourages readers to maintain a suspicious attitude towards the cheap appeal of unmediated revelation and to value, instead, the truths conveyed through artful, selective representation [ibid; p 54].

It is for both these reasons that a less naïve reading of *The Aleph* itself than Soja achieves makes a perfect starting point for a critical understanding of his wider work. Alephs, after-all, reveal only those who invoke them.

2.2 Soja as Daneri, and the reassertion of space in critical social theory

The analysis of *The Aleph* presented above ended with two observations; the first that we should be conscious and distrustful of the appeal of Alephs, and secondly that we should be suspicious of the 'alephic vision' that results. Soja, like Daneri, is guilty of placing his trust in the Aleph, and this is particularly important when we consider the interpretation of the story presented above, for as Lindstrom argues, the real subject of the story is the possibility of knowledge. Borges highlights our propensity to allow our desires to dictate our experience, or perhaps our dreams to conjure our reality. To restate his point using a more academic lexicon, he warns that theoretical positions may compromise empirical perspectives, that the relationship between epistemology and ontology is complex and referential.

It is this commentary that makes Soja's use of *The Aleph* so ironic, because the epistemological and ontological reworkings that lie at the heart of Soja's project are full of paradoxes. While *The Aleph* should stand as a warning that theoretical perspectives can railroad our perceptions of reality, Soja uses *The Aleph* in quite the contrary manner; to bolster his perception of the experience of Los Angeles, thereby revealing the degree to which his understanding is a result of his theoretical perspectives. Once again, he should have been mindful of Borges' precise use of language and literary referents, and in particular his interest in Hebrew and Cabbalistic belief, in

² Daneri, it seems, is even something of a postmodern geographer, declaring, that our twentieth century had inverted the story of Mohammed and the mountain; nowadays, the mountain came to modern Mohammed; a spatial fix?! [op. cit.; p 17].

which, "the Aleph [...] is considered the foremost Hebrew letter, a symbol of all other letters and by extension of the universe itself" [Fishburn and Hughes; 1990]. Although this reading in some ways validates Soja's use of the Aleph as a synechdotal metaphor of Los Angeles ('LA-leph') and contemporary spatial experience, Fishburn and Hughes note that in one interpretation "its symmetrical shape symbolises the concept that everything in the lower world is a reflection of its archetypal form in the world above". The very figure of the Aleph itself should alert us therefore to the influence of this idealized 'upper' world on the 'lower' world of (imposed?) understandings.

To begin then, let us review in more detail Soja's reference to empirical work on this lower world, before uncovering the theoretical debates that govern his perceptions.

Approaches to Los Angeles - Historical-Geographical Materialism and the LA-leph

The empirical work in both Soja's books is concentrated at the end, and is presented very much as an illustration of the theoretical evolutions which have gone before³. Despite the 1996 subtitle, "Journeys to Los Angeles and other real-and-imagined places" the focus is almost entirely on Los Angeles (with the exception of a short comparison with Amsterdam, [1996a; p 280-310; 1996b]. Two distinct approaches emerge that are never confidently resolved. This struggle to ride two horses at once becomes most obvious in the 'empirical' sections of his work, but as we shall see the roots of the conflict lie in the effort to unite and overcome two conflicting theoretical positions which is the essence of Soja's work, a project that ultimately fails at its outset.

Soja's work has consistently focused on the development of a spatialized historical materialism, the project culminating in the 1989 publication which begins with a lengthy summary of the evolution of these ideas [see especially Soja 1989, 1988, 1987a, 1985, 1984, 1980; Soja and Hadjimichalis 1979]. His contribution forms part of that wider theoretical rejuvenation within geography identified in the introduction as the response to the perceived constrictions of 'spatial science', such that geography, "that most stiflingly cocooned of traditional disciplines", evolved a critical perspective "reaching outside of its traditional Kantian cage" [Soja, 1987b; pp 289 and 291].

³ See empirical work in Soja 1989 and 1996 chapters 7, 8 and 9 of 9. Importantly, his prefacing of empirical exegesis by theoretical development is the opposite of the structure attempted in this thesis.

While Soja would highlight differences between his approach and his contemporaries', particularly the degree to which a 'critical human geography' implied a spatialization of Marx as well as a 'Marxification' of spatial perspectives, there is nonetheless an identifiable 'school', particularly evident in the similar approach to empirical work. There are strong parallels, for example, between Soja, Harvey, Castells, Lefebvre and Davis in their focus upon issues of regional restructuring and the importance of a 'spatial fix' to overcome the latest 'Mandelian-bottleneck' in a crisis-prone capitalist system.

I would not wish to ignore the marked differences between these authors, which will be discussed in later chapters, but these differences lie within the domain of theoretical positionings, and tend to be swamped by the practicalities of empirical exposition; they indeed appear subtle beside the very great conflicts within Soja's own approach. On the one hand his historical-geographical materialist method gives us carefully researched accounts of cycles of investment and labour market restructuring, the historical and geographical evolution of contemporary and previous eras of capital accumulation which would seem to tie in well with the work of Harvey or Castells⁴. On the other hand we have the 'LA-leph'.

It is difficult to characterise this development in Soja's writing without turning to parody or to reflect once again on the parallels with the character Daneri, who as we recall, "dealt in pointless analogies". The conflict between approaches is quite deliberate, emerging as the 'surprise' stingin-the-tail realignment at the end of *Postmodern Geographies*. Soja is perhaps playing a game that he learnt from Giddens; to end each book with the opening to the next, a trait that he termed 'redoubling the helix', [Soja, 1989; p 138; 1983; p 1267]. The chapter headings give the game away; "It All Comes Together in Los Angeles" leads into "Taking Los Angeles Apart: Towards a Postmodern Geography", the final chapter in the 1989 book, while Thirdspace [1996] ends with, "The Stimulus of a Little Confusion", tritely concluding in the final section, ("Towards Postmetropolis"), "Only one ending is possible: TO BE CONTINUED...." [p 320, sic], a plug for the [then] forthcoming *Postmetropolis*.

However, for Soja the idea of a redoubling is much more than a reiteration, and more fundamental to his project than the 'sting-in-the-tail' presentation would suggest. His interest in his own text is also imported from elsewhere, in this case directly from Lefebvre (although it is a key feature of a wider concern with 'authorship', see chapter 4). His comments on Lefebvre's *The Producion of Space* [Lefebvre, 1991], "arguably the most important book ever written about the social and historical significance of human spatiality and the particular powers of the spatial imagination" [Soja, 1996; p 8] are revealing and in the light of the discussion above, highlight the debt that Soja owes to Lefebvre. He continues;

The Production of Space is a bewildering book, filled with unruly textual practices, bold assertions that seem to get tossed aside as the arguments develop, and perplexing inconsistencies and apparent self-contradictions.

He defends Lefebvre's text, and consequently his own, by revealing that;

its meandering, idiosyncratic, and wholesomely anarchic style and structure are in themselves a creative expression of Lefebvre's expansive spatial imagination [ibid].

Although on first readings Soja admits that he found the chapters following the "extraordinarily exciting and relatively clearly written introduction" difficult to "navigate", he decides to "set aside [his] frustrations with the rest of the text as a product of [his] own linguistic deficiencies and Lefebvre's complicated writing style" [ibid]. However, in the context of the writing of Thirdspace Soja realises that,

he [Lefebvre] may not have intended The Production of Space to be read as a conventional academic text, with arguments developed in a neat linear sequence from beginning to middle to end. Taking a cue from Jorge Luis Borges, who in his short story, "The Aleph", expressed his despair in writing about the simultaneities of space in such a linear fashion, and from Lefebvre's frequently mentioned love of music, I began to think that perhaps Lefebvre was presenting The Production of Space as a musical composition, with a multiplicity of instruments and voices playing together at the same time. More specifically, I found that the text could be read as a polyphonic fugue that assertively introduced its keynote themes early on and then changed them intentionally in contrapuntal variations that took radically different forms and harmonies [ibid.; pp 8-9].

Soja articulates three purposes that this approach has, each of which he reverentially embraces in his self-confessed "following" of Lefebvre [ibid.; p 9]. It spatialized the text, "breaking the temporal flow of introduction-development-conclusion" and thereby permits the exploration of new "rhythms" of argument, to be 'navigated' more than read; it "spatialized the equally temporal, sequential logic of dialectical thinking"; and it transforms the text into "a series of

⁴ See for example Postmodern Geographies chapter 7, 'The Historical Geography of Urban and Regional Restructuring', and its contextual application in chapter 8, 'It All Comes Together in LA', as well as Soja 1995, 1987a,

heuristic 'approximations'", thereby protecting Lefebvre from the "canonisation of his ideas into rigidly authoritative protocols" and received dogma [ibid.].

The spatialization of his own text becomes a key theme for Soja, even though in this and other references he perhaps does more than anyone to canonise Lefebvre himself, even if his use of *The Production of Space* in chapter 2 of *Thirdspace* "would have probably discomforted Lefebvre" [ibid]⁵. He begins *Postmodern Geographies* with a 'Preface and Postscipt', in order to "signal right from the start an intention to tamper with the familiar modalities of time, to shake up the normal flow of the linear text to allow other, more 'lateral' connections to be made" [Soja, 1989; p 1], returning to the theme of a spatialized text in chapter 9⁶.

It is evident that Soja's own 'redoubling of the helix' is considerably more complex than that which he perceives in Giddens' work. For the redoubling, or reflection, occurs on many levels and contains not only a radical inversion in approach, but also a justification and defence of that inversion. So even if redoubling the helix might seem to lead to a tangle, we are to understand that this is the nature and intention of such a polyphonous approach, and are encouraged in "the stimulus of a little confusion" to focus on our stimulus and to trust in, or ignore, our confusion.

Unravelling the helix

However, to begin to unravel this genetic metaphor and reach some clarity, a first step is to recall that we should be interested not so much in the reflections and twists of the helix itself, but in the DNA at its core. To get there we can identify a number of redoublings which, once neutralised, cease to act in their own defence and, I believe, point to a fundamental circularity in Soja's position.

The polyphonous and self-consciously subjective and anecdotal approach marks a distinct change from the tight empiricism of his historical-geographical materialism. He asserts, despite an early career concerned with the development of an effective Marxist geography reproduced in the early

⁵ This passage provides the opportunity for an autobiographical snippet that Moss argues is such a shallow way of building textual authority, and illustrates Soja's near canonisation of Lefebvre; "In the first of our all too brief meetings..." (ibid; p 9) See also *Postmodern Geographies* p 8; "I must express my debt...especially to Henri Lefebvre, whose insistent and inspiring sense of spatiality made me feel less alone over the past decade."

^{1986, 1985,} and Soja, Morales and Wolff, 1983.

⁶ This is a reprint of a 1986 article in which he explores the idea of the text as 'travelog' [sic]; the introduction but not the content is changed for the 1989 reprint [Soja 1986; p 255].

chapters of *Postmodern Geographies*, that "[t]otalizing visions, attractive though they may be, can never capture all the meanings and significations of the urban when the landscape is critically read and envisioned as a fulsome geographical text" [1989; p 247]. The change in approach, which can be defended of course as a new 'approximation', centres around a 'textual' reading of the city, and a new interest in a semiotic approach not apparent in the early work, applied not only to the city as a whole, but also individual buildings, most notably the Bonaventure Hotel. And yet despite the rejection of 'totalizing visions' we are told that, "Underneath this semiotic blanket there remains an economic order, an instrumental nodal structure, an exploitative spatial division of labour" [ibid.; p 246].

Significantly, the stimulus of a renewed approach turns to confusion and contradiction in the context of a changed focus, away from the political economy of Los Angeles, and towards the subjective *experience* of Los Angeles. It is this subtler change that proves the weakness at the heart of Soja's project and provokes the circularity.

The conclusion to Postmodern Geographies provides a key;

I have been looking at Los Angeles from many different points of view and each way of seeing assists in sorting out the interjacent medley of the subject landscape. The perspectives explored are purposeful, eclectic, fragmentary, incomplete, and frequently contradictory, but so too is Los Angeles and, indeed, the experienced historical geography of every urban landscape [1989; p 247].

This passage contains three assumptions that need to be clarified. The first is that the polyphonous approach, the "many different points of view", does assist in the understanding of Los Angeles. The second is that Los Angeles is "eclectic, fragmentary, incomplete, and frequently contradictory", at least for Soja (although this can be read as either a subjective or a normative statement), and the third that "indeed [so is] the experienced historical geography of every urban landscape", clearly now a normative statement. What is critical is to understand the justification for the smooth transition from one assumption to the next.

We can work backwards, beginning with the experience of Los Angeles. We are told that the "lived experience of the urban [is] increasingly vicarious, screened through simulacra, those exact copies for which the real originals have been lost" [1989; p 245 sic]; that "[w]ith exquisite irony, contemporary Los Angeles has come to resemble more than ever before a gigantic agglomeration of theme parks, a lifespace comprised of Disneyworlds" [p 246]; that Los Angeles is a
"hyperspace", an "elastic urban context", a "confusing collage of signs"[p 245]. In a passage most reminiscent of Daneri's poem 'The Earth', we are treated to a page-long list of the "dazzling array of sites in this compartmentalized corona of the inner city", concluding with the ecstatic promise of "so much more: a constellation of Foucauldian heterotopias 'capable of juxtaposing in a single real place several spaces, several sites that are themselves incompatible' but 'function in relation to all the space that remains" [pp 239-40, sic].

This normative description of Los Angeles as experienced is grounded in an effusive anecdotalism; Soja's conviction that the experience of Los Angeles is fragmented, polyvalent, confusing, is so strong that it carries before it the need for any evidence. As Soja develops his argument into the experiential realm of what he refers to as 'lived space' he abandons his materialist roots in favour of "different routes"; this radical subjectivism based in semiotics. Yet his only justification for this volte-face and the consequent mapping of his own understandings on to others is a circular appeal once again to the power of polyvalence;

Empirical regularities are there to be found in the surface geometry of any city, including Los Angeles, but they are not explained in the discovery, as is so often assumed. Different routes and different roots must be explored to achieve a practical understanding and critical reading of urban landscapes. The illusions of empirical opaqueness must be shattered, along with other disciplining effects of Modern Geography [1989; p 243].

The other "disciplining effects of [modernism?]" which go out with the sullied bathwater of empirical opaqueness would seem to include all forms of substantiation . As Marden argues, the later 'empirical' chapters of *Postmodern Geographies* are "ambivalent and confusing" [Marden, 1992; p 47]. Soja thus confuses the importance of empirical research with the opaqueness of empiricism and a positivist position. As Christensen argues, this implies that "if one engages in empirical research, then, by definition, one is a positivist in the logical empiricist sense of a person who idealises a human science in terms of physics", seeking explanation simply in regularity [see above, p 13 and Christensen, 1982; p 42^7].

This egocentric approach to scholarship is exaggerated in the second part of *Thirdspace* [Soja, 1996] where "he weaves his way through what he considers empirical demonstrations of what he means by thirdspace" [Moss, 1999; p 249]; a journalistic amalgam of culled 'facts', a discordant return to his pre-subjectivist materialism, anecdote, and subjectivism arranged into an series of

"scenes" of Los Angeles reminiscent of Robert Altman's film *Short Cuts*. Soja himself would undoubtedly see this as a compliment, but his scenes mask a simplistic synecdoche that magnifies his semiotic approach. Los Angeles represents every urban landscape, and is represented in turn by key 'sites', the epitome of this chain of signification being perhaps the Bonaventure Hotel;

[A]n amazingly storeyed [sic] architectural symbol of the splintered labyrinth that stretches sixty miles around it. Like many other Portman-teaus which dot the eyes of urban citadels in New York, San Francisco, Atlanta and Detroit, the Bonaventure has become a concentrate representation of the restructured spatiality of the late capitalist city: fragmented and fragmenting; homogeneous and homogenizing, divertingly packaged yet curiously incomprehensible, seemingly open in presenting itself to view but constantly pressing to enclose, to compartmentalize, to circumscribe, to incarcerate. Everything imaginable appears to be available in this micro-urb but real places are difficult to find, its spaces confuse an effective cognitive mapping.... [1989; pp 243-4].

The building represents not only Los Angeles as a whole;

[i]n so many ways, its architecture recapitulates and reflects the sprawling manufactured spaces of Los Angeles....The Bonaventure both simulates the restructured landscape of Los Angeles and is simultaneously simulated by it.

but significantly Soja's epistemological position also;

From this interpretative interplay of micro- and macro-simulations there emerges an alternative way of looking critically at the human geography of contemporary Los Angeles, of seeing it as a mesocosm of postmodernity [ibid].

And so we arrive back at the first assumption, that alternative ways of looking at Los Angeles provide a key to understanding what we see. The key theme to extract is the tendency to conflate a fragmented and eclectic understanding of Los Angeles (and by extension "every urban landscape") with a normative description of the experience of Los Angeles (and by extension, naturally, every urban landscape) as fragmented, eclectic and, it would seem, confused.

The tangled helix retains credibility by relying on the 'confusion of a little stimulus' enveloping the reader. As Marden has argued at length;

⁷ Christensen makes these comments in relation to her argument that, "phenomenology constitutes a rejection of positivism, but not a rejection of a positive, that is to say empirical, science." [1982; p 43, see above p 13].

Soja's postmodernism represents the 'worst of times' with respect to realigning geography with the recent advances in social theory. Like most of the literature on deconstruction and postmodernism, it leads us into a realm of provocative obscurity with an almost Messianic zeal because it promises the enlightenment of an alternative logic divorced from the tired old axioms of Marxist discourse. In particular, the language gives the impression of profundity and surety of argument. Hence, any confusions of the text is more often than not seen as reflecting the reader's shortcomings, rather than the abstruse narrative, a trait that characterises much of the literature on deconstruction and illuminates one of its major paradoxes: how does one 'deconstruct' deconstruction? [Marden, 1992; p 48]

However, I hope that the trap set by Borges can unravel this labyrith, offering an anchor by which to deconstruct Soja's position. The LA-leph, like the Aleph, simply reveals the desire of the author to find the world as he or she conceives it. While in 1979 Soja was able to assert that, "[t]his growing spatial consciousness and its rootedness in changing material conditions [...] does not spring from the thin air of isolated intellectual contemplation" [Soja and Hadjimichalis, 1979] this claim becomes less sustainable as his interests move from dialectics into 'trialectics'. When the 'LA-leph' comes to form the core of his empiricism we have come full circle and as Borges warned, the thin, perhaps 'rarefied', air of isolated intellectual contemplation seems to have gone to his head. Behind the 'trialectics' of a supposedly fragmented common experience of the city, the fragmented architecture of the Bonaventure Hotel, and a fragmented understanding, stands nothing but Soja's own ontological position.

It is this theoretical outlook that is mirrored in the seductively shimmering mirrored-glass of the Bonaventure Hotel as much as the panorama of the city beyond, for as the 'mirror-phobe' Borges warns us, whenever anyone invokes an Aleph, the only content to be found is the theoretical position of the author (in my case as much as Daneri's). So, while I agree with the concerns of Moss (see above pages 21 to 24, 30 and 37), I feel she is jousting at windmills to take on either the conception of 'thirdspace', the vacuousness of Soja's empirical demonstrations or his process of constructing authority in text as separate symptoms – for this ability of the helix to repair and retangle itself makes it a hydra of an adversary. Rather it is necessary to find what is essential to every head of the hydra, and Soja's misguided appeal to the Aleph directs us to his ontological reworkings.

This chapter uncovers two questions that are central to this first section. Firstly, why does Soja's ontological position lead to such circular confusion when tackling the experience of space, and secondly, what prompts him to confront this experiential realm in the first place?

2.3 Towards a spatialized ontology?

It is chapter 5 of *Postmodern Geographies*, "Reassertions: Towards a Spatialized ontology", that forms the key-stone of Soja's argument, the culmination of the theoretical re-workings of marxist geography and the bridging link into the later more empirical section. As our understanding of the Alephic vision predicts, it is in this section dealing with his ontological position that we uncover the kernel of his argument and find the basis for its unravelling. For just as in Borges, desires provoked experience and dreams conjured a reality, so here epistemological and ontological positions become equally confused and self-reinforcing.

Reading Soja's work, and indeed that of many of the 'respatialization theorists', it is apparent that the word 'space' itself is often exchanged for the more illusive 'spatiality'. Soja makes a late justification for this substitution in a later paper, *Postmodern Geographies and the Critique of Historicism* [Soja, 1993]. In a section entitled 'Retheorizing Spatiality' he writes:

I have defined spatiality as part of an encompassing trialectic of relationships that together form the existential macroparameters of human life. This ontological assumption is not as bold or as idiosyncratic as it might at first sound, for it is little more than an extension and a social specification of the conventional ontological triad of the physical world; space, time and matter. For matter I substitute social being and then socially activate the existential trialectic into a triple ontology of Becoming, defined as the consciousness-shaping social construction (or "making" if you prefer) of history (as historicity), geography (as spatiality), and society (as sociality) [ibid.; p 126].

It is clear that for Soja this trialectic is the basis not only for his understanding of society but also the relationship between society and the phenomenal world. "All generalizations about human phenomena", he states, "from ontological statements on the condition of being to theoretical statements about the contingencies of the empirical world, revolve around these specifying and contextualizing fields of expression" [Soja, 1993; p114]. However, his 'socially activated' trialectic is more than simply an extension of the 'conventional ontological triad of the physical world'. While 'space' and 'time' undergo transformation to become the more socially animated 'spatiality' and 'historicity', 'matter' is lost entirely, and without justification, in favour of 'social being', 'sociality' and 'society'. This is a critical theoretical step which underpins Soja's inability, identified above, to deal in any satisfactory way with the concrete experience of the city, despite his declaration that his trialectic aids understanding of the "practical consciousness of the contemporary". For as he abandons 'matter' from his 'macroparameters of human life' he also abandons the possibility of any materialistic conception of space as a foundation of his ontology [Soja, 1993; p 114, drawing on Berman, 1982].

And yet, drawing on Poulantzas and Lefebvre, he sees his project as the redirection of Marxist analysis "towards a materialistic interpretation of space and time" [Soja, 1989; p 118 emphasis added]. Spatial and temporal matrices, the 'material groundedness [of capitalism]', "establish a primal material framework, the real substratum of social life...[and]...assign to space what had so assertively been attached to time in the Marxist tradition: a fundamental materiality" [ibid.; p 119]. Soja resolves this paradox, therefore, by moving from a materialistic conception of space to a materialistic conception of spatiality, which in seeking social animation has dropped the key ingredient of any 'materialistic' philosophy: matter⁸.

The justification for this reorientation lies in the "more meta-theoretical project" which accompanies the reworking of Marxist analysis by Poulantzas, Lefebvre and others: "a search for an appropriate ontological and epistemological location for spatiality, an active 'place' for space in a Western philosophical tradition that had rigidly separated time from space and intrinsically prioritized temporality to the point of expunging the ontological and epistemological significance of spatiality" [ibid.]. This ontological project forms the core of Soja's argument, for the reassertion of space in social theory "cannot be accomplished simply by appending spatial highlights to inherited critical perspectives" but must begin at the level of ontology, with the resolution of a double-bind he identifies at the core of the Western philosophical tradition, allowing for the restoration of a "meaningful existential spatiality of being and human consciousness, [the composition of] a social ontology in which space matters from the very beginning" [ibid.; pp 6-7 and12].

His double-bind revolves around the tension between two 'misplacings' of spatiality, what he terms the "physical-mental dualism". 'Spatiality', the key term in his ontological trialectic, can be distinguished from the preceding conceptions of 'space' as the "physical space of material nature" and the "mental space of cognition and representation" because of its key attribute of being socially produced. This manoeuvre "shatters the traditional dualism", recognising that both "spaces of nature and cognition" are incorporated and transformed in the social production of spatiality, "setting important limits to the independent theorizations of physical and mental space"

⁸ The difficulties with aggregating 'materialistic philosophies' (thinking, for example, of historical materialism) are multiple, and in some sense shadow the problem of the approach to space to which I shall later return.

[p 120]. Despite its appearance of objectivity and separation, nature, like spatiality, must be seen as socially produced and reproduced, as must cognitive or mental space, which is always wrapped in the complex and diverse representations of human perception and cognition [p 121].

The misleading conception of an independent physical and mental space rests for Soja on two illusions. The first, the illusion of opaqueness, can be thought of as a form of myopia; "the shortsighted interpretations of spatiality which focus on immediate surface appearances without being able to see beyond them. Spatiality is accordingly interpreted and theorized as a collection of things, as substantive appearances which may ultimately be linked to social causation but are knowable only as things-in-themselves" [p 122]. Soja traces this legacy through Hume, Locke and Comte's emphasis on sensory-based perception; Cartesian mathematical-geometric abstractions; the mechanical materialism of a post-Newtonian social physics to Bergson's "extraordinary devaluation and subordination of space (relative to time)" [pp 122-3], in all of which "spatiality is reduced to physical objects and forms, and naturalized back to a first nature so as to become susceptible to prevailing scientific explanation in the form of empirical regularities (largely in the spatial co-variation of phenomenal appearances" [ibid.]. The weakness of such an approach, Soja argues, is that when description is substituted for explanation, such a narrow empirical and positivist outlook is found to be socially inert, and incapable of explanatory power, ignoring as it does the social production of space and the consequent contextual importance of politics, power and ideology [pp 123-4].

The second illusion is conversely a form of hypermetropia – extreme far-sightedness. The illusion of transparency "sees right through the concrete spatiality of social life by projecting its production into an intuitive realm of purposeful idealism and immaterialized reflexive thought...[in which]...[s]patiality is reduced to a mental construct alone, a way of thinking, an ideational process in which the 'image' of reality takes epistemological precedence over the tangible substance and appearance of the real world" [pp 124-5]. His blame for this philosophical wrong-turn runs back to Plato, 'boosted' by Leibniz's ideas on the relativism of space, "its existence as idea more than thing", but is pinned mostly onto Kant's transcendental spatial idealism, culpable for a "vision of human geography ... in which the organisation of space is projected from a mental ordering of phenomena, either intuitively given, or relativized into many different ways of thinking" [ibid.].

Soja resolves these two defects of academic sight with his conversion of space into socially activated spatiality that subsumes, transforms and supersedes the traditional dualism of physical and mental space. The result is "a materialist interpretation of spatiality" whose generative source is the recognition that "spatiality is socially produced and, like society itself, exists in both substantive forms (concrete spatialities) and as a set of relations between individuals and groups, an 'embodiment' and medium of social life itself" [p120]. It is useful to clarify this complex theoretical development graphically, see figure 2.1.

The core of Soja's 'Ontological trialectic', spatiality, is the product of another trialectic, that I have called the 'Socio-spatial trialectic' and it is here that the problematic dualism between physical and mental conceptions of space is socially animated and thus resolved. Soja's argument develops from 'bottom up', beginning with yet another inversion (too complex to represent!), the re-working of the space/ time/matter triad into space/time/society which forms the basis of his essentially epistemological trialectic (the level of understanding of socio-spatial relationships) which in turn feeds his ontological trialectic, the level of becoming.

This edifice lasts, but as we have seen before, only as long as the logic is not reversed and we do not return to question the foundation. However, this is exactly what Soja invites us to do by his appeals to experience, examined in the preceding section. He opens this weakness in the same context as he develops this theoretical structure, with continued assertions that theory must be grounded in a concrete material reality, with "empirical demonstration, the application of a materialist interpretation of spatiality to contemporary 'real world' issues and politics" being "a promising alternative path" [ibid.; p 131]. He offers his own work on the urban restructuring of Los Angeles as a paradigmatic example, but as we have seen, that is to acknowledge only one aspect of his approach to the urban context. The socially based concept of spatiality may provide a successful framework for a reworking of the essentially economistic aspects of Marxian analysis, as much of Soja's early work, as well as the work of Lefebvre, Harvey, Castells and others (to be reviewed in section 2) has shown. It feeds a contextual understanding of space; for example spatial inequalities of the market, of capitalism of the labour market. However, as Soja makes his more 'experiential' forays, his ontological trialectic is left compromised.





The reason that Soja, in discussing the experience of sites such as the Bonaventure Hotel, has to resort to normative statements and synechdotal hyperbole is that in over-turning the "conventional ontological triad" of space/time/and matter in favour of a more socially sensitive conception, with the consequent reworking of physical and mental conceptions of space, he has lost the ability to theorise very literal concrete material forms (such as the Bonaventure) as the physical component 'matter' has become isolated from his ontological system. In making the trade of 'society' for 'matter' he has exchanged the sensitivity of one tool for another, and then is unable to recapture that precision when it is needed.

Space, metamorphosed into spatiality, is a 'second nature' concept in Lefebvre's schema, one that is socially defined, but Soja's system has lost the ability to reconnect this to the 'first nature' of matter. His appeals to the 'context of material life' fall into a grey area around the level of experience therefore [see figure 2.1] as it is unclear whether or not this links back through first nature concepts to the ostracised 'matter'. It seems, therefore, that in the resolution of the two illusions of spatiality, Soja has firmly rejected the material illusion while being caught in the illusion of transparency himself, of which he himself says, "[s]ocial space folds into mental space, into diaphanous concepts of spatiality which all too often take us away from materialized social realities" [ibid.; p 125].

'Materialized social realities' for Soja are the "concreteness of capitalist spatial practices" [p 120] and not the physical spaces (as opposed to his preferred 'material spatialities') of urban experience. He therefore makes a conceptual separation between the related organisation of people in space (analagous to his less formal 'spatial practices') and the organisation of space itself that lies at the core of Hillier's approach [see Hillier and Hanson, 1984 pp 26-27, and below, chapter 5 for a more detailed discussion]. In fact, the only place given to physical space in his discussion is for the effects of 'friction of distance', apparently the only contribution of pre-Lefebvrian Geography that Soja can call to mind. "Physical and biological processes", he states, "affect society no matter how much they are socially mediated, and social life is never free of such restrictive impingements as the physical friction of distance" [pp 120-21], and later, "[e]xistence means having to deal with the friction of distance whether it be on the level of the 'primal setting' or in the dull routines of everyday life. A distance-ordered space-time patterning thus pervades the existential setting of human interaction and cannot be ignored in theory construction" [p 149]. This despite the fact that he faults modern Geography's neo-Kantian heritage of "narrow appeals to the ubiquitous friction of distance" [p 51], leaving the spatial

organisation of society, "a deadened product of the ordering discipline of the friction of distance" [p 124].

There is no substantive place for physical space within Soja's theoretical structure, yet, "[p]hysical and biological processes affect society no matter how much they are socially mediated". He continues, "[t]he impress of this 'first nature' is not naively and independently given, however, for its social impact always passes through a 'second nature' that arises from the organised and cumulative application of human labour and knowledge" [p 121]. The question remains, how is this connection back to first nature to be made once the closed loop of the space, time and society triad is firmly anchored to the 'second nature' concept of spatiality? Until this link is re-established Soja's appeals to spatial experience cannot lie within his declared metatheoretical project of a new spatial ontology.

The second section of this thesis will attempt to rebuild this project, recapturing the explanatory potential of the dismissed space/time/matter triad, while retaining the undisputed gains of Soja's social animation. It will address the possibility of a socially active conception of physical space, with an associated empirical possibility, that is neither reductionist, nor concedes explanatory power to analytical and descriptive precision.

First, however, I wish to turn to less formally 'academic' representations of contemporary space, to build upon the notion of a 'structure of feeling'. Here the focus will be not only on what is said of cities and spaces, but also the related style of writing, recalling Thrift's clarification of a 'structure of feeling' as a change in style and content.

Chapter 3 Delirious cities – ecstatic space

This chapter will introduce the second theme of this section. The first was the idea of the "Alephic Vision" and highlighted the buried understandings of space that underlie a particular view of the experience of cities. The second theme concerns the nature of these views, and examines contemporary characterisations of cities. Once again, my intention is to make inroads into this vast subject area by focusing on one particular example. Just as Soja's work was presented above as representative of a theoretical position towards contemporary cities and spatial concerns, so here I wish to examine the *Cities on the Move* exhibition (Hayward Gallery, London, 1999) as symptomatic of current attitudes to urbanism which seem increasingly pandemic, bleeding between popular and academic discourses.

I am aware that this approach may seem hypocritical in view of the fact that one of my principal concerns with much recent writing on cities is the reliance upon a synechdotal narrowing around key exemplars (perhaps the most obvious example being the Bonaventure Hotel and Ridley Scott's *Bladerunner*). However, in the following chapter I will make the case for these two examples being representative of what I suggested above was a new 'structure of feeling' towards space, by drawing links with a wide field of theoretical and popular literature on cities, as well as developing the linkages between the two themes of this first section.

3.1 Cities on the Move; an archaeology of ideas

Cities on the Move was an exhibition that toured Europe and North America between 1997 and 2000¹. Ostensibly it examined the rapid urban and social changes of Asian cities over the preceding decade through the work of artists and architects working in the region. However, I

¹ Following my visit to the London exhibition I became involved in a discussion forum about the show run by the curatorial staff at the Hayward Gallery. This led, through a series of coincidences mainly, to my being invited to participate in a previously unplanned date on the itinerary in Bangkok, the only Asian city on the tour. I traveled to Bangkok in October of 1999 and had the opportunity of speaking with the curatorial staff there as well as participating in the exhibition through a photographic installation and discussion forum that aimed to address directly with visitors and other exhibitors the images of Asian Cities, and by extension cities generally, presented both by the *Cities on the Move* exhibition and more widely.

think it is a useful indicator of a more widespread sentiment towards cities for a number of reasons.

Firstly, a core theme lying behind the presentation of life in Asian cities was that of globalization. In the introduction to the comprehensive catalogue (written for the Bordeaux manifestation of the show) the curators Hanru and Obrist present a well-argued case for linking global economic changes with urban and social changes in Asia [Hanru and Obrist, 1997]. A central aspect of that argument was the pressure imposed on Asian cities by rapid modernization following a perceived 'western' capitalist model and the loss of a distinctive society within the growing networks of capital. Although the specific focus was Asian cities, implicitly there lay within a critique of related global processes of capitalism and urbanization.

Secondly, the exhibition was inevitably not about cities so much as ideas about, and approaches to, cities. The focus of the following discussion will be precisely upon these buried ideas. What is revealing, therefore, is to note the systems of reference of curators and artists alike, even their biographic details. I would suggest that what we see is a profound and sophisticated engagement with a discourse on cities, architecture, social and economic theory and semiotics which is rooted in contemporary 'western' debates. There is, of course, nothing wrong with that, but it draws attention to the globalization of ideas as much as any other form of social or cultural production. Again, this reinforces my proposition that there is a new 'structure of feeling' towards cities and space, indeed one that transcends cultural and global boundaries².

It must be born in mind, therefore, that *Cities on the Move* represented Asian cities through an optic that is equally applied to European and American cities (perhaps the fashionable 'global cities' would be apposite). Furthermore, this is not an 'un-tinted' optic, but one that conforms to the alephic distortions encountered in the previous chapter. So, for example, we find the pandemic influence of key figures such as Baudrillard, and particularly of architect and urban theorist Rem Koolhaas, while in one venue of the Bangkok exhibition, entire dialogues with Peter Cook and Cedric Price were reproduced and appeared to receive the same solemn reverence from students that has been my experience in London. Indeed, the biographies of the artists reveal the diffusion pathways of these ideas. The typical formula appears to be either, "born in Bangkok,

² In making this argument I have drawn upon a collection of faxed proposals from artists hoping to include work in the original exhibition, an extraordinary and extensive primary source too detailed to discuss at length, for the access to which I am indebted to Fiona Bradley of the Hayward Gallery, London.

lives and works in Bangkok and New York", or, "Lives and works in Bangkok; after studying at ...in USA/ London/ Berlin"³.

I wish therefore to turn to these buried ideas which seem to have such a strong influence upon the more populist views of cities portrayed in the *Cities on the Move* exhibition.

The Koolhaasian City

Despite their academic genealogy, the texts that accompanied *Cities on the Move* (in both its London and Bangkok incarnations) make no pretence of 'academic status' in the sense of the customary rigorous attribution of sources and ideas. However, there is one clear source of reference for many of the themes about the city that are advanced. Rem Koolhaas was involved with Ole Scheeren (architect and prime mover behind the Bangkok show) as the designer of the exhibition space in the Hayward Gallery, London, and is interviewed by one of the overall curators of the show, Hans-Ulrich Obrist, in the London catalogue. Scheeren was then responsible for the information that accompanied the following exhibition in Bangkok, essentially a rewriting of the more extensive exhibition catalogues which accompanied the earlier shows, particularly at the 1997 Vienna Secession and at the Musee d'art Contemporain, Bordeaux [here referred to as Hanru and Obrist, 1997].

This seeming reliance on Koolhaas is interesting for two reasons. Firstly, through his discussions with the curator and his actual physical involvement with the architecture of the gallery space, he opens a parallel channel towards understanding the view of cities presented by the exhibition, a reinforcing dialogue to the contents of the exhibits themselves. Secondly, through a deeper archaeology into his previous writings about cities, we can perhaps use Koolhaas as a bridge to link contemporary popular understandings of the city, such as *Cities on the Move*, with academic debates and a genealogy of ideas traced from Koolhaas back to Soja, and then beyond.

The starting point for this chain is the London exhibition. Rem Koolhaas was invited by the curators to design the exhibition space and used the opportunity as a way of adding reflexivity to the exhibition, introducing a dialogue between exhibition and exhibited, subject and object that is

³ My own experience at the About Café in Bangkok (one of several venues for the exhibition spread around the city) was that almost without exception the curators and exhibitors that I met had worked or studied in either the UK or USA and were happy to discuss the ideas that now form the basis of this thesis. Indeed, one of the principal curators of that

a familiar theme from the earlier analysis of Soja (and will be returned to in the following chapter). He explains; "Here, Ole Scheeren and I have tried first to accumulate previous Hayward designs, then to reassemble them, almost as a form of urbanism" [Rem Koolhaas, quoted in London Catalogue, Hayward Gallery, 1999; p 16]. Drawing a parallel with the German artist Schwitters and his urbanistic installation 'Merzbau', "an accumulation of (urban) debris", Koolhaas and Scheeren re-used the "architecture" of the previous Hayward exhibitions, *Patrick Caulfield* and Zaha Hadid's structures for *Addressing the Century: 100 Years of Art and Fashion*, to make "a kind of intimate streetscape" [ibid.; p 17]. A first step to interrogating Koolhaas's ideas on the city, and therefore those of the exhibition more generally, is to examine the 'pseudocity' of the exhibition structure itself.

Merzbau as City

The reference to Schwitter's Merzbau is revealing of Koolhaas and Schereen's understanding of the physical structure of cities. Just as they reused the 'ready-made forms' of earlier exhibitions, Schwitters (Hanover 1887-1948) used the then avant-garde medium of collage, with its "emphasis on ready-made forms that are largely the products of urban culture (fragments of newsprint, photographic imagery, urban debris)" to break with the orthodox easel-based artistic tradition [Dietrich, 1993; p 3]. His was a language of "brutal fragmentation and violence" which was expressed as much in his collages as in his texts, whose "rhetorical strategies aim[ed] at chaos by scrambling linguistic codes" [ibid; pp 18 and 73]. He coined the term 'Merz' as a description of his collage process but applied it to all of his work; the production of images, graphics, texts, musical composition and architecture. It is interesting that in all his work he seems to be concerned more with spatial arrangement than pictoral representation. Pieces, such as Merz 19 and Merz 169, Formen in Raum (Forms in Space) [see figure 3.1] suggest this interest, while the very different and more representational Aquarelle series also depicts a world in which "the spatial and positional relationships have gone awry" [ibid.; p 88]. Dietrich argues that Aquarelle 1, Das Herz geht vom Zucker zum Kaffee explores "his new-found understanding of a world set in motion by technology" and cites Schwitters himself as arguing that this picture represented a microcosm of a larger world in motion.

gallery space was on an exchange program from the Witney Museum in New York (In fact she was herself Japanese Canadian, lived and worked in New York and Bangkok, educated New York, London...).



Figure 3.1 Kurt Schwitters, *Merz 169, Formen im Raum* [Forms in Space], 1920. Collage, 18x14.3 cm Kunstsammlung Nordrhein-Westfalen, Düssseldorf [Source: Dietrich, 1993].



Figure 3.2 Kurt Schwitters, *Merzbau*, [Merzbuilding], general view with Blaues Fenster (Blue Window), c. 1930, photograph destroyed [Source: Dietrich, 1993].

The key themes of the collage process, an aesthetic of fragmentation and violence, the impact of technologies of acceleration and a collapsing of spatial scales producing worlds within worlds show strong parallels with the ideas of Soja and Koolhaas⁴. Schwitters united these strands "into an all-encompassing new work of art: the *Merzbau*, an assemblage always expanding towards architecture" [ibid.; p 3].

There are important features of Schwitters *Merzbau* that direct our understanding of both Koolhaas's approach and the *Cities* exhibition. There are many physical resemblances between this 'architectural installation' and the *Cities* exhibition [see figure 3.2]. Like the *Cities on the Move* 'set', Schwitter's *Merzbau* took over the rooms of his studio and house to become an "all-encompassing, ever-expanding collage environment". It comprised two referential parts; an interior of collage material and an outer 'shell' of architectural forms punctuated by glass windows or "grottoes", as he referred to them, to allow a view to the displayed objects in the interior. Indeed, these are contrasted directly by Dietrich with museum display cases [ibid., p 164].

But both Koolhaas' and Schwitters' designs are more than simply a display case. As the curators Hanru and Obrist affirm, Koolhaas and his assistant Scheeren have "[thought] the exhibition through conceptually and thematically...to make an exhibition design which is a complex, dynamic system based on use, *a microcosm of the modern city*" [Hou Hanru and Hans-Ulrich Obrist, quoted in London catalogue, Hayward Gallery, 1999; p 15, emphasis added]. Mohsen Mostafevi concords with this reading - "The exhibition is an analogous city made anew with the accumulated traces of economic and cultural debris; of what has been and what is yet to come" – as does Susan Ferleger-Brades, Director of the Hayward, who argues, "they have created an 'event city' for the exhibition: a shifting cityscape of urban possibility" [ibid.; p 4].

This idea of cities within cities is interesting for several reasons. Firstly, it is reminiscent of techniques uncovered in the writing of Soja, particularly the synechdotal reference to idealised

⁴ As well as others, in particular Castells, Harvey and Jameson as will be discussed in subsequent chapters. In this section particular attention is paid to Koolhaas' *Delirious New York* because it is mentioned directly in the exhibition literature. However, the conviction of a chaotic and unintelligible urban experience pervades much of his written work and teaching. His course at the Harvard Graduate School of Design, the now famous 'Project on the City', was founded upon the realization of 'a double crisis'; "the academic and professional bewilderment with urban conditions that seem to defy traditional description" and the failure of design professionals to cope with these changes [Harvard Graduate School of Design website]. These ideas are developed in publications from the course, including volumes entitled *The Harvard guide to Shopping* and *Mutations* [both Koolhaas et al, 2001].

urban forms such as the Bonaventure Hotel as referents for an assumed wider reality. Secondly, in making this play between contrivance and reality, designed exhibition space and urban space, Koolhaas and Scheeren open softer ground on which to search for the buried archaeology of implicit ideas and assumptions about the city that inevitably permeate the exhibition, principally Koolhaas's own writings which seem to underpin not only many of the exhibited texts but also the form of the exhibition space as synechdotal referent for all that is exhibited.

The 'conceptual and thematic' approach to the design of the exhibition refers directly to these buried ideas. In designing an experiential metaphor for the Asian city, Koolhaas and Scheeren bring their concepts of what a city is to the very surface, and as this fantasy city is juxtaposed with the presentation (by other artists and architects, Koolhaas included) of the experience of 'real' Asian cities, we should be reminded also of the lessons learned from Soja when similar reflexive parallels are made. The analysis of Soja's work above suggested that we should be suspicious of these synecdotal metaphors which can relate more to the authors' specific understandings of an [urban] situation than to the supposed 'reality' which the metaphor describes. Here again, I suggest, we see the cyclical self-referential processes of Borges' Aleph taking hold, although in a slightly different form.

What is critical in this section that tries to draw parallels between academic and more populist understandings of the city, is that we see in the London catalogue a broad spectrum of critics in concordance with their reading of the city – Ferleger Brades, the gallery director, Hou Hanru and Hans-Ulrich Obrist, international curators living and working around the globe, Mohsen Mostafavi, Chairman of the Architectural Association in London. Although one would expect all these contributors to be 'on message', nonetheless, their views concord with a more general view of cities, evident in Soja's work as well as other academic and popular sources to be examined in following chapter; that cities are frantic and chaotic, unintelligible places. As with the analysis of Soja's work, we need to find the basis of Koolhaas' idea of the urban before we can begin to understand properly his contribution to this exhibition and my overall argument.

Merzbau as emotional response

As an introduction to Koolhaas' ideas, I wish to argue that the significance of Koolhaas' reference to the *Merzbau* goes far beyond a simple parallel with a physical and procedural resemblance between the collage and architectural forms. Schwitters and Koolhaas share a similar

attitude towards their structures and aspirations for their impact on those who experience them. The two elements of *Merzbau* and equally the *Cities* exhibition (the architectural structure and the exhibited material) were seen to be in continuous dialogue and the external form responded and grew in response to additions to the core. Schwitters described the *Merzbau* as "dynamic" and "unfinished out of principle", remaining "forever in flux" [Dietrich, 1993; pp 166 and 198]. *Merzbau* is not, therefore, simply a sculptural representation. It is also "a model for societal reorganization...Merz [referring to the whole of his oeuvre and method] does not want to form, Merz wants to transform" [ibid.; p 200].

The work of both Schwitters and Koolhaas is intended actively to influence the visitor. The effect of the experience of the *Merzbau* and the transformation it induced is recorded by one visitor to the studio, Rudolf Jahns. He describes entering the cave-like structure and the path leading to the centre which, "was very narrow, since new sections and constructions, together with the already existing Merz-reliefs and caves, grew into the empty space". However, on reaching the centre he, "was overcome by a sense of *rapture*" [ibid.; p 204, emphasis added].

Dietrich argues that Schwitters here reveals himself a follower of Nietzsche - the *Merzbau* a controlled environment in which the Nietzschean Abyss can be contemplated, even conquered. I wish to suggest that this notion of "rapture" is also critical in the work of Koolhaas where it emerges as the notion of 'ecstasy'. Both rapture and ecstasy refer to a complex emotion, incorporating a disturbing undertone, captured by *Merzbau's* alternative title, *The Cathedral of Erotic Misery*, which echoes the tensions between freedom and destruction in Nietzche's term *rausch*. I will argue below that the notion of 'ecstasy' is central to the contemporary 'structure of feeling' towards space.

Our archaeology into the work of Koolhaas must be sensitive to these two strands therefore – the relationship between the physical structure and character of the city and the emotional response that the city prompts in the inhabitant or critic.

3.2 Delirious New York

Koolhaas' *Delirious New York*, is subtitled, "A Retroactive Manifesto for Manhattan", and I suggest that we can look at his design for the *Cities on the Move* exhibition in the same way -a retroactive blueprint for the building of Asian cities.

Unlike Soja, Koolhaas explicitly points out that, like all manifestos, his is grounded in a personal and particular understanding of the city. He begins with a quotation from Giambattista Vico's *Principles of a New Science*:

Philosophers and philologists should be concerned in the first place with poetic metaphysics; that is, the science that looks for proof not in the external world, but in the very modifications of the mind that mediates on it. Since the world of nations is made by men, it is inside their minds that its principles should be sought [Quoted in Koolhaas, 1994; p 9].

As if to emphasise the solipsism of his approach, he adds a quotation from Dostoyevski; "Why do we have a mind if not to get our way?" [ibid.]. However, *Delirious New York* is as much an interpretation of the physical reality of Manhattan as a theoretical project. He states that, "The fatal weakness of manifestos is their inherent lack of evidence", while for Manhattan the situation is reversed; "it [Manhattan] is a mountain range of evidence without Manifesto" [ibid.]. Consequently, Koolhaas parallels his approach to that of a ghost-writer ("I was Manhattan's ghost-writer") whose role it is to discover patterns, express unarticulated intentions and to record and remember significant events [ibid.; p 11]. The book is, therefore,

an interpretation of that Manhattan which gives its seemingly discontinuous – even irreconcilable – episodes a degree of consistency and coherence, an interpretation that intends to establish Manhattan as the product of an unformulated theory, *Manhattanism*, whose program – to exist in a world totally fabricated by man, i.e., to live *inside* fantasy – was so ambitious that to be realized, it could never be openly stated [ibid.; p10, sic].

The book is a blueprint, therefore, "that describes an ideal state that can only be approximated...a *theoretical* Manhattan, a *Manhattan as conjecture*, of which the present city is the compromised and imperfect realization" [ibid.; p 11, sic].

From the outset, therefore, there is a complex interplay between notions of theory and evidence, fantasy and reality. Perhaps a parallel might be drawn with the epistemological dualism between

Baconian and Cartesian methodologies. While Soja makes claims to be an empiricist, beginning with his supposedly value-free observations of L.A. and reading off from them a theory of reality, Koolhaas' approach is more complex. He seems content to let the ambiguities of a bleeding of theory and evidence take their course, and even sees this as the very essence of his manifesto project. The result is perhaps more robust to criticism than Soja's work, for what we have is an overtly personal understanding of the city which because of its 'retroactive' nature and theoretical intent makes explicit relationships between theorisation and the view of the material city.

It is not a surprise then, given this freedom of approach, that we find a familiar parallel drawn between the structure and subject of the book that mirrors the architectural intent of the *Cities* exhibition. "In terms of structure", Koolhaas argues, "this book is a simulacrum of Manhattan's Grid: a collection of blocks whose proximity and juxtaposition reinforce their separate meanings" [ibid.; p 11]⁵. However, unlike Soja's deployment of a similar technique, Koolhaas is able to avoid straddling the two epistemological horses of objectivity and subjectivity by renouncing the academic constraints of justification and judicious argument, thereby credibly extending his argument further. It is for this reason, perhaps, that such polemics are so persuasive and generate such committed following, *Delirious New York* being no exception.

Koolhaas' view of the city is premised on its 'legibility' and, therefore, decipherability. Manhattan is "the 20th century's Rosetta stone" [ibid.; p 9] – by implication a text whose decoding provides a cipher with which to approach all similar 20th century cities [texts]. This textual interpretation is particularly evident in the treatment of the tower - "In 50 years the tower has accumulated the meanings of: catalyst of consciousness, symbol of technological progress, marker of pleasure zones, subversive short-circuiter of convention and finally *self-contained universe*"[sic] - but it is apparent and emphasised throughout; "This book is an interpretation of that Manhattan..." [ibid.; pp 9-10]. The method then is similar to Soja's approach to the Bonaventure; an artefact or building is taken as a singular referent of the whole from which it comes, a process of synecdoche. In Koolhaas' words; "[f]rom all the episodes of Manhattan's urbanism this book isolates only those moments where the blueprint is most visible and most convincing" [ibid.; p 11]. From these interpretative moments a theory of Manhattanism, and so of urbanism, is constructed.

⁵ The same artifice is used in Soja's work, with parallels drawn between the text and L.A. through the intermediary of Borges and the Aleph, and furthermore (according to Soja) in Lefebvre's work, which can be read "spatially" (see Soja, 1996; pp 8-9 and above p 34 on reading Lefebrvre's *Production of Space*). In the following chapter this recurrent theme will be encountered again, and some account given of its significance.

While his approach is to "discover patterns" in the surfacing of Manhattan's blueprint at the level of the legible in these particular sites, his aim is to access the "unarticulated intentions" behind key events of Manhattan's development. He has a particular interpretative bent however, which I would suggest is quite erotic. The basic interpretative structure of the book is that Manhattan is paradigmatic of a culture of congestion, which in turn, "consistently inspire[s] in its *beholders ecstasy about architecture*" [ibid.; p 10, sic].

Here we find the union of the two themes identified earlier in relation to the *Cities on the Move* exhibition and the Merzbau: the physical congestion of the urban form producing a rapturous or ecstatic response. The notion of 'ecstasy' is perhaps a deceptively complex one. Its immediate connotations are with joy and pleasure, perhaps in some degree erotic, even sexual, but there exists also a polarized reading that contains a more sinister element. It is often used to imply a subtext of danger or death and is chosen to make this juxtaposition ("an ecstasy of fumbling" in Owen's famous *Dulce et Decorum est*). The roots of this double meaning lie in the word's Greek origins; ecstasis means literally "being out of normal rational state", used in the sense of 'to drive a person out of his wits', forming the basis for concepts of 'insanity' and 'bewilderment'. However, later associations are made with the idea of the 'withdrawal of the soul from the body', coming together with the classical meanings to give the current complex significance of 'ecstasy'. Ecstasy is "a state of being 'beside oneself" related to frenzy, stupor, anxiety, astonishment, fear and passion. However, it is also used by early writers to refer to "all morbid states characterized by unconsciousness" such as trance and catalepsy and so becomes used to describe a state in which "the mind, absorbed in a dominant idea, becomes insensible to surrounding objects". It is therefore associated with the idea of 'rapture' in which the body becomes "incapable of sensation" while the mind is "engrossed to the exclusion of thought" [Oxford English Dictionary]. Both ideas are clearly related to the experience of the psychasthenic.

There is a link, then, between the idea of 'ecstasy' as used by Koolhaas and 'rapture' by Schwitters, with its Nietzchean associations, and the supposed experience of contemporary urban and architectural environments. All these themes converge in Koolhaas' vision of 'ecstasy' which comes to define, I will argue, his approach to the understanding of the city.

The ecstasy of congestion

Throughout the book there are references to sex, death, denial, subversion and a delight in the macabre which seem to constitute collectively Koolhaas' ecstatic vision of architecture and Manhattanism, indeed urbanism.

The culture of congestion refers as much to the built form of the city, the hyper-density that Koolhaas sees as the 'splendor and misery' of the urban condition (note the echo with Schwitters Cathedral of Erotic Misery), as to the congestion of competing ideas, "Manhattanism's unspoken theory of the simultaneous existence of different programs on a single site..." [Koolhaas, 1994; p 197]. He draws a parallel between the metropolis as a whole and the prototypical theme parks on Coney Island, an "embryonic" and "foetal Manhattan", which becomes a stage for unnatural phenomena, appropriately for an island whose Indian name means "Place Without Shadows" [pp 28 and 30]. There Koolhaas uncovers three theatres, 'The Creation', 'The End of The World' and 'The Circus', each sharing a single cast, "a precise metaphor of life in the metropolis, whose inhabitants are a single cast playing an infinite number of plays" [p 53]. However, the congestion on Coney Island is not only related to the numbers of visitors, but also to conflicting and incompatible views of reality, the normality of the metropolis is expunded through the architectural and technological apparatus of deception that develops a "psycho-mechanical urbanism" at "frenzied pace" [p 62]. Creation and destruction are key pillars in his thesis of Manhattanism, for, "In Manhattan's Culture of Congestion, destruction is another word for preservation", which means that sites in the city become, "not simply the end product of a long pedigree, but even more its sum, the simultaneous existence – on a single location, at a single point in time – of all its 'lost' stages" [p 151, sic]. This congestion of experience and simultaneous activities upon one site is, for Koolhaas the "unforseeable and unsustainable" promise of the skyscraper, which, "in spite of its physical solidity, [the skyscraper] is the great metropolitan destabilizer; it promises perpetual programmatic instability", an "unknowable urbanism" [p 87].

There is a clear resonance with the idea of Soja's Aleph; the concentration of experience in a single synechdotal referent and a shared tendency to hyperbole in his rhetoric on the city. Indeed for Koolhaas, Manhattan itself can be seen as a "congestion of hyperbole" [p 208]. But in Koolhaas this hyperbole is inherent to the quasi-sexual ecstasy that the culture of congestion arouses.

This ecstasy has several different components; sex, death, subversion, denial, repression. At the most superficial level, Koolhaas uses the images of Madelon Vriesendrop as the frontispiece (cover of the original 1978 edition) and chapter plates, each making playful reference to skyscrapers as players in some pseudo Freudian soap opera [see figure 3.3]. It is also Madelon Vriesendrop who is afforded special credit in the acknowledgements; "above all, *Delirious New York* owes a special debt of inspiration and reinforcement to Madelon Vriesendorp" [pp 317].

These overt sexual parallels are mirrored by various textual references; the 'uterine' Radio City Music Hall [p 210], the 'clitoral' Coney Island [p 30], and the 'Ferrissian womb' which produces the same image of Manhattanism regardless of the source of impregnation [p 117]. Although these are of little significance, they do direct the reader to a more attuned reading of the rest of the work.

Manhattan is seen as "an accumulation of possible disasters that never happen", the "leitmotiv of the island's future development", inspired by Otis' dramatic demonstration of the safety mechanism on his elevator which prevents him plunging to his death⁶. Like the elevator, Koolhaas argues, "each technological invention [upon which Manhattan is predicated] is pregnant with a double image: contained in its success is the spectre of its possible failure" [p 27].

Perhaps the best example of this juxtaposition of technological disaster and sexual frisson is the Leap Frog Railway at the Dreamland park on Coney Island, an amusement ride in which two railway carriages heading towards each other pass on the one track by means of bent rails attached to the roof which allow them to pass over and under one another, mimicking, Koolhaas observes, animals copulating. He continues, "Ostensibly the Leap Frog Railway is a prototype to 'reduce the mortality rate due to collisions on railways', but in this apotheosis of the tradition of barely averted disaster Reynolds [the impresario speculator] has blended the mechanics of sex with the imminence of death in a single respectable experience" [p 61].

The sexual tension in Koolhaas' Manhattan derives not just from the inescapable vulnerability of the congested population in the city itself, but their willing complicity. Koolhaas' search for "unarticulated intentions" remains at the level of the consciousness of Manhattanites, who remain either [willfully?] unconscious or in denial. These elements of subversion and denial in his

⁶ This is an urban vision paralleled in Mike Davis' more recent book, The Ecology of Fear: *Los Angeles and the imagined disaster* [1998].



Figure 3.3 Madelon Vriesendorp (Clockwise) *Delirious New York* Cover 1978 and frontispiece 1994, *Aprés l'amour*, p 80, *Flagrant délit*, p 160 *Freud Unlimited*, p 23 [Source: Koolhaas, 1994, page references refer to *Delirious New York*, 1994 edition].

reading of Manhattan seems to be the core of his 'Manhattanism', "doctrine of indefinitely postponed consciousness" [p 110], and the reason for the successful blending of reality and fantasy in Koolhaasian city. He argues,

[t]he subversiveness of the skyscraper's true nature – the ultimate unpredictability of its performance – is inadmissible to its own makers; their campaign to implant the new giants within the grid therefore proceeds in a climate of dissimulation, if not self-imposed unconsciousness. [p 87, see also p 293, on the idea of 'self-imposed' unconsciousness]

Manhattan has, he states, "no time for consciousness" [p 162].

What I wish to emphasise is not a particular sexual interpretation of Koolhaas' Manhattanism, but the ostensibly less controversial statement (which he affirms himself) that he is moved to 'ecstasy' by Manhattan. I believe, however, that this ecstasy carries with it more important implications than would a purely sexual understanding. For in Koolhaas' 'ecstasy' there are elements of a suspension, even suppression, of consciousness through denial, a macabre fascination with the potential of disaster and death, a certain frisson derived from juxtaposition, fragmentation, confusion, layering of polyphonic understandings and dualism of consistent incompatibles, an excitement in the blending of fantasy and [what remains of] reality.

Cities on the Move; resurfacing of ideas

These ingredients of ecstasy inform Koolhaas' view of Manhattan, "the 20th century's Rosetta Stone" [p 9] and appear 20 years later in his understandings of Asian cities presented in *Cities on the Move*.

The London exhibition, at The Hayward Gallery (13th May to 27th June 1999), embedded many of these ideas, in the accompanying catalogue and on the gallery text panels, and in the analogous urban environment constructed as the exhibition space itself. As was shown above, all the contributors to the catalogue appeared to subscribe to the view that this represented a city, and this was also made explicit to visitors; "a form of urbanism in itself, the installation complements and intensifies the exhibition" [introductory panel, *Cities on the Move*, Hayward Gallery].

The exhibition was organised into five sections, dictated mainly by the galleries of the Hayward; Street, Building, Commerce, Protest, Decay. Although there was considerable bleeding between the categories, the main idea of 'Street', "confront[ing] the viewer with the cacophony and visual chaos of the city street" [ibid] became a unifying theme. Throughout the space there was also an "urban wallpaper" as a backdrop, a collage of "urban images, urban realities" designed by Koolhaas and Scheeren as "a background, a grey presence everywhere, kind of overwhelming. That's the whole point of cities [Koolhaas continues], a nightmare in a way. An overkill. Urban overkill inside the Hayward" [Hayward Gallery, 1999; p 17].

A representation of the result is pictured below, photographs taken in four of the differing zones [see figure 3.4]. Perhaps the most interesting image comes from the catalogue and shows Koolhaas [?] working on the model of this pseudo city, surrounded by words which seem to reflect not only Koolhaas' inspiration but also an assumed reality, mappable areas within this constructed blueprint of a city [figure 3.5].

The themes - but most importantly the attitude - identified above re-surface here in Koolhaas' description of his approach to the designing of this analogous city. He says of this designed city, in an interview with the curator Hans-Ulrich Obrist;

RK: "We'll do newness, like airport construction, but we'll also do decay, sex and drugs like in a real city. HUO: You think that at present the exhibition is not sexual enough? RK: Yes, very unsexual. I mean, given the fact that there is an enormous volume of sex tourism and that sex is one of the most important forms of transaction between people in cities, this show as it has been so far is almost oblivious to it. The problem is doing it without exoticism..." [Hayward Gallery, 1999; p 17].

This passage reflects two of the key traits of *Delirious New York*; the use of synecdoche – airport construction as a symbol of all that is new in the Asian urban context – and also the references to decay, "moral and physical" [from the introductory exhibition text], in relation to sexualized understanding. The message that seemed to be promoted by the *Cities on the Move* exhibition, at least in the incarnation I saw in London, was that Asian cities, and perhaps by extension cities more generally, were places of 'chaos', 'confusion', 'cacophony', and inhabitants of these spaces were overwhelmed, bewildered by contradictory messages and fragmented identities, even to a state of schizophrenia.

However, as the examination of Koolhaas' earlier work reveals, the genesis of many of these ideas predates the current urban phenomena of Asian cities, and was conceived in relation to









Figure 3.4

Images from *Cities on the Move*, London, Hayward Gallery. Clockwise from top left: Business, Street, Commerce, Decay [Source: Hayward gallery, author's own photographs].



Figure 3.5 Centre spread from the *Cities on the Move*, catalogue for the London exhibition. Note the characteristic 'and yet' juxtapositions: architecture, decay; airports, blandness; sterility, danger; food, drugs; sex, commerce, shot through with the constant appeals for a 'photo opportunity'. [Source: Catalogue, Hayward Gallery, 1999].

Manhattan. Once again, I believe at root there is an 'Alephic' process at work; Koolhaas' portrayal of cities owes more to his own conviction about what a city is than to any dispassionate engagement with the material conditions of Asian urbanism. Recall the opening quotations in *Delirious New York*;

Since the world of nations [perhaps cities] is made by men, it is inside their minds that its principles should be sought [quoted in Koolhaas, 1994; p 9].

This Koolhaasian juxtaposition of material and constructed realities, perhaps of fantasy and reality, is of particular interest in relation to the *Cities on the Move* exhibition in Bangkok (October 1999). This was an unofficial stop on the otherwise exclusively western tour imagined for the show (Vienna, Bordeaux, New York, Humlebaek (Denmark), London and Helsinki) which was organised by Ole Scheeren, Koolhaas' partner on the design of the London exhibition, and Thomas Nordanstad, an independent curator from Sweden. While the majority of the material for the exhibition had not been shown before in the other shows (the window between the close of the London show and the opening in Helsinki being little more than one month), the essential message of the exhibition remained unchanged. Unlike the London show there was little information accompanying the exhibition itself but the press pack contained statements from the curatorial team, Hanru, Obrist, Schereen and Nordanstad, which reiterate the ideas presented in the earlier exhibitions.

Once again, Hanru and Obrist present a well researched summary which engages in a serious way with the issues of global economic change, social changes and post-colonialism that are all of acute relevance for cities such as Bangkok. However, as their text begins to deal with the material and experiential aspects of the city we are presented with a re-emergence of many of the Koolhaasian ideas (Koolhaas is the only source referred to in the text), and the rhetoric begins to switch away from the academic and back to the ecstatic, ticking off a 'wish-list' of appropriate concepts; chaos, schizophrenia, "theme-parkization", "Disneyfication", simulacra, "Generic city", "Frenzy City", advanced communication technology as "indispensable 'survival kits' for urban inhabitants" and, as we expect, the exhibition as a city itself, within the city.

Their argument is that "Hyper-capitalism", which is never defined or explained, produces "Cities of Exacerbated Difference" (from Koolhaas) in the Asian context, and this process of transformation "causes inevitably contradictions, contests, chaos and even violence" such that,

"nothing is established, harmonious and 'normal", "everything is in permanent transformation"⁷. They continue;

"one can even coin it as 'Frenzy City'", which serve as the prototype of a future "Generic City" (from Koolhaas). "Hyper-Capitalism causes systematically competition, frenzy desire, frustration, restructuring of social classes, and, eventually, establishment of a new totalitarian power of the Capital itself [sic], let alone the problems of the separation between the urban rich and the urban poor, between the 'electronic haves' and 'have-nots' ... [as]... "the most advanced telecommunications technologies have become a 'natural' aspect of everyday life in Asian urban societies. Mobile phone, internet and video games are not only trendy gadgets for young people to show off but indispensable 'survival kits' for the urban inhabitants". Within this 'generic city' the conservative middle classes prompt a melding of "the most advanced architectural know-how and 'Asian identity'... [t]he typical result [of which] is the Disneyfication of Asian urban spaces... the final disappearance of real historic areas and the appearance of 'more than real', highly sterilised simulacras of history and tradition... second reality par excellence" adding to "the frenzy schizophrenia of the new urban life"[Hanru and Obrist, *Cities on the Move 6*, press information pack, sic].

Again, we see the wish list of appropriate references (particularly the influence of Baudrillard and Eco) wrapped in characteristically hyperbolic rhetoric. But these themes are taken to another level by Ole Scheeren, Koolhaas' assistant in London and effectively the principal curator of the Bangkok show. His contribution begins;

...this might be an attempt to describe the city through the structure of an exhibition – or maybe vice versa...[sic]

and continues:

Bangkok, City in the Future

543 years later....The city of Bangkok is full of Robot-Buildings, Louis-XIV-Towers and Skeletons of unfinished constructions. They seem to be the dominant typologies, vertical characters, the ones to survive the battle of urban growth and mutation. In-between: The city is floating again, rivers, flows everywhere, brutally-carefully carving out and filling in what is left around the buildings. Concrete substitutes of what was previously streams of water now lifted above the ground. A fluidum of vehicles – boats are cars are moving points are continuous lines. Gravity is finally overcome: Elevated highways. Skytrains. Express and walkways. Pipes and tubes. Never sure who dominates, the vertical or the horizontal, the concrete snake, biting off the corner of a tower, or the robot that forces the snake to twist in curves and curls at his appearance. Endless competition.

The opening passage ends; "The city of the future..."

⁷ There are significant, and not coincidental, echoes with Berman's characterization of modernity, derived of course from Marx, that "All that is solid melts into air", see chapter 4.

This opening and the four pages that follow are the most extreme example of the 'architectural imagination' tending to the ecstatic. There are a number of very close parallels to Koolhaas' work as we would imagine (Scheeren not only collaborated with Koolhaas on the Hayward project but on several other projects, and as an architect at the OMA office, Rotterdam from 1995 to '96). Firstly, there seems to be the macabre fascination with the potential, but never realized, imminent disaster. Secondly, the possibility of architectural anarchy within a culture of encouraged congestion ("Congestion is created within the belief of endless advancement"), Thirdly, the blending of mental construct and 'reality' ("it is no longer walls that are moving, or floors, it is buildings, structures [possibly in a social/theoretical as well as architectural sense], concepts, it is a whole city"). Fourthly, the excitement of simultaneity and juxtaposition "co-existence of ultimate extremes... [s]eeming contradiction resolved within no-time... [b]uilding and rebuilding, connections and disruptions, distortions and merging, collaboration and competition, tension and suspension, Sense and no sense [sic], colliding in simultaneous operation. The new and the old, progress and tradition, the street and the mall, the dust and the highway, the river and the skyscraper. Speed turns points into lines...".

Here too, a prominent place is reserved for the importance of new technologies of communication and reproduction, defying space and time and producing duplicate realities, simulacra:

Spatial and non-spatial. The image in a fixed location within the urban context. And the appearance within a specific moment in time [as sheer availability]. The permanent and the temporal. The billboard and the newspaper. The poster. And television. Internet...

The colour of the future is pink. Apart from pink, all that is left is black: Black copies [a good deal] of all imaginable material: computer, clothing, artworks. Even entire buildings are available as duplicate...

Media are no longer looked at in search for information [content], but as realities in themselves, as relationships, as structures, containers of potentialities. Simultaneity of juxta and super-Positions. A hybrid of absolute existence [virtuality] and specific inscription [real space]. Where one medium is no longer sufficient as container, the moving into [un]related territories promises immediate help and relief. Space, Scale. Time. Shift...

This theme is extended more explicitly in another section:

Space: emptiness. Content: information. Or stories. Sequences. Rays of light as only physical matter. Absorption of the image inside the void of sheer endless rooms... [Scheeren, in *Cities on the Move 6*, press information pack, Bangkok 1999] There seems to be another echo here of the earlier arguments made in relation to Soja's work. There it was argued that at the heart of Soja's position was the separation of matter from his 'ontological trialectic', to be replaced with an idea of 'spatiality', a mediated "second nature" concept. Here we find intimations of the same separation; matter is superseded by image and data as 'space', perhaps in its traditional [Euclidean] understanding, collapses into sign and information.

The second theme of this section, introduced in this chapter as the 'ecstatic vision', concerns principally the character of much contemporary writing on the city based upon a rhetorical analysis: the hyperbolic rhetoric and various key images that are recurrent (the city as chaotic, frenzied, exhilarating yet dangerous). However, we have also seen a convergence with the first theme, the 'alephic vision', which emerged from a theoretical analysis of the work of Soja. The main elements of that argument were that the world view (Soja's in that instance) was driven less by empirical referents and more by a priori conviction, and that the result seemed to be the abstraction of a material conception of space into a more fluid definition of socially defined spatialities. This convergence intuitively suggests a connection between the two themes, a connection that can be established through a further archaeology into the sedimented layers of Koolhaas' scheme of reference.

3.3 Uniting the 'alephic' and 'ecstatic' visions

The key to the union lies in blurring of epistemological, ontological and methodological positions. Just as we found Soja relying heavily on Borges to illustrate his epistemological and ontological principles, so Koolhaas turns to Dali and the Paranoid Critical Method, which I aim to show, has strong parallels with Borges' Aleph.

In the section entitled, "Europeans", Koolhaas describes the visits to New York by Dalí and Le Corbusier, both aiming to 'conquer and reclaim Manhattan for Europe', Dalí conceptually, Le Corbusier "by proposing literally to destroy it" [p 235]. Koolhaas has more sympathy with Dalí and his Paranoid Critical Method [PCM], whose basis Koolhaas describes in terms similar to his own project - "the conscious exploitation of the unconscious" [p 237]. This continual tension between unconscious intentions made conscious has been noted already, and the parallel is clear in his declaration that, "Manhattan's architects performed their miracles luxuriating in a self-

imposed unconsciousness; it is the ardent task of the final part of this century to deal with the extravagant and megalomaniac claims, ambitions and possibilities of the Metropolis *openly*" [p 293, sic].

What Dalí proposes is "a *tourism* of sanity into the realm of paranoia" whose definition is taken beyond the realm of "simple persecution mania" to mean "*a delirium of interpretation*" [pp 237-8 sic]. Gibson points to two important influences on the development of Dalí's method; the suicide of his godfather Gal and the importance of a local friend and 'remarkable crackpot' Lídia Noqués [Gibson, 1997; pp 120-1]. Gibson quotes Dalí as explaining,

Lídia possessed the most marvellously paranoiac brain aside from my own that I have ever known. She was capable of establishing completely coherent relations between any subject whatsoever and her obsession of the moment, with sublime disregard of everything else, and with a choice of detail and a play of wit so subtle and so calculatingly resourceful that it was often difficult not to agree with her on questions which one knew to be utterly absurd. [Dalí, 1968 quoted in Gibson, 1997].

What Dalí himself points to here is the persuasive nature of such personal interpretations of the sort that both he and Koolhaas provide. However, his last comment is revealing for it suggests that he is aware that such paranoiac creations can be 'absurd' and therefore judged against some other yardstick of 'reality'. For Dalí there is, therefore, still a distinction between the 'inner', interpretative world of the paranoiac and the 'outer world', presumably of some unclarified notion of objective reality. He continues;

She [Lídia] would interpret d'Ors's articles as she went along with such felicitous discoveries of coincidence and plays on words that one could not fail to wonder at the bewildering imaginative violence with which the paranoiac spirit can project the image of our inner world upon the outer world, no matter where or in what form or on what pretext. The most unbelievable coincidences would arise in the course of this amorous correspondence, which I have several times used as a model for my own writings [ibid.].

For Dalí then, the paranoiac vision is still a 'projection' upon, rather than a construction of, reality. We also find within the paranoiac-critical method the twin generators of death and sexuality that were seen to be the basis for what was termed above the 'ecstatic vision' of the city. Gibson makes the link between Dalí and Freud, who met in London in 1939, the latter proposing a link between paranoia and sexuality, asserting that paranoia, "regularly arises from an attempt to fend off excessively strong homosexual impulses" [*Introductory Lectures on Psychoanalysis*, vol XVI; p 308, quoted in Gibson, 1997; p 256]. Ades quotes Dalí as saying that *The*

Interpretation of Dreams was "one of the capital discoveries of my life" and in his work *Visible Woman* [Dalí, 1930] Dalí validates this link, focusing in the piece entitled 'Love' on the relations between dreams, sexuality and the death wish [Ades, 1982].

Gibson suggests, therefore, that the provoked paranoiac method was a way of 'precluding paranoia', a way of 'cheating' his family history (the suicide of Gal) and a defence against his sexual impulse. Freud also provided a methodological inspiration, however, and Ades draws the parallel between Freud's idea of the transcription of the dream narrative and the automatism at the core of the surrealist movement which Dalí joined in 1929. Breton describes this process of automatism as;

Pure psychic automatism through which it is intended to express, verbally or in any other way, the true functioning of thought; thought transcribed in the absence of any control exerted by reason, and outside any moral or aesthetic pre-occupation. [Breton, 1934, quoted in Ades, 1982; p 72]

Ades describes how, for Dalí, this automatism took the form of painting an image that had been fully formed previously in his mind, rather than letting the painting 'sublime' off the surface of canvas. However, Breton argues [and perhaps decades later Koolhaas validates his comment] that the paranoiac-critical method, "shows itself capable of being applied with equal success...to all manner of exegesis" [ibid.; p 119]. Certainly for Dalí the method of actively stimulating paranoiac readings became central to his approach, to the degree that the division between a productive methodology and an objective view of reality, identified previously in his view of Lídia Noqués' paranoiac connections as persuasive yet 'absurd', begins to dissolve. His paranoiac-critical methodology that underpins his epistemological approach to understanding the world begins to dominate his view of 'reality'. He argues that;

I believe the moment is near when, through a process of thought of a paranoiac and active character, it will be possible (simultaneously with automatism and other passive states) to systematize confusion to the total discrediting of the world of reality. [L'Ane Pourri, in Dalí, 1930].

We see that Dalí's methodological reliance upon the paranoiac-critical method influences not only his approach to his subject matter but also his view of the objective reality from which it is drawn, such that PCM legitimates a preconceived view of the world that is imposed as an objectified understanding, 'discrediting the world of reality'. Ades describes the PCM method as the "cultivation of confusion" [Ades, 1982; p 128], a theme which is familiar both from Koolhaas' work and also directly from the *Cities* exhibition in Bangkok where the 'motto' of one of the curators was "confusion is progress"⁸. Dalí himself describes PCM as, "a delirium of interpretation in which suites of images, ideas or events are perceived as having causal connections, and are all related to one central idea..." [Dalí, 1930, quoted in Ades, 1982; p 122].

This theme of a 'delirium of interpretation' is directly paralleled in Koolhaas' ecstatic vision evident in *Delirious New York*, which clearly owes much to Dalí's methodology. There is a direct relation between interpretation, Koolhaas' declared aim at the beginning of the book ("This book is an interpretation of that Manhattan" [p 10]), and the consequent delirium of the title. Koolhaas quotes from Dalí, "[PCM is] the spontaneous method of irrational knowledge based on the critical and systematic objectifications of delirious associations and interpretations..." demonstrating the way that methodology underpins epistemology which then defines ontological perspectives [quoted Koolhaas, 1994; p 237]. This is to say that the product of delirious interpretation and association is objectified, fantasy is made real. This is exactly what we see in Koolhaas' and Soja's normative descriptions; the personal interpretation is presented (through the techniques of aphorism, synecdoche and maxim) as objective fact.

This is exactly what happens to Borges; he falls down the cellar stairs, strikes his head and in his moment of delirium makes the interpretation and free association between the globe/trunk and the world, which he believes he actually sees [see above, chapter 2]. The parallels with the story of the Aleph are more profound however, for as Koolhaas himself acknowledges;

Each fact, event, force, observation is caught in one system of speculation and "understood" by the afflicted individual in such a way that it absolutely confirms and reinforces his thesis – that is, the initial delusion that is his point of departure. *The paranoiac always hits the nail on the head, no matter where the hammer blows fall.*

Just as in a magnetic field metal molecules align themselves to exert a collective, cumulative pull, so, though unstoppable, systematic and *in themselves strictly rational* associations, the paranoiac turns the whole world into a magnetic field of facts, all pointing in the same direction: the one he is going in [p 238, sic].

Koolhaas ends by making a clear point about the epistemological position that this implies, drawing on Dalí;

⁸ This comment was listed as the motto of Thomas Nordanstad in the Cities on the Move 6 (Bangkok) press information pack. In response to a public debate at the exhibition venue and an article I wrote for *The Bangkok Times*, Thomas Nordanstad tried to disassociate this comment from the content, and indeed the organization, of the exhibition. Nonetheless, it has many resonances.

The essence of paranoia is this intense – if distorted – relationship with the real world: "The reality of the external world is used for illustration and proof...to serve the reality of our mind..." [ibid.].

The theory of PCM maps precisely onto the Aleph therefore, and reveals the strong epistemological continuity and shared problems between Koolhaas and Soja. Furthermore, the method of PCM is also duplicated. Koolhaas explains;

As the name suggests, Dali's Paranoid-Critical Method is a sequence of two consecutive but discrete operations:

1. The synthetic reproduction of the paranoiac's way of seeing the world in a new light – with its rich harvest of unsuspected correspondences, analogies and patterns;

This might correspond to Soja's ontological trialectic for example, the quasi-obsessive 'discovery' of interpretative triptychs. This is a fairly common trait, to draw out threads that link to and substantiate a theory. The second operation, however, resounds with echoes not only of Soja but also the rhetorical excesses of Koolhaas and the text and presentation of the *Cities on the Move* exhibitions;

2. The compression of these gaseous speculations to a critical point where they achieve the density of fact: the critical part of the method consists of the fabrication of objectifying "souvenirs" of the paranoid tourism, of concrete evidence that brings the "discoveries" of those excursions back to the rest of mankind, ideally in forms as obvious and undeniable as snapshots [p 238, sic]

...such as the Bonaventure or the immersive congestion of a gallery space constructed as just such a souvenir of a paranoiac tourist-excursion to Asian cities. These 'souvenirs' are the synecdochal objects about which Soja, Scheeren and Koolhaas hang their objectified fantasies of the world. Once the cipher for their decoding is given, they are presented as signifiers for all the evidence that could have been presented but was not, perhaps lest it conflicted too overtly with the common understandings of familiar environments. Reading Mike Davis, the Bonaventure hotel symbolizes the dystopian future of fragmented urbanism – until I visited it and found it a close relation of Croydon's Whitgift Centre, and no more sinister. Similarly, travelling to Bangkok for the first time as part of the *Cities on the Move* entourage, I did not find an experiential hyperbole. I found a city much like most others I have visited, in which notions of the Disneyfication, fragmentation, schizophrenia etc. bore little relevance to the pragmatic strategies and mundanities of "everyday life" and made little sense outside the isolated discourse
of the cultural critique [perhaps 'clique'] in which they originated. Indeed, part of my project undertaken there for *Cities on the Move* involved translating (as far as was possible) the Baudrillardesque exhibition literature on Bangkok into Thai – a gesture that incredibly the organizers had not thought necessary – and attempting to extend the dialogue beyond the rarified walls of the gallery by turning the quotations and commentary to the street. Few people that I spoke to seemed to identify with the ideas presented there.

There is a second relevance of paranoia in this context (perhaps 'critical paranoia', rather than Paranoid – Critical). The Bonaventure Hotel first comes to prominence as symbol of late 20th century urbanism when Frederic Jameson gets lost there trying to find his way to a conference, an anecdote told, appropriately, by Soja⁹. Having selected it as such a powerful simile for the supposed 'non-place realm', others have to follow suit, to adhere to the academic convention of trumping your predecessor by showing you have read the book and have your own angle. I am conforming now. The question is whether the Bonaventure Hotel was first an urban or an academic landmark. My guess is that no one paid it much attention, and still don't, unless they have received the 'academic cipher' by which its 'true' significance is revealed. It is in this way that the critique inevitably defines a clique.

Ultimately, there is a question here that relates to the coincidence between academic understandings and popular understandings, and between interpretative positions and a 'reality' or truth. It is significant to note, therefore, that Koolhaas' presentation of the second stage of Dali's method (the sublimation of delusion into objective fact) perhaps over-states Dali's intentions, for his description of PCM quoted above continues; "[suites of images] are all related to one central idea, and are internally coherent *for the subject of the delusion, though meaningless to an outside observer*" [Dalí, 1930, quoted in Ades, 1982; p 122, emphasis added]. Herein lies the difference between the method of Dalí and that method as utilized by Koolhaas. For Dalí paranoiac-critical method is an active state in that it encourages a mental process which allows him to represent the world as *he* saw it, to concretize *his* understandings. For Koolhaas paranoiac-critical method invokes a normative understanding of how the world *is*. Thus the *Cities on the Move* exhibition and the work of Koolhaas and Soja presents an objectified, not a personal, view which presents at best an explanation, but more often a dictation, as to the nature of the city.

⁹ Soja tells this anecdote in an Open University programme in the *Understanding Modern Societies* series entitled, *Los Angeles: City of the Future?*

The character of that normative presentation has been the subject of this chapter. I would suggest that its central trait is the rejection of the mundane and everyday *lived experience* of cities in favour of an obsession with a sensationalized *reading* of the city, presented through a narrative whose exaggerated rhetoric exoticizes the urban. As a corollary of this focus on a hermeneutic approach bedded in semiotics, a *reading* of the city, what is lost is an empirical understanding of the *lived experience* and use of space by the anonymous population rather than the identified critic.

A final illustration of this academic rejection of the 'common view' comes from Koolhaas himself, commenting on Gorky's visit to New York. Gorky is disgusted by his visit to Coney Island, Koolhaas' source of inspiration; "Everything is stripped naked by the dispassionate glare.... The visitor is stunned; his consciousness is withered by the intense gleam; his thoughts are routed from his mind; he becomes a particle in the crowd..." [Gorky's essay, *Boredom*; quoted in Koolhaas, 1994; p 69]. Koolhaas argues that, "Gorky's disgust represents the modern intellectual's dilemma: confronted with the masses, whom he admires theoretically, in the flesh, he suffers from an acute distaste. He cannot admit to this disgust; he sublimates it by identifying external exploitation and corruption as the reason for the masses' aberrations" [ibid.].

For Koolhaas [and it is tempting to expand this to others writing about contemporary cities in a similar vein] the masses are represented by the concept of the 'common understanding'. The mundane, continuous and ordinary is either rejected as homogeneous and uninteresting or the experience and understandings of 'the [Gorkian] masses' is sublimated into an ecstatic understanding of reality and lived experience, which is then re-imposed through a obfuscatory and didactic rhetorical style. As Gorky is unable to accept the masses' collusion in what he considers to be the exploitative vulgarity of Coney Island for the sake of his theoretical continuity, so it is imperative that Koolhaas presents his view of the city as a seamless reality, rejecting the consideration of an alternate and less sensational reading. The 'ecstatic vision' is predicated upon a union of 'art' and 'life' seen in Dalí's approach, a merging of aesthetic vision and experienced 'reality', and therefore fundamentally upon the denial of the possibility of empirical referents in a system of understanding based entirely upon the radical hermeneutics of the 'ecstatic vision'. This breakdown of empirical referents in relation to the discussion of the 'everyday' experience of the city is exactly mirrored in Soja's understanding of Los Angeles.

In the previous two chapters I have aimed to show that this is a construction developed out of a pre-inclination to 'hit the nail on the head'. In the following chapter I want to broaden the debate out, both to demonstrate that the themes examined thus far are indeed widespread across a wide canon of academic and popular literature dealing with the city and also to examine what relationships exist between this approach to the empirical problem of describing urban and architectural environments and the wider context of contemporary social theory.

Chapter 4 The 'rush to the post' and 'the eclipse of the real'¹

Following on from the previous argument, I will attempt in this chapter to widen the debate and to justify my apparently synecdotal (and hence hypocritical) position that the analysis of Soja's work and of the *Cities on the Move* exhibition can be extrapolated to apply to a range of writing on the contemporary city and the treatment of spatial issues in theoretical debates. This chapter has three distinct aims; firstly, to demonstrate the connections between the two cases explored thus far and the wider literature identified above. Chapter 4.1 will begin with an analysis of contemporary writing on the city that falls into the ambiguous, and often persuasive, middle-ground between academic and popular discourse. Rather than return to well-worn examples, such as Ridley Scott's *Bladerunner* and the novels of Pynchon and others, I will turn to a recent series of books published under the title *Topographics* which deal primarily (though not indeed exclusively) with the contemporary urban experience, and also to the work of Iain Sinclair, whose poetry, prose and commentaries focus primarily on his experiences of London, our common city.

This investigation will attempt to demonstrate shared themes, and the second aim of this chapter will be to uncover the origins of these motifs, an exploration which, in part 4.2, will draw us back to nineteenth century literary inventions. The final aim will be to relate these arguments to contemporary theoretical positions on space and the city (4.3 and 4.4).

Ultimately, the aim of this chapter will be to unite the two dominant themes of this first section: the view of cities and the theoretical approach to space. I will aim to show that the two are intimately linked, justifying my claims of a new 'structure of feeling' towards both our spatial experience and understanding [see above, chapter 1]. This chapter forms a critical bridge in the overall thesis, therefore, for it is through the argument presented here that the 'problem' that lies at the heart of this research is exposed - the loss of a material basis from the understanding of space that has come to be such a critical variable in contemporary social analysis. It is my intention to demonstrate that this attitude to space is widespread across a number of genres of writing, justifying the mobilization of Williams' potent terminology.

¹ The phrases belong respectively to Soja [1993] and Virilio [2000].

The argument, therefore, moves forward and back between academic and popular positions, not following a precise chronology of ideas but rather, as was the case in the preceding chapters, starting with an analysis of one text (in this case the *Topographics* series) and overlaying successive layers of analysis and exploration.

4.1 "Urban Lepidopterists"

Topographics

The *Topographics* series begins in 1995 with the publication of Barber's *Fragments of the European City* [Barber, 1995]. The 'mission statement' inside the back cover (and, in shortened version, on all subsequent volumes) is a useful springboard for this analysis. The editors state that the series "appraises the geographies people inhabit" through a mingling of "analysis with anecdote, criticism with original expressive writing", with the intention of "explor[ing] the creative collision between physical space and the human mind". Already we are clearly inhabiting the same genre as Soja's more expressive work (for example *Thirdspace*) and the quasianalytical, quasi-rhetorical approach of Koolhaas and the *Cities on the Move* exhibitions. Therefore, while in a literal sense it is true that "*Topographics* features new writing about place", the assertion that "[t]he new literature about place is still in its infancy: its character and identity will be formed in this series" belies the considerable links that the volumes of the series exhibit with established narratives of the city².

We can draw various key themes from the series that relate initially to the analysis in the preceding two chapters, but with a longer focus, can be seen to originate in the 'character and identity' of innovative nineteenth century literature. Of great importance yet again is the idea of the blurring of the subject and the narrative. Although the editors in their 'mission statement' argue that unlike travel literature the texts "do not depend on a journey to supply a plot", most of the volumes develop the idea that the narrative is based upon, or indeed *is*, a walk through the city. Richie explores his Tokyo both literally and metaphorically on a walk from centre to suburbs – "as the circles become more irregular, we stray to related topics, led (as is the city) by association, and by the end of the book we are out in the suburbs" [Richie, 1999; p 7] as does

² Indeed, some volumes are reprints and translations of existing works, such as Réda's *The Ruins of Paris*, first published in 1977 and Schlör's *Nights in the Big City*, first published 1991.

Barber in his extended journey around the periphery of Europe, culminating in a walk through the Parisian suburbs beyond the *péripherique* [Barber, 2001]. Hertmans catalogues those who have explored the city on foot, from don Pasos to Proust and Joyce [Hertmans, 2001] and Réda's text is explicitly based around a series of walks through Paris, and overtly parallels the nineteenth century figure of the Flâneur. Indeed the predictable itinerary of Réda's passage (the Grandes Boulevards, Champs Elysées, Bastille, faubourg Montmartre, Les Halles - a nineteenth century synecdochal itinerary of Paris as reductive as the twentieth century's equivalent in Los Angeles) mirrors exactly the 'prototypical walk' discussed by Schlör, who begins his second volume of the series with the statement that "Passion and sleeplessness lure one out to walk the streets of the city" and encourages his reader to follow suit [Réda, 1996; Schlör, 1998; p 17, 1999; p 9]. Finally, Keiller's Robinson explicitly sets out on a journey to explore the 'unknown spaces' of England following in the example of Defoe's *Tour* of the early Eighteenth Century [Keiller, 1999; p 20], and Burgin similarly goes on a 'grand tour' of cities around the world.

What is critical, however, is the layered inference that the text itself is like a city, the experience of reading mirroring the author's walking experience. We find this association in many of the works ("Therefore, I decided to draw my picture of Tokyo in the shape of Tokyo itself" [Richie, 1999; p 7]) and crucially in the editorial comment, "[1]ike the city, the text pulsates, creatively chaotic, raw and exhilarating" [Frontispiece, Barber, 1995]. Richie elaborates on the reasons for this inflection, arguing that "to have offered a logical, straightforward, obvious historical description of the place would have been to misrepresent this illogical, subtle, brash, teeming and utterly human place", suggesting that "through this construction I hope to reflect the sudden turns, the instant felicities, the surprising incongruities of [Tokyo]". However, his comment that "[t]his is perhaps not the ordinary way to construct a book" would seem to be undermined by the frequency with which this rhetorical trick is employed. We have seen such a reflection in Soja's work, as well as in his analysis of Lefebvre's The Production of Space (to be understood as a network or map, rather than as a consecutive text, according to Soja [see chapter 2, p 34). We also encountered it forcefully both in the *Cities* exhibition and in the writing of Koolhaas, while it surfaces in the work of Perec (Life: a users manual), Prendergast [1992], and also in Pile and Thrift's City A-Z [2000] (to be discussed below).

The significance of this trait is that it blurs distinctions between the subject and the text such that the characteristics of the latter reflect the perception of the former. We can identify two principle themes that blur this distinction.

An aesthetic of fragmentation and the Aleph

The first could be categorized as an 'aesthetic of fragmentation'. In relation to the texts themselves this is manifested in a literary style based around the 'vignette'. We have encountered this already in Koolhaas' staccato text, whose 'blocks' he compares to the Manhattan that is his subject. It is likewise a common feature of the *Topographics* series, part of the 'new' character and identity developed through the series³. Keiller, Burgin and Richie all exhibit this literary form, while Barber's text, "[p]rovocatively written as a series of interlocking poetic fragments", epitomizes the style. His work consists of 50 such fragments (a figure not arbitrarily chosen, echoing as it does his key referent, Baudelaire and his work *Paris Spleen*), each of which captures a declamatory and dogmatic style which translates into a normative account of the nature of the observed.

This normative dogmatism arises because the vignette (a literary analogy with a pictorial, typically photographic technique) is, implicitly, a selection, a cropping and blurring of a point of view, be it pictorial or intellectual, and is therefore an imposition upon the viewer of the author's selective perspective. This style of observation characteristically confirms its empirical validity solely by the authoritative manner in which it is presented, relying upon a series of aphorisms ["a short pithy statement or maxim – a *general truth or rule of conduct* expressed in a sentence" OED, emphasis added] thus distracting the reader from peering into the artfully shaded borders of the image to detect the broader picture beyond. This is the same technique of obfuscation condemned by Schopenhauer and Magee, and highlighted by Marden in relation to Soja's work [Magee, 2000 and Marden, 1992. See discussion above pages 18-19 and 38-39 respectively].

Similarly, this stylistic fragmentation also typifies the view of the city described therein, indeed derives from it. This fragmentation applies not only to the physical form of the city but also to the narratives and understandings emanating from it. Barber argues that:

The flux between the city and its inhabitants is a site of ferocious visual tension, with imageries generated that collapse and reformulate the perception of the city, its languages, its societies, its nationalities, its cultures. The cities have never possessed unity, and now the multiplicity of voices passing through the transforming city and the transforming individual creates an utter fragmentation [1995; p 9].

³ The exceptions are Schlör's two volumes, which take a more conventional approach to exegesis.

This passage encapsulates several key themes. The city is reduced to a system of images, "overhauled by digital-image screens signs and hoardings – "proliferating visual facades of every kind" [2001; p 7]; an ocularcentrism based upon a hermeneutic understanding of the urban rooted in semiotics. This is allied to a predominant sense of flux and change rather than continuity which itself is seen as a break from the past such that 'now' is characterized by physical fragmentation and explanatory polyphony.

These themes recur insistently throughout Barber's work: "The contemporary... unstoppable in its broken rhythms and cacophonies" [1995; p 10]; "...Europe resides in fragments" [p 14]; "The city is perpetually invested with a dynamic jarring and upheaval of its configuration" [p 29]. They are also mirrored in other texts. For example, Richie concludes his exploration of Tokyo with the comment that:

Looking at Tokyo, one is reminded of the Buddhist condition *shogyo mujo*. All is transient, impermanent; nothing is fixed, all is in motion - life is illusory. Tokyo is in this sense a Buddhist capital, a mandala illustrating *mujo*, impermanence itself [Richie, 1999; p 134].

This passage captures the inter-dependence between key strands of contemporary debate; the city is seen as transient and illusory, mirroring the comment by Marx, used to great effect by Berman in his characterization of modernity, that "all that is solid melts into air" [see below]. However, it is also seen as a mandala, a symbol to be 'read' and a condensation of a world view, an ocularcentrism that leads him to claim (in romantic mood!) that without a vantage point (such as Sacré Coeur in Paris or the Capitoline in Rome) Tokyo is 'unintelligible', the signs and hoardings of the street merge to form a "semiotic babble" [pp 32 and 37].

Here is the idea of the city as chaotic and fragmented expressed not only in the textual references to the physical form of cities and the polyphonous narratives and identities within them, but also in the very character of those texts themselves. Again, Barber illustrates this tendency most clearly, but behind it lies an understanding of space that underpins the entire *Topographics* series. Richie extends his analysis of Tokyo as a place of impermanence by concluding that,

Even space itself is mutable. It is not to be defined as something contained within walls. It is fluid and in constant transformation [ibid.; p 134].

Similarly, Keiller describes his character Robinson as going in search of new spaces of production that are themselves produced 'new spaces'; new spaces which Burgin links to developments in information and communication technologies. He argues in relation to Orléans (and a multimedia archive established there) that, "[t]he old spatial and historical dimensions of the city of Orléans have collapsed into the black hole of the archive. Today, satellite television - and other forms of electronic communications indifferent to geographical and political boundaries - have consigned the expression 'city limits' to the realm of nostalgia" [Burgin, 1996; p 178]. Finally, for Barber, as the physical city becomes overhauled by ubiquitous screens "it becomes increasingly impossible to separate [even] yourself from that visual envelopment" – once again the spatial pathology of the psychasthenic [Barber, 2001; p 45].

This first characteristic of the *Topographics* series, which I termed an aesthetic of fragmentation, has many overlaps with the 'alephic vision' identified in chapter 2. Both are rooted in a spatial understanding of their subject matter that contradicts what might be seen as a traditional approach to the understanding of space. Soja describes a similarly fragmented Los Angeles, which, like his reading of Borges' Aleph, reflects cities around the world as described in the work of Barber and others. Indeed, both Richie and Burgin use this image of the Aleph; Richie in relation to the theme parks which congregate "all of the interesting localities on earth...located in one spot"; and Burgin in relation to television, "spaces that open onto all space through the ubiquitous ambient video screens". He chooses to end his work with a quotation from Calvino's Invisible Cities in which Marco Polo argues that "Every time I describe a city, I say something about Venice" [Richie, 1999; p 84; Burgin, 1996; pp 150 and 213, quoting Calvino, 1997]. However, the second strand of my analysis of *The Aleph* suggested that such views depended heavily on the preconceptions of their authors. There are intimations of this second strand in the *Topographics* series also. Indeed the summary of the project provided by the editors (cited above) suggests that such a personal viewpoint is exactly the point of the series - the aim being "to explore the creative collision between physical space and the human mind" [op. Cit., above, p 77].

There are other indicators that a similar process is at work. Key figures of nineteenth century literature lurk behind the scenes in most of the texts, principally Baudelaire and his commentator Benjamin whose influence has already been noted in relation to Barber's work, and who are referred to by Richie [pp. 12, 110], Burgin [p 42] Réda and Schlör. Another key reference is Borges himself, whom Richie invokes comparing Tokyo to a 'Borgesian labyrinth' [p 43], while Keiller notes that before setting out, his Robinson reads *Garden of Forking Paths* [p 223]. Indeed,

the character Robinson moves to Reading after misreading de Certeau's *Practice of Everyday Life*, inspired by the statement that "reading is ...a place constituted by a system of signs" in a book that "inspired his [Robinson's, and we assume Keiller's] entire project" [Keiller, 1999; p 2].

These literary references are not unimportant, for they highlight that Keiller's work, and I would argue that of the series as a whole, is not 'new' other than in the literal sense, but demonstrates awareness, and hence forms part of, a much wider discourse on the nature of urbanism and indeed of space. The question arises, therefore, as to where this conception of the urban as chaotic, fragmented and unknowable originates, with its attendant theme of material space as somehow negated through the contemporary processes of related social and technological change.

The ecstatic vision revisited

Before turning to this question (the second aim of this chapter) it is necessary to return to the theme of the 'ecstatic vision' and substantiate my claim that this too forms a pervasive trait of literature on the city. It is convenient to continue with Keiller's Robinson who,

"was very excited by [the] literary associations of the town [he identifies a connection to Rimbaud – and note also the connections discussed above], which he praised with a euphoria reminiscent of that of Nietzsche for Turin, so much so that I was concerned for his well-being and the extent of his commitment to *the derangement of senses* [Keiller, 1999; p 2, sic].

Recall the derivation of ecstasy discussed above, 'standing outside oneself', and the links made to Koolhaas' theme of delirium, a state which Robinson exhibits here. It is unsurprising then to find that Keiller declares himself to be interested in Surrealism, "which transform[s] experience of what already exists", and its relationship to "designers, architects and manufacturers, who produce *new things*" [ibid.; p 223, sic]. The approach of the author to the subject is critical here. For Koolhaas this was determined by Dalí's paranoiac-critical method - "a tourism of sanity into the realm of paranoia". Here the approach to the city is determined by the related state of hallucination, presented as a tourism of the rational/sane into a dreamlike state that nonetheless captures something of what the city is. This is most clearly expressed in the opening to Barber's *Fragments of the European City*:

The European city is a hallucination made flesh and concrete, criss-crossed by marks of negation: graffiti, bullet-holes, neon. The city is an immense arena of eroded and

exploded signs - signs that mediate the city to the individual, and that individual to the city. For all their pockets of stasis and stagnation, the European cities have taken on a momentum of transformation in the final decade of the twentieth century, and that transformation demands constant, obsessional exploration. The eyes of the cities' inhabitants are in a process of visual suffusion...The process of experiencing the European city is one of corrosion....From this mesh of space and time...the imageries of television and cinema are ejected into the city: television constantly, droning with the noise of the city, and cinema intermittently, performing its dense projection of visions into the eyes of its spectators. The inhabitant of the European city is a participant entangled utterly in the visible, susceptible to an infinity of aural and visual acts that encompass the tortuous, the exquisite and a vast array of the banal: the banal supports the city and gives it life.... The survival of the figures that inhabit the European city hinges on a questioning of - a penetration of - the hallucination that is a city [Barber, 1995; pp 7-8].

The character of the city as hallucination has many similarities with the 'Koolhaasian' city of 'paranoid delusion'. The rhetoric resounds with themes of negation and destruction, "corrosion", overload, and as with Koolhaas' Manhattanities, the inhabitants are "participants" rather than victims of these sinister undercurrents, despite them apparently jeopardizing their very 'survival' [see above]. Likewise, the "true identity" of Keiller's London "is in its absence" and "...Tokyo's style is an absence of style...the resulting mayhem *is* the style of Tokyo" [Keiller, 1999; p 223 and Richie, 1999; p 11]. Again, there is a duality at work; on the one hand the city is characterized by this negation and void, while on the other it is just this negative reading that stimulates the ecstatic "obsessional exploration" of the *Topographics* authors.

This theme of the poignant juxtaposition is pervasive throughout much architectural discourse. It is standard practice in architecture schools to use two projectors, constantly invigorating one image by the other, and here the same process is at work. Schlör uses the technique in both his volumes. *Nights in the Big City*, although one of the more 'traditional' works in the series in terms of its approach and language, is structured around the duality of the city at night as site of pleasure *and yet* fear, while *Tel Aviv* explores themes of contradiction, juxtaposition and paradox through a polyphonous narrative, captured by the cover photograph of a modernist tower block rising behind derelict buildings.

The use of language reinforces the technique of juxtaposition and what might be termed the 'epistemology of paradox', the conjunction "*yet*" seeming to capture the flavour of contradiction (as in Barbers' suffusion *yet* stagnation). Similarly, photographs are used to reinforce and illustrate the conviction of juxtaposition as the urban zeitgeist. The photographs of Richie's *Tokyo* rely heavily on crude forms of 'poignant juxtaposition' - he repeatedly uses images such as

people in traditional costume in modern settings (in the metro, watching television, Sumo's jogging, a teenage girl standing next to a man reading a pornographic magazine) to illustrate the contradictions of Tokyo presented in the text. Hertmans offers a series of characteristically macabre juxtapositions of city life culminating with "only vaguely visible, [the] partly mangled body under a tram that has stopped just too late" [2001; pp 9-10]. Similarly, Burgin presents a photographic story of a car crash in Los Angeles. Significantly, it is an accident in which he is involved, dissolving the barrier between observer and protagonist. Witnessing one accident he is involved in a second, and while insurance documents are exchanged one car rolls downhill and causes a third. "Contemplating the carnage, the woman flashed a smile and asked: 'Is that a British accent? Are you in the movie business?" [Burgin, 1996; p 74].

"Strangely-Familiar"

My concern is that such anecdotes, with their disconcerting cocktail of irony and sinister eroticism, are presented as apposite vignettes of urbanism, synecdotal signs of an urban experience that we all supposedly share. But as with all such inferences they presume either a shared experience or a cipher by which to decode the sign. If such an empathetic experience is lacking, these juxtapositions seem hollow. For example, Keiller writes:

In 1817, the Shelleys moved to Albion House in Marlow, where she transcribed his *Revolt of Islam* and prepared *Frankenstein* for publication.

Marlow is also home to the UK headquarters of Volvo, Saab and Rank Xerox, and at Cookham near the home of Stanley Spencer, is the home of the Chartered Institute of Marketing [Keiller, 1999; p 23, sic.].

The implied significance of these associations is lost without the necessary cipher, which in the case of Keiller is an understanding of the relationship between contemporary economic and cultural changes. It is appropriate, therefore, to question again whether these 'ecstatic visions' do not speak more of the author's own theoretical predilections revealed through the hallucinatory stimulus of the city than of any facet of the city itself. A hallucination is, after all "the apparent perception of an external object or sense-datum when no such object or stimulus is present; the mental state of being deceived, mistaken or deluded; an unfounded idea or belief, a delusion" [OED]. Keiller states that "[i]t is certainly easy to find a disconcerting aesthetic in the post-Conservative landscape, especially in the country". His 'disconcerting aesthetic' is reminiscent of Koolhaas' New York or Davis' Los Angeles:

The windowless sheds of the *logistics* industry, road construction, spiky mobile phone aerials, a proliferation of new fencing of various types, security guards, police helicopters and cameras, new prisons, agribusiness, UK and US military bases, mysterious research and training centres, 'independent' schools, eerie commuter villages, rural poverty and the country houses of rich and powerful men of unrestrained habits are visible features of a landscape in which the suggestion of *cruelty* is never far away [ibid.; p 211].

And yet, in discussing the project Keiller admits that:

In fact, we didn't find it [his suggested *new spaces*] for a long time...it wasn't visible enough. It did change: as we went along, it became more aggressive - the points on the fence got sharper; the difference between a prison and a supermarket became more difficult to discern; the atmosphere became more S&M.

There is clearly a degree, therefore, to which Keiller and his character Robinson 'discover' the character of space that they are looking for. Keiller, influenced by surrealism, has found, like the paranoiac, that he "always hits the nail on the head, no matter where the hammer blow falls" [Koolhaas, 1994; p 238, see discussion above, chapter 3]. As he himself confesses, "I had a preconception about this, an idea that there is something up in the countryside, that the countryside is actually a rather forbidding place...The countryside seems more scary. I don't know how real this is because I don't live in the countryside" [op cit.; p 228].

It is unsurprising, therefore, that another recurrent characterization of the city in literature that attempts to span the academic/popular divide is that the city is "strangely familiar" [Keiller, 1999; Borden et al, 1996⁴]. I would suggest that this familiarity is prompted by the circularity of dominant narratives of the city, which influence the perception and presentation of cities in popular as well as academic literature. Before returning to the academic, and the provenance of these ideas, I wish to turn to a final example from wider canon of literature on the city - the poetry, prose and fiction of Iain Sinclair.

⁴ This volume also illustrates many of the traits discussed. It consciously integrates written and visual material without prejudicing either with the demeaned status of either 'illustration' or 'caption' in an attempt to make the work more polyvalent and accessible. However, its essence is a series of essays by 'the usual suspects' of urban theorists and historians. It implicitly reinforces what I have argued is an exoticization of the city, its deliberately "provocative" views focusing on the "unexpected...and the complexity of the everyday" [Borden et al., 1996, rear cover]. Even Soja's more mundane contribution advocates the "stimulus of a little confusion", conforming to the unchallenged conviction that the city is a place of fragmentation and confusion [ibid.; p 30].

"Urban Lepidopterists"

Sinclair's work is interesting for a number of reasons. Firstly, he ranges across the spectrum of literary genres, from poetry in the 1970s and '80s, to fiction, prose writing and criticism more recently. Secondly, his work deals predominantly with London; the novels (*White Chappel, Scarlet Tracings* [1987], *Radon Daughters* [1995], and *Slow Chocolate Autopsy* [1997]) all focus around East London where Sinclair lives, while the poems make frequent reference to sites such as London Fields, Victoria Park and the Isle of Dogs (see for example *Jack Elam's Other Eye* [1991])⁵. Finally, like the *Strangely Familiar* project (see footnote above), he has collaborated with several illustrators and photographers, likewise insisting that, "the books don't need images, and the photographs don't need words", opening a parallel channel to his understanding of the city that is his obsessive subject [Atkins and Sinclair, 1999; p 223].

This body of work exhibits many similarities with *Topographics*: one of his most recent books, *Liquid City*, in which he writes of "the mess of the moment, the rushing, babbling chaos", forming part of the series [Atkins and Sinclair, 1999; p 59]. The language encapsulates the same mix of exhilaration and didacticism, while employing the familiar sinister imagery of chaos and destruction (see for example *Nil by Mouth* [1991] and *Significant Wreckage* [1988] and *Kotope* [1975] - "carnage and mutilations at Moorgate" - and *Back Garden Poems* [1970]). The early poem collections (*Lud Heat* [1975] and *Suicide Bridge* [1979]) focus particularly on the myths of London's occult and criminal figures, but through a second inflection relate this 'literary geography' to a cabbalistic geography of London revealed in various 'triangulations'. His is a consciously 'spatialized' narrative, therefore, reflecting the concerns of the *Topographics* series. Sinclair describes significant "occult structures" in the built form of London, linking the mound at Whitechapel to similar mounds in Oxford and Cambridge; subsystems of obelisks and bulls (in *Lights Out for the Territory* [1997]); triangulations of churches and stars, the eight churches of Hawksmoor producing an 'envelope' - "the shape of these, fear" [*Lud Heat*, 1975].

Sinclair's interest in the occult drives the cabbalistic rhetoric which pervades his work and uncovers a "subterranean preconscious text... a sorcerer's grimoire" principally through the walk

⁵ His most recent book, Landor's Tower [2001a] although set in the countryside of the English-Welsh borders, is (like many of his books as will be discussed below) profoundly autobiographical, the main character a writer and habitué of London who returns to his rural roots an urbane outsider. Reviewing the book Sinclair described his own move to London as a search for the anonymity of the city and the draw of the density of myth and history found there, and discussed the importance of the concept of borderlands for his wider 'psycho-geographical' literature examined here [2001b].

as a revelatory experience [1997; p 1, commenting on *Radon Daughters*, 1995]. He asserts in the introduction to his most extended walking narrative, *Lights out for the Territory* [1997], that, "[d]rifting purposefully is the recommended mode, trampling asphalted earth in alert reverie, allowing the fiction of an underlying pattern to assert itself" [ibid.; p 4]. Again, we find the tension between the city as revealed *to* the author and the city as fictionalized *by* the author. Similarly, the character of the revelation echoes those examined above. Sinclair returns to the theme of the walk, arguing that; "as we progress, the city reveals itself as a confederation of petty mysteries: no square mile, but a chaos of triangulations, botched mandalas, competing hieroglyphs"; a sentence that unites themes of chaos with a revealed undercurrent of spatial significance, the primacy of the sign and a hermeneutic approach, and the idea of the city as mandala, symbol of a dystopian ('botched') universe [ibid., p 103].

Yet it is Sinclair himself, rather than any innate quality of the city, that is the motor behind this apocalyptic impression. He constructs a speculative city around the protagonists of his fictions, be they the manifestations of his own "rampant schizophrenia" or the quasi-fictional characters of his autobiographical novels. "Such autobiography as I want to deliver", he argues, "comes through portraiture, exaggeration, caricature. The city as a darker self, a theatre of possibilities in which I can audition lives that never happened" [1999; p 8 and p 7]. He is conscious of his own exaggerated predilection for the macabre, parodying his role in a discussion with J.G. Ballard as "the low relief, mumbling apocalyptic nonsense in a riverside dive". Evidently he has considerable sympathy with Ballard's appreciation of Dalí, particularly the idea of pursuing one's own psychopathologies as a game that forms the basis of the paranoaic-critical method discussed above [Sinclair, 1999 and above chapter 3.3, p 68 onwards]. For Sinclair, this game is the process of the walk, through which he confronts myth, and the "living breath" of its "Siamese twin", place [1979]. Through the process of the walk the physical space of the city, in a Euclidean sense, is sublimed into a series of key places, themselves the physical residue of myth, such that "what we walk is myth flattened into space". Ultimately, space becomes the conceptual connections between places, the thematic vectors of triangulation, while in Sinclair's apocalyptic vision, "[p]lace, finally, can be only one thing: where you die" [ibid.].

Sinclair's London celebrates a highly personal view that offers an understanding of space dematerialized into myth. His defence against the argument of "no-bullshit materialists" for whom he speculates his project sounds like "fin de siècle decadence" is that, unlike the nineteenth century flâneur, whose motivation lay in the "texture and fabric" of the city and "eavesdropping on philosophical conversation pieces", the contemporary "dedicated psycho-geographer" notices and records *everything*; "alignments of telephone kiosks, maps made from moss on the slopes of Victorian sepulchres, collections of prostitutes' cards...the crystalline pattern of glass shards surrounding an imploded BMW quarter-light window...." [1997; pp 4 and 72]. As with Borges' attempt at suggesting an infinite series [above p 27] this represents a selection which echoes Sinclair's own preferences articulated in his introduction to an anthology of contemporary poetry, *Conductors of Chaos*. "The work I value", he writes, "is that which seems most remote, alienated, fractured. I don't claim to 'understand' it but I like having it around" [1996; p xvii].

My reservation (no doubt being what Sinclair would identify, perhaps mistakenly, as a "nobullshit materialist") is not with the approach of psycho-geography *per se*, but rather with the obvious macabre predilections which are apparent in his supposedly encyclopaedic "noticing of everything". This is nowhere more visible than in his collaboration with illustrators, particularly most recently with the photographer Marc Atkins⁶. He describes them as being like, "Victorian lepidopterists; bagging unusual specimens", and Atkins' photographs as "perfect representations of chaos", complementing his own written efforts to "mould wriggling chaos" [1999; pp 8-9]. Sinclair has used a mix of text and imagery to persuade the reader of his sinister convictions of urban chaos since his earlier works, including Back Garden Poems [1970] and the disturbing images, reminiscent of Piranesi's nightmarish cartoons or Goya's Capricios and 'Black Paintings', in Jack Elam's Other Eye [1991]. However, it is only in his 1999 volume, Liquid City, that he discusses the role of the photographer, highlighting through their collaboration the selectivity of both visual and literary images. He comments that, "[i]f an image is too complacent, if it fails to disturb, it will be put aside", perhaps a rare contingency since, "...in the alchemy of the darkroom, he [Atkins] subverts this impersonal neutrality [of a "clean, crisp print"]. He will "print the darkness", and "give it a stronger, more disquieting element" [1999; p 7].

The most graphic illustration of his style is achieved in the collaboration with illustrator Dave McKean in *Slow Chocolate Autopsy* [1997] which tracks a fictional character 'Norton' who resembles Sinclair himself (just as *Robinson* doubles Keiller). Although Robinson makes a tour of rural England at a specific time, Norton is confined to London spatially, but achieves great temporal freedom, being present at a series of sinister events from the murder of Marlowe to the activities of the Krays. The imagery is common to the two projects however. One of three

⁶ See *Lights out for the Territory* [1997], and *Liquid City* [1999]. Atkins also appears as a character in *Radon Daughters* [1995], and *Slow Chocolate Autopsy* [1997].

'graphic stories', *The Griffin's Egg*, begins with the statement, "WANTED: INTERPRETER. UNEDITED CITY" which is picked up a few pages later in the statement that, "Pin down the true images and words are redundant. Stick any two postcards to a wall and you've got a narrative" [see figure 4.1]. Here again we see the idea of the city as unedited, somehow unintelligible without the mediation of a specialist (interpreter), and the related idea that there are certain images that, juxtaposed, access an underlying verity about the city, a 'true' narrative. These ciphers become as predictable and recurrent as the *Bonaventure Hotel* and *Bladerunner*; in this particular story Sinclair returns obsessively to the MI6 headquarters on the river Thames in London, to the apartment owned by Jeffery Archer and the government buildings on the north side of the Thames – "buildings which [for Sinclair] generate paranoia. That's their only purpose".

This paranoia is a constant theme, Norton declaring surveillance to be the art form of the Millennium, and leads to a preoccupation with death as Norton crosses the river towards the triangulation around Vauxhall and is seen plunging from the balcony of what is indeed Jeffrey Archer's apartment [figure 4.1]. Again, this is reminiscent of Keiller's obsession with security in his 'new spaces' and their increasing 'S&M' character as he explores his post-Thatcherite landscape, and also of the juxtaposition of zones in the *Cities* exhibition - 'commerce' with 'decay'. Norton/Sinclair's approach to the city is perhaps typified by his encouragement to "treat London like an autopsy catalogue" [figure 4.1] and the 'mapping' of places of significance into a space of sinister relationships. For as he suggests elsewhere, "Stone as meat, that's what Atkins sees...Stone, conduit of urban memory..." [Atkins and Sinclair, 1999; pp 168 and 135].

"Information-age Orientalism"

It might have been tempting to isolate the *Cities* exhibition as being of little consequence, perhaps driven more by a particular curatorial vision, and yet the literature on the city examined above seems to reiterate familiar themes and to be written in similar ecstatic vein. Indeed, in retrospect the *Cities on the Move* exhibitions provide an excellent yardstick of both artistic responses and contemporary thinking on cities⁷. It would furthermore be a mistake to isolate these

⁷ Indeed, since my involvement with *Cities on the Move*, there have been two other high-profile exhibitions in London dealing with cities. The first, *Century City: art and culture in the modern metropolis* [Tate Gallery, 2001] reiterated many of the themes of *Cities on the Move* although in the context of a broader review of 20th century artistic responses to the city. Blazwick's catalogue draws heavily on familiar academic references, including Lefebvre, Benjamin and (perhaps surprisingly) Soja's *Postmodern Geographies* [Blazwick, 2001; p 11], while Sardar's argues that the "urban space [of the 'modern Western metropolis'] frightens its citizens; their dreams are of decay - the Robocop imagery, the

understandings as limited academic or 'high-brow' genres. Recent advertisements, significantly for mobile 'phones, emblematic of the communications changes that are often seen as the generators of the fragmentation and 'placelessness' of modernity, have exposed a far wider audience to these themes. Figure 4.2 shows an advert for Vodaphone in which the city is literally deconstructed into a system of eponymous signs. A simultaneous campaign for Orange encourages viewers to 'Bring your world to you', illustrated by a series of scenarios in which space and scale collapse, such that users of the mobile 'phone watch a police car chase along the top of a bar and a football match in the palm of their hand. These texts should not be ignored, the more so, because through them, as well as Soja's work and the work of other theorists both popular and academic, there is the added normative argument that this is what "everyday life" is like.

This imposition appeared to me to be particularly evident in the case of the Bangkok *Cities on the Move* exhibition. My impression, as a visitor and exhibitor for one week, was that the exhibition re-presented a version of Asian 'real life' back to Bangkokians as somehow 'revealed' through the explanatory envelope of western pseudo-academic discourse examined in the previous chapter⁸. It seemed the most crass example of Orientalism imaginable, and just the type of exoticisation that paradoxically Koolhaas warned against [in discussion with the curator Hans-Ulrich Obrist, Hayward Gallery, 1999; p 17 and above p 62].

My impression of the Bangkok show echoes that of one reviewer of the London exhibition;

The show's portrait of the East Asian city as a site of incommensurate chaos, an unstable emblem of 21^{st} century exoticism, is an information-age Orientalism. The terms have

millenarian visions of destruction, disjuncture and the death of meaning" [Sardar, 2001; p 268] He further legitimates my extension of the Asian focus of *Cities on the Move* to a more general attitude, arguing that there is a globalization of the idea of the Western city as the subordination of all other futures. He therefore idealistically conceives of an opposition between Western and non-western cities, the latter being sites of resistance where "meaning and identity...is rooted in religion" [ibid.; p 269]. In relation to London, Dexter draws on Benjamin's description of city as a dream world and catastrophe [Dexter, 2001; p 79, Benjamin, 1999] and notes the sense of melancholy in works chosen to represent London's recent contribution to visual arts – Landy's *Costermonger Stall* and Melanie Counsell's *British Art Show 1990* speaking of an end of an era and conveying "a sense of foreboding, of immanence and suspense". In contrast the *Facts of Life: contemporary Japanese art* exhibition [Hayward Gallery, 2001] is "more about realism" [Jonathan Watkins, curator, quoted by MacRitchie, 2001]. While a welcome change from the imposed hyperbole of the *Cities* exhibition, I take MacRitchie's statement that those expecting to find "such staple clichés of contemporary life in Japan [as] manga comics and digital monsters, Bladerunner neon and gadgets galore...are in for a disappointment" as confirmation of my claim of the recent ubiquity of these references.

⁸ I am thinking here particularly of the derivative hyperbole of Scheeren. In relation to the rhetoric of mobile communications advertisers, recall the idea of new communications technologies as "indispensable 'survival kits' for urban inhabitants" in Bangkok [Hanru and Obrist, *Cities on the Move 6* (Bangkok) Press Pack].



Figure 4.1 Images from Sinclair's *Slow Chocolate Autopsy*. Note once again the juxtaposition between sinister and erotic visual and textual imagery [Source: Sinclair, 1997].



Figure 4.2 Screen grabs from the Vodaphone advertisement "*Plane Simple*" in which two characters experience the city, and indeed themselves, deconstructed into text [Source: BMP DDB Ltd].

changed – instead of being mired in tradition, it's now the most rapidly changing place on earth – but it's still the same phantasm of an unknowable Asia [Rugoff, 1999].

While I would agree with Rugoff that *Cities on the Move* exhibited 'Orientalism' in the sense of the exoticized 'other' of Said's original conception, it is, I would suggest, *cities generally* that are exoticised, not 'an unknowable *Asia*' (although the 'intellectual imperialism' is just as eurocentric)⁹. Hence the metropolis has become a "myth of our times" which through its "allegorical extension" has become "unmappable", unknowable [Chambers, 1990; p 54]. This more reflexive brand of 'orientalism' reflects an unshakeable conviction as to the nature of cities and the contemporary experience of living in cities which becomes a conceptual straitjacket forced without exception over contemporary experience.

The effects of these forcings are at times visible. Rugoff comments that the *Cities* exhibition "desperately yearns for that passé epithet 'cutting edge'", its 'nowness' being its principal claim to importance, but argues that, "beneath its modish veneer, this exhibition is singularly, and uninspiringly old-fashioned".

Mired in dusty assumptions about the borders between art and life, it ends up leaving us with little more than a revised cliché of the inscrutable and exotic East...[based in a] creaky utopianism underlying the whole show" [ibid]. He concludes; "Displays such as these are yet another expression of the way *Cities* [on the Move] wants to persuade us that art and life can merge. It is an idea that has haunted much 20th Century art, and sits close to the heart of the modernist impulse. Essentially, it springs from the utopian yearning to erase the difference between alienated spheres of activity, to sew aesthetics and reality into a holistic existence" [ibid.].

Rugoff here points to the fact, which should already be apparent, that many of the essential components of the 'ecstatic vision' are derived from concepts originating in the context of modernism – the fascination with speed, with change, with scale, the blurring of aesthetic vision and reality, and the Freudian relationships between sex and death. Likewise, the vignette form, with its didactic and revelatory style typical of this literature which masks the imposition of normative understandings of the city, has its antecedents in the literary inventions of 19th Century modernism. In this epistemological muddle it is necessary to draw apart these contradictory and complimentary strands to unravel the continuities and subtle inflections between 21st and 19th century understandings of cities and space.

⁹ See Edward Said's enormously influential *Orientalism* on the creation of 'The East' in 'western' discourse [Said, 1978].

4.2 The unreal city; 19th century origins of the 'ecstatic vision'

The Futurist Manifesto of 1909 identified the city as being "the pre-eminent theme" of Modern poetry and prose, affirming the central concern of literature and painting since the mid 19th Century [Timms, 1985; p 1]. Sharpe argues that this literature exhibits a 'classic trajectory', "a movement from initial disorientation to a feeling of the city's impenetrability or mystery, followed in turn by alienation from city, self and Other, and then finally a sense of hallucination, of being adrift in the unreal city" [1990; p 12]. Indeed, Prendegast argues (in relation to Paris) that even by 1860 the idea that the city 'lies beyond intelligibility' is "already a stereotype... entered into the stock of city-clichés or *parisianismes*", and that "the proposition that the city is too complex to be understood or known will become increasingly naturalised from the later 19th century onwards" [Prendegast, 1992; p 3]. Sharpe extends this continuity, arguing that the city by Cain is as a direct consequence of his exile, and traces the continuity through Blake's 'London' of 1793, where:

I wander thro' each charter'd street, Near where the charter'd Thames does flow, And mark in every face I meet Marks of weakness, marks of woe. [Blake, 1793; quoted in Sharpe, 1990; p 1].

Sharpe argues that Blake's reference to three biblical cities, Babel, Babylon and New Jerusalem, "points to three principal visions of the city: the city as a text, as a sexual object and as unreal" [ibid.; p 2].

There are striking similarities with the approach of contemporary authors above, but although Sharpe's 'classic trajectory' exhibits many common features - impenetrability, alienation and finally hallucination - it does not explicitly mention the dual response that was captured above by the notion of 'ecstasy'. He notes elsewhere, however, that the city has always been a "divided sign" - while God marks Cain as a punishment ("a fugitive and vagabond shalt thou be in earth" [Genesis 4:12]) he also offers Cain salvation ("the Lord set a mark upon Cain lest any finding him should kill him" [Genesis 4:15]), by extension marking the city as both a place of estrangement and of hope and salvation [Sharpe, 1990]. Similarly, Preston and Simpson-Housley find parallels in Wordsworth's *Prelude*, Book VII. Describing the Bartholemew Fair, Wordsworth is at first drawn to the wealth of sights and experiences, but ultimately judges; oh, blank confusion! and a type not false of what the mighty city is itself

He continues, prefiguring not only 19th Century responses of poets such as Baudelaire but also the analysis of commodities by Marx and the attention to 'flows' of much contemporary theory, that people are;

slaves unrespited of low pursuits, living amid the same perpetual flow, of trivial objects, melted and reduced to one identity, by differences That have no law, no meaning, and no end.

while elsewhere describing the city in terms that, as we shall see, present parallels with many postmodern approaches:

those mimic sights that ape the absolute presence of reality [Wordsworth, *Prelude*, Book VII lines 695-704 and 247-8, quoted in Preston and Simpson-Housley; 1994]

There is a continuity among responses to the city, therefore, divided into the celebration of the variety and vitality of the city, and the abhorrence of what Wordsworth terms its "Babel din" [ibid.]. The importance of the city in literature, however, reaches its climax during the 19th Century, particularly in relation to Paris, and the work of Baudelaire, whom Prendegast argues is of central importance [op cit; p 26]. Following the argument that it is the role of poetry to "re-cast 'normal' ways of describing reality", Prendegast suggests that the provocativeness of Baudelaire's language develops an "aesthetics of shock" which opens a series of new urban themes [pp 26-7]. The principal such theme developed among the writers of 19th Century Paris is the idea of the city as "a site of atomistic fragmentation and dispersal on such a scale as to defy intelligibility itself" [p 11].

In this literature of the Nineteenth Century a critical link is made between the city as the site of social and most importantly technological changes, particularly in transportation and communication, and the identity of the urban dweller. For Prendegast this critical fulcrum is epitomised by two classic arrival scenes: the disorientation of Rousseau's Saint-Preux and the excitement of Balzac's Lucien de Rubempré when faced with the 'tourbillon social' and the 'tournoiement' of Paris respectively [p 194]. This dichotomous reaction is also evident in

Baudelaire's response. In the *Poems en Prose* he describes the "délire officiel d'une grande ville fait pour troubler le cerveau du solitaire le plus fort"¹⁰, while describing the satisfaction of a destructive impulse metered out upon a stranger in *Le Mauvais Vitrier*. Yet in *Les Foules* he describes the pleasures of "un bain de multitude" - a cleansing 'bath' in the Parisian crowd, while in *Le Chien et le Flacon* he retracts this, treating the crowd with contempt, arguing that like the dog they should be offered "des ordures soigneusement choisies" - carefully selected filth. Likewise in the *Tableaux Parisiens* he contrasts,

Fourmillate cité, cité pleine de rêves,

with in the next stanza,

Un matin, cependent que dans la triste rue Les maisons, dont la brume allongeait la hauteur, Simulaient les deux quais d'une rivière accrue, Et que, décor semblable à l'âme de l'acteur¹¹.

Vigny, in his poem 'Paris' of 1831, perhaps offers the most succinct illustration of Sharpe's 'divided sign', exclaiming, "Enfer! Eden du Monde!" – "This Eden is the world's Inferno!" [quoted in Collier, 1985; p 32] - perhaps illustrating the point made by Timms and Kelley and Davies that even in the most exuberant prose of the Futurists there remains an underlying disorientation [Timms and Kelley; 1985; pp 1-2; Davies, 1985; p 65].

The central idea is the relationship between the new technological environment of the modern era and the impact that this has on the understanding of identity, mediated through the experiential form of the city itself. For Baudelaire the observation of the city's outside space as through a window leads to a knowledge of the 'inner space' of the individual as through a window on the self [Norman 1997]. The main driver is the influence of speed as a fundamental condition of modernity, which authors such as Simmel and Nietzsche relate to the fracturing of urban identities, and the consequent 'destruction of space through time', a theme developed from Marx that has become endemic to the discourse of modernity [see Berman, 1982].

 ¹⁰ "the officialized delirium of a great metropolis, calculated to unbalance the sanest loner's mind", from Un Plaisant, (A Wag) referring to New Years celebrations. Translation by Francis Scarfe, [Baudelaire, 1989].
¹¹ "Pulsating city overrun with dreams.... Daybreak. A dismal street. The houses yawn: Grim quays along a riverbank

¹¹ "Pulsating city overrun with dreams.... Daybreak. A dismal street. The houses yawn: Grim quays along a riverbank in flood. Under the brown fog of a winter dawn (the set design reflects our hero's mood)", from *Les Sept Viellards* in *Tableaux Parisiens*, Baudelaire [1997], Translated by Walter Martin.

There is, however, a second critical change in 19th century literature that exhibits direct parallels and continuities with contemporary writing on the city, for not only did the subject of this literature change, but so too did its style. Once again, Baudelaire was at the forefront of this development arguing that the ideal form for the prose of the city should be:

musicale sans rythme et sans rime, assez souple et assez heurté pour s'adapter aux mouvements lyrique de l'âme, aux ondulations de la rêverie, aux soubresauts de la conscience¹² [Baudelaire quoted in Collier, 1985].

The result is a fragmentary style that mirrors Baudelaire's understanding of the city itself, "a new lyricism that will subsume and sublimate the fragmentation and dislocation of modern urban life" [Collier, 1985; p 36]. As Simmel argued, "art not merely mirrors a world in motion, its very mirror has itself become more labile" [quoted in Prendegast, 1992; p 6] and we find Baudelaire describing his work as having "ni queue ni tête", such that "puisque tout, au contraire, y est à la fois tête et queue¹³ [Baudelaire, 1989]. Baudelaire goes on to argue that, "Nous pouvons couper où nous voulons...car je ne suspends pas la volenté rétive de [le lecteur] au fil interminable d'une intrigue superflue"¹⁴ [ibid], perfectly prefiguring the arguments presented in the *Topographics* series, as well as by authors such as Pile and Thrift, that texts can be approached spatially, the readers as literary flâneur¹⁵. Indeed, this is a connection advanced by both Prendegast and Lehan in their analyses of the city in literature, both suggesting parallels between their own work and the city [Prendegast, 1992; p 3 and Lehan, 1998; p 4].

We find in the 19th century, therefore, the origins of the bleeding between perceptions of city form and writing on the city that seemed the hallmark of contemporary literature. Indeed, possibly the most important critic of Baudelaire who highlighted this elision, Walter Benjamin, himself epitomises this style, carrying it into the 20th century, and on to the 21st, where Pile and Thrift list him as a 'contributor' to their City A-Z who "has a ghostly presence throughout this book" [2000; p. vii]. Benjamin focused on the importance of the snap-shot as the defining technique of 19th Century expression, and charted its influence upon the fragmentary and dissonant rhythms of 19th Century literature. It is, however, his own works and most particularly

¹² "musical but lacking rhyme and rhythm, supple and jerkey enough to marry the lyrical impulses of the soul, the meanderings of the daydream, and the twitchings of consciousness".

¹³ "neither beginning nor end, indeed everything is at once head and tail".

¹⁴ "We may break off or skip wherever we wish...for I have not strung [the readers] wayward will to the endless thread of some unnecessary plot". ¹⁵ I am thinking here of Pile and Thrift's *City A-Z*, [2000].

his analysis *Paris, Capital of the Nineteenth Century*, and his more illusive *One Way Street* that have become the critical fulcrum between 19th Century and contemporary writings on the city.

In Benjamin's work we find the fragmentary aesthetic taken to its extreme. As Buck-Morss argues, "To the mind that would comprehend intellectual phenomena in terms of logical or chronological development...his work offers little satisfaction. It is grounded, rather, on philosophical intuitions sparked by cognitive experiences reaching as far back as childhood. These 'develop' only in the sense that a photographic plate develops..." [Buck-Morss, 1989; p 7]. The result was an attempt to describe the transformation of his contemporary world through a collection of "aphorisms, jokes, dreams" which loosely use the city as a medium to connect social changes to individuals [Benjamin, describing One Way Street, quoted in Buck-Morss, 1989; p 16]. Buck-Morss argues that the text incorporates the "outside world of gas stations, metros, traffic noises, and neon lights" and juxtaposes them with intellectual thought, "like so many discrete pieces in a photomontage or Cubist collage" producing a friction which generates "cognitive sparks, illuminating the reader's own life-world" [ibid.; pp 18-19]. Of fundamental importance is Benjamin's attitude to the city and to the treatment of images. Benjamin treats the city as a fossil from which history can be read, and his approach privileges the visual, reducing the city to a succession of images which he approaches through his dialectical method [see Buck-Morss; p 67]. Buck-Morss argues that his approach to materialism is based in this "quasimagical" attitude towards objects [p 13] which are imbued with meaning and hence sublimated to image, in turn to be animated through the process of montage which resists a "harmonizing perspective" through juxtaposition, in a similar way to which Baudelaire denied the reader the security of a linear narrative [ibid; p 67]. Through One Way Street Buck-Morss argues that Benjamin redeems the practice of allegory, such that "modernist fragments, images of the city and of commodities" characterise urban modernity. She concludes that, "[t]he allegorical mode allows Benjamin to make visibly palpable the experience of a world in fragments, in which the passing of time means not progress but disintegration" [ibid.; p 18].

Although here the main focus has been upon the development of modernism in the sphere of literature, there are equally many parallels with the visual arts. Clarke addresses the innovation of the Impressionists in Paris following Manet, while Whiford focuses on the German expressionists Munch and Ensor, picking out the same thread of wonder and horror and the development of an increasingly subjective aesthetic based upon fragmentary and violent metaphorical images [Clark,

1985; Whitford, 1985]. Long provides an synthesis of the relationship between Modernism, the city and identity, arguing that;

[w]e are used to the idea of Modernism as an art of disintegration; and to the idea that its typical location, the scene and the cause of the disintegration it records, is the city. An art of despair and pain; a dissonant, fragmented art that confronts meaninglessness; an art bred by the city where the scale of life dwarfs the individual and where each isolated person lives in bewildering, shifting patterns of relationships with others, or in no describable patterns at all...[Long, 1985; p 144].

I have shown that the pivotal figures of Baudelaire and Benjamin open a continuity in both literary form and the related perception of the city from the 19th century into the 20th century, from the beginnings of modernism to its extension in writers such as Joyce, Pound and Eliot, in whose *Wasteland* "the Modernist, fragmented city is virtually the poem's protagonist" [ibid.; p 145]. These new perspectives were critically related to the advent of new technologies, particularly of communications and transportation affecting the speed of life and the perceptions of space.

However, these technologies themselves are similarly always developing, and hence while we find Benjamin noting the importance of the snapshot, by contrast Ezra Pound, commenting on Eliot's *Wasteland* remarks that "The life of the village is narrative....In a city the visual impressions succeed each other, overlap, overcross, they are *cinematographic*" [Pound, quoted in Timms and Kelley, 1985; p 3, emphasis added]. It is to the role of technological development in defining our contemporary understandings of cities and space more generally, extending this genealogy of ideas from the 19th through to the 21st Century, which I now wish to turn.

4.3 'Here no longer exists...'

I wish to argue that as modern transmogrifies into 'postmodern', literary responses once again focus on the relationship between technological change and identity as mediated through our supposedly shared experience of the city. However, as the driver moves from the 'snapshot' then 'cinema' to the more generic and pandemic 'screen', and the speed of technologies accelerate exponentially, I wish to suggest that in the subtly altered intellectual climate of 'postmodernism' the spatial themes present in the modernist discourse become amplified, with three important consequences. Firstly, modernism was essentially concerned with an aesthetics of speed. While this has implications for the experience of space and relates to the increasing understanding and representation of experience as fragmentary, the primary concern was with time. Spatial effects result from increased speed (principally of communication and transportation, [see Harvey, 1989]). In the current era, however, the focus of interest is more directly on these spatial outcomes, time dropping from the equation as speeds of communication reach (for all practical purposes) the instantaneous. The change is subtle, but I would suggest that whereas 19th century representations focus on the turbulence of the modern city with its fragmenting effects, contemporary literature tackles abstract spatial themes overtly. So, whereas Conrad characterised modernity as "living in the flicker" [*Heart of Darkness*], many contemporary authors tackle directly themes such as the 'placelessness of cyberspace', as popular and academic representations have become increasingly blurred, self-aware and auto-referential.

Secondly, I wish to suggest that the themes of the 'Alephic' and 'ecstatic visions'. which have been treated as related but distinct, fold into one. It is the direct engagement with ideas of *space* itself (as opposed to the city) that prompts the horror and joy of the ecstatic vision.

Thirdly, and as a consequence of the above, I wish to argue that these discourses have ceased to share any mutual ground with common understandings and experiences of the city, as the conception of space becomes divorced from any relation to the material and empirical. It is ironic that much contemporary theory, which has opened itself to the polyphony of 'other' perspectives in a critique of the 'privileged' discourses of the Enlightenment, has thereby created an equally privileged and remote discourse. Relieved of its emancipatory responsibility, postmodern discourse becomes increasingly remote, despite its polyphonic aspirations, rejecting 'common understandings' just as Gorky rejected the people of New York whom he found contrary to his idealistic expectations¹⁶. While embracing 'the other', the paradox of contemporary theory is that it becomes unintelligible to far larger uninitiate 'other', the non-academic other, the presumed 'another' (in conspiratorial sense of 'another one of us', sharing a common understanding).

This 'lifting off' of theory [Chambers, 1987, 1990] has precedents in the academic and literary approaches of the 19th and early 20th century work discussed above. The quintessential modernist experience of anomie described by Simmel may be of relevance for the figure of the flâneur, but

it may not be generalizable to the experience of all. Certainly, Prendergast argues in relation to Baudelaire that "the tension between the poetic endeavour and the recalcitrance of the urban reality with which it engages becomes increasingly more apparent" [Prendergast, 1992; p 27], and Timms and Kelley are more explicit still, arguing that, "underlying the work of almost all the artists and writers reviewed in this book [focusing on the literature and art of Modern Europe] is a reluctance to accept the city in its mundane routine. They are visionaries rather than realists. They explore the extremes of hope and dread, between distant utopia and immanent Apocalypse" [Timms and Kelley, 1985; p 7].

I will seek to argue that, as with so many themes of modernism that become exaggerated in the contemporary era, this tension between normative presentation and the mundanities of everyday existence is stretched to breaking point, as the discourse becomes increasingly inward looking and self-referential. One could suggest (perhaps provocatively) that while modernist authors sought to describe a common experience through the allegorical character of the flâneur, contemporary authors have rejected any attempt to access a 'common experience' on philosophical grounds, and have instead validated their own subjective experiences and understandings, the key protagonist being the academic [flâneur] themselves (a rhetorical wordplay that Prendergast, among others, actually uses). There are good reasons why such a reading may not be as provocative as it may sound. The key lies in the multiple related positions advanced in recent decades under the banners of post-structuralism and postmodernism, and it is the impact of these currents of thought upon socio-spatial theory more generally that is the final destination of this chapter.

Faced with the Gordian knot of contemporary theory, it is tempting to fall back on the now ubiquitous argument that the text should be approached spatially, even 'as a city', that is itself an example of the bleeding between rhetorical and explanatory forms. However, through an analysis of key texts I hope to tease out the important strands that impact directly on the understanding of space, which is the fundamental concern of this argument. I do not hope or intend to provide an exhaustive discussion of the relationships between the complex and interwoven strands of contemporary theory, particularly the 'posts' of post-modernism, -structuralism, and the related

¹⁶ See above p 74; "Gorky's disgust represents the modern intellectual's dilemma: confronted with the masses, whom he admires theoretically, in the flesh, he suffers from an acute distaste. He cannot admit to this disgust; he sublimates it by identifying external exploitation and corruption as the reason for the masses' aberrations" [Koolhaas, 1994; p 69].

arguments of post-colonial theory and feminism¹⁷. Rather I will draw from the melting pot of contemporary approaches those important ideas that seem most influential on contemporary thinking about cities and space and the socio-spatial relationship. Indeed, one might suggest that it is in their approach to spatial questions that some common ground can be found between these related yet fractious positions, and for this reason the themes critical to this discussion surface in the often confusing cross-pollination between these related positions.

However, it is with the 'postmodern' that this archaeology will begin for several reasons. Firstly, 'postmodernism' is in some sense the 'end-stop' of many of these debates, evolving in what Best and Kellner describe as "complex twisting pathways", specific to each disciplinary context, which nonetheless seem to coincide into a 'postmodern*ism*' that they cautiously describe in the singular. Indeed, they argue that it is this parallel emergence in individual fields *and* this "coalescence" into some hard-to-define and recalcitrant worldview that signals the "new paradigm" [Best and Kellner, 1997; p viii]. Secondly, it is under the banner of the postmodern that many of these debates reach their vertiginous apogee, consequently placing the greatest stress upon their coherence and opening them to the greatest vulnerability. Thirdly, it is within the heterogeneous positions of the postmodern that the question of space has been so explicitly problematized, a focus which, while owing an intellectual debt to the precursors of the postmodern, was not previously of such critical importance. Finally, it is postmodernism and most specifically the 'condition of postmodernity' that has exercised the greatest interest among the theorists of the socio-spatial relation that are the subjects of this thesis, particularly because of the explicit links between postmodernism and urban culture.

Chambers underlines the linkages between postmodern theory and the urban environment; "[p]ostmodernism, whatever forms its intellectualizing might take, has been fundamentally anticipated in the metropolitan cultures of the last twenty years: among the electronic signifiers of cinema, television and video, in recording studios and record players, in fashion and youth styles, in all those sounds, images and diverse histories that are daily mixed, re-cycled and 'scratched' together on that giant screen that is the contemporary city" [op cit.]. However, a more profound understanding of the key issues relevant to this thesis, the interrelated *character* of the writing on space, and the *nature* of space that is proposed as the basis for a 'respatialized' social theory, necessitates a more detailed investigation of the relevance of 'the posts'.

¹⁷ For such an overview see the excellent summaries upon which I have relied heavily in Best and Kellner, [1991 and 1997].

"The rush to the post"

Best and Kellner provide a sweeping description; "there is today an *emerging postmodern paradigm* organized around a family of concepts, shared methodological assumptions, and a general sensibility that attack modern methods and concepts as overtly totalizing and reductionistic; that decry utopian and humanistic values as dystopian and dehumanizing; that abandon mechanical and deterministic schemes in favour of new principles of chaos, contingency and spontaneity, and organism; that challenge all beliefs in foundations, absolutes, truth, and objectivity, often to embrace a radical scepticism, relativism, and nihilism; and that subvert boundaries of all kinds" [1997; pp 18-19]. 'Postmodernism' is indeed an "exasperating term" leading to "epochal confusions" [Bertens, 1995; pp 3 and 12], for while it seems to capture a sense of the uniting of many positions, Best and Kellner caution against a reductivism to *a* postmodern mind. "In a strict sense, then", they continue, "there is no such thing as 'postmodern theory'; rather, there are a diversity of postmodern *theories*" [ibid.; pp 21-22]. Furthermore, they caution that it should not be used as "a slogan or a buzzword" referring to "the contemporary moment in which we live, or contemporary novelties... [without] substantive analysis" [ibid; pp 20 and 23].

I am mindful of this in my introduction of the term here, and yet would draw on Best and Kellner once more in their assertion that 'postmodernism' is often "a placeholder, or semiotic marker", that something is "new and needs to be theorized, that something is bothering us and requires further thought and analysis" [ibid.]. It will be apparent from the preceding discussion on the linkages between 19th and 20th century literature on the city that I sympathise with those who see a continuity between modernism and postmodernism rather than a clear rupture. Nonetheless there are critical elements to the theoretical position that have changed with profound consequences for the understanding and representation of cities and space such that postmodernism can best be thought of as an acceleration or "radicalization" of modernism¹⁸.

¹⁸ The latter term is Best and Kellner's [ibid; p 26]. I do not think that it is necessary here to rehearse arguments over the chronology of the postmodern evolution/turn/rupture (depending upon one's stance) nor the 'line up' of 'key players' who defend each position. Such an analysis is provided by Anderson [1998], Best and Kellner [1991 and 1997], and Bertens [1995] among others.

If one were to identify a single motor for this acceleration it would perhaps be the reliance upon Nietzsche, whose philosophy has been influential both directly and indirectly¹⁹. Nietzsche's most direct impact has been his critique of rationality and the authority of scientific method to access an essential truth about the world [see the critique of 'Socratic' or 'Theoretic' man in *The Birth of* Tragedy, Nietzsche, 1967]. He argues in An Attempt at Self Criticism that "it was the problem of science itself, science considered for the first time as problematic, questionable" that distinguished his critique [quoted in Best and Kellner, 1997; p 59]. There are a number of compounded results of this position that similarly have clear echoes in the postmodernist arsenal. It raises the profound epistemological problem of how we are able to know the world if we abandon the belief, held since the Enlightenment, in rationality and the exclusive validity of the scientific method in uncovering facts about the world. But furthermore, it introduces a metaphysical critique, for from this attitude of radical positionality Nietzsche argues that "there are no eternal facts, just as there are no absolute truths", arguing that metaphysics imposes a contextual view of the world upon past epochs [Human, All too Human, quoted in Best and Kellner, 1997; p 63]. Thus, as Best and Kellner explain, "postmodern assaults on Enlightenment rationality and universalism, as well as postmodern relativism, perspectivalism, difference and particularity, stem as much from the philosophical critiques of Western thought that began with Nietzsche and continue through Dewey, Wittgenstein, Heidegger, and feminism, as from particular political experiences".

This genealogy, passing through the critical figure of Wittgenstein, opens another channel of impact for Nietzsche's ideas. Wittgenstein developed the critique of 'reality' through his approach to the use of language, particularly as a form of game. This linguistic turn has formed the basis for much of the post-structuralist critique that further develops the questioning of an absolute, knowable and representable 'reality', as well as opening the semiotic approach, through the work of Barthes and Eco among others, which treats the knowable in terms of signs, such that language constitutes rather than reflects the world²⁰. While Bertens is adamant that post-structuralism and postmodernism must be kept distinct, highlighting significant differences between the two in relation to their treatment of subjectivity and authorship, there are clearly many parallels and cross-fertilizations, most particularly in the approach to the possibility of

¹⁹ Nietzsche too links the modern and postmodern in terms of the view of the city as well as in theoretical terms, refering to the, "haste and hurry now universal...the increasing velocity of life" and of the "hurried and over-excited worldliness" of the modern age [*Untimely Mediations*, Nietzsche, 1983; p 148, quoted in Prendergast, 1992; p 5. See also Thrift, 1994; p 219].

²⁰ Berterns also notes that there is a parallel with the psychoanalysis of Lacan which similarly sees the subject as constituted through language [Bertens; 1995; p 6].

making objective statements about the phenomenal world, and Best and Kellner see the two as closely linked, postmodernism in some way as emergent from post-structuralism.

Lyotard's "*La Condition Postmoderne*" bridges the two approaches, applying Wittgenstein's theory of a language game to epistemological questions of the nature of contemporary knowledge. He makes a distinction between the scientific and narrative that is not dissimilar to Nietzsche's distinction between the Apolline and Dionysiac (*Birth of Tragedy*), and argues that while narrative is concerned more with the transmission of understanding (treating scientific knowledge as a subset), scientific knowledge rejects the narrative as based on opinion, fable and myth and fatally lacking in proof that is the basis of the scientific 'game' of denotation (of truth) [Lyotard, 1979; pp 23-7]. However, Lyotard argues that modern science has taken on a "transcendental authority" as it has left behind the metaphysical foundations, the 'first proof', or 'proof of proof', that was the grounding of Aristotle's science [ibid.]. Therefore, the "rules of truth" emerge through consensus within the game, resulting in the "modern proclivity to define the conditions of a discourse in a discourse on those conditions" [ibid.; p 30].

Clearly there are many parallels with Nietzsche's critique of rationality upon which Lyotard draws. Nietzsche argues that all ideas, values and positions are posits of the individual constructs of the 'will to power' and are to be judged against the extent to which they serve the ends of the will. There are, therefore, no facts, only interpretations, and "all interpretation was thus inevitably laden with presumptions, biases, and limitations" [Best and Kellner, p 64]. "Ultimately", therefore, " man finds in things nothing but what he himself has imported into them: the finding is called science" [*The Will to Power*, quoted in Best and Kellner; p 68]. This could read as an evaluation of Borges' *Aleph*, and there are important resonances here with the earlier idea of the 'Alephic vision', which while apparently concerned with the experience of space was in fact seen to address epistemological concerns with circular self-referential perspectivism.

This analysis of the thought of Nietzsche that lies behind both the postmodern and poststructuralist positions has attempted to answer why it is that these metaphysical and epistemological questions, the approach to space and the approach to the possibility of knowledge, are implicitly bound together in the work of Soja and others dealing with the contemporary urban experience within the contemporary theoretical zeitgeist. At root the two themes develop from Nietzsche's critique of rationality, scientific method and therefore 'reality', with the resulting turn from metaphysics to a focus on epistemological questions. However, Nietzsche's thought also unites the other strand of my earlier analysis, the idea of the 'ecstatic vision'. Certainly, the linguistic developments and the blurring of more dispassionate (scientific) academic styles with more informal subjective (narrative) work reviewed above relate in some measure to the Nietzschean critique on privileged vantage-points. However, this was only one aspect of the 'ecstatic vision', the other being the character of 'ecstasy' itself. Here too, Nietzsche's work is of prime importance, and especially *The Birth of Tragedy* once again. For while *The Birth of Tragedy* forms an oblique critique of science as discussed above, it ostensibly deals with the relation between the Apolline and Dionysiac in art. Nietzsche describes artistic endeavour in terms of a 'perpetual antagonism' between these two polarized approaches which are only united, he suggests, in Attic tragedy [Nietzsche, 1967; p 33]. While he associates the Apolline more with sculpture, a concern with surface appearance, individuation and the clarity of depiction (and hence with the rational and scientific mind), the Dionysiac overcomes this rational ordering, producing a loss of clarity, a blurring of the principles of individuation which Nietzsche describes in terms of "rausch" or an intoxication. For Nietzsche this response is arrived at through music, particularly in his opinion that of Wagner, although Tanner offers a more contemporary analogy of this loss of identity among the community of spectators in football crowds [Tanner, 1994].

I would wish to suggest a further contemporary parallel, for the character of "rausch" described by Nietzsche carries important associations with the idea of 'ecstasy' introduced earlier. Nietzsche describes the "...curious blending and duality in the emotions of the Dionysian revellers [which] reminds us...of the phenomenon that pain begets joy, that ecstasy may wring sounds of agony from us. At the very climax of joy there sounds a cry of horror or a yearning lamentation for an irretrievable loss" [Nietzsche, 1967; p 40]. As with the writing of Koolhaas, Sinclair and the rhetoric of the *Cities* exhibition a duality of excitement *and yet* horror is critical. But Nietzsche is more specific as to the causes of this horror than these others. He argues that,

...Schopenhauer has depicted for us the tremendous terror which seizes man when he is suddenly dumbfounded by the cognitive form of phenomena because the principle of sufficient reason, in some one of its manifestations, seems to suffer an exception. If we add to this terror the blissful ecstasy that wells from the innermost depths of man, indeed of nature, at this collapse of *the principium individuatonis*, we steal a glimpse into the nature of the Dionysian, which is brought home to us most intimately by the analogy of intoxication" [ibid.; p 36].

The ecstatic response is, therefore, rooted in the breakdown of reason in the face of phenomena that lie beyond the realm of accessibility. Initially I would suggest that the city may be, for many commentators such as those introduced above, just such a phenomenon. But Nietzsche puts emphasis upon the horror of ecstasy relating to an "irretrievable loss". I wish to argue that what has been lost, within the envelope of the 'post-Nietzschean' critique of reality, is the conception of a material space. To justify this claim I wish to turn to the extremes of postmodern literature, both academic and literary (if such distinctions survive) before tracing these threads back to the more moderate positions of the theorists who are at the core of the 'reassertion of space in critical social theory'.

Baudrillard and Gibson: cyberpunks or social theorists?

Best and Kellner accuse Baudrillard not only of extremism but also of "theoretical opportunism" (along with Lyotard), switching between extreme and more moderate position as is expedient [1997; pp 24-6]. But, however extreme his approach, they do not deny his significance, and indeed I will suggest that Baudrillard emerges as a critical fulcrum between the philosophical positions described above and the more contextual writing on cities. Baudrillard's approach can be seen as a development from Nietzsche's position in a number of ways, particularly in terms of its relativism and subjectivity, his highly aestheticized style of writing, and the idea of the 'simulacrum'²¹ [Best and Keller, 1997; p 60].

However, Baudrillard's important contribution is to relate Nietzsche's critique of reality as it emerges through postmodern theory to the post-structuralist linguistic focus, particularly the ideas of semiotics. Baudrillard develops a critique of Marx, arguing that commodities are treated as signs and are valued as such more than for their use or exchange values. Indeed, he collapses the referent into the sign, arguing that "there is no fundamental difference between the referent and the signified" [quoted in Bertens, 1995; p 87]. The 'real' then, is replaced by a simulacrum that is the 'hyperreal' with the result that, "Los Angeles and the America surrounding it are no longer real, but of the order of the hyperreal and of simulation" [Baudrillard, 1983; p 25]. Bertens is dismissive of these later writings, arguing that, "he sketches a surreal apocalypse in terms that leave no room for argument...exhibit[ing] all the worst traits of post-structuralism; a contempt for

²¹ The 'simulacrum' is prefigured in Nietzsche's work in the idea that people play roles and are themselves reduced to shadows or 'simulacra' of the roles that they play [see Best and Kellner, op. Cit.].

facts and definitions, a style that is equally reluctant to give concessions to the demands of the concrete, and a grand vision that develops distinctly metaphysical overtones" [op cit.; p 133].

These themes are perhaps most apparent in his America [Baudrillard, 1988a] in which America is reduced to "a great hologram", a filmic simulacrum [p 29] which seems to reach its apogee on the freeways of Los Angeles and in the "labyrinthine convolution" of the Bonaventure Hotel which is "pure illusion...a box of spatio-temporal tricks" $[p 59]^{22}$. Indeed, as well as this obvious synechdoche, Baudrillard exhibits all the features of the alephic and ecstatic visions described previously. His narrative is driven by a preconception of what he will find ("I went in search of astral America...the America of the empty, absolute freedom of the freeways" [p 5]), and his response on finding his 'aleph' is one of ecstasy which has an undercurrent of his own brand of apocalyptic nihilism, (the desert is an "ecstatic form... an ecstatic critique of culture, and ecstatic form of disappearance" [p 5], just as New York provides "the sheer ecstasy of being together" [p 15]). However, he is clear that he does not deny the existence of the real, as "radical thought does not annihilate the real...It puts it out of play, out of equivalence". Rather he 'does not believe in realism', challenging reality through his focus on the simulacrum [1998; pp 23 and 34-5]. His approach bears a striking resemblance to that of Dalí as he argues that his intention is to "push the paradox to the limit...to the point of collapse" through thought as "provocative acceleration" [p 23]. This limit, perhaps exceeded to collapse, results in what Best and Kellner describe as a "devouring" of truth, reality and power - ultimately "...a new stage of abstraction, a dematerialization of the world through semiological (re) processing in which images and signs take on a life of their own..." [1997; pp 95 and 99].

Virilio also advances similar arguments, focused around the influence of technology and what he has termed "La Vitesse de Libération", the pre-eminent significance of the speed of light which becomes the critical measure of time and shrinking-space in the relativistic spaces of a communicational "teletopia" whose violent concertina risks an "economic and social crash"²³ [Virilio, 1997 and 2000; p 67]. There are consequences for the city, the "*real city*, which is situated in a precise place...giving way to the *virtual city*", a 'de-territorialized meta-city' at the centre of a communications web [2000; p 10]. However, like Baudrillard his argument extends to question not just the form of contemporary urbanism but also reality and space. He argues, developing the arguments of Lyotard, that scientific knowledge is now defined by that which can

²² Recall also Barber's assertion of the overhaul of the real by the digital image [Barber, 2001 and above, 4.1].
be digitized, that as knowledge becomes 'cybernetic' the result is not the acceleration of history ['as in the past'] but "the dizzying whirl of *the acceleration of reality*" resulting in, "a knowledge which denies all objective reality...the eclipse of the real" [Virilio, 2000; p 3 sic.]. "What is being revealed here", he states in the characteristic declamatory style of the genre, "are the beginnings of the 'end of space'..."

This idea of the 'end of space' is explicitly explored in the writing of 'cyberpunks' such as William Gibson, whose work can be understood as part of the wider tradition of approaching issues of technology and identity through spatial imagination examined above. Indeed, Gibson's work in particular is important for it forms a link between the postmodern theorists such as Baudrillard and the more moderate writing of geographers and others who would perhaps distance themselves from Baudrillard's rhetorical excesses. As the boundaries between 'academic' and 'literary' give way in the face of the post-structuralist and post-modern critique, Kellner is able to argue that Gibson's *Neuromancer* can be read as social theory, in contrast to Baudrillard's work, which can be considered science fiction, and goes so far as to argue that since both authors problematize the subject and notions of time and space, "providing cognitive mappings and poetic figuration to illuminate the constellations of our contemporary high-tech media culture", Gibson has 'taken over' the challenging mantle that Baudrillard dropped as he became increasingly "dull and repetitive" in the late 1980's [Kellner, 1995; p 299].

The genre of fiction known as 'cyberpunk' is interesting because it represents the extreme development of the continuities between 19th century and contemporary literature examined above, being predicated upon an implicitly spatial imagination revolving around the concept of 'virtual reality', with many tacit links to contemporary academic thought. Following the template of modernism, the key driver for 'cyberpunk' remains the intersection between technology and identity, mediated through the spatial environment of both the city and 'virtual reality'. In their wide-ranging review of the impact of telecommunications on the city, Graham and Marvin [1996] argue that "[t]he shift to telemediated economic and social networks undermines the old notion of the integrated, unitary city which has an identifiable boundary and is separated from others by Euclidean spaces and the all-powerful friction of distance" [p 71]. Similarly, Mitchell argues that what he terms the "infobahn" is reconfiguring spatial and temporal relationships, principally through the advent of fibre-optic networks and the Internet. Significantly, he argues that the

²³ Although their arguments are very similar Baudrillard is critical of Virilio's analysis of the 'cyberworld' which he describes as "intransigent and inexorable" [Baudrillard, 1998; p 22].

Internet is not simply a-spatial (a familiar although not itself uncontestable claim, I would argue), but that it is "fundamentally and profoundly *anti spatial*" [Mitchell, 1995; p 8].

The three authors, therefore, see these new telecommunications technologies as having a profound impact on our understanding of the urban, concluding, in a reiteration of the familiar theme of the Modernist epoch that, "[there is a] widening perception that we are losing our ability to view and understand the contemporary city..." [Graham and Marvin; 1996; p 376], to the extent that the "very notion of a city is challenged and must eventually be re-conceived" [Mitchell, 1995; p 107]. This demand for "new notions of place and urbanity" [Graham and Marvin, 1996; p 71] becomes subsumed, however, within the search for a renewed understanding of identity, for critically the spatial implosion attributed to the current technological revolution condenses around the body. The central thesis, expounded by Mitchell among others, is that, "[w]e are all cyborgs now. Architects and urban designers of the digital era must begin by re-theorizing the body in space" [op cit; p 28].

However, the most challenging explorations of what this new relationship between the body and space might be are to be found in the work of performance artists such as Stelarc²⁴ and the writings of the 'cyberpunks' such as William Gibson. Featherstone and Burrows offer a detailed description of the linkages between the nested terms 'cyberpunk' and 'cyberspace', exploring the variants of Barlovian and Gisbsonian cyberspace and the more generic 'virtual reality' [Featherstone and Burrows, 1995; pp 5-7]. However, it is the rhetorical excesses of Gibson's fiction which emerge as epitomising both terms, and they reproduce Gibson's own landmark definition of cyberspace as:

A consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts.... A graphic representation of data abstracted from the bank of every computer in the human system. Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data. Like city lights receding. [Gibson, 1984; p 51, quoted in Featherstone and Burrows; 1995; p 6].

Indeed, others such as Rushkoff widen the definition, arguing that 'cyberia' is where one goes both in "the wildest speculations of every imagination" and in out of body experiences alluded to by all mystic religions. He argues that this heady blend of technological change and "the rebirth

²⁴ The artist know as Stelarc submits his body to external control by remote 'users' in disparate on-line locations around the globe, and evangelises on his website that "the body is obsolete", see www.stelarc.va.com.au.

of ancient spiritual ideas" have "convinced a growing number of people that Cyberia is the dimensional plane in which humanity will soon find itself" [Rushkoff, 1994; pp 16-17]. And yet this dimensional plane is no promised Eden. As Mitchell notes (in relation to the possibilities of teleworking) there is a considerable polarization of attitudes which he interprets along politicized lines as a right wing hope for a return to family values and stable localized communities, and a left wing fear of a return to the [digital] dark satanic mill [op cit.; p 102].

The polarities are more apparent in fictional responses. Pawley's *Terminal Architecture* takes up Graham and Marvin's demand for new conceptions of place and urbanity with an exploration of possible architectural futures. The title, *Terminal Architecture* captures the bifurcation typical of the genre, suggesting as it does on the one hand the redundancy and inevitable failure of current approaches, as well as expressing the hope of a renewed architectural, urban and social vision based around the idea of the building as a 'terminal' through which to access the "operating system" of an alternative reality. The resulting flight of imagination, *Terminal 2098*, a notional visit to the *Ideal Terminal Exhibition* of 2098 ("We dont say house [home] anymore we say 'terminal'"), bears many resemblances to Robinson's tour of England or Sinclair's suggestive psyco-geographic derivés around the East End in its focus upon the "authentic architecture" of distribution centres, factories and petrol stations and disturbing imagery of pervasive security and decay. The description is of a landscape of Tardis-like 'terminals' which through access to a technological placenta become "brain pods, virtual worlds", more 'real' than the 'outside' to the extent that, when asked "What's it like living in Dorset?" [where, incongruously, *Terminal 2098* is set], the interviewee responds;

Terminal people don't think like that.... They've left all that stuff behind them. Time is a vast continuum for them. Just like space. Jim doesn't think about living in Dorset, he lives everywhere [Pawley, 1998; pp 15-16].

Pawley's fictional character, like Keiller's Robinson, acts as a mediator to the author's own views, and shows clear parallels with the semiotic collapse of Baudrillard's *America*;

I realized that our progress [by jeep] over this bland but uneven landscape was a paradigm of the future, as purposeful yet as meaningless as the noise of a tank, car or plane in a video game. Everything that had happened in 100 years had already begun happening in our own time. Nothing was new. Everything was different [ibid.; p 18].

This is the prelude to his assessment of the potential for a new urbanism, based in the conviction of the computer as "a state-of-the-art medium for simulating and transforming reality that could transcend time and distance: a piece of equipment capable of creating reality that could become part of the normal equipment of everyday life anywhere and everywhere in the world" [p 28]. Crucially, "this, of course, is what is beginning to take shape today" he claims, as satellite communications have, "made the concept of physical travelling speed as meaningless as it was thousands of years ago, when mankind could only walk" [ibid.; pp 164 and 166]. The "of course" is important, for here we see resurface the didacticism that was a common trait of the *Topographics* series. Speaking of the present (and therefore on my behalf!) he argues that, "Citizens feel as though they are dwindling to the size of pygmies while their states of communication, which are the 'cities' they really live in, are growing to infinite size.... It is as though the environment they have lived in for years has suddenly been magnified one million times while they, its former masters, have become no more than atoms within it" [ibid.].

Such interpretations of the future/present are not isolated. Indeed, they have percolated from perhaps the literary fringes of cyberpunk to mainstream incarnations in recent films such as *The Net*, *The Matrix*, and *eXistenZ*, (all released 2000-2001) as well as their now cult-classic predecessors *Tron* and *Bladerunner*, which explore Mitchell's claim that "we are all cyborgs now" [ibid.; p 28]. This genre is important to my argument for two reasons. Firstly, it illustrates the blurring of contemporary theoretical and imaginative approaches which exhibit "a 'habit' of folding into each other" in what Featherstone and Burrows describe as "a recursive relation between the fictional and the analytic", which they parody as "a hyperreal positive feedback loop" [op cit.; p 9]. Secondly, and more importantly, in consequence of this blurring we find the central themes of the alephic and the ecstatic visions emerging in the work of the cyberpunks as we did in the analysis of the theorists examined above. But it is through an analysis of the literature of cyberpunk, drawing on Coyne's notion of 'technoromanticism', that we can finally validate the merging of the two main themes of this section, and show that it is de-materialized space that is seen to be the catalyst of contemporary 'ecstasis', no longer the city itself.

Ecstasy, The Aleph and the 'postmodern' vision

Gibson himself describes *Neuromancer* as "a way of trying to come to terms with the awe and terror inspired in me by the world in which we live" [Gibson, quoted in Kellner, 1995]. We have charted this duality between 'awe' and 'terror' from the nineteenth century literature examined in the previous part (4.2) through the 'modern' literary responses to the city of contemporary authors. However, recently this duality has become more blurred as what Prendergast terms narratives of "end-time" (the dystopian view of imminent disaster) and of "playtime" (the jouissance or thrill of the urban) have moulded into one [Prendergast, 1992; p 207]. While affirming that "if apocalyptic imaginings and ludic fantasies have acquired pride of place among our postmodern urban shibboleths, they are less novel than we might think", I would reject the continued distinction that Prendergast draws between these two narratives in the contemporary context in which "the fixative [of the collage-city is] no longer holding, as life speeds up more and more" [ibid.]. Rather, the two narratives of end-time and playtime, paralleled in Koolhaas' reference to the theatres of the beginning and end of the world on Coney Island [see above p 58], have become fused, mirroring the duality of Nietzsche's 'rausch'. We see this transition in the move from the clean aspirational styling of Kubrick's 2001: A Space Odyssey to "the more grimy, post-urban realism of Batman, Neuromancer and Bladerunner" [Rushkoff, 1994; p 17], in the apocalyptic arousal of Ballard's Crash and Cocaine Nights [Ballard, 1995 and 1996] and in Fielder's question, "Do those who imagine the end of the city, whether in fire or ice, wish it or dread it - or, like me, dread they wish it, wish they dreaded it?" [Fielder, 1981; p 120].

Coyne characterizes such responses as "technoromanticism" and draws parallels with the earlier Romantic movement of the Eighteenth and Nineteenth centuries. In particular, he stresses the inheritance of Kant and Burke's idea of the 'sublime' – "awe and admiration at the various spectacles of nature...arousing emotions akin to fear rather than merely joy" [Coyne, 1999; p 60-61²⁵]. Kant makes the contrast between the responses to the 'beautiful' and 'sublime', suggesting that, "The mien of a man who is undergoing the full feeling of the sublime is earnest, sometimes rigid and astonished.... [the] feeling is sometimes accompanied with a certain dread, or

²⁵ See also Davis' *Ecology and Fear* [1998] where he argues that in the face of natural disasters Los Angeles is reinventing itself from former "Land of Sunshine" to "Book of Apocalypse theme park", partly though literature that seems to revel in the destruction of the city on average three times annually since the 1950's [pp 6-7 and 276]. He notes that "[n]o other city seems to excite such dark rapture" and although he sees in this the re-emergence of the ghost of idea of romantic sublime, he argues that for Los Angeles, the horror tinged with pleasure of the sublime is turned more in favour of the pleasure of destruction [p 277].

melancholy...", a state which Kant describes as the "terrifying sublime", offering a series of illustrations of enjoyment tinged with horror: such as "...Night is sublime, day is beautiful...The sublime *moves*, the beautiful *charms*" [Kant, 1991; p 47-48]²⁶. Burke is more explicit, stating that,

Whatever is fitted in any sort to excite the ideas of pain, and danger, that is to say, whatever is in any sort terrible, or is conversant about terrible objects, or operates in a manner analogous to terror, is a source of the sublime; that is, it is productive of the strongest emotion which the mind is capable of feeling... When danger or pain press too nearly, they are incapable of giving any delight, and are simply terrible; but at certain distances, and with certain modifications, they may be, and they are delightful, as we every day experience [Burke, 1970].

Coyne's analysis of a re-emergence of the Kantian sublime parallels closely the analysis above of Nietzsche's 'rausch'. Indeed, the Kantian sublime is the cornerstone of Lyotard's argument in *La Condition Postmoderne*, and there are many resonances with the critique of academic authority and authorship and the rejection of unitary meta-narratives in favour of a polyvalent multiple understanding that is the hallmark of postmodernism. Kant's approach in the *Observations* is to look for an understanding of the beautiful and sublime in the reaction of viewers, and not in the object itself²⁷. His was a revolutionary approach (in contrast to the rationalists) because of this subjectivism, his descriptive rather than prescriptive style which draws upon his own experience, and his rejection of the essentiality of unity to beauty, declaring that "Multiplicity is beautiful" [Kant, 1991; p 67, Goldthwait, 1991; p 23]. Furthermore, Kant's distinction between the noumenal (real but unknowable) world and the phenomenal (knowable but filtered through consciousness) world dovetails with Baudrillard's claim that "radical thought does not annihilate the real...It puts it out of play" [op cit.].

We saw above that this 'postmodern turn' resulted in the merging of what I had termed the alephic and ecstatic visions, and it was suggested, without substantiation, that it was the experience of space itself that now prompts the response of the sublime. Coyne's analysis applied to the cyberpunk literature, legitimates this link by arguing that the current "technoromanticism" unites the neo-romantic idea of the sublime with the neo-platonic idea of 'ecstasis' - the release of the soul from the body (that was described earlier in relation to Koolhaas' work [see above,

²⁶ Note the parallel here back to Schlör's description of 'nights in the big city' in similar terms of excitement and horror, see above p 83.

²⁷ In the *Observations* Kant still maintains the view that beauty is inherent to the object, a view overturned in his *Critiques*, where he argues that although beauty phenomenally seems to belong to the object, it is in fact inherent to the mind [Goldthwait, 1991].

chapter 3]). He argues that in the cybernetic narrative the idea of the soul is replaced by that of the mind, and the state of 'cybernetic rapture' achieved through the 'ecstasis' of the "immersion in an electronic datastream" [p 10]. This separation of mind from body means that "the material world [is] transcended by information" [ibid.]. He argues that this 'cybernetic excess' is evident in narratives which subvert notions of space and challenge the distinction between mind and body, reality and virtual reality; "[i]t is in the desire for ecstasis, and the mistrust of the body, that the confluence between Neoplatonism, romanticism, and the cyberspace theorists is strongest" [p 47 and 65].

Featherstone and Burrows also point to the overcoming of the material body and the dissolution of the boundaries between subject, body and outside world as critical to the understanding of cyberspace. While Benedikt offers a moderate assessment of the possibilities of cyberspace to "violate the rules of space", insisting that it remains within the limits of "credibility, orientation and narrative power" and offering the metaphysical middle-ground that cyberspace will "displace rather than replace objective reality", other authors enthusiastically stretch the metaphysical possibilities much further [Featherstone and Burrows; 1995, Benedikt, 1991b; pp 124-5]. Notably, Heim in the same volume argues that, "cyberspace is more than a breakthrough in electronic media or in computer interface design. With its virtual environments and computer simulated worlds, cyberspace is a *metaphysical laboratory*, a tool for examining our very sense of reality", and more beligerently still, Rushkoff asserts that there is a "battle for *your* reality", which is "up for grabs" [Heim, 1991; p 59, Rushkoff, 1994; pp 13-15, emphasis added]. The consequences of Cyberspace are summed up by Rushkoff with a quotation from McKenna,

We're going to find out what 'being' is.... We're going the distance with the most profound event that a planetary ecology can encounter, which is *the freeing of life from the chrysalis of matter* [ibid.; p 19].

As with the analysis of Soja's ontology presented in chapter 2, so here the analysis of postmodern theory (which concluded with the "dematerialization of the world through semiological (re)processing") and of the cyberpunk fiction (which "marginalizes the world of practice - of material, human, and technological contexts [through the] trope of dematerialization" [Coyne, 1999; p 68]) both end with this dematerialization of the understanding of space. Gibson's work was seen to be pivotal, blending cyberpunk and social theory. However, Gibson is also the fulcrum for another merging, between cyberpunk and the more moderate analysis presented by geographers, in this case Mike Davis (particularly his *City of Quartz*, [1990]). Davis himself has

argued that *Neuromancer* is a "stunning example of how realist 'extrapolative' science fiction can operate as a prefigurative social theory..." [Davis, 1992, quoted in Featherstone and Burrows, 1995; p 6, see also Bukatman, 1993; p 144 on the relationship between Davis, Gibson and *Bladerunner*]. This link from Davis through Gibson to the ideas of Baudrillard among others is interesting for a number of reasons. Firstly, because Davis is an important commentator on Los Angeles which, more than any other city, has been at the forefront of recent debates about the nature of the urban and has been of critical importance to key theorists such as Soja, Jameson, Harvey and others. Secondly, it is important because Davis writes within a generally Marxist framework, and this is a common inheritance that he shares with many key figures among the 'respatialization theorists', significantly Soja, Harvey, Castells and Lefebvre. Critically, however, it points to a common approach to space between the postmodern extremists such as Baudrillard and these more moderate theorists, not only in terms of empirical approaches to questions of urbanism, but also in terms of epistemological issues of the approach to space.

4.4 'Freeing life from the chrysalis of matter' – 'spatialization reigns supreme'28

It is inevitably dangerous to group together such authors amongst whom there are many subtle nuances of position and interpretation as well as glaring differences of opinion (as much as there were between the various 'post-' positions examined briefly above). However, I would assert that the commonality lies in what is *not* theorized rather than in what is; that is to say that a material understanding of space is dropped in favour of a more 'socially sensitive' idea of 'spatiality'. This in itself is not necessarily problematic, were it not for the fact that the 'cultural turn' that is implicit in postmodernism has drawn commentators such as Soja, Harvey, and Castells away from the conservatism of their Marxist roots towards an engagement with contemporary cultural expressions and the 'experience' of contemporary urbanism [for example Soja, 1996, Harvey, 1989, Castells, 1996]. Without a framework that is able to deal empirically with the use and experience of space *as well as* making theoretical linkages within the socio-spatial problematic, such texts have recourse to the imposed and universalized 'experiences' of the commentators themselves. The result is the replaying of the well-worn characterizations of urban and spatial

²⁸ The phrases come respectively from McKeman quoted in Rushkoff, 1994; p 19, and Bertens, 1995; p 181 commenting on Jameson's conclusion to *Postmodernism; The Cultural Logic of Late Capitalism* [Jameson, 1991]

experience examined above: that space is fragmented, chaotic, and cities a bewildering cacophony of signs and images that exhibit the traits of the alephic and ecstatic visions²⁹.

Certainly Jameson is a key bridge between the theoretical developments of Baudrillard, Lyotard, Lacan and others and authors such as Soja, Harvey and Castells, and he similarly notes that "[t]he more fundamental modification in the situation today involves those who were once able to avoid using the word [postmodernism], out of principle; not many of them are left" [Jameson, 1991; p xv]. He is among the first to draw the parallel between postmodernism as an aesthetic theory and epistemological critique, and the process of capitalism and to claim that, "[I]t is in the realm of architecture, however, that modifications in aesthetic production are most visible, and that their theoretical problems have been most centrally raised and articulated", architecture being in some sense "a privileged aesthetic language" (1984; 1991; p 2 and 37). Jameson's discussion of the Bonaventure Hotel in Los Angeles and his reliance upon Venturi, Scott-Brown and Izenour's *Learning from Las Vegas* set a precedent for the treatment of architectural and urban issues. Jameson's Bonaventure, which through the most extreme synechdotal extrapolation becomes the referent for a universalized "lived experience of built space itself" [ibid.; p 6], is treated in terms of the "depthlessness" that Jameson finds in his analysis of Warhol's *Diamond Dust Shoes* [ibid.; pp 8 to 10]. He argues that, "[n]or is this depthlessness merely metaphorical: it can be experienced physically and 'literally'..." and continues, drawing on ideas of the fragmentation of the subject and schizophrenia from Lacan and Lyotard's notions of 'intensities' and the sublime, that "I think it is at least *empirically* arguable that our daily life, our psychic experience, our cultural languages, are today dominated by categories of space rather than by categories of time" [p 16, emphasis added].

And yet he does not present this 'empirical evidence' in support of his claim that, "the city itself ...has deteriorated or disintegrated to a degree surely inconceivable in the early years of the twentieth century" [p 33]. He begins his analysis of the Bonaventure with the assertion and clarification of his earlier remarks;

I am proposing the notion that we are here in the presence of something like a mutation of built space itself. My implication is that we ourselves, the human subjects who happen into this new space, have not kept pace with that evolution; there has been a mutation in

²⁹ Cloke, Philo and Sadler provide a useful distinction between postmodernism as subject (of study), object (such as the Bonaventure) and attitude (of authors to subject and object), and the tendency for these distinctions to become blurred [Cloke, Philo and Sadler, 1991].

the object unaccompanied as yet by any equivalent mutation in the subject. We do not yet possess the perceptual equipment to match this new hyperspace... [ibid.; p 38]

Jameson's account of the 'architectural space' of the Bonaventure is an unstable mix of the 'architectural' treated as allegorical (particularly the technical components of the building; the elevators, 'gigantic kinetic sculptures', 'emblems of movement' and 'allegorical devices', and the exterior whose "glass skin repels the outside") and the spatial treated in terms of the movement of people. He argues that visitors are characterized by "milling confusion, something like the vengeance this space takes on those who walk through it", suggesting that what he terms the "total space" of the Bonaventure, symptomatic of his new space of postmodernity, corresponds to "a new collective practice, something like the practice of a new and historically original kind of hypercrowd" [pp 40-43]. He universalises his own disorientating experience in the Bonaventure to a general defining condition of the contemporary ("I am anxious that Portman's space not be perceived as something either exceptional or seemingly marginalized" [p 44]), characterized by the "transcend[ence] of the capabilities of the individual human body to locate itself" and ultimately, "an alarming disjunction point between the human body and its built environment" [ibid.]. Indeed, it is perhaps critical distance, the possibility for objective analysis, that "has very precisely been abolished in the new space of postmodernism. We are submerged [he continues] in its henceforth filled and suffused volumes to the point where our now postmodern bodies are bereft of spatial co-ordinates and practically (let alone theoretically) incapable of distanciation" [p 49].

Although Harvey is critical of Jameson for "losing his foothold [as does Baudrillard in his 'frenetic writings'] on both the reality he is seeking to represent and the language that might properly be deployed to represent it", he nonetheless follows Jameson in his treatment of the Bonaventure Hotel and the approach to architecture generally [Harvey, 1989; p 351]. Once again, Harvey is drawn towards a discussion of the 'lived experience' of urbanism which, despite his being "refreshingly sceptical of hyperbole" [Bertens; 1995; p 220], tends towards the same imposed and unsubstantiated 'readings' of the urban experience which founder on a confusion of architectural style and a presumed impact upon perception and behaviour³⁰. Similarly, Castells focuses upon the socio-spatial relation, arguing, as do Jameson, Harvey, and Lefebvre³¹, that

³⁰ A more detailed analysis of Harvey's approach to space is the subject of chapter 6.

³¹ I have chosen in this section, which aims briefly to draw the link between authors such as Castells, Harvey, Soja and contemporary social theory, to omit a discussion of the work of Lefebvre whose ideas underpin most current writing on socio-spatial issues. I have one defence for this; that it has been my intention throughout this thesis to reach theoretical positions through empirical evaluations. Indeed, it is my contention in the following section (following Giddens) that

space should be considered as "an historically-constituted social relation", as a material product of social practice rather than as a "physical given" which "presupposes the determination of social behaviour by reactions to a particular physical environment", thus drawing a clear distinction between 'habitat' and 'inhabiting' [1977; p vii ,115 and 105]. He clarifies, "[a]lthough spatial forms may accentuate or deflect certain systems of behaviour...they have no independent effect, and, consequently, there is no systematic link between different urban contexts and ways of life" [p 108].

His more recent work joins the debate on the impact of technologies [1989, 1996, 1997, 1998] and proposes a new 'space of flows' as the expression of contemporary 'network society', following from his earlier assertion that "there is no theory of space that is not an integral part of a general social theory" [1996; p 410; 1977; p 115]. However, in understanding space as "the material organization for time-sharing social practices" he creates a division between the essentially conceptual space of the network of circuits of electronic impulses, nodes and hubs and managerial elites that make up the space of flows, and the residual spaces where, "[t]he space of flows does not permeate down to the whole realm of human experience in the network society" [ibid; pp 412-415 and 423]. "Indeed [he continues] the overwhelming majority of people, in advanced and traditional societies alike, live in places, and so they perceive their space as placebased". This signals a return to the conception of space in terms of meaning that was prominent in The City and the Grassroots, where he argued that, "[w]e will call urban social change the redefinition of urban meaning" [1983; p 304]. Hence we find a similar distinction to that in Jameson's work between space on the one hand as abstract and related in some way to what Castells calls "time-sharing social practices" [1996; p 412], Jameson terms "collective practice" (and that I will term co-presence, following Hillier and Giddens in the following section), and space conceived in terms of meaning.

These two unresolved understandings tend both to be mobilized in passages dealing with the "lived experience" of architectural and urban space. The argument thus far, originating with the 'case studies' of Soja and the *Cities* exhibition and broadening these initial themes through the

philosophical debates are emergent from empirical real-world problems, "to make philosophical speculation responsible to reality" [Smith, 1990; p viii, see above, chapter 1]. Lefebvre offers little opportunity for this type of analysis as his work, particularly the influential *Production of Space* does not engage in any substantive way with the phenomenal realm. As Harvey says; "Show me where it is Henri!" [comment at public lecture LSE, 1999]. I will therefore return to the work of Lefebvre in the summary of the following section, having explored through empirical work the possibility for a synthesis of 'spatiality' (perhaps epitomized in Lefebvre's position) and a material approach to space.

discussion of contemporary theoretical and literary approaches, has sought to illustrate that there exists a common understanding of the 'lived experience' of cities that, despite the differences in approach between different authors, is united by the rejection of a material space at the heart of the socio-spatial problematic. It was argued in chapter 1 that this rejection neutralised the threat of a latent determinism and the reductionism of spatial science. The result is that without an effective empirical tool for analysing the experience and use of space, authors rely heavily upon unsubstantiated assertions which, while claiming to access a common experience, in fact constitute a 'lifting off' of explanation from common understandings of space, related to the material environment.

Chambers argues the point forcefully, parodying the synechdochal reference to particular sites that I have drawn attention to (in this case the ubiquitous 'airport as city' and the 747 as the vantage point of the academic; see Augé, 1995, 2000; Barber, 2001; Chambers, 1987, 1990; Haggett, 2001; Hertmans, 2001; Pascoe, 2001; Sinclair, 1997; Sudjic, 1992; Virilio, 1997 among others including Koolhaas and the *Cities* exhibition examined above). He argues that the airport is a "metaphor of cosmopolitan existence" where the pleasure of travel is not only to arrive but also to be "simultaneously everywhere". However, he twists this around drawing a parallel, as I have sought to do, between the position and *positionality* of the 'academic flâneur', updated in his analysis to the academic air traveller. It is worth quoting again in full:

It [being simultaneously everywhere] is a condition typical not only of the contemporary traveller, but also of many a contemporary intellectual. Viewed from 35,000 feet, the world becomes a map. Recently some of the views brought back from the high flying have arrived at the conclusion that the world is indeed a map. At that height it is possible to draw connections over vast distances, ignoring local obstacles and conditions. At that height certain common-sense objections ('down-to-earth' views) to a reading of the terrain can be ignored. When further height is gained, the flight plan only needs to consider the relation between the plane (undergoing rapid transformation into a spaceship at this point) and the flat referent beneath its fuselage. At this point, the meanings of events elsewhere are incapable of penetrating the space we have put between ourselves and them. Meaning contracts into the pressurized cabin. Life inside the plane, with the observation it affords, becomes more 'real' than the 'reality' we presume to observe. Knowledge of the social, political and cultural globe becomes the knowledge of a second-order reality, a 'simulacrum' [Chambers, 1987; p 1-2, see above, chapter 1 p 16].

Chambers' metaphor precisely captures the elements of my argument, the idea of a blurring between epistemological, ontological and metaphysical positions that is the hallmark of an attempt to engage with the perception, behaviour and use of space with a theory that lacks an adequate formulation of 'physical space', sacrificed in favour of a more socialized 'spatiality'.

There is then, I would argue, something approaching what in Williams' terminology might be called a new 'structure of feeling' about space. Thrift uses this term in relation to his theory of 'mobility' in which he argues that we are living in an "almost/not quite world" of a nascent cyborg culture resulting from a shift in the realm of experience characterized by changes in the "machinic complexes" of speed, light and power [Thrift, 1994; pp 191-2]. His argument engages with many of the same themes that I have addressed here, but from a more sympathetic standpoint, arguing for "an almost/not quite ontology" that results from the late twentieth century synthesis of speed, light and power. In his "new order reality" in which "the modern world is increasingly seen as decentralised and fragmented", space takes on "critical importance" as "a battlefield and zone of mixing, blending, blurring, hybridizations", and is understood in terms of boundaries and boundedness which transgress the physical and non-physical to constitute "a new kind of materiality" which rejects the analytical independence of space in favour of a Bergsonian 'space-time' [ibid.; 215-9].

Despite our divergent arguments, Thrift's explanation and defence of the 'structure of feeling' concept in the context of a changing understanding of the experience of space can equally apply here. Certainly, I have sought to justify the most superficial understanding in terms of 'the culture of a period', and further that the change is wider than simply the 'institutional or formal', consistent with a "change of style which also turns out to be a change of content", and is related to an [assumed] experience with [claimed] palpable effects³². However, I am interested by his interpretation of a 'structure of feeling' as a *process* and note that he turns to the "social and cultural conditions of academe out of which this structure of feeling has arisen", while noting that "we have now reached a point where western cultures have become increasingly self-referential" especially in relation to "sources and horizons of meaning... which are based in hybrid images of machine and organism, especially images based on speed, light, and power" [ibid.; 192-3].

I wish to argue that this spatial 'structure of feeling' is born of a process of academic inflection within the fuselage of Chambers' pressurized cabin, and through the abandonment of all notions of space relating to 'material objects' (that is the 'enclosure' which Thrift relegates to a "mystical past" [ibid.; p 218]³³) compromises the possibility of extending this new and impoverished understanding of space into empirical work dealing with the use and experience of space. While Thrift provides evidence of such an 'empirical bent' in the social sciences and humanities now

³² These qualifications relate to Thrift's summary of the structure of feeling concept. See also Williams, 1977.

³³ Thift borrows this perhaps slightly limited term from Emberley, [1989].

"saturated with the vocabulary of mobility", these range from "nomadic criticism" to "the increasing use of *metaphors* based on maps, topography, billboards, networks, circuits, flows", work on the "not quite/almost places of mobility" (such as airports once again, that recurrent synechdotal device), the "extraordinary...importance of street life", and the "meanings of electronic spaces...the communication spaces of the telephone, fax and radio", none of these approaches relate to a physical space grounded in matter or, following Thrift, 'enclosure' [ibid.; p 228, emphasis added].

However, it is in just such accounts, which nonetheless often presume to describe some common experience of space, that space is reified in terms of the 'ecstatic' or 'sublime'. And indeed, this should be no surprise since Jameson argues that the Kantian sublime, which underlies both his and Lyotard's foundational description of postmodernism, differs from the Burkian in including within it a sense of a 'crisis of representation', such that "the object of the sublime becomes not only a matter of sheer power and of the physical incommensurability of the human organism with nature but also of the limits of figuration and the incapacity of the human mind to give representation to such enormous forces" [Jameson, 1991; p 34]. As Gregory argues, "the sublime is of immense importance for postmodern thought", because;

it marks that moment when we confront something that we are unable to represent as a purposive unity, something that exceeds our capacity for totalization, intuitively or conceptually, and when we are wrenched away from our tranquil contemplation of the world's seemingly obedient regularity [Gregory, 1994; p 143].

But Jameson is yet more precise in identifying the instigator of the "hysterical sublime": it relates to the impossibility of representing the 'new global spaces' of late capitalism in which "our bodies are bereft of spatial co-ordinates", and which have "moved closest to the surface of our consciousness, as a coherent new type of space in its own right" [1984; pp 87-8].

Such concerns with the possibility of representing (and hence understanding) cities and space preoccupy authors such as Pile and Thrift. They conclude their *City A-Z* with a '*Technical Note*' which draws a parallel between their approach to the [edited] text ("a vortex of thoughts") and the possibility for knowledge of the city understood as "a patchwork of intersecting fields, as a discordant symphony of overlapping fragments...to all intents and purposes, an unassimilable, irreducible and sometimes even incomprehensible entity" [Pile and Thrift, 2000; pp 303 and 309]. Again blurring the distinction between city and text they renounce the project of 'knowing' the

city in favour of opening a 'space' of tension using their "representational technologies" of diagrams, montage, screen and clues. However, their appeal to the impossibility of 'knowing' a totality such as the city (a *reductio ad absurdum* with which no-one could disagree) is used as a veil for the abandonment of a more plausible, though evidently for Pile and Thrift less appealing, project of a systematic understanding of the city. Such an understanding founders on the fashion for contextual rather than material understanding of space, fostered by the lack of a coherent theory for linking material space and society without recourse to the deeply unfashionable spatial science or comprehensively rejected determinism.

I would point, therefore, to a crisis of representation of the '*old*' material spaces in contrast to the 'new global spaces' which have been the focus of 'saturating' attention, and, in contrast to Jameson who argues that the postmodern sublime can only be theorized in terms of "that other reality of economic and social institutions", would point to this abandonment of a material approach as the genesis of the current 'sublime' or ecstatic approach to the understanding of cities and space generally [Jameson; 1991; p 38]. As Chambers argues, there are "stubborn referents - material, sometimes even geological - that periodically pierce the daily networks of sense", and he extends his airport analogy by suggesting that the academic high-fliers are 'in-flight' in the alternative sense of fleeing this confrontation with the material [Chambers, 1987; p 2]³⁴. In the current atmosphere of scepticism towards realism and the fear of a latent determinism and scientific reductionism in any discourse relating a physical space to social outcomes, there is no adequate empirical approach to the use and experience of 'lived spaces', a lack compounded by empiricism's, "sober narratives of common-sense realism [which] leave no space for the heady speculations of [its usual antagonist,] romanticism" [Coyne, 1999; p 68].

There are two possible ways to proceed. The first is typified by Chambers. He argues that both Benjamin and Nietzsche (key protagonist in the development of the current 'structure of feeling' towards space that I have outlined), "in considering attempts to represent the sense, the pulse, the fullness and tactile sensuousness of the world, recognise the necessity of failure" and that, "there is ultimately...no resolution [between multiple perspectives]. We are condemned to wander - critically, emotionally, politically...passionately, in a world characterized by an excess of sense which while offering the chance of meaning continues to flee ahead of us. This is our only world, our responsibility, our only chance" [Chambers, 1990; p 12].

The alternative case, while couched in equally fatalistic language, is put by Bertens;

After an overlong period in which Enlightenment universalist representationalism dominated the scene, and a brief, but turbulent period in which its opposite, radical anti-representationalism, captured the imagination, we now find ourselves in the difficult position of trying to honor the claims of both, of seeing the value of both representationalism and anti-representationalism, of both consensus and dissensus...this is our fate: to reconcile the demands of rationality and those of the sublime, to negotiate a permanent crisis in the name of precarious stabilities [1995; p 248]

It is this reconciliation that is the aim of the second section of this thesis - an alternative representation of space, based in materialism, that opens the opportunity for empirical study of the use and experience of space without resorting to determinism, and which also advances not a 'reassertion' of space into social theory, but an approach to the socio-spatial problematic that is resolutely spatial from the outset.

³⁴ I acknowledge that this is to use Chambers' attractive concept somewhat out of context, as his notion of the real that academics are in flight from, "violence, strikes, war, earthquakes...", has little common ground with my proposition of a material space that he would, perhaps, have little sympathy with.

Section 2 - Reconstruction

Introduction

The world of supermodernity does not exactly match the one in which we believe we live, for we live in a world that we have not yet learned to look at. We have to relearn to think about space.

Non-Places; introduction to an anthropology of supermodernity, [Augé, 1995; pp 35-6]

In the first section I have sought to twist conventional arguments to suggest that if at the heart of contemporary theory there is a crisis of representation, provoked predominantly by our difficulty in representing space, it lies not in our ability to represent the 'new spaces' or 'spatialities' which, as Chambers notes, have become the focus of saturating attention, but rather in our continued difficulty in representing the 'old space' of material phenomena. Bertens emphasises that this 'crisis' is peculiar to the humanities and is dismissed by the 'hard sciences'¹. Indeed, there are many on the fringes of the cyberpunk/social theory melting pot who decry the genre's excesses. Graham and Marvin argue that the notion that the material city has been 'undermined' is "naive, short-sighted and dangerous", and Featherstone and Massey counter assertions by Rushkoff among others that "the attitudes of the cyberians will become as difficult to ignore as the automatic teller machine and MTV", questioning their claimed impact². Kevin Robins is perhaps the most outspoken detractor, arguing in a parody of Gibson's *Neuromancer*, that "[t]he contemporary debate on cyberspace and virtual reality is something of a consensual hallucination too", driven by a "feverish belief in transcendence", to the degree that ideas of a new and alternative space or reality represent a "tunnel vision [which] has turned a blind eye on the world we live in" [Robins, 1995].

However, this appeal to address the 'world we live in' juxtaposed to a 'new' and transcendental sense of space and reality is problematic, for it appears to advocate a return to a previous

¹ See for example Sokal and Bricmont's scathing parody of the 'abuse' of science by the 'intellectual impostures' of postmodern philosophers [Sokal and Bricmont, 1999].

² Featherstone argues that; "...theorists of the postmodern often talk of an ideal-type channel-hopping MTV (music television) viewer who flips through different images at such speed that she/he is unable to chain the signifiers together into a meaningful narrative, he/she merely enjoys the multiphrenic intensities and sensations of the surface of the images. Evidence of the extent of such practices, and how they are integrated into, or influence, the day-to-day encounters between embodied persons is markedly lacking" [Featherstone, 1991; p 5].

consensus in the approach to space and in particular its contentious relation to society and the material realm, that has never existed. I wish, then, to approach this problem from the aspect of a 'crisis of representation' of space, and to propose the configurational approach of Space Syntax as an alternative representation which may begin to resolve these problems. I aim to show that by departing from a different representation of space, Space Syntax opens empirical possibilities without encountering the bugbear of a crude determinism, and is able to develop a coherent, if perhaps restricted, approach to the socio-spatial dynamic. Certainly it offers the theoretical and empirical latitude to develop the possibility of "systematic knowledge of human action [and] trends of social development", the questioning of which by postmodern theory Giddens' dismissed as "unworthy of serious intellectual consideration"³ [Giddens, 1990; pp 46-7]. But perhaps it also offers a suggestion of a new approach to conceptualizing the role of space in other fields, not least the relation between space and the material realm. Given the current saturation of 'spatiality' which "reigns supreme", and the beginnings of a turn against thinkers such as Baudrillard (instrumental in that saturation and still fêted recently by an audience at the Bartlett School of Architecture), now caricatured by some as a "jaded Frenchman" with "hackneyed reflections", I might even go so far as to claim a degree of ironic radicalism, inverting Baudrillard's own rhetoric to argue that, "radical thought does not annihilate the real...It [brings it into] play, [into] equivalence"⁴ [Chambers, 1990; Bertens, 1995; Kellner; 1995; Baudrillard, 1998; p 35].

My approach will be to offer only the essentials of a theoretical elaboration of the theory of Space Syntax before developing a number of case studies which explore the possibilities for an elision with the work of other authors perhaps more prominent in the socio-spatial discourse. This initial introduction to the main theoretical positions, and their development in subsequent chapters, will be uncritical, my own critique and evaluation of the theory being reserved for the final chapter of this section in the context of the contributions of those other authors. There are a number of reasons for, and necessary clarifications of, this approach. Firstly, it must be clear that my task is not to reiterate the work of Hillier and others but to recontextualize it within the broader discourses of theory dealing with the socio-spatial relation. There seems a need for this exposure not only in the elaboration of the theory itself but also in its application to empirical situations. Too often, it seems to me, the potential of interesting empirical work to challenge accepted

³ Indeed, Giddens continues that, "Were anyone to hold such a view [that no systematic knowledge were possible] they would hardly write a book about it", reaffirming Magee's correspondence between the style and subject of writing, in rejection of Dr Johnson's jest that "he who drives fat oxen should himself be fat" [see above p 19].

⁴ The original reads "puts it out of play" and "out of equivalence".

theoretical approaches is lost as empirical results are not related back to theoretical positions *outside* the practice of Space Syntax. Secondly, it is not my intention to replace or 'overwrite' other positions on space or 'spatiality' examined above. My aim rather is to add to these understandings, and to address what I believe to be some of their failings when extended (as they must eventually be) into the phenomenal realm of experience which precipitates the crisis of [spatial] representation.

Finally, despite the need for a brief theoretical introduction, the aim is to develop theoretical positions from empirical observation. While Hillier uses this approach to develop a theory of society and space, drawing heavily on Hacking's notion of the 'creation of phenomena' [Hacking, 1983], my ultimate intention is to move through empirical work and theory to reopen the ontological and metaphysical debates about the nature of space. Therefore, while applauding Robins' call to "disillusion ourselves", I reject his regret that cyberspace discourse focuses on ontological and metaphysical questions such as "what is the nature of body/reality?" [his example] to the exclusion of "social and political issues of the 'real world'" [Robins, 1995]. Rather I would argue that it is just such social questions of the 'real world' that perhaps hold the key to a renewed approach to the question of space at the ontological and metaphysical level, and that such a speculative aim is best approached circuitously through the application of renewed understandings of space through empirical work leading to theoretical proposal, rather than through the construction of elaborate but perhaps detached theoretical structures whose application to 'real world' empirical phenomena remains awkward if not impossible.

With this intent, chapter 5 will introduce the theory of Space Syntax, and subsequent chapters in this section will seek to illustrate fruitful elisions with the work of other authors, chapter 6 with that of Harvey, chapter 7 with Giddens, chapter 8 with Foucault, before critically evaluating the potential for Space Syntax to rejuvenate the approach to space in social theory, and opening the speculative epilogue of the final section.

Chapter 5 Space Syntax: towards a theory of space as configuration

Let us begin this introduction to the concepts behind Space Syntax with a direct comparison with the work examined in the previous section, this time returning to Frederic Jameson. Jameson epitomizes the 'city as chaos' belief, asserting that, "the city itself ...has deteriorated or disintegrated to a degree surely inconceivable in the early years of the twentieth century" [1991; p 33]. Furthermore, he begins his analysis of the Bonaventure Hotel by relating this disintegration to a change in the nature of the built space of the city, and in our abilities to comprehend this renewed urban environment;

I am proposing the notion that we are here in the presence of something like a mutation of built space itself. My implication is that we ourselves, the human subjects who happen into this new space, have not kept pace with that evolution; there has been a mutation in the object unaccompanied as yet by any equivalent mutation in the subject. We do not yet possess the perceptual equipment to match this new hyperspace..." [ibid.; p 38, and above pp 117-118].

This position, as well as his proposal of a renewed 'cognitive mapping' drawing on the work of Lynch, is at dramatic variance with the position advanced by Hillier and others within the Space Syntax 'school'. Cities, Hillier argues, are 'nearly ordered', not 'nearly chaotic', indeed are, "utterly remote from chaos" [1999b; p 170]. Although this statement is made in relation to the topology of the city form, it is the central tenet of Hillier's approach that this material form, approached through the analytic of configuration, relates to social processes. Uniting these basic positional statements (and drawing on Hanson's distinction between intuitive geometric 'order', such as found in planned towns, and the non-geometric, non-intuitive 'structures' identified by Space Syntax [Hanson; 1989]) we could characterise Space Syntax as an approach to sociospatial structures through the configurational analysis of spatial layouts. Such a definition performs a useful orientation, for it clearly places Space Syntax in the same domain as those theorists concerned with the 're-assertion of space' into social theory, with two crucial differences. Firstly, Space Syntax does not seek to 'insert' space into an existent theoretic as a theoretical addendum or rejuvenator (the most obvious example being those theorists who have proposed a spatialization of a Marxist understandings of the city) but treats space as the starting point, ultimately even for a theory of society itself. Secondly, space is treated in material rather

than conceptual terms, that is in terms of the physical spaces of the city and buildings, rather than in the contingent terms of the *spaces of*...[the market/ capital/ etc]. Hillier describes this as "a key element in the meta-theoretical foundation of Space Syntax: that space is not to be treated as a background either to objects or human activities, but as an intrinsic aspect of both" [1999b; p 184]. Again, the proposition that space is an intrinsic aspect to both social and material life is not by any means an idea unique to Space Syntax, indeed it is one of the most basic areas of correspondence between Space Syntax and the wider canon of socio-spatial theories with which I would hope to broker a common ground. However, it is the approach to space, indeed the theory of space, which is at the heart of Space Syntax that differs so markedly.

Perhaps the most explicit statement of the Space Syntax position in regard to these theoretical debates has come in two recent contiguous papers; A Theory of the City as Object [Hillier, 2001] and Society seen through the Prism of Space [Hillier and Netto, 2001]. Together these mark a return to the project of presenting a theory of the socio-spatial problematic, which has not been so explicitly stated since the early work of Hillier and Hanson [1984]. While there has been considerable work in the interim, both published and unpublished, this has often focused more on the presentation of the results of empirical research⁵. While it is neither possible nor appropriate to wholly separate that empirical work from the theoretical developments upon which it depends and which it in turn drives, it is important to recognise that all too often Space Syntax is understood simply as a representational tool with associated analytical techniques without sufficient regard to the parallel and significant development of an approach to the socio-spatial problematic that is its foundational concept⁶. My concern here is to present these foundational concepts rather than the computational and representational techniques upon which the empirical work is based, although these will be encountered in the following chapters where I draw upon both my own and the Space Syntax Laboratory's work, as well as the work of other authors in the field.

In *Society seen through the Prism of Space*, Hillier and Netto attempt to engage directly with some of the current debates about the impact of technology on the city and to counter what they term the 'myth of historical spatiality' - the idea that in the past we were somehow more spatial and local, as opposed to now being 'virtual' and global, resulting in the present seeming strange

⁵ Notable exceptions would be the crucial theoretical papers *Natural Movement* [1993], *Cities as Movement Economies* [1996], and *Centrality as a Process* [1999a].

⁶ A perfect example of this misunderstanding is exhibited by Soja's own contribution to the Third International Space Syntax Symposium [Soja, 2001], analyzed in detail below (Chapter 9).

and alienating [Hillier and Netto, 2001; p 4]. While their conclusion that the resurgence in urban living provides little evidence of the claimed destruction of cities through technology is in some respects to joust at windmills, the argument really being about the annihilation of space itself through modern communications, nonetheless the preceding analysis of the relation between society and space is persuasive. They begin with a direct counter to the views of authors such as Jameson, quoted above, by arguing that we have no means of identifying a change in the relation between society and space without, "a theory of society and space adequate to account for where we are now", thus prohibiting any speculation about the impact of technological changes. The reason they give for this "theoretical deficit" is that previous attempts to build a theory of society and space have looked for space in the output of society and have therefore missed the "constructive role of space in creating and sustaining society" [ibid.; p 1].

While again this is to misrepresent the approach to society and space among many authors for whom the idea of a recursive and constitutive relation is central (indeed forming another of the principal arenas of correspondence with Hillier's own position), it does highlight Hillier's unique approach, "looking first at space and trying to discern society through space"; what he describes as looking at society "through the prism of space" [ibid.]. Rather than looking at the material expression of society and positing a process by which such an outcome is produced and is in turn productive (the approach of authors such as Castells, Harvey, Soja, Davis et al), Hillier begins from the twin proposition that for there to be any systematic relation between society and space two conditions must be satisfied⁷. Firstly, "society must have or be capable of having spatial necessity of some kind", which is to say that society must be material in some sense and not entirely non-spatial. Secondly, "space must have, or at least be capable of having, social potentials of some kind", it must express society in some way [Hillier and Netto, 2001; p 5].

Beginning from the acceptance that there is a relation between society and space, Hillier satisfies the first condition by presenting a theory of society that is fundamentally spatial. His starting point is to revisit what he describes as the 'core problem of social theory' - the dichotomous positions of methodological individualism and organicism, with their polar foci on the individual and society as a singular organism - and to restate this as a problem of space. "[W]hatever else societies are", he argues, "at one level they seem to be relational [...] constructs out of

⁷ I have elected to reverse the order of these two conditions which relate to the argument presented across the consecutive 2001 papers, as well as the order of those papers themselves in constructing the overall argument. The reason, in part, is once again to avoid an overly precise replication of Hillier's arguments, but also to move from socio-

individuals", with interaction and co-presence being what is manifested of society in space-time [pp 8 and 11]. And yet interaction seems at once too transient and governed by embedded social rules to itself become the basis of a spatial understanding of society. But within the polarized model of individuals and society, Hillier returns to the question of the locus of social rules, arguing that like language, it is impossible to propose that they are either exclusive to individuals, nor purely social abstractions, but rather are realised in space and reproduced through time in the dispersed situated practices and interactions of individuals [pp 9 to 10]. Just as with language, Hillier argues that the abstract rule set that governs the emergence of global patterns (in this case the culturally specific relation between a society and its spatial expression) are recoverable from our localised experience of concrete realities [p 10; see also Hillier and Hanson, 1984; Hillier, Hanson and Graham, 1987; Hillier, 1996; Hanson, 1998].

There are strong parallels between this position and Giddens' idea of the duality of structure by which structure is conceived of as both the medium and outcome of situated practices in spacetime, thereby similarly linking the production of social realities in space-time to the reproduction of structure⁸ [Giddens, 1984a; Hillier and Netto, 2001; p 10]. However, Hillier suggests that one failing of the Giddens formulation is that as well as being embodiments of social rules, societies are large scale patterns, *emergent* structures that are produced through localized recursive activity. Giddens, therefore, only satisfies half of the first criteria for a systematic relation between society and space. What is further required is a theory that explains the spatial necessity of the emergent global structure, as well as the reproduction of that structure at the local level.

Hillier suggests that society can be seen as a system of relations between individuals, conceived as a graph - hypothetical because of its inconstructable complexity, and yet theoretically critical because it is the product of situated practices and therefore of the mechanism of social reproduction. Arguing that society can be understood in some sense as a network of interdependence that acts as an insurance policy, he suggests that it is indeed the role of social interaction to construct this larger graph of social relations upon which the global structure and stability of a society depends⁹. This leads to a 'tentative' definition of society which expands

spatial questions to the buried approach to space and the material that has been the pattern throughout this 'archaeology' and, indeed, is my ultimate focus.

⁸ See chapter 7 for a fuller and empirical comparison of the work of Giddens and Hillier.

⁹ Hillier substantiates this position by drawing upon anthropological evidence; the fluidity of composition in individual hunter-gather groups yet the strength of the society as a whole and, in more sedentary societies, the frequency of divorce as a mechanism for strengthening society as a whole. See also Hillier and Hanson, 1984, for a fuller discussion of this material.

upon Giddens', including both "the large graph of pure relatedness", in addition to what it takes to produce and reproduce it - the situated practices that are the foundation to both Giddens' and Hillier's approach. Society then, conceived of in terms of the successful construction of the global graph, is inherently spatial not only in the local sense of the importance of co-present activity for social reproduction (Giddens' 'situated practices') but also in the additional sense that space has been overcome in the construction of the global graph. Indeed, Hillier argues that the existence of the global graph entirely changes our notion of society by suggesting that at its core society is a global entity, and the localised practices through which the graph is created will be selected for their ability to construct and manage the global graph *in spite of* the spatial dispersal of individuals.

Yet problems still remain, for we are still left with a theory that appears to treat individuals and society as separate categories, despite the one being emergent from the localized practices of the other. While individuals clearly inhabit a material realm and society implicitly involves the overcoming of spatial distance in the formation of the global graph, it is still not clear whether society, conceived as a graph or "strongly relational system", is an abstract or material entity; that is, in terms of the first condition for a systematic relation between society and space outlined above, whether society has 'spatial necessity' beyond the trivial aspect of occupying a continuous territory.

In representing the argument in this way I have reversed Hillier's own presentation in *Society seen through the Prism of Space* to emphasise the importance of the solution to this problem for the theory of Space Syntax, for the approach to the 'space-time status' of strongly relational systems lies at the heart of the conception of both society and space. I introduce it here, therefore, as a device by which to link the two conditions with which the argument began - that society should exhibit spatial necessity and that space should exhibit social capacity - with their common solution in the concept of spatial configuration.

Approaching strongly relational systems

Following Russell, Hillier acknowledges that relations themselves seem to be neither of the physical world nor purely a mental construct and hence, for society to exist in some material sense at the supra-individual level we need to be clear as to the 'space-time status' of the relations

which seem to link individuals into a society¹⁰. This is the central concept within Space Syntax - that such systems of relations be understood in terms of the more sophisticated concept of 'configuration'. While a relation need invoke no more than a binary pairing, the concept of configuration takes into account at least a third, and at most every other discrete binary relation in a much more complex system [Hillier and Hanson, 1984; Hillier, Hanson and Graham, 1987; Hillier, 1996; Hillier and Netto, 2001]. This is critical because, unlike the simpler 'relation', configurations exhibit empirical characteristics and can be shown to exhibit independent material effects.

The complexity of configurational structures is approached through an application of graph theory, and in particular the idea of the 'justified graph'. Using a series of model examples, Hillier develops a depth analysis technique that represents a configuration of elements as a sequential series of 'moves' or 'steps' of incidence from a given starting position. Each element in the system is a potentially different starting point, the resultant graphical representation of the system as a whole as viewed from that point being one of a corresponding number of 'justified ['J'] graphs'. He demonstrates that any system treated to such analysis can be found to be different from each perspective, and argues that these differences are not only the foundation of the idea of structure in space, but also the means by which that structure can be quantified [Hillier and Netto, 2001; p 16; see also Hillier, 1996 chapter 3, and Hillier et al, 1987]. The final step is the summation of all these individual graphs into the global graph for the system as a whole (referred to as an 'Axial Map' in the line analysis of urban systems) which quantifies the relative "integration" of each element into the overall system [see figure 5.1].

We have rehearsed Hillier's arguments for approaching society as a complex global graph, and he makes the additional observation that each individual who forms an element in the global graph would in turn have their own justified graph describing their relationship to the social whole. The importance of this is that both the society and the individuals who constitute it are defined by the same structure - an individual being, " a particular position from which the whole of the graph can be seen". Individual and society are, therefore, no longer polar concepts but different ways of viewing the same thing [ibid.].

¹⁰ Hillier uses Russell's example of the relation that 'Edinburgh is to the North of London' seems not to be a material thing in the same sense as Edinburgh and London are, and yet does seem to exist 'out there' as a real thing in some sense.





Figure 5.1 The top two figures demonstrate how small changes in morphology represent significant configurational changes, expressed through the j-graph. The lower figure is an axial map of London, the summation of the individual j-graphs of every line in the system. The 'hotter' colours indicate higher integration, that is fewer 'steps' to every other line in the system.

While the treatment of society as a configurational structure remains a theoretical abstraction, the same theoretical stance is developed into an empirical methodology in regard to the analysis of the spatial systems that make up the material realm of experience. The configurational approach is again deployed successfully in satisfying the second requirement of a systematic relation between society and space - that space should have, or be capable of having, social potential of some kind.

This question has been the preoccupation of much early Space Syntax research, which has approached spatial systems at both urban and architectural scales with the graph techniques outlined above, producing a basket of spatial representations that reflect the integration structure of the spatial elements of a system. The most commonly used representations (and those which will be encountered in subsequent chapters) are the *axial map*, and the *convex map*. While each is a development of the same treatment of space, breaking the continuous spatial realm into a series of configurational elements, each is used in slightly different circumstances. The *axial map*, is typically deployed at an urban scale, and represents the least set of longest lines that pass through and connect all the spaces of a system. It is a representation that captures the potential movement structure of an urban system. By contrast, the *convex map* is typically deployed at the architectural scale and represents the discrete spaces associated with more static activity (typically rooms in a built structure)¹¹.

Empirical work has shown that the prime correlate of the configurational structure of spatial systems is movement [see for example Hillier 1987, 1993 and 1996]. The theory of 'natural movement' [Hillier, 1993] argues that the urban grid shapes the existing natural movement of individuals through a spatial system by overlaying a probability structure of route selection. Given that there is sufficient movement through the system, and that origins and destinations are evenly spread, then the patterns of movement observed will be highly determined by the spatial structure of the system. This has important social implications - primarily that the structure of movement will in turn influence patterns of co-presence and hence social interaction by creating "a probabilistic field of potential encounter and avoidance" [Hillier, 1993; p 32]. Indeed, there are further consequences of this spatial structuring of movement patterns, for it was shown (in *Cities as Movement Economies* [Hillier, 1996]) that movement patterns - and therefore in turn the

¹¹ These techniques form the basis for more recent approaches which include the 'all-line map', which constructs all potential direct lines of sight and movement within a defined series of spaces and Visibility Graph Analysis (VGA) which represents the visual connections between all points in a notional grid. Both are representational techniques that allow the same relational analysis to be performed on the elements within the system.

spatial structure of the city - influence land use patterns through the attraction of movement dependent activities such as retail to areas of high natural movement in the grid. This then initiates a constructive feedback process, not only in terms of attracting more movement to these already favourable locations because of their land use functions, but also initiating spatial adaptations of local grid intensification and smaller block sizes to allow for ease of movement in the centre, which in turn biases its strategic location within the overall grid to further encourage movement attraction. This biasing of the 'town centre' leads Hillier to describe centrality "as a process" rather than a state, a process which begins with the configurational inequalities of the urban grid, and results in the familiar pattern of dense mixed use areas set within a background of more homogeneous residential development [Hillier, 1999a; 2001].

These papers describe the impact of the spatial form of the city upon economic and social activity. But they do not investigate the grid itself and the socio-spatial generative process by which it is constructed. This is tackled in the recent paper *A Theory of the City as Object* [Hillier, 2001] which argues that the marked invariants and differences in the spatial structure of sample cities can be explained by social forces working through invariant spatial laws. However, Hillier does not refer to spatial laws in any deterministic sense relating to universal human behaviours. Rather he refers to the independent configurational effects of placement decisions when objects are aggregated into spatial systems. These 'spatial laws' interface with the social realm in two related ways therefore - firstly in that the placement of objects within the [urban] system is a social act which inevitably reflects a series of embedded social conventions and intentions, and secondly that there will be a social outcome of placement through the principle of natural movement outlined above. The spatial laws are the intermediaries, therefore, between embedded social rules and social outcomes.

A number of urban structures are analysed from different cultures, including single systems that are bisected by two cultures (such as the city of Nicosia in Cyprus). The analysis shows that while at the local level there are many spatial differences according to the culture in which the urban system has evolved, at the global scale there are strong cross cultural parallels, particularly in the structures of the system related to commercial activity. There are therefore, two aspects to the settlement generative process - a socio-cultural component that is idiosyncratic and local, and a micro-economic process that is universal and global [Hillier, 2001; p 8]. However, Hillier argues that both these processes are themselves the outcome of the aggregative process and the impact that this has upon movement patterns.

Modifying the basic J-graph approach to give a 'depth gain' measure for various basic systems (the difference in the total number of moves required to move from each cell in a system to each other when configurational changes are made to the system) two spatial laws are proposed which can be shown to have independent effects upon the structure of the system¹². The first is described as the "Law of Centrality", and states that objects placed centrally in a space will increase universal distance (the overall depth of the system) more than objects placed peripherally. This is then essentially a statement about the spatial impact of aggregative building strategies; it "addresses the fundamental spatial problem of settlement: how to aggregate built forms in such a way as to preserve the interaccessibility which is potentially interrupted by those built forms, and how to maintain this as the settlement grows" [ibid.; p 14]. The result of this law of centrality is that the lines of accessibility through the system (the open space of the street network) will tend to bifurcate into long and short lines rather than lines of equal length. This implied result of the laws of aggregation is born out in the duality of the physical structures examined.

The second law, the "Law of Compactness" states that the more compact a group of objects the less the increase in universal distance in the surrounding space. 'Island' forms will conserve the accessibility through the system better than elongated forms.

The duality that was observed in the structure of cities (a global structure associated with microeconomic activity that is invariant and a localized structure associated more with residential activity that is culturally specific) is carried through into the spatial laws of settlement aggregation - the law of centrality relating to the spatial component of the urban system, the law of compactness the physical component of built forms. Indeed, Hillier goes on to demonstrate that the law of centrality alone accounts for the physical duality of urban structures, producing as it does many shorter lines in the process of conserving the longer lines of the system. The sociocultural process associated with the interstitial areas of residential space are associated with restrictions imposed upon the integrative micro-economic led process that always seeks to maximise natural co-presence [ibid.; p 17].

It is important to be clear that both laws are founded on simple geometric principles, what Hillier refers to as the "if-then" rules of object placement [ibid; p 2], and not in the first instance on rules derived from an assumed universal of human behaviour. This does not of course mean that such

¹² These two laws are developed from the four more general 'principles of partitioning' [Hillier, 1996] which address the impact of partitioning strategies within a basic grid system [see Hillier 2001; pp 10-16 for the refinement of these

configurational outcomes are detached from behavioural decisions. It is the fact that quite predictable configurational consequences follow from spatial decisions, although themselves wholly independent of human will or intention, that gives spatial strategies such strong social effects through the impact that configuration has on movement through spatial systems and hence co-presence.

Space Syntax, then, treats both society and space as "strongly relational systems" in which it is movement that is the "strong force" linking the social and spatial through the structuring of possibility fields of encounter. Hillier outlines five points of correspondence between social and spatial systems so conceived which relate to key features of the Space Syntax approach.

Firstly, they are made up of both material events occurring in space-time (encounters/ objects) and also 'informational entities' which govern the local patterns of these events. The analogy is proposed of social hardware (the manifest interactions) and software (the rule structures governing interaction). What is important is that the software is embedded in, and retrievable from, the hardware; that is, we are able to retrieve descriptions of social rules and conventions from our lived practice within the existing 'hardware' of socio-spatial forms.

Secondly, both social and spatial systems are forms *emergent* from distributed processes, that is (with a few exceptions of imposed social and spatial orders) they are generated over time from the discrete actions and decisions of individuals, nonetheless to produce a recognisable global structure.

Thirdly, both social and spatial systems are at least partially ordered, in contrast to the implied chaos of much contemporary urban commentary, and seem to control for the existence of randomness alongside reproducible patterns.

Fourthly, both are predominantly non-discursive. This is to say that while we are able to operate intuitively within such systems we find it hard to give formal descriptions of their logic¹³.

basic principles into the more distinct spatial laws].

¹³ See also Hillier, 1996 for a full discussion of non-discursivity.

Finally, such systems seem to exhibit a degree of top-down as well as bottom-up functionality, which is to say that while movement and land use patterns are functions of the overall structures of the urban grid, so individual behaviours seem to be - though to a varying degree - functions of the overall pattern we call society. It is importantly, therefore, not an approach that privileges space over society but rather understands the two as implicitly related.

Space, analysed through graph theory lies at the heart of the theory. Empirical work using alternative models of urban forms (particularly models based on a metric scale of distance) have failed to post-dict movement patterns with the same success as the axial map. Two reasons are advanced to explain why the axial map may capture something of the essence of the urban system [Hillier, 2001; pp 20-21]. The first is a substantive argument that the model of spatial aggregation, centring on the conservation of longer lines and the resulting line inequalities represented by the axial map, seem to correspond to the observable dynamics of urban systems. The line length inequalities lead to a relation between local and global organisation which make structures intelligible and navigable. Without such a system of emergent line inequalities, the resulting form would correspond to a labyrinth, of the sort that many authors examined in previous chapters believe exists, despite the powerful morphological evidence to the contrary.

The second is a cognitive argument, suggesting that the analysed axial map seems to correspond to the intuitive picture of urban systems that we utilise daily. Hillier argues that complex and nonlinear systems over-stretch our capabilities of judging simple linear distances, and instead we have to approach complex spatial systems of the order of cities as 'assemblages of interrelated geometrical elements'. The most important such element is the line corresponding to the extent of visual perception, powerful in its simplicity of comprehension and yet its global importance within the system as a whole. It seems therefore that the techniques of discrete geometry, used for analysing such geometrical assemblages, are the most appropriate way of analysing these spatial forms.

The space of configuration

This approach to space in socio-spatial systems is in a very important sense paradoxical because it is grounded in the seemingly counter-intuitive step of removing space from both its social and material setting and treating it in isolation as a pure set of relations. The relationship between society, space and configuration that is proposed by Space Syntax can perhaps best be represented diagramatically, with configuration providing a system of possibilities and limits which are realised in both society and space, mediated by movement and the structuring of copresence and interaction [see figure 5.2].



Critically, in treating space as configuration with quantifiable invariant characteristics, independent of the material and social context, what Hillier refers to as "a thing in itself", the problems of spatial determinism are avoided without sacrificing the ability to approach the direct relationship between society and space in a rigorous and quantifiable way. Hillier refutes architectural determinism most explicitly in *Space is the Machine* [1996] where he 'fatally undermines' what he terms 'the three interrelated paradigms' underlying the erroneous 'tripartite edifice' of determinism. He summarises as follows,

Architectural determinism is the way in which the scheme of ideas appears within architecture, and confronts its practice and its theory. The paradigm of the machine is the invisible scheme of thought which history implanted in architectural discourse as the framework within which the form-function relation, seen as social engineering, should be defined. The organism-environment paradigm is the broader and older master scheme of quasi-scientific ideas upon which the whole fallacious structure was erected. The threelevel scheme constructs an apparatus of thought within which neither the form-function relation in architecture, nor the role of space in society can be formulated in such a way that research can be defined and progress made in understanding [1996; p 390].

Hillier argues that in rejecting the notion of architectural determinism, we must not also reject the 'common sense' notion that form and function in buildings are somehow related, since an architectural theory can only be distinguished from theories of art or aesthetics by the fact that 'they [architectural theories] are in essence propositions about the relation between architecture and life' [ibid.; p 374]. Therefore, to understand the 'apparently perverse' rejection of theories based on form-function relationships as a result of their application to 1960s architecture, yet also ''to see that it was in a certain sense justified'', we must understand exactly what it was that was rejected [ibid. p 376].

What was rejected was the 'paradigm of the machine', distinct from the 'metaphor of the machine' implied by the writings of Le Corbusier and others, which suggested that the built environment could have a direct, deterministic influence over the behaviour of people. This in turn was spawned by the third tier of Hillier's 'tripartite edifice', the 'organism-environment paradigm'. The origin of this paradigm lies in the first instance in the 18th century meaning ascribed to 'environment',

It implies not only the milieu in which we exist, but a milieu which *surrounds* us. Environing means to surround, so an environment is not only a physical milieu but one which actively and significantly surrounds so that the environed thing in some way is aware of, or affected by, its 'environment' [ibid.; p 380].

However, the deeper origins lie in Aristotle's enquiry into the relationship between the form and function of organisms which he ascribes to the idea of a 'purpose', in effect a reliance upon the antecedent order that characterizes the 'unmoved mover' of Aristotelean physics.

This inelegant solution of Aritotle's was overturned by the Newtonian conception of inertia which posits that all bodies move in a 'right line', thus placing motion 'on the same level as beings at rest' [ibid.; p 383]¹⁴. This solution is then reapplied to Aristotle's original organism-environment problem in the work of Darwin who clarifies the *mechanism* by which the environment influences organisms by removing the necessity for antecedent order and replaces it with, 'not a direct physical relation of cause and effect, but [....] an indirect relation, [....] an

¹⁴ Hillier here quotes from Koyre, 1965, Newtonian Studies

abstract statistical mechanism' based on randomness and probability [ibid.; p 385]. This crucial aspect of the theory of evolution has not infused into the commonly held understanding of 'environment' however, and the theory of architectural determinism can be understood as a *vestigial* feature of the pre-Darwinian paradigm.

The essential problem, then, with the paradigm of the machine is that it 'sets up the built environment as no more than an inert physical background.... This blinds the enquirer to the most significant single fact about the built environment investigated above; that it is not simply a background to social behaviour - *it is itself* a social behaviour [ibid.; p 388]. Buildings and urban space are 'probabilistic space machines' [ibid.; p 395] in which configuration defines a system of co-presence and co-awareness which are the essence of what we experience as 'society'. The form-function relationship, therefore, is preserved in a mutated form;

This whole tripartite edifice of thought is dissolved by the proposition that the formfunction relationship in architecture, and the relation of space to society, is mediated by spatial configuration [1996; p 390].

Just as Hillier caricatures Aristotle, suggesting that, "in buildings people are the unmoved movers" [ibid.; p 392], so we can caricature Hillier, presenting the theory of Space Syntax as belonging to the 'Newtonian-Darwinian paradigm' based in the idea of an independent statistical relation between environment, conceived as configurational potential, and individuals, mediated by the "inertia theory" of natural movement.

Natural movement is a kind of inertia theory: it says not how individuals are impelled by buildings to move in this or that direction, but that, given that they move, then their distribution in a spatial configuration will follow certain mathematical and morphological laws, given only that movement is from all - or at least, most - parts to all others, and follows some economy in route selection [ibid.; p 391].

This schematic introduction has hardly done justice to a theory whose evolution and explanation has depended so greatly on empirical work. The following chapters of this 'reconstructive' second section redress this balance by taking the skeleton argument presented here and developing it through empirical work. The intention is to return to some 'key players' of the renewed emphasis upon space in social theory and, in the light of the argument presented in section 1, to examine the shortcomings of their approach to material space and the potential for Space Syntax to provide a valuable integrative perspective.

The selection of theorists to be examined is not innocent, however, and there is an intention in moving from the macro scale of Harvey's economistic argument to the micro scale of Foucault's corporeal discourse to open up tensions within the Space Syntax approach. It is a deliberate omission, therefore, not to discuss some of the reservations that I have with Space Syntax at this introductory stage. Following the method of analysis presented in section 1, I wish to introduce a discussion of these concerns in the light of the strains increasingly apparent in the empirical application of the theory.

Chapter 6 The Urban Scale: Harvey's space as 'value in motion'

Yet, Marx insists, there is a single unitary principle at work that underpins and frames all of this revolutionary upheaval, fragmentation, and perpetual insecurity. The principle resides in what he calls, most abstractly, 'value in motion' or, more simply, the circulation of capital restlessly and perpetually seeking new ways to garner profits.

How we represent space and time in theory matters, because it affects how we and others interpret and then act with respect to the world.

The Condition of Postmodernity [Harvey, 1989a; pp 107 and 205].

6.1 Introduction – 'riding the tiger'

Although in his taxonomic work, "Postmodern Geographies", Soja pays little attention to the work of David Harvey it is beyond contention that he has been at the forefront of 'the reassertion of space in critical theory'. Given that Giddens has described him as "perhaps the greatest living geographer"¹, it is perhaps surprising that Soja pays him so little regard, especially given that their projects, as we shall see in more detail below, are broadly very similar. Like Soja, Harvey's concern is to reintroduce a missing geographical sensitivity into the body of Marx's historical materialist method. His work bridges the period of this spatial revival in social theory, such that in 1973 he wrote, "Social and spatial forms are, for the most part, distinct in our minds...distinctive and irreconcilable modes of analysis" [1973; p 10]; in 1985 that, "the question of space is surely too important to be left to geographers exclusively [...] [s]ocial theorist of all stripes and persuasions should take it seriously" [1985; p xii]; while by 1989 he notes the revival of recent interest in "the problem of spatiality", citing the work of Gregory and Urry [1985] and Soja's principal theoretical text discussed above [Harvey, 1989a; p 284]. Indeed, reflecting my argument and concerns about a new 'structure of feeling' towards space, in recent work he comments that, "[a] seeming consensus can be constructed from [these] multiple inquiries to the

¹ Introductory comment made at a public lecture by David Harvey, London School of Economics, London 1999.
effect that time and space are social constructs...[behind which]...there lurk innumerable and potentially damaging confusions" [Harvey, 1996; p 207].

There is however a distinct difference in approach between the two authors. For Soja, the spatialization of historical materialism is not an absorptive but a transformative process allowing Marxist geographies to meet with postmodernism both as a theoretical position as well as a historical phenomenon on an equal and symbiotic level. We begin to see in Soja's later works, therefore, a move away from a classic Marxian analysis, founded 'in the last resort' on an analysis of the economic sphere. It becomes clear that Soja's main referent for his theoretical position is Lefebvre, and particularly *The Production of Space* [Lefebvre, 1991] with its far less prescriptive theoretical structure based in a typology of three types of social space. This theoretical structure comes to dominate his less objective and more positional writings about Los Angeles, in particular *Thirdspace* [Soja, 1996] which through its deliberate engagement with not only the subject but also the 'attitude' of postmodernism (to follow Cloke, Philo and Sadler's distinction [1991]) displays the myopia of both the alephic and ecstatic visions discussed previously.

Harvey's approach is more cautious however, and his intention is to invoke a spatial element in dialectical materialism without significantly altering the understandings advanced by Marx. Ultimately he relies heavily on the idea of the economic as being the determinant of last resort and this in turn has an important impact upon the conception of space that is embedded in his 'respatialization' project. In clinging to the fundamental importance of the economic and without, I will argue, any satisfactory way of dealing with the relationship between the morphological nature of space and the social (and implicitly, therefore, economic) structures within space, Harvey presents a conception of space based upon the idea of differentiation. His is a geographical more than spatial 'consciousness', and the link between the two cannot be made because he lacks a theoretical tool for doing so without returning to the rejected spatial science and determinism of earlier geographical theory [see above, chapter 1].

The previous section of this thesis introduced three key themes which will be further developed in this chapter. The first, originating in the analysis of Borges' work, was epistemological in nature - the idea of the aleph, not as a physical object but as an epistemology that forces the world to fit a theoretical schema already devised – 'the alephic vision'. The second was the idea of an 'ecstatic vision' - a view of the world rich in chaos, fragmentation, where 'everything solid melts into air'.

The third was that the theoretical positions advanced to understand this world are based upon the removal of 'matter' from the classical ontological trialectic (space-time-matter) and its replacement with an alternative term, 'sociality' in Soja's renewed trialectic of spatiality-historicity-sociality.

These themes will be encountered again in the analysis of Harvey's work, although for different reasons and to varying extent, and the analysis will point to the same inability to deal convincingly with the impact of physical space and the experience of cities. This is particularly true in Harvey's 1989 work, *The Condition of Postmodernity*, still his best selling and perhaps, therefore, most influential book². This work extends the earlier theoretical propositions of *Limits to Capital* [1982] to the phenomenon of 'postmodernity', and Harvey's ambitious scope includes not only what Cloke, Philo and Sadler term 'postmodernism as subject' but also 'postmodernism as object' [1991, see above p 117]. It is their last distinction, 'postmodernism as attitude', that Harvey is most wary of, anxious as he is not to make the same elisions as Soja. Although Harvey examines a number of 'postmodern objects', most notably in his comparison of the visual work of Salle, Rauschenberg and a contemporary advertisement [1989a, chapter 3], the central theme is the contemporary experience of space and time.

While his tone is indeed far more measured than that of Soja, once again familiar themes emerge, particularly in the synechdotal reference to particular key buildings such as the Bonaventure Hotel and also the 'ecstatic' treatment of the experience of time and space under the supposed 'condition of postmodernity' with its emphasis on flux, impermanence and polyvalence. This would indeed be contested strongly by Harvey himself, who is keen to distance himself from the 'excesses' of the postmodern discourse. He argues that, "postmodernism, with its emphasis on *jouissance*, its insistence upon the impenetrability of the other, its concentration on the text rather than the work, its penchant for deconstruction to the point of nihilism, its preference for aesthetics over ethics, takes matters too far". Note here the familiar relationship between *jouissance* and *nihilism*, the former taken from Barthes' attitude to the pleasures of textual deconstruction, the latter from postmodernism's debt to Nietzsche, which parallels the tautologous nature of 'ecstasy' captured in Nietzsche's term 'rausch' [See above, chapter 4]. Harvey continues, "postmodernist philosophers tell us not only to accept but even to revel in the fragmentations and the cacophony of voices through which the dilemmas of the modern world are understood" [1989a; p 116].

² According to a comment by Harvey at the London School of Economics, 1999.

Harvey groups this literature together as his fourth 'response to [the] time-space compression' that he sees as the basis of the postmodern condition. He describes these authors as, "trying to ride the tiger of time-space compression through the construction of a language and an imagery that can mirror and hopefully control it". Within this group he highlights "the frenetic writings of Baudrillard and Virilio...since they seem hell-bent on fusing with time-space compression and replicating it in their own flamboyant rhetoric" [ibid.; p 351] and I would argue that Soja, among others, could be added to this grouping, although more as an emulator at second-hand of the frenetic writings of the inspirational ringleaders such as Baudrillard. Harvey accuses these writers of, "[losing their] hold on both the reality [they are] seeking to represent and on the language that might properly be deployed to represent it..." (speaking this time of Jameson), such that, "the hyper-rhetoric of this wing of the postmodern reaction can dissolve into the most alarming irresponsibility".

There are strong sympathies, therefore, between these and my own criticisms expressed in the preceding section. Harvey cites the selective use of sources (referring to Jameson, but as pertinent would be my criticism of Soja above) and indulging in euphoria in describing the experience of neurosis and anxiety. This last criticism, levelled at Jameson, Foucault, Deleuze and Guattari, is exactly analogous to the reading of ecstasy from the work of Koolhaas. He also follows Eagleton in warning of the powerful influence that such rhetoric has over ontological positions; "there can be no difference between truth, authority and rhetorical seductiveness" Eagleton argues in relation to Lyotard, mirroring in this instance the power of the 'alephic vision' presented above³.

In making these criticisms, Harvey is articulating the complex and blurred division of postmodernism as subject, object and *attitude* that Cloke, Philo and Sadler distinguish in an attempt to clarify such muddled rhetoric. However, Harvey's antithetical position to the latter and indeed his concurrence with my argument presented above, is perhaps not quite as clean-cut as it might first appear. For while lambasting the authors cited above for their rhetorical excesses, he nonetheless refers to them either explicitly (in the case of Jameson whom he cites frequently) or implicitly in the debates with which he engages, clearly accepting the "*fact* of fragmentation, ephemerality and chaotic flux" [ibid.; p 117 sic]. Furthermore, he evidently accepts the thesis of a recent transformation in patterns of thought and practice and asks why "such a fact [of fragmentation etc] should have been so pervasive an aspect of modern experience for so long a

³ Eagleton, 1987 'Awakening from modernity', Times Literary Supplement, 20 February 1987; quoted in Harvey, 1989a; p 117.

period of time", and further, why "the intensity of that experience seems to have picked up so powerfully since 1970" [ibid.] making the current features of "excessive ephemerality and fragmentation in the political and private as well as in the social realm [an] experiential context that makes the condition of postmodernity somewhat special" [1989a; p 306].

At some point, therefore, Harvey's critical stance towards so much of the paradigmatic literature on the postmodern condition seems to be compromised. Although certainly he avoids the rhetorical excesses of Baudrillard and perhaps the more extreme passages of Jameson, his work is certainly not free from unsubstantiated generalisation, hyperbole and the fixation with the aesthetic of fragmentation. Once again, we find that distinctions between object, subject and attitude, though schematically useful, are easily blurred and transgressed in practice. I will seek to demonstrate that the critical turning-point that leads Harvey into such uncharacteristic ground comes as the argument moves to deal with the experience of urbanism in the contemporary period, and the relationship between the physical structure of the city and buildings (postmodernism as object) and the social structures within the city (postmodernism as subject). The lack of a satisfactory conception of this link, caused I will argue by an understanding of space which replaces matter with meaning, results in the blurring of Harvey's epistemological and ontological positions on the city⁴. The result, as with Soja, is a description of *the* [universal] experience of urbanism based in concepts of flux, fragmentation, schizophrenia etc which evolve less from a detailed study, either psychological or behavioural, of how people relate to the spaces of contemporary urbanism than from an engagement with the fashionable academic discourses of the generation. The inevitable consequence is that Harvey simply reiterates the alephic and ecstatic tendencies of the paradigm, and in doing so further entrenches the parallel approaches to

⁴ This chapter focuses mainly on Harvey's descriptions of the *contemporary* urban experience in *The Condition of* Postmodernity [1989], linking this to the earlier theoretical texts, Social Justice and the City [1973] and The Limits to Capital [1982]. In so doing I am aware that I have not discussed directly his 1985 volume Consciousness and the Urban Experience. The reasons for this are twofold. Firstly, my interest is in addressing writing on the contemporary urban experience. While, as I have argued above in chapter 4, there is a strong genealogy of ideas between 19th and 20th century interpretations of the urban experience, my intention has not been to focus on discussions of the 19th century city such as Harvey presents in this volume, beyond the necessity of explicating this genealogy in the context of contemporary descriptions. Secondly, although Harvey's subject matter differs in this volume, whose empirical content focuses around his two famous essays, Paris, 1850-1870, and Monument and Myth: The building of the Basilica of the Sacred Heart, his theoretical position remains unchanged from his earlier 1973 and 1982 volumes ['Social Justice' and 'Limits'] - that is, "to progress toward[s] a definitive Marxian interpretation of the urban process under capitalism" [1985; p xi]. His understanding of space is, as will be demonstrated in detail below, encapsulated in the diagrammatic representation of the flow of capital through the urban system, manifested 'physically' only in terms of geographical differentiation (of, for example, rental values) [see Harvey, 1985; p 92 'Rent and the Sorting of Land to Uses']. Similarly, his approach to built form, particularly in this instance Sacré-Coeur and the Place Vendôme, is restricted to suppositions about 'meaning' similar to his (as well as Jameson's among others) comments on the Bonaventure Hotel in Los Angeles.

space within geography - the abstract approach of diffusion and the hermeneutic approach of space as place, as decodable sign.

It requires some archaeology to explain why someone whose approach, even conviction, rests on a tradition of material understandings of social conditions should come to make such unsubstantiated claims of 'common experience' and 'everyday life'.

6.2 "Empty Boxes" - The spatialization of historical materialism

Harvey's work, as explained above, has tended to take the form of a diachronic development of theory and 'empirical' extension through the elaboration of historical-geographical materialist method that he advocates. Certainly his 1973 *Social Justice and the City* marks a turn towards the consideration of the linkages between ideas in social and moral philosophy and geography that are returned to in his more recent *Justice, Nature and the Geography of Difference* [1996]. The 1973 text, however, deals not with ecological issues but with the urban processes in a way that "[he] later saw to be erroneous" and whose reformulation into "a definitive statement on the urban process under capitalism" formed the basis for the subsequent *The Limits to Capital* [1982; p xiii, xxix in the 1989 edition]. A close parallel exists between this work and *The Condition of Postmodernity* [1989a], the former essentially developing the theoretical framework that is to be applied to the understanding of contemporary changes in the latter. He describes this combined project as an attempt "to write the theory of urbanization, to integrate it with detailed historical studies...and to casually fill in a few 'empty boxes' in Marxian theory en route" [ibid.].

The Limits to Capital is, therefore, a critical fulcrum in Harvey's work. Not only does it propose the theoretical union between Marxian theory and a geographical perspective (what Harvey describes as "deal[ing] only with the 'empty boxes' in the theory") which is the theoretical core of his later work on the experience of urbanism, it also represents an abandonment of earlier theoretical perspectives set out in *Social Justice and the City*, which when re-examined reveal some significant repudiated positions that chart the course of subsequent work.

That *Limits* (as Harvey refers to it) is prescient for the concerns of this present study is clear. On reflection he writes, "I had no option except to write a treatise on Marxian theory in general, paying particular attention to the circulation of capital in built environments, the credit system

and *the production of spatial configurations*" [ibid. emphasis added]. This passage is important for two reasons. Firstly, it clearly orientates this work within that of the 're-spatialization' theorists of whom he is clearly aware, making reference in a footnote to Lefebvre and Soja among others [1982; p 337]. Secondly, it introduces my principal criticism of Harvey's approach - that he reduces the 'spatial' to that which he can conceive of as being important in the capital circulation system. 'Space', in Harvey's self-declared "definitive statement on the urban process", even modified by the qualifier "under capitalism" or "from a Marxian perspective", is reduced simply to a consideration of rent and, as with Soja, the importance of the friction of distance to the distributive process. He states, "I saw...that earlier errors on the interpretation of rent arose precisely out of a failure to integrate this single aspect of distribution into the general theory of production and distribution that Marx proposed", resulting in a holistic reworking of Marxian theory, since "the virtue and difficulty in Marx [is] that everything relates to everything else" [ibid.].

The principal contribution to this reworking is the idea of the importance of 'spatial configurations' and for us it is the link that Harvey draws between spatial configurations and social processes that is of central importance. The process of capitalism and the productive forces that lie at its root always form an intermediary layer between the two. "The historical geography of capitalism is a social process which rests on the evolution of productive forces and social relations which exist as particular spatial configurations" [ibid.; p 421]. This might suggest that spatial configurations remain passive manifestations of a social context that produced them. However, Harvey would adamantly deny this. In the introduction to the reissued volume [Harvey, 1999] he makes the argument that many of his peer group of theorists working within Marxist Geography at that time tended "to segregate the geographical and spatial arguments from the general theory of accumulation that Marx proposed, and to cast the argument in a fixed rather than malleable spatial frame" [1999; p xxi]. He clearly rejects, therefore, the notion of a 'theoretically disenfranchized' space standing outside the complex system of dialectical relationships that is the key epistemological and methodological tenet of Marx's theory, ensuring that "everything [including space and society] relates to everything else".

This link is most clearly made in the section of *Limits* titled 'Space, Place and Location' which opens, "[r]ent is that theoretical concept through which political economy (of whatever stripe) traditionally confronts the problem of spatial organization" [1982; p 337]. Rent forms a controlling feature in capitalism as "space is required as an element of *all* production and human

activity" [*Capital* Vol 3, quoted by Harvey, 1982; p 337]. Furthermore, Harvey follows Marx in arguing that 'spatial properties' (he gives the list location, situation, shape, size, dimensions, etc) are to be considered as 'material attributes of use values', which "claim our attention only in so far as they affect the utility...of commodities" [ibid. quoting directly from Marx]. Hence, "the social aspects of use values is what counts in the end" which cannot be understood separately from exchange and the formation of values. Exchange involves the bringing of commodities to a market place and "this eventually involves a physical movement in space" and so we have the inevitable appeal to the friction of distance. Similarly, locations, stripped of their 'material properties' are given their true significance when seen in relation to use values, exchange values and value (following Marx's framework). This leads Harvey to consider space in terms of "more favoured locations" [ibid.; p 339] in the production and consumption process. "The trick" he describes, "is to set our understanding of material spatial properties of use values into motion together with concepts of exchange value and value. The meaning of the spatial properties of use values in their social aspect can then be unravelled" [ibid.; p 338].

The 'spatial configurations of built environments' are seen as a response to these two processes as orchestrated by landowners, developers, financiers and the state. Spatial configurations, therefore, are seen as either opportunities or restrictions to this process, and the prime mechanism for moving capitalism out of the "crisis of accumulation" states to which it is prone through what he describes as a series of 'spatial fixes'. Rent is critical, therefore, as "it is the basis of land price and operates to allocate capital and labour to land, guides the location of future production, exchange and consumption, fashions the geographical division of labour and *the spatial organisation of social reproduction*" [ibid.; p 396, emphasis added]. As the credit system unites the process, "[t]he effect is to reduce time and space to a common socially determined metric - the rate of interest itself a representation of value in motion".

Economic reductionism - spatial consequences

'Space' is conceived, therefore, in terms of competition between locations. Harvey proposes a systemic view of the process of capitalism in which space has a role in terms of the aerial differentiation between competing locations or regions, which introduces a second theme; that of scale. When rephrased like this, it is easy to see why Harvey uses the terms 'spatial' and 'geographical' so interchangeably - his is a quintessentially 'geographical' understanding of space as an abstract theoretical structure of hierarchical ordering rather than a 'lived' experiential

realm. As Hagerstrand says, in relation to Harvey's early work, "[1]et us still take as the first fundamental assumption that the geographer sees his task as viewing the world in geometrical terms of some sort" [an assumption which would now be hotly contested]. He goes on. "[e]ven a purely verbal discourse, like David Harvey's (1971) analysis of the redistribution of real income in an urban system, revolves around such central concepts as accessibility and proximity, both geometrical in nature" [Hagerstrand 1973, p 76].

I wish to suggest that Harvey's spatial understanding is analogous to the processual flow diagram that he relies on in illustrating the process of capital accumulation⁵ [Limits, p 408; reproduced here as figure 6.1]. This is not simply a *representation* of his theoretical understanding of the role of space; *this is his 'space'*.

This limited spatial imagination is a product of Harvey's economistic viewpoint. Although in response to Marx's position that "when we attempt to view society as a totality, then ultimately everything has to be related to the structures in the economic basis of society", he comments that the "economic basis as the foundation of all analyses is open to dispute" and asserts that the key is the contradictions that exist within and between different structures [1973; p 292-3], his focus is entirely related to the economic sphere and its spatial manifestation as described above.

This reductionism becomes particularly apparent when the theories developed within *Limits* are applied in the more experiential context of *The Conditions of Postmodernity*. A foretaste of this difficulty is found in the 'Afterword' to *Limits*. Labourers are too easily thought of as "hands possessed of stomachs, 'like some lowly creature on the sea-shore'" (quoting Dickens), and it must be remembered that they are "human beings, possessed of all manner of sentiments, hopes and fears..." [ibid.; p 447]. Harvey's concern to save 'labourers' from 'labour' and, particularly in *The Condition of Postmodernity*, to deal with the experiential realm, is intended to make a defence against the accusation of idealism that is often raised against Marxian theory. It is for this reason, perhaps, that such a qualifier comes in the afterword to such a theoretical, and at times obtuse, volume that was always conceived as the introduction to a more contextual historical-geographical materialist discussion (published as the following 1989 volume). This is the beginnings of his emphasis on less theoretically reductionist and more experiential concern with

⁵ This same parallel was alluded to by Steve Pile and Nigel Thrift in a lecture at the Bartlett School of Architecture in 1999 and appears in less explicit form in their *City A-Z*, where the entry for 'Capitalism' consists solely of Harvey's diagram from 'The urban process under capitalism: a framework for analysis' [Pile and Thrift, 2000; Harvey, 1978, reproduced in Dear and Scott, 1981].



Figures 6.1 Harvey's conception of space: *The Paths of Capital Flow* (from *The Limits to Capital*, 1982; p 408)

practice, despite the fact that earlier he has discounted the importance of sentiment and emphasised the material and spatial basis of class struggle in capital distribution [ibid.; p 419].

Theory and practice: from *Limits* to *The Condition of Postmodernity*.

This foregrounds the issue of the relationship between theory and practice, which characterises the following section, dealing with the contextual exposition of the theoretical developments of *Limits* in *The Condition of Postmodernity*.

He acknowledges the idealism in Marx's belief in theory as a clarified mirror of reality, and seeks to defend himself from similar criticism. He summarises Marx as follows;

Theorists may seek to spin and weave their arguments so as to 'locate and describe the concrete forms which grow out of the movements of capital as a whole', and so approach 'step by step' the concrete forms that capital 'assumes on the surface of society' [*Capital* Vol. 3; p 25]. In this way, 'the life of the subject matter' may be 'ideally reflected as in a mirror' [*Capital* Vol. 1; p 19].

However, he draws a distinction between ideal*ism* and an ideal*ist* position, defending himself against the latter, arguing that;

the conceptual apparatus embedded in such a theoretical reconstruction is by no means an ideal*ist* abstraction. It is built up of categories and relationships...forged through actual historical transformations.... The categories are born out of *an actual historical experience* [1982; p 450, emphasis added].

In making a distinction between idealism and idealist positions, Harvey aims to retain the tight binding between spheres of theory and practice evident in Marx, while locating the point of tangency in the experience of the theorist in choosing categories of relevance rather than in the resultant theory. The aim of theory, then, is to create 'frameworks for understanding' and it is false to conceive of theory as being *ultimately* separate from historical practice, since it is false to draw a distinction between methodology and philosophy, leading to a division between facts and values, and (significantly), between "'things' as possessing an identity independent of human perception and action" [1973; p 11]. Harvey repudiates these separations that he acknowledges in his earlier works (especially *Explanation in Geography* [1969]) as "injurious to analysis even in their apparently harmless form of a separation of convenience" [1973; p 12]. Ultimately, he dissolves the distinction between theory and practice altogether, arguing that the two become

elided through social practice. Similarly, verification in a formalist sense of testing abstract propositions is replaced with a focus on social practice in general – "verification is achieved through practice...".

At the heart of this theoretical inversion which occurs between *Explanation in Geography* and chapters one and six of *Social Justice and the City* is a "shift away from philosophical idealism towards a materialist interpretation of ideas as they arise in particular historical contexts" [ibid.]. If Harvey's insistence that theory must be "born from actual historical experience" is to be maintained, then the scope of the arguments in *Limits* must be tested against their application in *The Condition of Postmodernity*; and conversely, the 'material' exposition of the theory presented in the later text must be tested for correspondence with the theoretical position that it illustrates. It is in this latter respect that we find that Harvey's theoretical position cannot support the material descriptions to which he extends it. The key proposition will be that there is a weakness in Harvey's conception of space, inherited from the theoretical schema of *Limits*, and that (appropriately) it is only revealed through his own 'historical-geographical materialist *practice*'; that is, through the extension of what was a water-tight, if somewhat reductionist, theoretical platform into a contextual sphere for which it was never conceived, and is ultimately inadequate.

This, indeed, upholds his own emphasis upon the importance of a priori categorizations and meanings as limiting the scope of research, since "definitions could dictate conclusions and a system of thought erected upon fixed definitions and fixed categories and relationships could inhibit rather than enhance our ability to comprehend the world". Again, this is a position that he moves away from during the course of the theoretical evolution of *Social Justice and the City*, towards a more fluid and "contextually and relationally" defined set of meanings derived through practice [ibid.]. Having regarded the former position as a minor problem inherent to scientific enquiry [1969] he moves this issue front-of-stage as one of "fundamental importance" to be addressed through practice and not through a tighter methodological set of definitions at the outset [1973; p 12]. However, despite the appeal to fluid, contextually derived meanings, he never underpins the new areas into which he drags his understanding of space or through reworking, either through a restatement of the scope of his understanding of space or through reworking those understandings through the practice of materialist enquiry in *The Condition of Postmodernity*. It is to these tensions and the causes for them that I now turn.

'The Argument'

For the most part *The Condition of Postmodernity* follows the theoretical framework set out in *Limits*, inheriting the idea of crises of accumulation in capitalism and the 'spatial fix' that allows their resolution, focusing particularly on what Harvey identifies as the current phase of spatial restructuring beginning circa 1972, and perhaps still continuing today. However, the scope of this work is much greater than its antecedent, as is captured in Harvey's opening statement of 'The Argument' which warrants reproducing in full;

There has been a sea-change in cultural as well as in political-economic practices since around 1972.

This sea-change is bound up with the emergence of new dominant ways in which we *experience* space and time [1989a; p vii].

Already we see the scope has enlarged considerably. While the earlier volumes were centrally concerned with the economic sphere, albeit as related to other social structures, here we find the reference to 'cultural practice' coming at the forefront of the work. Furthermore, this is related immediately to the ways in which '*we* experience' time and space. It is important to note that despite moving into new ground Harvey still retains his epistemological stance. Just as Marx (and Harvey) describe a system of relations into which we all fit, wittingly or not, so here we see that whether or not we are conscious of whatever the sea-change around us has been, we nonetheless experience it. This presumption, while perhaps sustainable when dealing with economic structures which are abstract and hidden from view (by their nature perhaps), seems hollow when invoking some weak idea of "common understandings" of the experience of space and time as Harvey later does in this context. 'The Argument' continues:

While simultaneity in the shifting dimensions of space and time is no proof of necessary causal connection, strong a priori grounds can be adduced for the proposition that there is some kind of necessary relation between the rise of postmodernist cultural forms, the emergence of some more flexible modes of capital accumulation, and a new round of 'space-time compression' in the organisation of capitalism.

The relation is made directly back to the earlier texts and the link between the spatial nature of capitalism already explored in *Limits* and postmodernist cultural forms that are synchronic with the current changes in that nature. However, already there is a subtle slippage that should be noted, for the 'postmodernist cultural forms' of the third paragraph are not the same as the

'experience of time and space' that 'we' share of the first. Already, I would suggest, Harvey is finding tensions between the ambitions and the sustainability of his thesis. For while 'postmodernist cultural forms' returns us to an analytically distanced perspective familiar from, and compatible with, the earlier 're-spatialization' of Marxian theory, it stands conceptually removed from 'our experience' of space and time. Between these two paragraphs in the preintroductory précis of the work, Harvey has glossed over the conceptual problem that he later magnifies - how to relate the 'postmodernist cultural form' that he identifies, particularly in terms of architecture and urbanism, to the changing *experience* of space and time.

'The Argument' concludes;

[b]ut these changes, when set against the basic rules of capitalistic accumulation, appear more as shifts in surface appearance rather than as signs of the emergence of some entirely new postcapitalist or even postindustrial society.

We return to familiar ground, therefore, and in its rootedness in the theoretical structure of *Limits* the exposition in *The Condition of Postmodernity* is watertight and convincing. It is not my intention to argue that this work is unsound or that the ambition of the work in dealing with the role of space in contemporary urbanism is overstretched. Rather, it is my aim to uncover the weakness in the theoretical underpining to that argument and to offer (in the final part of this chapter) a reworking that places this extension on a firmer foundation.

The experiential sea-change

That Harvey links at once into the vein of the 're-spatialization literature' introduced above, with its predilection for themes of chaos, fragmentation and schizophrenia, while also adhering to the 'alephic' trope of seeing all as a manifestation of one's own particular view of that world is well illustrated by a single summative passage:

Fiction, fragmentation, collage, and eclecticism, all suffused with a sense of ephemerality and chaos, are, perhaps, the themes that dominate in today's practice of architecture and urban design. And there is, evidently, much in common with practices and thinking in other realms as well such as art, literature, social theory, psychology and philosophy. How is it then that the prevailing mood takes the form that it does? To answer that question with any power requires that we first take stock of the mundane realities of capitalist modernity and postmodernity, and see what clues might lie there as to the possible functions of such fictions and fragmentations in the reproduction of social life [1989a; p 98]. Despite the insistence that no particular social structure (in the Marxian sense) is fundamental to all others, it is once again the economic that Harvey focuses on, and the critical transition phase of the book between the introductory chapters on modernism and postmodernism and the critical discussion of the experience of time and space is concerned with the transformation of political-economic forms from Fordism to what Harvey terms 'flexible accumulation'.

These politico-economic changes he relates then to cultural changes, as the mutating meaning of space under different regimes of time-space compression is seen to prompt a cultural response. While in the modern period this was based around an aesthetic of time manifesting itself in a concern with speed and disturbing the narrative chronology of the novel form, Harvey suggests, following Bell and Jameson, that in the current era "the sense that 'all that is solid melts into air' has rarely been more pervasive" [following Marx and Berman, 1982] and has lead to an aesthetics concerned with problems of space⁶. In the current era, he argues following Toffler's *Future Shock* [1970], time-space compression leads to "profound changes in human psychology" leading to a response analogous to that identified by Simmel relating to the modern era; in Harvey's conception the preceding period of societal stress caused by time-space compression.

The ultimate extension of this 'Simmelian' reaction draws Harvey towards the analysis of the culture of 'late capitalism' offered by Jameson [1984, 1991] in which a 'schizophrenia' of experience is the ultimate result and strategy, induced by "[t]he bombardment of stimuli, simply on the commodity front, [which] creates problems of sensory overload that makes Simmel's dissection of the problems of modernist urban living at the turn of the century seem to pale into insignificance by comparison" [Harvey, 1989a; p 286]. Harvey recognises this as "perhaps the most problematic facet of postmodernism" in its relation to "personality, motivation, and *behaviour*" [ibid.; p 53 emphasis added], and cautions that 'schizophrenia' should not be understood "in its narrow clinical sense". This reworking of established meanings forms the basis of Jameson's analysis upon which Harvey draws. Jameson invokes Lacan's understanding of schizophrenia as a linguistic disorder, "a breakdown in the signifying chain of meaning that creates a simple sentence" [Harvey, 1989a; p 3]. The effect is to reduce experience to "a series of pure and unrelated presents" which are consequently:

⁶ Here Harvey reinforces my earlier argument concerning the differences between the modern and emphases on time and speed, and the postmodern emphasis directly on space [see above chapter 4].

powerfully, overwhelmingly vivid and "*material*": the world comes before the schizophrenic with heightened intensity, bearing the mysterious and oppressive charge of affect, glowing with hallucinatory energy [Jameson, 1984 quoted in Harvey, 1989a; p 54, emphasis added].

'Material' for Jameson has a particular and refined meaning, however. It is a two dimensional materiality that is depthless, a quality that he sees as being one of the primary features of postmodern culture, and is concerned, therefore, with image rather than object. For Jameson, "the world...momentarily loses its depth and threatens to become a glossy skin, a stereoscopic illusion, a rush of filmic images without density", reducing the experience of the city to a hermeneutic deciphering of a chain of signifiers.

This textual treatment of architecture and the city form has already been identified as a common trait of contemporary approaches, and here it is important to note that Harvey seems to take on the common themes of the postmodern literature, focusing on the ephemerality and superficiality of a new image economy, while arguing (contrary to Baudrillard) that Marx's analysis can equally well address such an economy based upon the production of signs [p 289]. Reacting to what he describes as Baudrillard's exaggeration, he is tempted to "join the [language] game" but prefers to find some solidity in the midst of ephemerality and flux in the *constancy of change* in the capitalist system [p 291]. Hence his assertion in 'The Argument' that "these, changes, when set against the basic rules of capitalistic accumulation, appear more as shifts in surface appearance rather than as signs of the emergence of some entirely new postcapitalist or even postindustrial society" [p vii]. He argues, therefore, that, "[w]e can link the schizophrenic dimension to postmodernity which Jameson emphasises...with accelerations in turnover times in production, exchange, and consumption ...", which themselves ultimately rest on "another fierce round in that process of annihilation of space through time that has always lain at the centre of capitalism's dynamic".

In spatial terms, just as with Soja, this rests on little more than an appreciation of technical fixes to the problem of the friction of distance. He gives a series of examples of these significant changes; satellite communications, air-freight, containerization, decentralization of the production process, near-instantaneous media technologies, mass tourism etc. While he rejects the thesis that this is tantamount to the "abolishing of time and space" (quoting McLuhan), seeing rather a converse rise in the importance of space, this is only conceived in terms of the capitalists desire for locational advantage and a heightened awareness of the differential advantages and the

commercial opportunities of alternative locations. He refines this still further, however, returning to his earlier theme of "value in motion" as the key to the capitalist process, by proposing that "[n]one of these shifts in the experience of space and time would make the sense or have the impact they do without a radical shift in the manner in which value gets represented as money", which itself "has been 'de-materialized'", with neither a basis in gold nor commodities [pp 296-7]. This approach leads Harvey to consider "more tangible and material ways" to consider the significance of space and time for postmodernity, resulting in the conclusion that since "cultural forms are firmly rooted in the daily circulation process of capital... [i]t is, therefore, with the daily experience of money and the commodity that we should begin..." [p 299].

Harvey's econo-centrism is overt and he counters the criticism of understanding the economy as the determinant of cultural life, even in the Althusserian system of a 'last resort', with the challenge that, "if there is a meta-theory with which to embrace all these gyrations of postmodern thinking and cultural production, then why should we not deploy it" [pp 336-7, see also 344].

These passages invoke an understanding of space in economistic terms similar to that encountered in *Limits*. It is primarily a geographical conception and the central proposition is that there is a change in the way that capitalism as a whole, and individual businesses as elements within that whole, organise their production over space. The two key themes identified above are apparent again here - the notion of scale and nested hierarchies of interlaced understandings (capitalism - global, universal; individual firms - organisation of production process as part of capitalist process; individual worker - as part of the spatial organisation of the firm and of capitalism) and also the theme of difference over space, globally (developed/ under-developed), regionally (sun-belt/rust-belt) and locally (locational advantage). The added experiential dimension causes difficulties with this economistic conception, which is tenuously extended from the politico-economic domain to the cultural domain, and an understanding of how individuals experience space, without a thorough reworking of the idea of space at the core. It remains essentially a systemic view of space, best captured by the sense of diagrammatic space. If figure 6.1 (above p 153) was the essence of the spatial vision of *Limits* then perhaps the spatial imagination of *The Condition of Postmodernity* might be captured by figure 6.2 [from Harvey, 1989a; p 241].

Harvey might argue that figure 6.2 would indicate a relational understanding of space. However, this is surely to mistake a *representation of* relations with a relational understanding, perhaps



Figures 6.2 Harvey's experiential space: *The shrinking map of the world* (from *The Condition of Postmodernity*, 1989; p 241).

once again an 'alephic' symptom of trying, with difficulty, to conceive of everything as conforming to a particular viewpoint and the blurring of subjects, objects and attitudes pointed to by Cloke, Philo and Saddler [1991]. Figure 6.2 illustrates the idea of a 'shrinking' globe that is central to the idea of time-space compression. However, the conception of space that it implies is surely more *absolute* than *relational*, with its implicit position of judgement and ideas of scale and measurement against which to apprehend absolutely the shrinking of the image on the page as much as the world that it represents.

A comparison might be made with the thought experiment advanced by Poincaré [*Space and Hypothesis*, 1952 and also commentary in Huggett, 1999] of a non-Euclidean world that shrinks, as do its inhabitants, according to the laws of thermodynamics. As Poincaré demonstrates, to the inhabitants of his hypothetical world the laws of geometry remain Euclidean as they are unable to perceive any difference⁷. The parallel resides in the fact that while Harvey presents a strong case for the impact of an acceleration in the circulation of capital and reduction in transportation and communication times⁸ which might be *represented* as a shrinking globe, he has difficulty in relating this to the *experience* of space, beyond advancing the hypothesis that cultural forms have been influenced by this change - indeed have developed this representation that he now turns to for evidence.

Matter and the material

The difficulty lies in the conception of space that Harvey introduces early in his section on '*The Experience of Time and Space*', using the looser style of the introduction's 'broad brush' to slip through, perhaps unwittingly, some re-orientations that are significant and unsupportable, in a similar manner encountered in '*The Argument*'. Here, significantly, the juggling relates to materialism and matter as the basis of Harvey's approach to the experience of space.

He begins by noting that many authors working in this field do not clearly define what they mean by 'space' and 'time' as they relate to social life. Following a trajectory from Berman [1982] to Bell [1978] and Jameson [1984], Harvey introduces the idea of a relationship between cultural shifts from modernity to postmodernity, and a changing experience of space and time; the former

⁷ Huggett extends the explanation by considering the world as a disk that shrinks as an observer moves to the periphery, as does the observer himself, who thereby concludes that world he inhabits is infinite.

⁸ Once again the limited 'friction of distance' argument forming the corner stone of the importance of material space as was the case with Soja.

coming to dominate the latter in aesthetic debates and developments towards the second half of the twentieth century, the earlier part having been dominated by the aesthetics of time [Bell cites Bergson, Proust, Joyce, and see above chapter 4]. He aims to rectify this lack of clarity by exploring the 'material links' between political-economic and cultural processes, which "will allow [him] to explore the link between postmodernism and the transition from Fordism to more flexible modes of capital accumulation via the mediations of spatial and temporal experiences" [1989a; p 201]. Spatial (and temporal) experiences are sandwiched as a mediating link between the two poles of Harvey's enquiry (postmodernism as a cultural process and capitalism as a political-economic process), both of which are theoretical abstractions related to a materialist base invoking a conception of space which tends to be abstract, geographical and distributional.

"Space and time are basic categories of human existence", and because we rarely debate their meanings Harvey argues that the self-evident or common-sense attributes need to be questioned, offering a sampling of socially-defined conceptions of space and time as well as the 'space-time' of the physicists' understanding as evidence for the more complex and multiple objective qualities that space and time can express [p 203]. However, whereas his argument on time is quite conclusive, challenging the idea of time's "ineluctable arrow of motion" and ruling out any return to that as a commonly held understanding with alternative conceptions as mere "interpretations", his argument in relation to space is a little less secure.

He begins by arguing that space also "gets treated as a fact of nature" through the assignment of common-sense everyday meanings, and needs to be open to the same multiple understandings as those that were brought to time, principally derived from subjective, anthropological and historical perspectives. However, he concludes that there remains;

some sense of an overarching and objective meaning of space which we must, in the last instance, all acknowledge is pervasive [p 203].

Following from the previous paragraph this appears to be a direct contradiction and Harvey is obliged to explain why he rescues a 'pervasive objective' quality of space where a similar gesture was not made for time, indeed it was ruled out explicitly. His argument moves swiftly but in distinct stages. Firstly, he argues against a single objective understanding of time and space, while simultaneously avoiding a total dissolution of the objective-subjective distinction, preferring rather a multiplicity of possible objective qualities which space and time can express and emphasising "the role of human practice in their construction". The first step therefore is the

familiar one of a socially-defined conception of space and time which allows for competing understandings without descending into the formless relativism of subjectivism. The second step in bringing this within the scope of his Marxian perspective is to move from 'human practice' to 'material processes', stating that "the objective qualities of physical time-space cannot be understood, therefore, independently of the qualities of the material processes".

However, there is a critical bridging construction to which the preceding 'therefore' refers;

Neither time nor space, the physicists now broadly propose, had existence (let alone meaning) before *matter*; the objective qualities of physical time-space cannot be understood, therefore, independently of the qualities of the material processes.

In making this link between 'matter' as conceived by the physicists and 'material processes' in its Marxian sense, Harvey is blurring two sets of ontological and epistemological positions. That he does so, even momentarily, perhaps reveals why he hints at, although cannot articulate fully, "some sense of an overarching and objective meaning of space, which we must, in the last instance, all acknowledge is pervasive". This sense of space is captured in his description of what space is – "it has direction, area, shape, pattern and volume as key attributes, as well as distance" [p 203]. Here we see the basis of what I have referred to above as his 'geographical consciousness' (the parallel with his 'geographical imagination' of *Social Justice and the City* is intended and will be expounded upon below); space as distance, area, pattern. This also parallels the understanding of 'materialism' of Jameson; the peculiarly two-dimensional collapsing quality of his 'stereoscopic illusion'. However, there is also a second key set of attributes referred to by Harvey - volume and shape - that point to a different spatial vision, one that is based more in the concept of matter.

Harvey, however, repudiates this concession no sooner than it is stated, I would suggest because he realises where such a position inevitably takes him. He immediately positions "this particular physical conception" also as a social construct, since it relies on a particular version of the constitution of matter and the origin of the universe. He thus subordinates matter to "material practice", concluding finally, and without the now subsumed appeal to matter, that "neither space nor time can be assigned objective meanings independently of material processes, and it is only through investigations of the latter that we can properly ground our concepts of the former" [p 204]. Under a system such as capitalism which is inherently revolutionary, material practices are constantly changing so that the "objective qualities as well as the meanings of space and time also change" and such conceptual changes can then 'have material consequences for the ordering of daily life" [ibid.]. The process is conceived of as referential, therefore, but in postulating the relationship between conceptions of time and space and material consequences, Harvey once again introduces the conception of matter that is continually lurking in the background of his understanding of the relationship between space and spatial experience. Here it is introduced through an example:

When, for example, a planner-architect like Le Corbusier, or an administrator like Haussmann, creates a built environment in which the tyranny of the straight line predominates, then we must perforce adjust our daily practices [ibid.].

This introduces the geographical bug-bear of determinism that he has been so keen to avoid, realising (above) that it was the inevitable consequence of introducing physical space into his theoretical framework. His fix is revealing for he justifies his assertion that "this does not mean that practices are determined by built form" with the argument that "they [practices] have the awkward habit of escaping their moorings in any fixed schema of representation". His solution, therefore, is to equate 'built form' with 'fixed schema of representation', a link that is reinforced by his following assertion that, "new *meanings* can be found for older materializations of space and time" [ibid., emphasis added].

Just as with Soja therefore, we see that Harvey struggles to avoid determinism in his conception of the relationship between experience and spatial form, and so finds himself forced to remove matter from his theoretical position despite the fact that his subject matter instinctively draws him back towards this 'no-go' area for geographers and all those considering the environment-society relationship. He avoids determinism by focusing more on the 'meaning' of space as an adjunct to his economistic absolutism despite his description of the key attributes of space, all of which were physical/ dimensional.

Theoretical slipages

Harvey explores this problem again in a more theoretical vein in *Justice, Nature and the Geography of Difference* [1996], reinforcing once more the temporal separation between theoretical development and its practical application (albeit for reasons of convenience) that one finds across the body of his work. Here, with the perspective of hindsight, he is able to reflect upon the gains of the 're-spatialization' literature which has resulted in a "seeming consensus...that space and time are social constructs" [1996; p 207, note the stark contrast with the position at the outset of *Social Justice and the City* over twenty years earlier, see above p 144].

However, he points to "innumerable and potentially damaging confusions" lurking within this consensus, foremost among which is a slippage that occurs in 'actual accounts', "into a much more prosaic presentation [of the reflexive relations between a socially constituted space-time and social relations and practices] in which social relations occur *within* some pre-constituted and static framework of space and time" [ibid., sic]. Harvey here reiterates exactly my own criticism of his previous work, which relied upon just such a static framework of space and time, developed in *Limits*. His difficulty seems to be in seeing that an emphasis on the changing 'experience' of space and time does not imply that the conceptions therein also necessarily change, in other words, although the quantitative aspects of space and time are alleged to have changed through time-space compression (the time taken to overcome a particular distance for example) the qualitative nature of the concepts remains unchanged in Harvey's earlier vision. This is not unrelated to his argument, presented above, that although capitalism is in constant change, it is the constancy *of* that change that provides an analytical continuum between modernity and postmodernity.

Harvey's unintentional self analysis continues along a convenient path as he concludes that the explanation for this 'slippage' suggests that, "there is something radically amiss in the way relations between spatio-temporality and sociality are constructed *at the very outset*" [ibid., emphasis added]. It was suggested above that this foundational difficulty can be attributed to the way in which 'physical space' or matter is treated, and Harvey opens his renewed theoretical considerations by questioning the difference between material and metaphorical uses of 'space', arguing that, "it is therefore impossible to proceed far with a discussion of space and time without invoking the word 'place'" [p 208]. Although he notes the multiplicity of meanings, both material and metaphorical, that are attached to this "most multilayered and multipurpose keyword[s] in our language", he argues that rather than creating an impasse, this "immense confusion of meanings" should rather be seen as an advantage which "suggests some underlying unity which...will reveal a great deal about social, political, and spatial practices over time" [ibid.].

In introducing the term 'place' into his theoretical arsenal, there has been a significant shift from the position set out in *Limits* where a material understanding of space was the foundation stone. Here, by contrast, there is "renewed emphasis upon the interrogation of metaphorical and psychological meanings which, in turn, generate material practices that give new material definitions of place". This relationship between material practice and metaphorical understandings is reinforced by four points of clarification. Firstly, that 'social constructions' are based in "the materiality of the world", derived from "the various forms of space [and time] which humans encounter in their struggle for material survival" [p 210]. Again, this seems to be an appeal to some intuitive 'common understanding of space' as an experiential as well as conceptual realm. However, the second clarification reinforces that there can be no understanding that is not contextually derived from "cultural embeddedness in language, belief systems, and the like" and so challenges the notion of a 'fact of nature' that might be understood as being implied in the first. Lest this be interpreted as radical subjectivism, the third clarification draws a distinction between personal subjectivism and social construction, arguing that the latter operates "with the full force of objective facts to which all individuals and institutions necessarily respond". This establishes a set of "universal concepts and representations which are canonical for the society as a whole" [p 212, quoting Gurevich]. These clarifications might seem innocuous enough but once again they point to conflicts within the theoretical structure.

What has been created is a characteristic Marxian framework of a shrouded 'base' overlaid by, and isolated from, an interpretative infrastructure (the cultural, metaphorical and intellectual skills of language and belief structures). The latter separates the base from society, which remains "unaware both of the imposition and the acceptance, the 'absorption', of these categories [derived from the base] by its members" [ibid., quoting Gurevich]. The effect is to confuse the assertion that understandings of space and time are ultimately embedded in the material world. How then are we to understand the "various forms of space and time encountered by humans in their struggle for material survival"? As social constructs, even though they were supposedly the material basis *of* those social constructions, or as material realities independent of contextual understandings?

This confusion between realist and contextual positions is amplified by a series of examples of what this material and experiential base (that "which human beings encounter") might be. But while elsewhere he asserts that space and time cannot be considered separately, it is noticeable here that he is only able to give decidedly temporal illustrations. "For example, night and day, the

seasons, lifecycles in the animal and plant world, and the biological processes that regulate human reproduction and the body are typical encounters with various kinds of temporality". In relation to contemporary experience temporal examples are once again offered, "The swing of the pendulum or the pace of radioactive decay are now used, whereas in other eras it may have been the cyclical motions of the planets and the stars or the migrations of animal populations" [p 211]. In terms of time, therefore, Harvey is able to conceive of properties of the material world which are precursors to the social constructions balanced upon them. Continuing with time therefore he shows that "in modern societies we accept clock time, even though such time is a social construct, as an objective fact of daily life... Even when we do not conform to it, we know very well what is being rebelled against" [p 212].

It is notable, therefore, that in supporting his argument about the material grounding of concepts of time and space, he is only able to offer examples derived from time. This might be explained in two ways; either there is a weakness in the assertion that 'social constructions of space and time are not wrought out of thin air, but shaped out of the various forms of space and time which human beings encounter in their struggle for material survival", because constructions of space *are indeed* wrought out of thin air and are not based in any materiality. This would then suggest a philosophical position in which time had a material manifestation while space did not, which is contrary to Harvey's own stated position. Alternatively, it would suggest that beyond flacid remarks about the material basis of space, he is unable to give a concrete example, presumably not because one could not be offered, given the above conclusion, but because he is reluctant to do so. This can only be because to do so would, within the context of the framework set out above, be to posit a link between material properties of space and society through the medium of human experience which would be dangerously close to spatial determinism.

It is for this reason that in the fourth clarification that Harvey offers to the notion of space and time as social constructs he makes a clear distinction between space and *representations* of space. It is the *latter* that he sees to be of importance, using the example of the layout of the Kabyle house described by Bordieu [1977]. The "material embeddedness [of] social constructs of space and time which internalises social relations" is founded within the physical structure of the house ("the partitions within the house etc") but this is not treated as *material space* but as a *representation of space* which, "arise out of the world of social practice but then become a form of regulation of those practices" [p 212]. The effects is to separate ways of representing space from the use of space (Harvey even construes these as oppositional in the text) such that although

it is the "spaces *occupied* at specific times" that are the key to understanding the role of women in Kabyle society, this is seen as a "way of *representing* (as opposed to using) space and time" [ibid.].

There seems to me to be a fundamental weakness in Harvey's argument. Despite the assertion that space and time cannot be treated separately and that both are embedded in a material human experience, the two are treated very differently in the text. While Harvey is happy to point to 'fact of nature' phenomena such as night and day and the seasons as a material basis for a universal experiential understanding of time, no such examples can be given for space, although his argument continually returns to guarded allusions that such an experiential basis does exist. The spatial component of this experiential spatio-temporal base never seems to reconnect to that root, always circling within the interpretative superstructure of social construction.

This conclusion undermines Harvey's sympathy with the arguments of Gurevich, Munn and Mitchell [1985, 1987, and 1991 respectively] which he sees as pointing to the undermining of a world view derived from Descartes, Newton and Locke, opening a more relational understanding of space and time which overcomes the pervasive mind-matter, fact-value dualities of Western thought [see Harvey, 1989a; pp 220 and 224]. Mitchell characterizes this as a binary order with;

on the one hand individuals and their activities and on the other an inert structure that somehow stands apart from individuals, pre-exists them, and contains and gives a framework to their lives. Such techniques have given rise to the peculiar metaphysics of modernity, where the world seems resolved into the two-dimensional form of individual versus apparatus, practice versus institution, social life and its structure - or material reality and its meaning [Mitchell, 1991; p ix, quoted in Harvey, 1996; p 224].

As we have seen, Harvey has not resolved this mind-matter duality in terms of his view of space. It is still present in his work as the disjunction between the social construction of space and its material basis. The way that he moves around this problem and tries to avoid what he calls the "Western conceit of the individual as a performed identity within a set of absolute structures of space and time" [ibid.] is to conceive of material objects in terms of their symbolic meanings. This is again an attempt to move away from what Harvey sees as the moribund dualisms described by Mitchell and is the mechanism proposed by Munn to link representations and material circumstances that Harvey finds lacking in Gurevich's account, just as I have found it lacking in his. Drawing on Munn's description of the importance of canoes and shells in

constructing social relations and concepts of space and time in Gawan society, Harvey argues that;

The power of objects and things over us, the fact that they seem to have a life of their own and to possess value on their own account depends entirely on the way discourses of value envelop them and invest them with symbolic meaning [ibid.; p 221].

He thereby draws a parallel between Munn's work and the idea of the fetishization of commodities in Marx, in which objects are seen to be invested with social values, and argues that central to this practice of valuation is the notion of evaluative discourses about the 'thing'. Material objects are again seen to be accessible only through language and decoding of socially attributed meanings. In relation to built environments of all scales, from domestic interiors to cities, he argues that the "[t]he fixing of spatiality through material building creates solidly constructed spaces that instanciate negotiated or imposed social values" and that a semiotics of spatial ordering can create of these material realities 'texts' to be read in social terms.

Money as 'thing'

There appears to be a distinct change in emphasis, therefore, between the early theoretical work of *Limits* and the current position outlined above, a change from an economistic and abstract understanding of space towards a relational and phenomenological understanding, what Harvey would identify as the positions of the 'young' and 'old' Marx. However, he argues that as there is no rupture between the two phases of Marx's thought but rather a dialogue, so there is no distinction to be made between these seemingly different approaches to space [see Harvey, 1996; pp 232-3]. The key to mediating this union is the role of 'things'.

Particular importance must be paid to the mediating role of things in allowing the "translation and transformation from one spatio-temporality to another", to the extent that the approach to 'thingness' brings into question the binary duality identified by Mitchell between the spatio-temporalities of the 'lifeworld' (rooted, it has been shown, in symbolic meanings) and the "abstract 'rationalized' spatialities attributed to modernity and capitalism (such as those that emerge from a discussion of market exchange)" [ibid.; pp 233-4]. This is a critical passage as he raises an awareness of exactly the criticisms I have made of his own work, and finds the resolution through a discussion of 'thingness' that is a direct engagement with the concept of

material objects that I have argued is the foundational problem within the 'respatialization' literature.

Harvey illustrates his argument in relation to money, for the reason that it is "by far the most important 'thing' in which social relations become invested, values articulated, and social powers incorporated" [p 234], a role which I shall later argue should be ascribed to space itself, conceived as a 'thing' (if indeed such a singling-out is useful). Money, he argues, mirrors in its uses the heterogeneity of spatio-temporalities under capitalism, such that although "each concrete money use defines a particular spatio-temporality, it does so in some relation to the spatio-temporal processes regulating the abstract qualities of money on the world market" [p 238]. However, it is able to make this translation between relational and abstract spheres because money is understood as 'value'. It is, therefore, not possible to consider money as a thing outside of the system of 'value in motion' that is the process of capitalism. To do so would be to make the same mistake that Marx termed the 'fetishization of commodities' - the treatment of objects as distinct from the circumstances of their production that is caused by the way that markets "conceal social (and, we should add, geographical) information and relations" [Harvey, 1996; p 232].

For Harvey, therefore, 'things' are not fixed material entities but must be seen in terms of processes. The groundwork for this position is laid early in his justification for following Marx's dialectical thinking. This Ollman summarizes;

Dialectics restructures our thinking about reality by replacing the common sense notion of 'thing', as something that *has* a history and *has* external connection with other things, with a notion of 'process', which *contains* its history and possible futures, and 'relation', which *contains* as part of what is its ties with other relations [Ollman, 1993; p 11, quoted in Harvey, 1996; p 48].

The consequences for the understanding of the traditional ontology of space-time-matter can be seen in eleven propositions offered as the principles of dialectics, which itself is to be understood in processual, and so perhaps uncategorizable, terms, thus overcoming the Cartesian separations that are characterized here as mind: matter, thought: action, consciousness: materiality, theory: practice [ibid.; p 49].

1. Dialectical thinking emphasizes the understanding of processes, flows, fluxes, and relations over the analysis of elements, things, structures, and organized systems.... There

is a deep ontological principle involved here, for dialecticians in effect hold that elements, things, structures, and systems do not exist outside of or prior to the processes, flows, and relations that create, define or undermine them.

This initial proposition clearly has many ontological and epistemological consequences, which Harvey acknowledges and to which I will return in the light of the other propositions that follow to a degree as a consequence of this first critical axiomatic proposition.

Subsequent propositions develop the understanding of 'things' as processual: "Elements or 'things' are constituted out of flows, processes, and relations" (no. 2) and are therefore to be treated in the light of constituting and sustaining processes rather than as inert. 'Things' are seen not to be irreducible but as constituted by multiple problematic and contradictory processes (no.3) and are therefore seen to be internally heterogeneous and reducible to other things *ad infinitum* as there are no essential 'things' that are building blocks. Therefore, all levels of understanding can be resolved as a part of a further process, leading to the conclusion that parts and wholes are mutually constitutive of one another (no.6) and that subject and object, cause and effect are also interchangeable (no.7). However, there are boundaries to be set to the understanding of a relevant system, necessary to avoid the monadal-type conclusion that each thing (the example is given of a person) internalizes everything in the universe (no.2 and 4c). The boundaries are not established a priori but are set in terms of the systems of relevance (no. 4c), but these boundaries, with respect to space, time, scale and environment, are of strategic importance in the development of concepts, theories and abstractions. In geography this is particularly identified (by Harvey) with the question of scale (no. 4d). Space and time are to be seen, therefore, as "neither absolute nor external to processes" but as "*contingent* and contained with them" (emphasis added). This is the basis for the understanding of space explored above as produced by different "physical, biological and social processes" which do not operate in, but "actively construct", space and time.

Perhaps the most important principle according to Harvey is that "change and instability are the norm" and that what has to be explained is why and how, for example, the physical world *appears* to be a "relatively stable configuration of matter and things" (no. 9).

These principles seem to lay a theoretical groundwork that might explain the particular understanding of space that has been found in Harvey's work. However, the principles given involve epistemological as well as ontological principles, and indeed it is in the nature of dialectical thinking, Harvey argues, to question this separation also, since the problem of whether dialectics is "an ontological statement about the nature of reality or a convenient epistemology for understanding nature" is also rendered inappropriate along with the other Cartesian binary dualisms [ibid.; p 48]. Principle 10 asserts, therefore, that as dialectical enquiry is "itself a process that produces permanences such as concepts, abstractions, theories and institutionalized structures of knowledge" the relationship between the researcher and the researched must be seen as constitutive also, such that it is integral to dialectical thinking to explore other "possible worlds", that is to acknowledge that "ethical, moral and political choices (values)" are implicit in dialectical thinking and that its goal should be the exploration of other possible (and better) worlds through the union of theory and practice.

There are two key attributes that can be extracted from this description of dialectical method by Harvey. Firstly, it blurs the distinction between ontological and epistemological positions. Methodologically this lack of distinction is hard to maintain, and Harvey notes that "epistemologically, the process of enquiry usually inverts this emphasis [on processes rather than things]: we get to understand processes by looking at either the attributes of what appear to us in the first instance to be self-evident things or at the relations between them". However, this "epistemological condition should get reversed when it comes to formulating abstractions, concepts, and theories about the world...[which, therefore,] transforms the self-evident world of things with which positivism and empiricism typically deals into a much more confusing world of relations and flows that are manifest in things" [p 49]. This resonates with the understanding of *The Aleph* introduced above. Dialectical enquiry holds that epistemological and ontological positions are blurred but it is the epistemological emphasis of dialectics on emphasizing an approach to 'things' that guides the ontological view of 'what is'.

Secondly, and as a consequence of this, the idea of material objects in the 'self-evident' and 'common sense' understanding is dissolved as these are regarded as 'permanences', manifestations of constitutive and sustaining processes. 'Matter' is excluded, therefore, from the ontological framework as it is epistemologically of no significance in comparison with these processes (being always reducible to further processual understandings according to principles 3 and 6 above). Again, this echoes earlier conclusions, both in relation to Soja's work, and Harvey's inability, described above, to reconnect his spatial understanding to a material base. That impossibility can now be understood not only in epistemological terms of how to conceive of a relationship between physical space and societal processes, but also in ontological terms, since physical space itself is to be conceived of not in terms of a 'referential base' but as a

process also. It is this basic interpretation of 'thingness' which is critical in understanding Harvey's approach to the city and architecture as a physical as well as social phenomena.

The City and Architecture

Having reached a thorough understanding of the conceptual basis of space and matter within Harvey's work, I now wish to turn to their more contextual development, examining the view of cities and architecture that emerges as a corollary of these positions. This necessitates a return to the early work *Social Justice and the City*, which forms the beginning of his concern with urbanism.

During that work, Harvey makes a dramatic shift in position that he alerts the reader to in the introduction; "[t]he general approach contained in Part 2 is substantially different (*and, I believe, substantially more enlightening*) than that in Part 1" [Harvey, 1973; p 10]. While he argues that both parts maintain the view that the distinction between social processes and spatial form is artificial, the second part of the book does mark a distinct change of approach, "the distinction is regarded as unreal in a rather different sense" [ibid.]. There is a development from an idealist to a materialist approach, which perceives urbanism to be more than simply a 'thing in itself' and neither separate nor separable from ideas of space and social justice [p 17]. There is similarly a shift in the understanding of space from chapter 1, which he argues descends into a "formless relativism", to a relationally defined conception and a change of approach from an ontological focus on the a priori definition of space to an epistemological and contextually motivated approach that seeks not "philosophical answers to philosophical questions" but turns to human practice as the source of answers.

However, Harvey is adamant that the transformation of approach "does not negate the formulations of part I. It enriches them by assimilating them into higher order concepts" and gives them new meanings in the context of a renewed framework [ibid.; pp 10 and 301]. The formulations of chapter 1 should not be ignored, therefore, despite being written off as "formless relativism".

"Any general theory of the city must somehow relate social processes in the city to the spatial form which the city assumes" [1973; p 23]. Harvey develops this opening statement into a discussion of the elision between what he describes as the "geographical" and the "sociological imaginations". While the latter is concerned with the relation between history and biography within society, the former, which is also referred to simply as 'spatial consciousness', relates to the role of space within the biography of individuals. Thus it bears on "the spaces [the individual] sees around him [sic], and [recognizes] how transactions between individuals and between organizations are affected by the space that separates them", as well as allowing one to gauge the significance of spatially removed events.

Significantly, Harvey then continues that, "[i]t allows him also to fashion and use space creatively and to appreciate the *meaning* of the spatial forms created by others" [p 24, emphasis added]. Without the strength of an analytical method, he argues, the 'geographical imagination' relies heavily on intuition and is primarily based within 'the plastic arts' [p 24]. While the majority of his argument in this section is indeed weak in its lack of an analytical means for linking spatial form to behaviour - a lack to be rectified in later sections reworking Harvey's theory and salvaging these early positions from the 'formless relativism' - this association between a 'spatial consciousness' and the '*meaning* of space' becomes a persistent feature of his understanding of the physical form of the city and buildings. Indeed, despite his repudiation of the position taken in the opening chapter later in this book, much of his 'conclusions and reflections' continues in a similar vein.

Harvey argues that the sociological and geographical imaginations cannot be separated, either in analytical terms or in any attempt to influence social practices, and yet seems to have difficulty in making this union. The reason for this difficulty is this hermeneutic approach to space, which Harvey sees as the only way in which to link society and space (and the two related forms of 'imagination'). He begins by seeking a 'geometry' or analytical framework by which to link the different experiential levels of space that he takes from Cassirer - organic space (biologically determined spatial responses etc); perceptual space and symbolic space (such as geometries themselves). However, he then asserts that "social space is not isomorphic with physical space" and, drawing on evidence from the study of space by physicists (a perpetually popular and dangerous parallel to make - see Sokal and Bricmont [1999]), argues that each form of social activity defines its own space of relevance as "geometry is defined by process" [p 30].

This is the beginning of his 'formless relativism' and here we begin to see Harvey's limited 'architectural imagination' evolve. While he states that this subordination of geometry to process gives geographers the concept of 'socio-economic space' (revealing also!) and psychologists and

anthropologists the idea of 'personal space', he continues... "[w]e know very little...about the exact manner in which the artist or architect fashions space to transmit an *aesthetic experience*" for the reason that [we] have little understanding of the processes operating within the perceptual realm of spatial experience [p 30, emphasis added].

This parallel between the artist and architect is important, and derives from the resolution of architecture into two principles of spatial organization - the first "designed to prevent the structure from violating physical constraints" which pose no analytical problem, being "Euclidean and tractable"; the second "designed to facilitate the transference of some aesthetic experience". What precisely the first principles refer to is not clear. These are not the principles of physical constraints of spatial organization" by which presumably he is referring to the 'jigsaw' skill of the architect in fitting elements into a scheme. This, however, is a disappointingly shallow conception of the importance of physical space within architecture, theoretically constrained principally because of the lack of an analytical methodology. Furthermore, 'physical space' is excluded from the second principle dealing with aesthetics also as, following Langer, " 'the space in which we live and act is not what is treated in art at all', for the space in which we have our physical being is a system of relationships whereas the space of art is a created space built out of forms, colours, and so on" [Harvey, 1973; pp 30-1, quoting Langer, 1953; p 72].

Langer (and Harvey) extend this conception to architecture also and although it "defines and arranges spatial units in terms of the space in which we live and move", as before these qualities of the built environment are seen as secondary to its common nature with the 'artistic environment' in transmitting an illusion, that is the physical manifestation of something purely conceptual. In the case of architecture this conceptual blueprint is what Langer calls an 'ethnic domain', which Harvey understands to mean that, "the shaping of space which goes on in architecture and, therefore, in the city is *symbolic* of our culture, *symbolic* of the existing social order, *symbolic* of our aspirations, our needs, our fears" [p 31, emphasis added]. Harvey here isolates the *constitutive* importance of the spatial form of the city, placing it at one remove from social importance, which is mediated through the perceptual and subjective realm of 'symbolic meaning' that leads him into such problems of relativism. 'Culture' is similarly removed one step from the physical domain, as the city is 'symbolic *of* our culture' which itself presumably resides in a non-physical therefore conceptual, mental domain. Here Harvey makes use of the work of Lévi-Strauss (particularly *Structural Anthropology*, 1966) and the idea of the physical form of a

village being a reflection of the mythological structure of that society. In doing so he loses perhaps some of the sense that Langer places on architecture as a "physically present human environment", concluding that, "if...we are to evaluate the spatial form of the city, we must, somehow or other, understand its *creative meaning* as well as it *mere physical dimensions*" [p 31].

I wish to argue that this marks for Harvey a critical wrong turn that he perpetuates into his later work. Harvey is seeking a correspondence between *spatial symbolism* and behaviour as he sees the understanding of the symbolic qualities of form as being the necessary precursor to a meaningful relationship between spatial and social forms mediated through behaviour. The result is a view of the city as containing,

all manner of signals and symbols, [by which] we can try to understand the meaning which people give to them. We must seek to understand the message which people receive from their constructed environment. To do this we need a very general methodology for the measurement of spatial and environmental symbolism. Here, the techniques of pyscholinguistics and psychology have much to recommend them. [Harvey, 1973; p 32].

Although this specific methodological approach is abandoned in later work, the view of space in relation to the built form of the city and architecture essentially remains little changed;

In general, we have to conclude that social space is complex, non-heterogeneous, perhaps discontinuous, and almost certainly different from the physical space in which the engineer and the planner typically work... If we are to understand space, we must consider its symbolic meaning and its complex impact upon behaviour as it is mediated by the cognitive process [ibid.; pp 35-6].

In *Social Justice and the City* he gives what he himself admits to be "crude examples" - the Chrysler Building or the Chase-Manhattan Bank building as symbols of capitalism, the 'dreaming spires' of Oxford as symbols of church power, referents that he returns to in his analysis of the symbolism of key sites in 19th century Paris [Harvey, 1985]- but his approach to urban space and architecture remains essentially unchanged in the later *Condition of Postmodernity*. Again, we see in that work a typical blurring of theoretical perspective and subject matter. In introducing the subject of postmodern architecture and urban design Harvey describes postmodernism in stylistic terms, pointing to a turn from technologically rational, efficient and metropolitan wide planning of the modern era to a "conception of the urban fabric as necessarily fragmented", a palimpsest, a

collage of ephemeral forms and uses and in architectural terms a new eclecticism of architectural styles paying particular attention to local vernaculars. He argues that;

Above all, postmodernists depart radically from modernist conceptions of how to regard space. Whereas the modernists see space as something to be shaped for social purposes and therefore always subservient to the construction of a social project, the postmodernists see space as something independent and autonomous, to be shaped according to aesthetic aims and principles which have nothing necessarily to do with any overarching social objective, save, perhaps, the achievement of timeless and 'disinterested' beauty as an objective in itself [Harvey, 1989a; p 66].

Harvey follows this 'aesthetic turn' in his own analysis, focusing more on how a "city looks". The theme of 'created' as opposed to 'effective' space that was introduced in *Social Justice and the City* is here apparent again, with the inevitable following question, "in whose image are spaces created?" [see *Social Justice and the City* p 307]. Harvey shows sympathy with the idea of architecture as a form of communication, and quotes Barthes assertion that "the city is a discourse and this discourse is truly a language" [1989a; p 67] and relates this to his central theme of the impact of the changing capitalist process via Jencks who argues that postmodern architecture and urban design is driven by market forces, the "primary language of communication in our society" [ibid.; p 77].

Harvey links architecture to capital through Bordieu's notion of "symbolic capital" [see *Outline of a Theory of Practice*, Bordieu 1977], the idea of architecture as a symbolic luxury good which is a 'stand-in' for capital serving the ideological function of "reproducing the establish order" while the fetishistic concern with surface appearance ensures that " the perpetuation of domination remains hidden" [1989a; p 79]. He conceives, therefore, the eclecticism of architectural styles associated with postmodernism as a response to the economic 'sea-change' that forms the core of his thesis. To achieve this link between capitalism and aesthetics, architecture is reduced ('flattened' perhaps would capture the prevailing postmodern rhetoric) to a form of capital, 'symbolic capital', and is thereby treated simply in aesthetic terms. Although Harvey's early suggestion that postmodernism as a style turns from modernism's concerns with social programs may well be accurate, this does not mean that postmodern architecture does not have social outcomes related directly to the built form, physical or effective space any less than the architecture of the 1960s. However, Harvey's approach to the importance of architecture precludes any focus on this possibility, despite the fact that he is supposedly concerned with human practice as the precursor to theory. Instead, he treats architecture as a language system and

suggests that the eclecticism of the postmodern period can be understood as a "highly specialized series of language games" [ibid.; p 82].

The result of this transformation in stylistic terms and, I would argue, in theoretical approach also, "is fragmentation, often consciously embraced" [ibid.]. Interestingly, Harvey here cites the Office for Metropolitan Architecture, the practice of Rem Koolhaas, who perceive the city as "a system of anarchic and archaic signs and symbols" and who understand "the perceptions and experiences of the present as symbolic and associative, a fragmentary collage, with the Big City providing the ultimate metaphor" [Harvey, 1989a; p 82, quoting Klotz, *Postmodern Visions*, 1985; New York].

Such an appraisal could equally well apply to Harvey with the added nuance that for both Harvey and Koolhaas within the umbrella of the city metaphor particular emphasis is placed upon synechdochal examples; once again Harvey turns to the "inescapable complexity" of the Bonaventure Hotel with its supposed schizophrenic associations [ibid; p 83].

To review this complex argument before a 'rebuilding' is offered, this "flattening" of the importance of architecture to a decoding of its surface meaning comes as a result of the replacement of 'matter' with 'process' in Harvey's ontological trialectic of space-time-process, as his engagement with dialectical method leads to 'things' being resolved (perhaps 'dissolved') into process to avoid the criticism of Marx's 'fetishization of commodities'. In relation to architecture, a processual approach is achieved by treating architecture in stylistic terms only and linking it to the process of capitalism by treating it as 'symbolic capital', following Bordieu.

The subtext here is that any more materialistic conception of architecture would lead him towards what he would perceive as a deterministic understanding of the relationship between spatial and social forms, a possibility that he rules out on numerous occasions. For example, he accuses (rightly) Coleman and other members of "Prince Charles' 'kitchen cabinet'" of "the most vulgar form of crude determinism" in their association between design failure and social ills [1989a; p 116]. However, like so many critics, in condemning determinism outright he shows no interest in reformulating the relationship between built space and society. Harvey thereby places a semantic-buffer between the physical form of the city and its social significance.

Ultimately this rests upon his decision not to treat material 'things' as 'things in themselves', in adherence to Marx's warnings of fetishization. However, this is precisely contrary to the approach of Space Syntax which rests upon understanding space as independent *both* of material objects *and* of human activities "but as an intrinsic aspect of both" [Hillier, 1999b; p 184]. Space Syntax's approach of treating space as independent both of the material and social realm similarly rests upon a definition of 'thingness'. While Harvey 'dissolves' 'thing' into 'process', Hillier by contrast argues, referring to Thom's idea of objective 'structural stabilities' as the basis for the existence of 'things', that 'thingness' is defined through "configurational persistence" [Hillier, 1996; p399]. As we have seen above [p 133], configurations show quantifiable material attributes such that when the spaces of a city, or indeed a building structure, are treated as a configuration it can be shown that movement, and critically in relation to Harvey's arguments secondary correlates such as rental values and land-use, are directly affected by the spatial form of the city, unmediated by semantic factors [see Hillier, 1993 and above pp 135-6].

Through treating space precisely as 'a thing in itself', in direct contradiction to Harvey and indeed Marx's approach, Hillier is able to demonstrate a direct link between physical structure and social forms. Moreover, it is a critical aspect of configurations that they 'persist over time'. Spatial structures such as cities and buildings are emergent structures, and are hence not only explicitly social but are also *implicitly processual*. However, Hillier's approach through configuration is able to "save 'thingness' despite the processual nature of everything"⁹.

There are strong grounds, therefore, for seeking to rework Harvey's conception of the relationship between material space and society, around the idea of configuration, which appears to 'tissue-type' well with his own approach to space, with the qualification that it is not predicated upon a rejection of the importance of the material. This reinvesting of material space into the work of Harvey is the goal of the following section.

⁹ Hillier, personal communication.
6.3 Respatializing the spatial

The previous section offered a detailed analysis of the role of space within Harvey's work. The conclusion was that the understanding of space that he advances conforms to the polarity within the geographical canon - an abstract space of geographical difference and a hermeneutic space of hypothesised general meanings – in which there is no consideration of the materiality of space.

This section will seek to advance an alternative approach to the spatial problems which preoccupy Harvey, one drawing upon the materialist conception of space advanced by Hillier et al. We have seen that while Harvey argues for the inseparability of theory and practice, in *his* practice he tends to develop theoretical ideas that he then extends into a 'laboratory' of experience. Here I will reverse that logic, introducing two empirical case studies before drawing out what their theoretical impact might be. Although there are many potential examples that would be of relevance (and some of the later case studies employed in relation to the work of Giddens, Goffman and Foucault will have resonances with Harvey's work) I have decided to develop two that apply to Harvey's earlier concerns with spatio-economic relations, particularly the idea of the city as 'movement economy' [introduced in the previous chapter, pp 135-6]. The themes of his later work - for example the move towards more experiential understandings of space found in *The Condition of Postmodernity* - are touched upon by these later examples.

The two examples are as follows; the first will revisit Harvey's concern with the role of rent in the urban system, developed in *Social Justice and the City* and *The Limits to Capital*, and will demonstrate the importance of the physical space of the city form, understood through a configurational approach, in determining rental values. The character of this example, particularly in relation to the approach to space upon which it is based, can usefully be compared to Harvey's own more empirical exposition of these ideas in his essay *Paris, 1850-70* [Harvey, 1985; pp 63-220]. The second example will return to the key concept of a 'spatial fix' to capitalism's crises, and will re-examine his weakly developed notion of competition between spaces and more favoured locations. The example will demonstrate that rather than conceiving of 'space' in abstract terms as a differentiated region of potential opportunity, the configuration of spatial systems plays a direct role in governing the success or failure of local economies.

Having demonstrated the utility of the approach, the beginnings of a theoretical reconciliation may be proposed.

Rent and Spatial Order

The aim of this thesis is to argue that the claimed 're-assertion of space in social theory' relies on contrasting abstract and hermeneutic understandings of space that are opposed to common 'material' understandings abandoned through a reaction against 'spatial science' and determinism. Nowhere is this more apparent than in Harvey's approach to the role of rent in the urban system. For Harvey, as was demonstrated above, rent is of importance because it is the spatial expression of the inequalities of the capitalist process. Its central importance, both to his theory of urbanism and also in his reworking of historical materialism, derives from the fact that the differential spatiality of potential investment returns, defined by rental topographies, governs land price and "operates to allocate capital and labour to land, guides the location of future production, exchange and consumption, fashions the geographical distribution of labour and the spatial organisation of social reproduction" [Harvey, 1982; p 396].

This is, as was argued above, a quintessential 'geographical' conception of space - the abstract, systemic, birds-eye view, that Harvey himself describes as "invoking the facts of *distribution*" [ibid., emphasis added]. However, I suggest that *distribution* is a 'second order' spatial concept that describes the ordering of a category (defined a priori by theoretical constriction) within a notional, abstract (often diagrammatic or theoretical) space. The *spatiality* of rent topologies is important as a theoretical loop completing the recursivity of the system, but *space* is not fundamental to the process. In determining rent the importance of 'location' is often cited, but again this is typically understood in terms of proximity of access to other key sites (dependent functions, transport links etc) and so relates once again to 'friction of distance' considerations, more temporal than spatial.

Desyllas aims to understand more thoroughly this location variable in office rents [Desyllas, 1997 and 1998]. He draws a distinction between the importance of location in the 'micro-behaviour' of individual firms, and the 'macro-behaviour' that defines the market place as the aggregate of these decisions, which in turn produces the emergent structure of location rents across the city. This concern with the emergent structure at the macro/aggregate scale has obvious parallels with Harvey's argument. However, Desyllas [1998] begins by challenging overly simplistic conceptions of the relationship between location and rent, arguing that "although there is a broad consensus...that 'location' is in some sense a critical factor in determining rents, the exact role that the location factor plays is unclear and elicits little consensus" [ibid.; p 2]. While previous studies have attempted to use multiple regression analysis to isolate spatial and non-spatial variables in rental values, he notes that little work has been done relating the 'location rent' (that part of rent paid for the location distinct from other factors) to the observable pattern of rent in cities. His aim, therefore, is to separate out the locational variable of rent and, through mapping these values, to identify an emergent pattern and an underlying spatial logic.

He also provides a far more sophisticated understanding of rent than does Harvey, necessitated partly through his empirical focus. He demonstrates that there is considerable difference between the 'asking rent' (that which typically is in the public domain) and the headline rent (that which appears in the concluded contract between tenant and landlords)¹⁰. Using multiple regression analysis, Desyllas is able to account for the non-spatial determinants of rent, and by segmenting his sample into time periods is able to neutralize the influence of time, the most important non-spatial variable. Mapping of the residual factors produces a distinctly non-random pattern, suggesting that the 'location rent' has been isolated [ibid.; pp 6-11].

It is this spatial analysis location rent and the critical choice of study area that makes his work so interesting. The sample of 435 office leases are taken from Berlin between 1991 and 1997, a period of rapid spatial reorganisation following in the wake of reunification. What the mapping of location rent shows is that the most desired location in the city, measured by location rent 'hotspots' changes rapidly post unification following "a *re-valuing* of locations by the market" [ibid.; p 3 sic]. While in the immediate wake of unification the peak location rents are bifurcated, with hotspots in the West Berlin CBD and a weaker concentration in the East, in the period 1995-7 there has been a significant spatial shift to a much more monocentric pattern, focused on the former East Berlin district of Mitte [see figure 6.3]. As Desyllas concludes, "Downtown has moved from West to East Berlin" [ibid.; p 15].

Although thus far the case-study adds much needed empirical evidence to Harvey's work, it still treats space as descriptive rather than as an independent variable. Desyllas's aim, however, is to relate the observed pattern of 'location rent surfaces' to such an independent analysis of the spatial system of Berlin. While previous studies have tried to relate location rent approximates to 'dummy area location variables', these are themselves significantly determined by the observed

¹⁰ He makes further distinctions between 'consideration' and 'effective' rent, but concludes that headline rent in all but a few cases provides an accurate guide [Desyllas, 1998; p 6].



Figure 6.3 Location rent values for Berlin CBD for 1991-1994 (top) and 1995 – 1997 (bottom). The analysis shows a clear spatial reordering following reunification [Source: Desyllas, 1998].



Figure 6.4 Axial analysis of Berlin before and after unification, showing the relocation of the integration core (higher integration values shown moving from blue, though green, yellow and to red) [Source: Desyllas, 1998].

rent patterns, and models of distance from a point or points over-simplifies the complexity of accessibility in urban systems [ibid., p 17].

Desyllas turns, therefore, to the Space Syntax technique of 'axial mapping' (described above, chapter 5) to provide an independent measure of accessibility ('integration' in the Space Syntax terminology¹¹). Figure 6.4 shows the analysis of the spatial configuration of the urban system before and after reunification. The correspondence with the location rent pattern is striking, and is demonstrated by Desyllas statistically.

The importance of this result is that it shows that the reordering of the spatial structure of the city was the driver of the spatial shift in rental values. The spatial configuration of the urban form itself is shown to have a *direct* impact on the rental market, therefore, because the configurational properties of the street grid will tend to influence locational decisions, forming an emergent pattern in aggregate. What Desyllas has shown is that the spatial distribution of rents can be explained without problematic reflexive recourse to social and economic data but through an analysis of the physical space of the urban form. He therefore treats spatial structure as an endogenous variable, rather than as an exogenous variable as in conventional studies [Desyllas, 1997; pp 04.12-04.13]. This is to reverse the logic of Harvey, who sees spatial characteristics of the market as a dependent, though recursive, variable. His 'spatial' concerns are limited to the descriptive level of distribution without engaging with the fundamental influence that *material space* of the urban structure has in influencing that emergent *spatial* pattern of rental values.

'Local Spatial Advantage': configuration and uneven economic development

The second case-study [see figure 6.5] builds upon this result but develops the consequences further. Here the focus is upon the consequences of spatial configuration for the relative 'consolidation¹²' of 'site and service' settlements in Santiago, Chile [Hillier, Greene et al., 1998, Hillier, Greene and Desyllas, 2000]. The study is of relevance to Harvey's argument because the results point to the role of urban configuration in determining economic activity through what Hillier and Greene term 'local spatial advantage', analogous to the disparity of potential between locations that is the impetus to Harvey's spatial fix. Once again, the empirical analysis offered by

¹¹ See Hillier, 1996 and Hillier and Hanson, 1984 for a full description and mathematical basis.

¹² Consolidation is defined by several complex composite indices of physical, social and economic factors [Hillier, Greene et al, 1998; ch 5 and 6, Hillier, Greene and Desyllas, 2000].

Space Syntax points to the fundamental importance of material space, ignored by Harvey in his focus on the *spatiality* of other factors, principally rent.

The study examined 17 settlements in Santiago of differing perceived levels of consolidation, collecting data on land use, pedestrian and vehicular movement as well as questionnaire data from 553 households across the 17 settlements for the formulation of the consolidation indices. Furthermore, an axial map of Santiago was constructed to quantify aspects of the urban morphology of the spatial system as a whole as well as of the individual settlements and their immediate (1.5km radius, 7km) areas.

The results contradict conventional understandings because they show, through regression analysis, that the social factors (income, savings, persons per dwelling, length of residence, car ownership etc) have relatively little influence over the consolidation indices, while spatial configuration is seen to be more influential, as are space use factors, particularly vehicular movement rates which are themselves largely determined by configuration [see analysis in Hillier, Greene et al., 1998; chapter 7]. Furthermore, there is a strong relationship between the level of commercial activity and consolidation. While this might be expected, there is an unexpected spatial refinement. There are strong correlations between the consolidation indices and the 'edge commercial index'. This is an amalgamation of two ratios seen to be of importance; firstly, the number of commercial premises to the number of plots in the settlement (shops/plots) and secondly, the ratio of such commercial premises located on outward facing edges of the settlement to those on interior streets. The combined index expresses the rate of commercial activity in the settlement and its spatial orientation; a measure of 'edge-oriented commercial activity' [ibid.; p 163].

The multiple regression analysis reveals four key determinants of settlement consolidation: edgeorientated commercial activity, crime, vehicular movement and aspects of local and global spatial integration [ibid.; p 168]. However, it is only the latter that are truly independent. Crime is shown to be dependent upon the level of commercial activity as well as income (and has been shown in previous studies to be highly dependent itself on spatial configuration as it impacts upon pedestrian movement potentials [see for example Hillier and Shu, 1999, 2000]). Edge orientated commercial activity is determined principally by vehicular movement (an R2 result of .888) but also with another independent spatial variable, Local Spatial Advantage, as well as spending (not income) within the settlement. Vehicular movement is critical, therefore, but because it is shown







b

a



Figure 6.5 Informal settlement dynamics in Santiago. Figure a (see previous) shows the axial analysis of 17 settlements in the Santiago grid. The configurational structure is a strong predictor of vehicular movement (b). Figures c-f show two settlements with conversely weak (c & d) and strong (e & f) positions in the configurational structure. The settlement with the stronger vehicular movement at the periphery (strongly influenced by configuration) develops a high degree of 'edge-orientated commercial activity' (see d & f). This in turn is shown to be a strong factor influencing the combined consolidation index of settlement success (g) [Source: Hillier, Greene et al. 1998].

not to be affected by the level of car ownership within the settlement, what is critical must be the accessibility of the settlement to the wider urban context.

The key determinants of vehicular movement (and in consequence edge-orientated commercial activity) are two independent spatial measures. The first is termed 'synergy', meaning the correlation between local and global aspects of spatial layout, and the second 'Local Spatial Advantage'. This measure expresses the degree to which each settlement holds an inherent spatially strategic position in the overall urban system¹³. The higher the value, the more the settlement has a higher integration value compared to a uniform metric context.

This analysis allows Hillier and Greene to suggest a direct spatial process affecting what they term the 'pathways of development' of different settlements. They argue that the key independent variables are spatial, relating specifically to the local configurational environment determining how individual settlements cohere with the wider urban morphological context. In consequence, this determines the pattern of movement through different settlements, particularly vehicular movement. In settlements with a particular local spatial advantage, the concentration of vehicular movement stimulates the generation of edge-orientated economic activity (i.e. commercial activity orientated to the wider urban context as well as simply the internal spaces of the particular settlement). This in turn is seen to be the prime determinant of overall economic success in different foundling communities evidenced through the various consolidation indices [ibid.; p 169]. Even individuals' incomes, conventionally thought to be determined principally by education, are seen in this study to be affected to an equal degree by the spatial factors of local spatial advantage. Taken together education and the local spatial advantage of the settlement in question account for 66% of the variation in family incomes and 71% of the variation in individuals' incomes (r-squared values of 0.656 and 0.711 respectively [ibid., p 170].

As with the previous example, this demonstrates that the physical layout of settlements has a demonstrable effect upon the capitalist process, impacting *directly* upon not only rental topologies but also upon the viability of local neighbourhood economies, with the knock-on impact on social variables identified in the consolidation indices.

¹³ This is calculated by taking the mean radius-n integration value of each settlement in the context of the 7km local system, and dividing it into the mean integration value of the 7km system [Hillier and Green, 1998; p 162, for detailed discussion of the principles of this calculation see Hillier and Hanson, 1984, and for a brief summary above chapter 5].

The space of difference

These two worked examples have sought to demonstrate an alternative approach to the problem of space in the economy of the urban system. These studies have not relied upon a notion of 'spatiality of capitalism/ the market/ the urban system'. Rather, they have approached space in a material way that is in stark contrast to Harvey's historical-geographical materialism. The focus has been upon the physical space of the city, approached through the idea of configuration, and the *direct* impact that this has upon economic factors. In this way it puts space at the centre of the analysis, as an independent variable with observable and quantifiable emergent effects, rather than as a theoretical construct brought to bear on an intellectual problem, without correspondence with empirical examples beyond the level of anecdotal reference.

However, this is not to encourage a separation between empirical exegesis and theory, for the *technique* of Space Syntax is rooted in a theory of the relationship between society and space which, moreover, is implicitly spatial. Critically, it is founded upon an approach to space that does not necessitate the 'trade-off' between the material and processual which lies at the heart of Harvey's approach. For Harvey, 'space' refers either to the abstract spatial differentiation of the capitalist process, or to the symbolic meaning of built forms. Both are conceptually one step removed from lived experience, rejecting the direct, unmediated, influence of physical space.

He rejects the possibility of this influence early on in his essay on "the conceptual problems of urban planning", itself part of the rejected 'liberal formulations' of the first section of *Social Justice and the City* [1973]. There he makes the early orientation away from the importance of the physical, arguing that, "if we are to understand spatial form, we must first enquire into the *symbolic qualities* of that form" [ibid, p 32, emphasis added]. He offers two approaches; the first using psycholinguistics and psychology to approach "the measurement of spatial and environmental symbolism". His second approach, however, is "simply to observe people's behaviour and thus gauge their reaction to objects and events...At the aggregate level, we have to rely upon the information provided by a generalized description of spatial activity" [ibid.; p 33]. However, instead of relating spatial activity directly to the physical form of the city, Harvey's interest (rejected within the same volume) is to relate spatial activity to the response to the symbolic meaning of the city; "If we are to understand space, we must consider its symbolic meaning and its complex impact upon behaviour as it is mediated by cognitive processes" [p 36].

These early 'liberal formulations' are rejected entirely by Harvey in favour of his more 'socialist formulations' focusing on the 'space-economy of urbanism'. What the approach of Space Syntax demonstrates is that the appeals to symbolic meaning are an unnecessary linkage between "understanding space...[and]...its complex impact upon behaviour" [ibid], thereby offering the possibility of reuniting Harvey's 'liberal' and 'socialist' formulations through an understanding of space relating the behavioural impact of material forms to the embedded capitalist process.

This is a strategy that unites his theoretical perspective with a more empirical understanding of the lived experience of space, such that his more recent commentary on behaviour and experience in the contemporary city can be made more robust to theoretical and empirical criticism.

Chapter 7 The Architectural Scale: Giddens, Locales and co-presence – white spots and black boxes.

While the previous chapter focused on the urban scale, and the contribution that Space Syntax can make to the understanding of the spatial dimension of the capitalist system, this chapter aims at a more architectural scale through an analysis of Giddens' work on the 'spatiality' of social processes. Giddens' ideas, particularly his 'structuration theory', have been influential in arguing for a spatialized social theory, making his work central to this analysis. However, once again, a detailed critique of the approach to space within structuration theory reveals that he is unable to deal effectively with material space at an empirical level. The analysis will offer a detailed deconstruction of structuration theory and its referents [section 7.2], before developing an empirical case study [section 7.3] demonstrating the potential for the configurational approach to material space of Space Syntax to integrate both a theoretical and empirical dimension to Giddens' work.

7.1 Introduction

I find them [Hägerstrand's ideas] attractive in so far as, coming from a background in sociology, I am just not used to thinking in terms of concrete aspects of context [Giddens, 1984b; p 126].

This quotation, from an interview with Derek Gregory, makes an appropriate introduction to an analysis of Giddens' work for two reasons. Firstly, it implies that having encountered the work of Hägerstrand and others, on what Giddens himself admits was a rather "circuitous route to the writings of geographers" [ibid.], he has identified the lack, and acknowledged the importance, in his own work of what he here calls "the concrete aspects of context". Indeed, a conception of space-time is central to his theory of structuration, as will be outlined below. Secondly, in addition to this acknowledgement and rectification in regard to his own theory, the comment also encapsulates a statement of fact; that there *are* "concrete aspects of context" which are of

importance. Although this may seem tautologous, we will see that in his work 'concrete' material contexts are often alluded to but are never dealt with successfully. This incapacity is inherited firstly from the work of Hägerstrand and Goffman for whom physical contexts are always present but never resolved beyond the level of opaque 'stations' or 'regions' within which co-presence occurs, and secondly from a fear, openly acknowledged in Giddens' work, of the influence of geographic determinism upon sociology.

The work of Giddens, influenced as it is by Hägerstrand's focus upon the time-space biography of individuals and Goffman's dramaturgical theories of human interaction, allows the focus of this analysis and reworking to move closer to the level of the individual, in anticipation of the reworking of the theory of Space Syntax itself proposed in chapter 10. Clearly, any preservation of the distinction between agent and structure would be a misrepresentation of Giddens' argument. For what he refers to as the "base domain of study for the social sciences" should be "neither the experience of the actor, nor the existence of any form of societal totality". Rather it is "social practices ordered across space and time" with which social science should concern itself, a formulation echoing Harvey's focus on 'human practice' [Giddens, 1984a; p 2]. However, it is this ordering and the role that space plays that is the focus of this discussion rather than the prominent concern of structuration theory with the 'duality of structure' and the reworking of oppositions between agent and structure. While it is difficult to separate the theory of duality of structure and the importance of space from the overall framework of structuration, which after all Giddens suggests dissolves disciplinary boundaries between sociology and geography (as well as history), it is necessary to bear in mind when dealing with such a wide ranging theory that it is only the role of space and the concrete context that is of pertinence to this enquiry.

That Giddens is a key figure in what I have termed the 'respatialization theorists' is attested to by his late introduction to the work of geographers. As noted already above, he came by what in his own admission was a "circuitous route" [Giddens, 1984b; p 126] as his initial area of interest was the role of temporality in social theory and the challenging of disciplinary boundaries between sociology and history [Gregory, 1989; pp 186]. He explains, "I came first of all to see problems of temporality as essential to social theory in some part via phenomenology", the key theme of interest being the duration of human action through which he developed an interest in Heidegger. "In Heidegger, time is theorised in some sense as time-space, as 'presencing': and that lead me back to look at the origins of geography" [ibid.; also Giddens, 1981; p 29]. Despite this route to

geography through Heidegger's ideas of 'presencing', Gregory argues that, "[i]n common with most other writers, however, Giddens paid little or no attention to questions of spatiality" [ibid.].

Certainly, then, over time Giddens has been involved in a conscious attempt to 're-spatialize' his theory of society such that he can argue that, "I've come to believe that contextuality of time-space, and especially the connection between time-space location and physical milieux of action, are just not uninteresting boundaries of social life, but inherently involved in its constitution or reproduction" [Giddens, 1984b; p 126] and that, in apparently direct contradiction of Gregory's point, "most forms of social theory have failed to take seriously enough *not only the temporality of social conduct but also its spatial attributes*" [1979; p 202, sic]. He concludes that the same disciplinary permeability advanced in respect of history and sociology should, therefore, also apply to geography; "The same point made in relation to history applies to (human) geography: there are no logical or methodological differences between human geography and sociology!" [Giddens, 1984a; p 368]. Indeed, Gregory interprets Gidddens' 'project' as a 'deconstruction of historical materialism' which, while not following the same path as Harvey (and Soja) in seeking to formulate a historical-geographical materialism, nonetheless places him within the 'geographical tradition' [Gregory, 1989; p 187].

However, the question remains, 'what is the nature of the geography (or space) that Giddens wishes to fuse with his theory?' For Gregory remains critical;

"Structuration theory in its present form remains close to the analytics of spatial science...it continues to theorise the problem of order as in large measure a problem of pattern. [It] is virtually silent about the 'production of space'" [Gregory, 1989; p 187].

It is perhaps ironic that Giddens, who is so strongly associated with the overcoming of oppositional dualities, and clearly keen to heal breaches between disciplines, should so obviously antagonise the chasmic 'human/ physical' division within geography. But his clumsy insistence on "(human) geography" is critical; for it is in its implicit relation to the physical context of co-presence that his theory seems weak. Before following further the genesis of Giddens' ideas about space in the geographical literature that he leans on, it is necessary to describe where we encounter the influence of physical context within the theory of structuration.

7.2 Space in Structuration

The critical distinction that Giddens makes is between structure and system. "Social systems are composed of patterns of relationships between actors or collectives reproduced across time and space. Social systems are hence constituted of *situated practices*". In contrast to systems, structures have only virtual existence but are recursively connected to the constituting practices of social systems as the medium and outcome of these practices (the 'duality of structure') [Giddens, 1981; p 26]. They exist, therefore, "only in so far as forms of social conduct are reproduced chronically in time and space" [1984a; p xxi]. His concern, therefore, is "first and foremost with reworking conceptions of human being and human doing" and understanding the "situated" character of social practices at the conjunction of three "moments of difference" - temporally, structurally and spatially [1984a; p xx; 1981; p 30].

Giddens is explicit about the notion of space that is implied by the idea that time-space relations are constitutive of social systems. He points to a continuity between Heidegger and Leibniz and argues that the Kantian portrayal of space and time as concepts of mind was a regressive step from the Leibnizian conception of space and time as "modes in which relations between objects and events are expressed" [1981; p 31]¹. However, Giddens' focus is upon the notion of 'Being' and he aims to connect this to the understanding of space and time. He achieves this through using the idea of 'presence', again from Heidegger. The idea of a four dimensional time (past, present, future and the animating term 'presence') he tentatively compares to conceptions of space-time in post-Newtonian physics (particularly Minkowski) with the aim of undermining the 'imposed' idea of space and time as a succession of measurable instants. The aim is to achieve the union between a unified conception 'time-space' and the ontological 'presencing'; "To say this, in other words, is to reaffirm time-space as 'presencing' rather than as a 'contentless form' in which objects exist" [ibid.; p 34].

Although considerably more complex, the essential idea here bears similarities to Soja's attempt to 'socially animate' the understanding of space and time (see chapter 2). For Giddens the aim is to understand the relationships between social systems and structures manifested in time-space and the role these relationships have, particularly in power relations and the development of

¹ Note the continuity here with Soja's argument that geography, "that most stiflingly cocooned of traditional disciplines" had to "reaching outside of its traditional Kantian cage" [Soja, 1987b; pp 289 and 291, and above p 32].

'ontological security'. Despite the intensely theoretical nature of Giddens' work he relates it to the possibility for empirical extension, for "[s]ocial theory has the task of providing conceptions of the nature of human social activity and of the human agent which can be placed in the service of empirical work, [t]he main concern of social theory [being] the same as that of the social sciences in general: the illumination of concrete processes in social life" [1984a; xvii].

He achieves this jump from philosophical exegesis to the formulation of empirical research possibilities by stating that;

It follows from what has been said about time-space relations in general that discussion of temporality can best be approached through grasping the interpenetration of presence or absence, the movement of individuals through time-space being seen as processes of 'presencing/absencing' [1981; p 37].

This 'concretization' of the Heideggerian themes of 'presence' and 'Being' into the 'real world' phenomena of presence and absence through the movement of individuals through space-time opens up the possibility for Giddens of using Hägerstrand's 'Time-Geography' as a notational system accessible to empirical investigations. Also, it opens the connection between presence/absence in space and the construction of actors' performed identities; "The situated character of action in time and space, the routinization of activity and the repetitive nature of day-to-day life - these are phenomena which connect dimensions of the unconscious with Goffman's analysis of co-presence" [1984a; p xxiv].

Co-presence and the physical context – space as 'stage'

'Co-presence', whether focused or unfocused [see; Giddens, 1984a; pp 70-72 and Goffman, 1963; pp 17-19], involves encounters between one or more agents. "During the course of [focused] encounters agents establish intimate contexts and engage in absorbing activities through the mutual co-ordination of talk, as well as the reflexive monitoring of facial expressions and bodily posture" [Cohen, 1989; p 96]. Such encounters, when embedded in the routinized character of day-to-day life establish social-relationships and social integration between individuals and the group. Cohen makes the "basic point" that such seriality implies a temporal ordering and, therefore, a spatial ordering, "in so far as face-to-face reciprocities are reproduced in diverse settings" [ibid.]. The key, then, for Giddens is to understand the conditions that shape

the *opportunities* for face-to-face interaction in time and space, the opportunities and constraints therefore, to *presence-availability* among actors [Cohen, 1989, p 96].

Giddens relates the importance of routinized physical co-presence directly to the spatiality of the body and argues, drawing on Merleau-Ponty, that "the body, and the experience of bodily movement, is the centre of forms of action and awareness which really define its [the body's] unity" which, he argues, is geared into the "spatiality of situation", the 'here' of the body relating to Heidegger's conception of 'being in the world' rather than a "determinate series of co-ordinates" [1984a; p 65].

Despite this understanding, which suggests that "the body [following Merleau-Ponty] does not 'occupy' time-space in exactly the same sense as material objects do", there is an expressed concern with the physical environment in which interaction takes place which is inherited from Goffman's work [ibid.]. The key is the understanding of the contextuality of co-presence. "By the term 'context'...I mean those 'bands' or 'strips' of time-space within which gatherings take place.... Context includes the physical environment of interaction but is not something merely 'in which' interaction occurs" [1984a; p 71]. Giddens extends Goffman's formulation, however, to emphasize the importance of the routinized character of interaction, thus extending the concept of context to include the temporal and spatial ordering (identified above by Cohen). In so doing he makes a link between the dramaturgical theory of Goffman, with its emphasis on the spatiality of the body and the presentation of 'face', and the time-geography of Hägerstrand which examines the spatial organization of encounters through time. Thus it is "the contextual organization of encounters [which] must be examined, since mobilization of time-space is the 'grounding' of all the above elements" [ibid.; p 73].

Goffman's theory of the reflexive monitoring of action is related to Hägerstrand therefore because, as Giddens notes, the dramaturgical nature of the theory implies that 'roles' must be played out on a particular 'stage' upon which expected norms of conduct are enacted and "such settings of interaction are virtually always provided by a specific locale or type of locale in which regularized encounters take place" [ibid.; p 86]. The 'space' within the work of Goffman refers not to the material space of physical co-presence but the 'social space' of normative behaviours. So for example, "bystanders are usually expected not only not to exploit a situation of proximity of presence, ... but also actively to demonstrate inattention" [ibid.; p 75]. While there are clearly material elements to this 'game playing' (such as the behavioural means by which inattention or eavesdropping are achieved) these are not dealt with by Goffman whose analysis does not penetrate below the level of the 'stage'.

This physical level of analysis is related to Goffman's distinction between the 'situational' aspects of activity and the 'situated' aspects. For example, the library is a place for study and not talking and to transgress this is to contravene the *situational* aspect of the activity of study [Goffman, 1963; p 22]. What I would term the physical aspects of the library space and the readers presence in it are "merely situated aspects of activity" - where the reader sits for example within the opportunity-space of the building. Similarly, in the description of institutions as "places such as rooms, suites of rooms, buildings, or plants in which activity of a particular kind regularly goes on" he places the emphasis on the activity, and sees its setting as habitual, not questioning the physical structure of the spaces themselves [Goffman, 1961; p 15]. In relation to the urban scale, also, streets are treated as "relatively unobstructed", a presumption that also surfaces in Giddens' claim that "in many 'public places', in jostling crowds on the street and so on, [...] there is no clear physical circumscribing of the conditions of co-presence" [Goffman, 1963; p 18; Giddens, 1984a; p 68]. Earlier examples in this thesis have demonstrated this to be an oversimplification, the configurational structure of street layouts being highly stratified both spatially and in terms of use along their length [see the examples in chapter 6.3]. There is throughout a lack of sensitivity to the role of physical space in ordering opportunities for copresence and thereby influencing 'presence-availability'.

I would argue that this is the case even in Goffman's *The Presentation of Self in Everyday Life* which he argues focuses on "especially the kind of social life that is organized within the physical confines of a building or plant" [Goffman, 1959; p ix]. There he examines two 'regions' of action, a front region where the normative performance expected is given, and a back region, "a place, relative to a given performance, where the impression fostered by the performance is knowingly contradicted as a matter of course" [ibid.; p 97]. Although the back region is defined 'relative to the performance' it also has a material dimension; "any place that is bounded to some degree by barriers to perception", whether that perception be auditory or visual (e.g. a glass as opposed to plasterboard wall) [ibid.; p 92]. So, for example, "very commonly the back region of a performance is located at one end of the place where the performance is presented, being cut off from it by a partition or a guarded passageway" allowing a performer to slip quickly from one to the other without revealing his 'off-stage' persona [ibid.; p 98].

Goffman gives a number of anecdotal examples; the waiter retiring to the kitchen letting slip his demure professional image; the mechanic who removes the car or watch from the presence of the customer so that work can be carried on without supervision; the hostess who uses the hall as a way to greet and say goodbye to guests individually and the kitchen as an 'off-stage' area from which hospitality is produced apparently effortlessly [ibid.; pp 104, 106-7, 120-21]. However, for Goffman these are simply 'zones'. For example, in my own experience of working on a shop floor, the distinction between front and back regions was far more complicated than the 'upstairs-downstairs' notion that Goffman presents. Rather than a 'zone of performance' on the shop floor and a 'zone of relaxation' in the storeroom downstairs, both 'regions' (to use Goffman's terminology) were spatially fragmented according to the irregular physical structure of the building and the sight-lines afforded through the space (including those of the CCTV monitors which opened the front region to surveillance from the back).

Despite, therefore, his claim that "it is apparent that the backstage character of certain places is built into them in a material way", he still has a simplistic notion of the effects of built structures on co-presence, which he sees as further distinct from 'outside' space that is treated as a separate category. Thus, "within [buildings] we find rooms that are regularly or temporarily used as back regions and front regions, and we find that the outer walls of the building cut both types of rooms off from the outside world" [ibid.; p 117]. Giddens has perhaps a more sensitive idea of the potentials of physical space, commenting that, "back regions in, say, settings of the shop floor include 'odd corners' of the floor, tea rooms, toilets and so on, as well as the intricate zonings of displacement of contact with supervisors which workers can achieve through bodily movement and posture" [1984a; p 128]. However, his illustration remains anecdotal and while there is an attempt to extend the concept of 'regionalization' to a generic scale this results in an oppositional treatment of front and back regions in terms of urban zoning which, while sensitive to the importance of differential levels of through-movement in 'ghetto areas', again is not linked to the spatial morphology of the urban system². The second part of this chapter will explore the role that a material understanding of architectural space can play in illuminating the physical contextuality of Goffman's (and Giddens') theory.

² A further instructive example of the potential for Space Syntax to clarify such issues would be the extensive work undertaken in just such ghetto or 'back region' areas of housing estates. This work is not dealt with here, because although important, it addresses an area of theory, particularly Newman's 'defensible space', that does not strictly form part of the contemporary interest of space in social theory.

Generating co-presence – spatial influences on interaction

While for Giddens, Goffman deals effectively with the situation of co-presence, still it remains to be shown how "the placing of actors in contexts of interaction" is linked to the "interlacing of those contexts themselves" [Giddens, 1984a; p 110]. "The 'being together' of co-presence demands means whereby actors are able to 'come together'" [ibid.; p 123]. In Hägerstrandian time-geography Giddens finds a methodology whereby the routinization and constraint in the praxis of 'day-to-day' life, related to the generation of co-presence and social integration, is opened to empirical analysis. While Giddens does not make the criticism advanced above concerning the treatment of 'physical context' within the work of Goffman, he does note that the 'situatedness' of interaction in time-space is treated as given. Time-geography confronts this lack in "a concrete rather than philosophical way" as "[w]e are able to begin to flesh out the timespace structuring of the settings of interaction which, however important Goffman's writings may be, tend to appear in those writings as given *milieux* of social life" [1989; pp 110 and 116, emphasis added]. 'Time-geography' addresses this weakness in Goffman's formulation by providing a notational methodology for tracing the 'spatial-biographies' of individuals as they undertake specific 'projects'. As the analysis incorporates the 'trajectories' of groups of individuals in time and space, points of co-presence become identified as 'stations' (for example the home or workplace) [see Hägerstrand, 1970, 1975, 1978, Carlstein, Parkes and Thrift, 1978 and Pred, 1977].

However, Giddens is cautious about many aspects of Hägerstand's schema, particularly his limited conceptualization of agents, the reinforcing of the distinctions between agent and structure, the focus on constraints more than opportunities and the role of power relations and institutions, and maintains a "reserved attitude...to the usefulness of [his] ideas in their unaltered fashion" [1984a; pp 116-8]. Yet he argues that in general, while the theory maybe "conceptually primitive", it is nonetheless "methodologically sophisticated" [1984a; p 116, 1984b; p 125]. Certainly, the Hägerstrandian graphical device for illustrating the choreography of the "biographical project" meshes closely with Giddens' focus on 'presence' which "replaces both the idea of the 'present' and the 'point in space'" [ibid; p 111, 1981; p 31]. However, it is perhaps naive to assume that the methodological application of Hägerstrand's work can be so easily separated from its conceptual make up. Certainly in relation to this chapter's concerns with the notion of space embedded within these nested theoretical positions there are important features of Hägerstrand's work that carry over into Giddens' application of it, which deserved attention. For Giddens the main difficulty with Hägerstrand's work is that it has a simplistic notion of the 'individual', conceived independently of the *social settings* that confront their lives. The idea of 'projects' that agents pursue is left unexplored and Giddens therefore argues that Hägerstrand recapitulates the dualism of agent and structure, "albeit in rather novel form because of his preeminent concern with time and space" [1984a; p 117]. Therefore, while Giddens takes on the importance of time and space within Hägerstrand's methodological approach, his own concerns that the 'stations' and 'domains' of the thesis remain 'black boxes', "taken as givens", is related more to the lack of emphasis on "the transformational character of human action" than to the lack of an adequate resolution of such domains as physical spaces [ibid.].

We see this in his comments on Hägerstrand's idea of 'place' [ibid.; pp 118-9]. Giddens argues that the time-geography approach suggests a powerful critique of the notion of 'place' as "ordinarily used by geographers" - as 'a point in space' - which, he continues, is inappropriate in the context of social theory where a far more socially animated variable is required. For Giddens this can be captured in his terms 'locale' and 'region'. The 'locale' is more than simply a point in space as it "refers to the *use of space to provide the settings of interaction,* the settings of interaction in turn being essential to *specifying its contextuality*" [ibid., emphasis added].

For Giddens, therefore, there is no distinction between space and the routinized social use to which it is put, the two being recursively linked. Locales, therefore, "may range from a room in a house, a street corner, the shop floor of a factory, towns and cities, to the territorially demarcated areas occupied by nation states", as defined by the meaningful context of the scale of interaction of interest. Locales themselves are further composed of 'regions' and regionalization "should be understood not merely as localization in space but as referring to the zoning of time-space in relation to routinized social practices" [p 119]. It therefore refers to the "structuration of social conduct across time and space" rather than to a "physically demarcated area [on a map] of the physical features of the material environment" [p 122].

While such a formulation has many advantages within the context of Structuration Theory, countering the criticisms that Hägerstrand's 'domains' remain "black-boxes" without social animation and, in particular, brokering the reworking of the duality of agent and structure at the heart of the theory, it nonetheless inherits certain problems. Most significantly, it moves Giddens' conception of space self-consciously towards the familiar notion of a socially animated

'spatiality'; "the concept of presence...has to be explicated in terms of its *spatiality* as well as its temporality" [p 118].

This reorientation does little to clarify the role of material space which is nonetheless referred to frequently in both Giddens' and Hägerstrand's work. As Giddens notes, "Hägerstrand's approach is based mainly upon identifying sources of constraint over human activity given by the nature of the body and the physical contexts in which activity occurs" [p 111]. Giddens interprets Hägerstrand's focus on the seriality of 'life biographies' to mean that "[t]he conduct of an individual's day-to-day life entails that he or she successively associates with sets of entities emanating from the settings of interaction"; *entities* being, "other agents, indivisible objects (solid material qualities of the *milieu* of action)" as well as divisible materials (such as air, water and foodstuffs) and domains, equivalent to Giddens' 'regionalizations'. However, how interaction with other agents comes about and how it is that "solid material qualities of the milieu of action" have an influence is not fully explained.

Material space as the constraint of distance

Hägerstrand tackles these issues only through the idea of constraints upon action. He makes a division into three types of constraint; capability, coupling and authority constraints [Hägerstrand, 1970]. 'Authority constraints' refer to domains which control access (an area that Giddens does not acknowledge in his review and which goes some way to countering his criticism of a lack of power relations in Hägerstrand's work). 'Coupling constraints' refer to the necessary location and duration of interaction with others as well as the tools and materials that might be needed to achieve the goal of the 'project' engaged upon. It is capability constraints that are of most significance in terms of the impact of the physical environment. These are primarily related to "physiological and physical necessity" [ibid.; p 11], the need for regular food and sleep which entails a spatial as well as a temporal routine. However, the other key element is once again the notion of friction of distance, and the roles of transportation and communication technologies in defining the 'island' of constraint [see also Pred, 1977; p 208, Hägerstrand, 1978]. This focus upon the means of communication and mobility of the body is also noted and absorbed by Giddens [compare 1984a; pp 111 and 123].

This concern with the physical environment in terms of the ease of communication leads both Hägerstrand and Giddens to tackle the issue of time-space 'distanciation' (in Giddens' terminology), the collapsing of space through time that is another characteristic feature of recent work on space (see for example the discussion in chapter 4 above on the linkages between 19th century and contemporary literature and chapter 6 referring to Harvey's 'time-space compression', and particularly figure 6.2 p 161). For example, in his early work we find Hägerstrand arguing that,

In a society where there are no appreciable time or cost obstacles preventing one individual from coming into contact with any other individual, relations within 'social space' cannot be appreciably modified by the constraints of geographical space [Hägerstrand, 1967; p 7].

He goes on to argue, somewhat prophetically in advance of contemporary debates (the 1967 text being itself a re-edition of a 1953 manuscript), that open access to air travel and television would produce a "one point society", the precursor to contemporary claims of 'the end of space' [Virilio, 2000; p 3, and see discussion above, p 109]. As with all such claims, however, the question of what conception and role the author gives to the material environment rises to the fore.

Hägerstrand's changing space - from 'distance' to 'room'

In his paper *The Domain of Human Geography* [Hägerstrand, 1973] Hägerstrand makes a clear distinction between 'human' as the primary subject of enquiry and 'geography' as implying "a way of viewing this subject matter" [p 67]. This again illustrates the separation between the agent and, in this case, his/her environment. Hägerstrand attempts to construct the "outlines of a new frame" to approach the role of space and time in geography. However, despite his assertion that "[a]part from the conceptual difficulties in handling the space-time problem it may be that we have become inhibited from trying to do so by the constantly repeated assumption that geography is the science of flat spatial relationships as depicted on maps", he nonetheless begins his reworking from the "first fundamental assumption" that "the geographer sees his task as viewing the world in geometrical terms of some sort" [ibid.; pp 73 and 76].

Pred argues that his outlook is conditioned by the prevailing mood of Swedish geography at the time, particularly the influence of De Geer and Kant [Pred, 1967b]. He quotes De Geer as arguing,

it is certain abstract qualities which are studied by Geography, and not the objects themselves, the study of which belongs to other sciences.... As distribution phenomena

must be regarded as abstract qualities...and it is these qualities that form the subject of Geography, it also follows that the object of Geography in its very nature is non-material - abstract. [De Geer, 1923 quoted by Pred in Hägerstrand 1967; p 304].

Hägerstrand confirms this view in his work on innovation diffusion [1967]. There he makes a justification for his use of the descriptive 'spatial' in preference to 'geographical'. He argues that firstly his theory is based on abstract, theoretical, hypothetical "model areas" which, "puts space per se in a position of more fundamental importance than would be so if analysis were restricted to a given part of the earth's surface, i.e., a geographical area" [1967; p 6]. Secondly, he argues that the prefix 'geo-' "involves irrelevant associations with those natural science disciplines that are concerned with various aspects of the *earth's surface*. The locational relationships here under investigation are essentially horizontal man-man relations and only in passing are of the vertical man-earth's surface variety" [ibid.; emphasis added].

To illustrate the point he gives the example of examining crop distributions. Instead of advocating observing the absolute and relative distributions 'in the field', he argues instead that the approach should be to count the number of farmers growing a particular crop and their average acreages, thereby "bypassing any consideration of individual acreages" and "divest[ing] ourselves of our bonds to the physical landscape and acquir[ing] information about social conditions in return" [ibid.; p 7].

He seems to construct in this [early] text a distinction between real and abstract, geographical and spatial that parallels his argument elsewhere that geography is [at that time, possibly still] overly descriptive and genealogical, and lacks a theoretical position of analytic and predictive potential [Hägerstrand, 1973; p 67]. In this text which deals directly with the question of the nature and future of geography, he argues that the discipline of geography has been orientated by a predilection for the outdoors, in particular for the pursuits of exploration and surveying which have "cut off both the human and the geographical content of our investigations in ways which prevent the field from developing in a truly fundamental direction" [1973; p 69].

The most important symptom of this fascination with the outdoors is the development of the characteristic geographic scale;

In size the Geographical scale of analysis and observation is bounded on the lower end by the architectural region - the area an architect usually considers when he designs a building - and on the upper end by the size of the earth. [Hägerstrand, 1973; p 67].

This is the clearest explanation for why the 'stations' within time-geography remain 'black boxes' the focus being on movement between them across an abstracted spatial landscape [see Giddens, 1984a; p 135]. He continues that "[a]s soon as people disappear behind their doors thy somehow cease to be living entities and turn at best into abstract densities per unit area" [1973; p 74].

However, this is not to say that Hägerstrand has not attempted to rectify this problem, but he has failed for the lack of an adequate notation, something "probably closer akin to the score of the composer" [ibid.; p 77]. He begins by try to dissolve the idea of geographical scale to access what he describes as "a large white spot to be explored";

How precisely do human beings on the organic level and viewed without the bounds of the conventional scale limitations organise their interaction and non-interaction with objects in the environment including fellow-men? [1973; p 74].

This unifying of approaches, regardless of "conventional scale limitations", is precisely the agenda of the second section of this thesis, which introduces the configurational approach from the supra-urban to architectural scales³. Indeed, Hägerstrand's starting position bears a striking resemblance to the approach of Space Syntax, for he begins his reworking by questioning the very nature of space as it is used in geography. He argues, following a "direction that I intuitively feel to be crucial" that the geographers' concentration on the "distributional arrangement of things and quantities in a relative locational sense...[has]...tended to overlook the space-consuming properties of phenomena and the consequences for their ordering which these properties imply" [1973; p 70]. Thus, the characterization of geography as a 'discipline of distance' is insensitive to "structures seeking spatial accommodation" and he points to 'interlocking', 'elbowing' and 'predation' as processes in space ignored by geography [ibid.].

He makes a re-characterization, therefore, which appeals to a notion of a 'lost' understanding of space, in rather the same way that this thesis argues for a loss of a material conception of space in contemporary theory, and draws on an appeal to a 'common sense' notion; "[t]he notion of space as made up of distances has overtaken *the notion of space as a provider of room*" [ibid., emphasis added]. Furthermore, Carlstein, Parkes and Thrift defending Hägerstrand's position, argue that physics has been the basis of understanding of time and space for too long and that, "much of the

³ Not withstanding the criticisms of the Space Syntax approach that emerge at the scale of the individual, to be discussed in chapter 10.

philosophy of space and time is derived from study of inorganic natural systems and is therefore biased towards such systems and not society" [Carsltein, Parkes and Thrift, 1978 ; p 2]. Again, this has resonances with the current project as well as Harvey's insistence of understandings based in human [social] practice.

There are clear parallels here with the notion of configuration that is advanced in Space Syntax [see above, chapter 5]. Furthermore, Hägerstrand's conception is an overtly materialistic one, based around the idea of "packing problems" as objects "compete for space";

As soon as one object has found a location, the space it occupies is not available for a host of other 'weaker' objects and the probability field of their location has changed [p 71].

This is precisely analogous to Hillier's proposition of basic invariant spatial laws of aggregation. Unlike Hägerstrand, however, Hillier is able to demonstrate through empirical work not only how these laws determine actual spatial forms, but critically that such laws are not abstracted from a social context but form the basis of spatial strategies upon which social reproduction depends [see above, chapter 5 and Hillier, 2001].

'Space packing' - the "large white spot" of the architectural scale

This renewed conception of space is directly linked, as in this thesis, to the re-evaluation of that lower limit of the 'geographical scale' as defined by Hägerstrand - the architectural realm. "The neglect of space-packing processes could hardly have continued for so long a time if we had not on the whole crossed out from our universe the microspaces conventionally belonging to the engineering and architectural scale" [p 72]⁴. For, as Hägerstrand argues, "[i]t is clear that the packing problem is impossible to abstract from in spaces below the size of the building". Still more pertinently he suggests that insights at the micro, building, level will have resonances at the more conventional scale of geographical analysis.

⁴ It is noticable also that critics of Giddens's theory within geography tend to focus on the contribution of Hägerstrand and not on the equally important influence of Goffman whose attention to performative 'regions', though not satisfying the material aspirations of this thesis, nonetheless offer an analysis at an architectural more than 'geographical' scale [See for example the essays in Held and Thompson, 1989 by Gregory and Saunders].

However, his solution to the notational problem (his time-geography) loses much of the promise of this theoretical repositioning for two reasons. Firstly, Hägerstrand is unable to do away with the 'first fundamental assumption' that "the geographer sees his task as viewing the world in geometrical terms of some sort" [p 76]. He points out rightly that;

Those who prefer multivariate statistical analysis on the application of systems concepts also begin with spatially organized data and evaluate their findings in terms of spatial form, location and distribution. Even a purely urban discourse, like David Harvey's [1971] analysis of the redistribution of income in an urban system, revolves around such central concepts as accessibility and proximity, both geometrical in nature.

This gives him cause to accept rather than question such a geometrical approach, and despite his concern that geography is too much a subject of 'distance' and not of 'packing' the result is that the materialistic overtones of his theoretical position are lost to a concern with the ease of movement through space governed by the constraints of friction of distance. The limitations of this conception, as well as the potential for the configurational approach to shed light upon the influence of just such material 'packing problems', has already been addressed, precisely in relation to Harvey's arguments referred to by Hägerstrand [see above, chapter 6]. For want of an adequate methodology linked to a developed theory of the 'packing problem of space', he is forced to return, therefore, to the abstract notion of space that Pred describes, inherited from De Geer and Kant among others, and fails to explore the "large white spot" of the sub-geographical scale.

Secondly, his approach is centred finally not on space so much as time, as his behaviouralist methodology, focused on the simplistic notion of 'projects' and 'goals' within a "budget-space", reduces space to an abstract contextual role while making time the active dimension, reflected in his suggestion that a union needs to be made between geography and accounting techniques.

The character of Hägerstrand's space can best be summarized in the 'axiomatic' constraints that lie at the heart of his theory; these are:

The indivisibility of human bodies and other living and inorganic things The finite length of human life The limited ability to take part in more than one activity at once That fact that every task has a duration That movement between points takes time The limited packing capacity of space The limited outer size of terrestrial space That every situation is inevitably rooted in past situations [Hägerstrand, 1975; see also Giddens, 1984a; pp 111-12].

The basic characteristics of the individuation of objects and people within a passive conception of time and space which 'contain' and constricts objects and events according to principles of contiguity points to an understanding of space and time derived from the Kantian tradition that separates material things from space and time as organizing concepts. He proves unable, therefore, to release geography "from its Kantian cage" [the phrase is Soja's, 1987b; pp 289, and see above p 32], and I would consequently dispute Pred's claim that time-geography says something about 'man/man', 'man/elements-of-the-natural-environment' and, most significantly, 'man*/man-made object relations*', constituting a "new level of intellectual maturity for Geographers", since it lacks the fundamental requirement of an approach to the material realm that has theoretical sophistication and empirical potential [Pred, 1977; p 207]. At its core, therefore, Hägerstrand *cannot* address "the large white spot" of the sub-geographical scale effectively, because his theory implicitly separates space and time from the material realm, which has no active role other than through the constraint of the friction of distance.

Similarly, I would argue that Giddens has done little to address these problems. While undoubtedly strengthening the weak conception of the agent in the theory and integrating timegeography into structuration theory's far more sophisticated understanding of social systems, he nonetheless absorbs the essential spatial character of Hägerstrand's work, particularly the concern with the friction of distance. Although, through the work of Goffman, he begins to open the "large white spot" of the architectural scale, as we have seen there is no real understanding of the role that physical space plays, and Giddens seems unaware of Hägerstrand's tentative move to a more materialistic conception of space [Hägerstrand's 1973 paper is not sited in the bibliography of *The Constitution of Society*].

Once more the fear of determinism in geographical literature seems to be pertinent. As Pred notes in his introduction to the 1967 edition of *Innovation Diffusion as a Spatial Process*, "[i]t was written at a time when it was still relevant to argue against physical determinism..." and Giddens argues that, "[t]he suppression of space in social theory derives from different origins [from that of time], probably in some part from the anxiety of sociological authors to remove from their

works any hint of geographical determinism" [Giddens, 1979; p 202]. Saunders expresses the same concern;

If they [locales] are more than the backdrop to action, then how exactly do they enter into the reflexive constitution of action? We know the theory of structuration is antithetical to any explanation couched in terms of physical determinism; so how do actors derive meaning from their physical environment? How does the context situate the action? What is the mechanism and where is the explanation for how it works?

I cannot find any answers in Giddens' work to any of these quite basic questions. There are references all through his work to the significance of space and the importance of locales, but he rarely provides illustrations of what he means, and when he does they are profoundly disappointing [Saunders, 1989; p 230].

The following section [7.3] aims to demonstrate that a materialistic theory of space need not resort to deterministic formulations, and will seek to illustrate how the approach of Space Syntax can be used to answer just the types of questions posed by Saunders. Through an analysis of the performative behaviours of teenagers in retail environments, the following section demonstrates the importance of the physical space provided by different design strategies in determining different social strategies. The aim, therefore, is to provide the detailed material analysis of 'stages and 'stations absent from Goffman, Hägerstand and [consequently] Giddens' theories, thus rendering opaque the "white spots" and "black boxes" of their approaches. Furthermore, Space Syntax, although providing empirical methodologies to address the material realm, does not sacrifice theoretical sophistication in formulating a theory of the socio-spatial relation, which, moreover, integrates well with, and adds empirical authority to, the approach of, Goffman, Hägerstand and indeed Giddens. It provides, therefore, empirical arguments for rejecting Saunders' inference that, "social theory has been quite right to treat space as a backdrop against which social action takes place", as a materialistic approach need not imply that "it [space] is passive; it is context" [ibid.; p 231].

I hope, therefore, to revive Hägerstrand's unrealized ambition to unite geographical and architectural scales of analysis in a common notational and theoretical footing (and along very similar lines to those that he himself proposed), advancing the configurational approach of Space Syntax as a powerful theory with which to address the 'space packing' issues of the 'sub-geographical' scale.

7.3 'Hiding in the Light': teenage performance in retail centres – a materialist approach

Social theory has the task of providing conceptions of the nature of human social activity and of the human agent which can be placed in the service of empirical work. The main concern of social theory is the same as that of the social sciences in general: the illumination of concrete processes in social life. [Giddens, 1984a; p xvii, and above p 197]

This section follows this agenda set by Giddens and also reverses it. I aim to make an empirical analysis in the context of the work of Giddens analysed above but to suggest that it is this empirical work that can illuminate deficiencies in social theory⁵. Space Syntax offers a clarification of the role of material space in generating what Giddens refers to as "presence-availability", engaging with Hägerstrand's concerns with the physical circumscription of action in the generation of 'bundles' of co-presence, thus extending the limited role of space in both their theories, reduced to friction of distance inhibiting free transportation and communication.

This section, rather than recapitulating that point, returns to Hägerstrand's challenging task of opening the 'sub-geographical' architectural scale to the same theoretical position applied to the understanding of the 'geographical phenomena' investigated previously, a project for which Hägerstrand's methodology proved inadequate. Also, I will seek to show that this same approach can fill the 'spatial holes' noted before in Goffman's work, thereby achieving a closer and more satisfactory union between the two than perhaps Giddens achieves, allowing a more convincing treatment of the 'physical environment' that appears in his work than is currently the case.

'Hiding in the Light'; the 'spatiality' of 'hanging out'

This section presents an empirical reworking of the idea of 'hiding in the light' advanced by Hebdidge as a description of teenage behaviours [Hebdidge, 1988]. While his work is *implicitly* spatial, it does not accord an active role to the physical environment. Rather, his work reinforces the spatial stereotypes of 'hanging out' on street corners without understanding why it is that particular spaces are of significance. He follows in the wake of the William Whyte school of intense observation and anecdotal description, therefore, which while of considerable empirical

⁵ Indeed, my ultimate aim (pursued in the 'speculative epilogue' of the final chapter) will be to follow Giddens' further assertion that such reciprocal developments between social theory and empirical work should form the basis of philosophical debates [ibid.; pp xvii-xviii].

value has little theoretical content, certainly in regard to linking the observed spatial nature of phenomena to wider social theories [Whyte, 1980 and 1988].

That it is appropriate for this study to focus on the activity of teenagers is confirmed by the emphasis in sociological literature on 'youth' as a constructed categorization in which spatial display performs an important role. The idea of 'youth' as a social category has emerged in the postwar period as a perennial thorn in the side of the moral guardians of society. Cohen has argued that group solidarity among young people is an expression of reaction against conventional stereotypes of what 'young people' should be and how they should behave. 'The Youth' have been understood as a counter or sub-culture, therefore, and have consequently generated a degree of 'moral panic', associated with a perceived 'youth problem', in the dominant (adult) culture [Cohen, 1972; Hall, 1976]. Although there have been several studies of teenage behaviour, few understand the spatial expression of counter-cultures as being of any more than contextual importance. Hebdidge's work on the Mods and Rockers conflicts of the early 1960s is no more than 'set' in the context of the beaches of Brighton, and while Shields adds some spatial understanding to the debate - through the concept of the 'liminal space' of reduced moral authority and heightened social permissiveness - there is still no fundamental understanding of why particular spaces are important for the construction of youth identities and how the behaviour of 'problem groups' is mediated through space [Shields, 1991].

The sites studied were not the beaches of the 1960s conflicts nor the urban estates but contemporary shopping malls. This shift is in no way inappropriate however. As the urban realm becomes increasingly privatized and regulated through surveillance, shopping malls have become key sites for the social construction of identity as well as for consumption⁶. They feature increasingly prominently as sites of significance in academic and popular discourse of all kinds⁷ and particularly the literature examined above that emphasises the dissolution of reality into a 'hyper-reality' of signs and commercially orientated simulacra⁸.

⁶ See for example the work of Fisk on surveillance and Mort and Nixon in relation to the construction of masculinity through shopping [Fisk, 1998; Mort, 1996; Nixon, 1991]

⁷ See for example Sorkin's *Variations on a Theme Park* [Sorkin, 1992] Zukin's *Landscapes of Power*, particularly sections dealing with redeveloped and gentrified shopping areas such as Faneuil Hall in Boston [Zukin, 1991], Miller's *Shopping, Place and Identity* [Miller, 1998]. Also popular sources, for example Woody Allen's Scenes from a Mall.

⁸ In this regard see particularly Featherstone's *Consumer Culture and Postmodernism* [Featherstone, 1991] and Eco's *Faith in Fakes: Travels in Hyper-reality* [Eco, 1986].

Shopping malls, therefore, most certainly conform to the idea of a 'station' within Hägerstrand's terminology, becoming an increasingly prominent part of the choreography of human biographies since Hägerstrand was writing, but they also conform to Giddens' more socially active term 'locale'. Finally, they provide a 'stage' in terms of Goffman's dramaturgical analogy, in this case upon which the often conflictual identity of 'youth' is negotiated. Thus, as Cosgrove argues;

The precinct, then, is a highly textured place, with multiple layers of meaning. Designed for the consumer, to be sure [...] nevertheless its geography stretches way beyond that narrow and restrictive perspective. The precinct is a symbolic place where a number of cultures meet and perhaps clash [Cosgrove, 1989; pp 118-119].

However, none of this work examines the role that the physical space of the mall plays and so malls make an ideal focus for the re-evaluation of the role that space plays in the ritual displays and auto-surveillance that Hebdidge terms 'hiding in the light', thereby demonstrating an analytical role for physical space in the theoretical positions examined above.

Two case studies

To investigate the role of spatial configuration in 'youth' behaviour patterns, a comparative study of teenage behaviours was made in two centres, Le Centre Commercial Grand Ciel in Ivry, Paris, and the White Rose Centre in Leeds [hereafter 'Grand Ciel' and 'White Rose']⁹. This was particularly important because the centre in Paris was perceived by the management to suffer from a 'youth problem', whereas in the Leeds centre managers felt that any problems with groups of teenagers had been overcome through the installation of an extremely sophisticated electronic surveillance system. The aim was to understand the degree to which these social outcomes were related to spatial phenomena through assessing the opportunities that the different spatial designs of the centres afforded teenagers for 'hanging out'. That is, using Hebdige's terminology, to assess the differing spatial strategies used by teenagers in different environments in the construction of their individual and group identities though strategies of spectacle and surveillance, what he terms 'hiding in the light'.

⁹ This research formed part of a larger study into benchmarking of quality assessment variables in the European construction industry [see Carr, Michell, Stonor and Winch, 1999].

The two centres make an appropriate comparison for while there are many similarities between them¹⁰ they differ principally in the spatial strategy that the architect (BDP/Groupe 6 in both cases) has employed. While the White Rose is a conventional 'bone' shaped mall on one level with two axes on either side of a central atrium and food court, the Grand Ciel is split into two distinct sectors; an original 1982 mall based around a Carrefours supermarket and an adjacent and connected three level extension with sub-level parking, completed in 1997. The two centres, therefore, exhibit very different spatial forms and consequently different spatial potentials for the patterning of co-presence.

Furthermore, in relation to the focus on teenage behaviour, both centres have a comparable social context. While the White Rose Centre is 'out-of-town' there are a number of council estates nearby on the far side of the main road facing the centre. These were identified by the architect as being some of the least affluent areas of Leeds. Although by no means the only residence of teenagers using the centre, these estates were identified by the security staff as being the base for groups of "known individuals" whose behaviour was perceived to be "undesirable" [Clarke, 1998 and security personnel, personal communication].

The Grand Ciel similarly has a close relationship to the neighbourhood of Ivry which is similarly a less affluent area associated with an immigrant North African population. There is also a perceived problem with teenagers using the centre in Ivry but the responses in the two centres are very different. In the Grand Ciel the presence of teenagers is still seen to be a problem, despite a significant security attempt to discourage teenage use of the centre for 'recreational' purposes which verge on the management's definition of 'anti-social', particularly persistent 'hanging out' on the upper levels. The management of the White Rose Centre see there to be no further problem following initial confrontations after opening. This was understood to be a result of the sophisticated surveillance equipment that allows continued monitoring of the mall and car parking spaces, and the quick response to the presence of identified offenders [ibid.].

¹⁰ Both have similar "out of town" locations close to major route networks (the Leeds, Sheffield, Bradford, Wakefield, Barnsley nexus and the Péripherique respectively), both are of a similar size and both attempt to position themselves as 'regional' rather than local facilities hoping to draw clientele from beyond their immediate neighbourhoods [Clarke, 1998].

However, this study suggests that it is the differing spatial layouts of the centres and the behavioural opportunities that each affords that is the cause of the imbalance in apparently "undesirable" activities.

Both centres were intensively observed over a period of days with sampled 'gate count' data being collected by zones and by category (gender and age) to establish the pattern of spatial and temporal co-presence within the centres and more behavioural 'snap-shot' information being collected to address questions of activity in space. These were then compared with spatial 'axial-models' of the centres¹¹.

Analysis

Figures 7.1 to 7.5 [see pages 210 to 229] show the results of the movement study. They show that while in White Rose the levels of movement in the main retail spaces are consistently high, in the Grand Ciel there is a considerable deterioration in movement levels up to the upper floor levels.

When compared to the computer models of the centres, figures 7.6 to 7.10, one can identify an immediate visual correspondence. The areas of highest movement, represented in red, correspond well to the areas of highest integration (or 'spatial accessibility') picked out by the model¹². The models shown are the most successful in accurately reflecting the spatial use of the centres. Several others were constructed however, including weighting for floor areas of individual shops to test the thesis that 'attractors' or 'magnets' affect movement patterns and modelling of the surrounding car parking areas and the immediate urban contexts of each centre to establish the influence that these had on space use.

¹¹ Gate counts and snap shots are both common observational techniques used within the Space Syntax methodology for collecting data on space use. Gate counts involves the counting of pedestrians or vehicles in whatever categories are appropriate for the study (men, women, locals, tourists etc) for a number of minutes each hour allowing for an average hourly flow rate to be calculated throughout the day. 'Gates' are typically positioned across every element of the spatial structure and counted every hour for 5 minutes (every two hours in this study because of the size of system involved and the limited number of researchers). 'Snap shots' are instantaneous evaluations of static space use, again divided by category and activity (sitting, walking, in conversation etc) and are typically made once an hour for all the spaces of the system under investigation.

¹² Integration measures the degree to which each unit has strategic importance within the overall configuration, in terms of the total depth of that element from all others in the system. This is equivalent to the number of 'moves' required to move from that space to all other spaces, a measure therefore of accessibility.

That the simplest model of the internal structure of the centres was the most successful in explaining the spatial use of the centre confirms that 'magnets' do not in fact have a strong influence over the use of the mall compared to the overall spatial structure itself. This questions the view that key magnets generate patterns of movement (and therefore co-presence) within retail environments. Furthermore, the external environment in these examples affects only the numbers of people entering the centres and not their distribution within the spaces of the centre.

This intuitive correspondence between movement and the computer model is confirmed using a statistical correlation. Figures 7.11 and 12 present a statistical correlation between the computer's measure of spatial accessibility and the levels of movement observed. The r-squared value shows that in Le Grand Ciel the model successfully accounts for over 80% of the observed movement while in White Rose the figure rises to over 90%¹³. This result is highly significant since it suggests that the most important influence over the movement of visitors within the centres is the spatial design of the centre itself - over and above other factors such as the 'attractor' qualities of individual stores/facilities. In other words, spatial design organises overall levels of "presence-availability" and therefore co-presence.

Teenage Behaviour

A more detailed analysis of the gate count data is presented in figures 7.13 and 14. Figure 7.13 shows that in the White Rose the adult population peaks between 12 am and 2 pm remaining relatively constant during the rest of the day. By contrast the teenage population builds steadily throughout the day to a peak in the two hours before closing between 18 and 20 pm. There is also a similar gender disparity between male and female teenagers, the males showing the significant peak between 16 and 18 pm. However, the disparity in numbers is slight compared to the relationship between adults and teenagers, the ratio varying around 10:1.

The usage by adults in Le Grand Ciel is much more consistent, varying little during the day (7.14). However, the teenage population shows a similar steady increase to a peak in the fourth time period (16 to 18 pm). There are two notable differences in the Paris example, however.

¹³ The correlation for White Rose shows three spaces that are 'over-performing', that is have a higher than expected level of movement for there degree of spatial accessibility in the overall system (marked in blue on 7.12). However, these spaces are the three spaces associated with the Savacentre, the main anchor in the centre. The movement levels are higher than the model would predict in these spaces (compare 7.04 and 09) because they are used as a point of access into the main mall space from the parking and are the start point of many visits to the mall.
Firstly, the numbers of male teenagers is significantly greater than female, reaching a peak at c.1600 compared to a steady level of c.900 after 2 pm for the females. Secondly, and more importantly, whereas the White Rose data showed little differentiation between the lower and upper levels in any category or time period, the evidence from Le Grand Ciel shows that as the teenage population grows so the number recorded on the top floor of the mall increases disproportionately to the number on the lower two levels which remains relatively constant. This is particularly the case with the male teenagers between 16 and 18 pm.

This observation is confirmed by more detailed analysis. The proportion of teenagers found in the lower level and the food court level of White Rose varies little during the times of lowest and highest teenage use. The composition of users in each space at all times of the day can be said to be a representative cross-section of the population of the whole centre. In the case of Le Grand Ciel the percentage of teenage users on the top floor changes from 6% between 10 and 12 am to 30% between 16 and 18 pm. The growth in the numbers of male teenagers makes up for 23% of this increase. A similar change in comparative use occurs on the first floor (6% to 21%) while on the ground floor there is little alteration in the composition of users. Peaks occur at almost every gate on the upper levels during the peak teenage hours. Those gates that consistently score lower are those at the extremities of the aisles. This indicates that teenagers are clustering towards the centre of the floor towards the atrium.

It seems therefore that while space use is homogeneous in the Leeds example, in the Paris case the upper floors are used preferentially by teenagers during the later parts of the day.

This difference in use can be shown to be statistically significant. There is a good correlation between average adults per hour movement rates and average teenage per hour rates across all the gates in White Rose with the exception of one, B3 (discussed below) [see figure 7.15]. The R-squared value (measure of correlation between 0 and 1) for teenagers considered as a whole is 0.743 - 0.572 for female teenagers and rising to 0.761 for males. This indicates statistically that adults and teenagers inhabit the same spaces in the White Rose centre during the day. This is in marked contrast to Le Grand Ciel, which shows a much poorer result, 0.221 for teenagers as a whole. The reason for this is that the scattergram shows a clear bifurcation [see figure 7.16] which indicates that the teenagers and adults are not inhabiting the same spaces in the centre. This result is replicated across all time periods and between male and female teenagers, indicating that









































not only are teenagers and adults segregated but so are male and female teenagers, unlike their Leeds counterparts.

Spatial Structure, co-presence and 'hanging out' in Leeds and Paris

This bifurcation phenomenon Hillier has described as "the L-shaped problem" [Hillier, 1996; chapter 5]. He demonstrates that such a segregation is caused by the probabilistic opportunities offered by a spatial environment which allows single category 'virtual community' to develop. This, he demonstrates, is symptomatic of the 'spatial pathology' of many contemporary housing estates, which while attempting to construct a safer environment through the segregation of vehicular movement to peripheral routes and concentration of pedestrian access into raised corridors and walkways, have in fact encouraged the segregation of user groups. This is fundamental to the understanding of how architecture is perceived to 'cause' social problems, as adult and through movement tends to be purposeful, using the more direct peripheral routes intended for vehicular access, effectively abandoning the internal routes to children who use the spatially complex networks of walkways as areas for recreation, "essentially about discovering the potentials of space", unsupervised by any incidental adult co-presence [Hillier, 1996; p 205]. It is this domination by a single use and user category that lies behind the perception of architecturally generated social problems.

However, while in that context Hillier characterises children as "space explorers", by contrast in this case we find teenagers using the space as a 'stage' upon which to construct and display their identities in relation to the environment of consumption possibilities, the mutual surveillance of their peers and in reaction against the dominant adult presence. Again, rather than pursuing the more conventionally purposive activities of shopping they are "discovering the potentials of space" to differentiate themselves from the majority of users. Through the use of gate-counts the role of space in providing opportunities for generating, and avoiding, co-presence has been elucidated. However, while gate counts give an accurate measure of the numbers of people passing through a space they cannot describe what those people do within that space as would be required for a clarification of Goffman's description of 'front and back regions'. For this we need to turn to 'static snapshot' data.

The static snapshots from the White Rose Centre show that there is no clustering of static teenagers in the mall. Most of the teenagers on the ground level are *moving* through the atrium

and the aisle spaces while in the food court there is clustering only in the seating areas, not around the balustrade of the atrium. Neither is the lower mall area visible from this seating area, which is too large to give a direct view. Even when the teenage population of the centre reaches its peak (18-20 pm), they do not form the dominant user category on either the upper or lower level. There is no spatial segregation in either space between static teenagers and other user categories. The only exception to this is the gate B3, the only stair access from the lower to the upper mall level, situated in a highly strategic and visible location in the centre of the mall. This route *is* used preferentially by teenagers, and is the only space in which they are able to form a single user-defined 'virtual community' and which allows the teenagers both to see the central areas of the mall and, importantly, to be seen by the greatest number of other people.

By contrast, in the Grand Ciel there is considerable clustering of static teenagers at the balustrade of the upper level. Figure 7.17 shows details of the atrium spaces on the top and ground floors with teenagers observed at all time periods shown. The clustering is pronounced on the top floor while much less so on the lower levels. In contrast to White Rose, when all users are shown at all time periods the teenage population is seen to form a significant proportion of users on the top floor, almost forming a single user category, while becoming 'invisible' on the ground floor, diluted by the adult presence. This discrepancy can be highlighted by analysing the distribution of user categories by floor shown in the static snapshots. The Grand Ciel was broken down into density areas and the numbers of each category counted for each area. The numbers of teenagers observed on the upper level, while not greater in absolute terms than the numbers on the ground floor, do form a much larger proportion of users observed.

I wish to suggest that the reason for this clustering of static teenagers on the upper level also has a spatial explanation. It has already been noted that the opportunity for surveillance of the lower level from the food court in The White Rose Centre is poor, the only vantage point being afforded by the stair access between the floors. Figure 7.18 shows the isovists constructed from the food court itself and the number of physical interventions in the central space; lifts, stairs and elevators. Views from the atrium on the ground level are restricted because each arm of the bone-shaped centre is offset from the other. Furthermore, the isovists from the spaces that overlook the main aisles are obscured by the placement of trees in front of the balcony on the lower level.

In the Grand Ciel, however, the isovists from the top level are exceptionally strong. Because of the visual permeability of each level the isovists are extremely hard to construct graphically. The photographs (figures 7.19 and 20) show the extent of the visual field from the top floors and the attraction of clustering at the balustrade to watch people on the lower levels.

It is my contention that while the two centres appear to function differently in terms of teenage behaviour this is in reality not the case. The differences are in the spatial opportunities that each centre affords the teenagers. In the White Rose centre there is no space that is poorly used by other categories in which teenagers can construct a single-category community other than the limited space of the central stairway. Furthermore, there are no spaces that offer the opportunity for static surveillance except again for the stairway. In the Grand Ciel the top floor readily offers both these possibilities.

In effect the Leeds centre encourages movement integrated with the other diverse user groups (hence the good correlation with the axial model) as the only available strategy through which teenagers can see and be seen, while the Paris centre encourages static, segregated surveillance. This is not a cultural difference in teenage behaviours. Both groups are adopting an appropriate spatial strategy, given the configuration of the malls, to achieve their social objectives in using the space; that is the articulation of their group and individual identities through strategies of spectacle; the 'hanging out' in strategic locations that Hebdidge terms 'hiding in the light' [Hebdidge; 1988]. However, there are unintended consequences of these strategies, for in denying the spatial opportunity for 'hanging out' in visually strategic locations and therefore encouraging visibility through movement about the centre, the teenagers in the White Rose find themselves in a situation of co-presence with the adult community, and as a result of their numerical unobtrusiveness their activity is not perceived as threatening and therefore 'socially undesirable'. In stark contrast, the teenagers of Le Grand Ciel are able to exploit the highly visible upper levels of their centre and thereby define themselves as a threatening group by the absence of copresence with an adult community, and hence come to be defined as a 'social [as opposed to a spatial] problem'.

Furthermore, the work of Hillier and others in relation to housing estates demonstrates that this is a generalized phenomenon that relates material space to the structuring of co-presence. Moreover, this is a far more spatially sensitive analysis than Goffman's 'regions' which tend to be limited to generalized descriptions of 'front' and 'back' in terms of generic criteria (the far corner, upstairs/downstairs) rather than any direct analysis of the spatial circumstances under consideration. It is also a more versatile and theoretically embedded approach than Hägerstand's Time Geography, which through tracing individual biographies within an abstracted 'space' of constraint is unable to extract such systemic principles, nor to understand the role of architectural space that lies in the 'white spot' of the sub-geographical scale.

What this chapter has aimed to show is that it is the physical structure of space itself which is the generically important variable between different situations. Not only does it play a direct role in structuring the "presence-availability" of actors, thereby generating circumstances of co-presence, it also provides the spatial arena in which social groups go about constructing their identities through spatial strategies. This chapter has sought to demonstrate that the spatial constraints of Hägerstrand and Giddens *can* be related directly to the physical 'milieu' of action without implying a geographical or physical determinism, and indeed that physical space should (following Giddens' criticism of Hägerstrand) be conceived of as opportunity creating as much as simply constraining.

Furthermore, in following the previous empirical reworking at the urban scale of chapter 6.3, this chapter has taken a step towards realizing Hägerstrand's ambition to integrate a geographical and architectural scale of analysis in a common methodology which retains social awareness and explanatory potential. The following chapter on the work of Foucault will take this challenge a step further.

Chapter 8 The Individual Scale: Foucault's Panopticism - "Part of the way modern men think"

Everything in [architecture], from its fondness for certain shapes to the approaches to specific building problems...reflects the conditions of the age from which it springs.... However much a period may disguise itself, its real nature will show through in its architecture [Gideon, 1967; p 19¹].

8.1 Introduction

The inclusion of a historian, Michel Foucault, in a discussion of approaches to space populated mainly by geographers and architects might seem inappropriate were it not for the extraordinary penetration of two of his works in particular into the architectural/geographical canon -Surveiller et Punir: Naissance de la prison [1975] and Ouestions à Michel Foucault sur la géographie [in Hérodote 1/4, 1976]². Indeed, these and his other works have made significant contributions to the eradication of the persistent divisions between the two disciplinary strongholds of history and geography, entrenched in their respective spatial and temporal prejudices. It is this spatial sensitivity combined with his style of sociological history that affirms Foucault's status as one of the critical players in the 're-assertion of space in social theory'. This is confirmed in the latter text, an interview with the board of editors of a geographical journal concerning the inclusion of space as a theoretical factor within his work. It is the source of what has become one of the 'sound-bites' of what I have termed the 'respatialization theorists' – that "[s]pace was treated as the dead, the fixed, the undialectical, the immobile, [while] time, on the contrary, was richness, fecundity, life, dialectic." It ends with the much-quoted admission that, "Geography must indeed necessarily lie at the heart of my concerns." [Foucault, 1980; pp 70 and 77]. Furthermore, Foucault's work lies at the heart of my own concerns, for his work deals explicitly with architectural space and his focus on the body as a locus of power relations transgresses the usual spatial categories associated with geography, thus further undermining the distinction between approaches to space within architectural and geographical theory.

¹ Reproduced in Tittler, 1991; p 1.

² These texts appear here respectively as *Discipline and Punish* [Foucault, 1995] and *Questions on Geography* in *Power/Knowledge* [Foucault, 1980].

It is *Discipline and Punish* and in particular Foucault's analysis of Bentham's Panopticon that has captured the imagination of architectural theorists, perhaps acting as a conduit to open interest in the rest of his work. While interest in the Panopticon predates Foucault's analysis, the impact of his work cannot be overstated. In 1971 Robin Evans was able to write that;

Many architectural historians have never heard of the Panopticon principle of construction, while philosophers and penologists tend to pass over it with a scratch of the head or a raised eyebrow [Evans 1971; p 21]³.

This is clearly no longer the case by the time of his 1982 analysis (*The Fabrication of Virtue; English prison architecture 1750-1840*) where he makes reference to Foucault's work among others concerned with penitentiary design. More strikingly, by 1992 Semple, one of Foucault's harshest critics regarding his treatment of Bentham's ideas, writes that "Foucault is fascinating, eloquent, trendy, brilliant, relevant, modern...", indeed he is "part of the way modern men think [sic]" [Semple, 1992; p105].

Driver confirms the relevance of Foucault to this thesis by noting that his work has particular "intriguing connections with recent attempts to conjoin the analysis of society with that of space" and Harris assents, asserting that, "[s]ocial power is no longer conceived apart from its geographical context." [Driver, 1985; p 432; Harris, 1991; p 678].

However, Foucault's work has an added significance because he cleaves precisely the vein of ambiguity between the sub-geographical and supra-architectural scales identified in the previous chapter, principally through the work of Hägerstrand [see above, especially p 204 onwards]. Harris notes that space and power are mutually constitutive of one another, following a refrain of reciprocality that should now be familiar, and he uses this conclusion to argue that the work of Foucault (as well as Giddens' Structuration Theory in particular) has lead to, "an intellectual environment that...could hardly be more hospitable for Human Geography in general and Historical Geography in particular", continuing that now one cannot write Historical Geography as if one had not read Foucault [ibid. 678-80]. This alliance of Foucault with geography is perhaps surprising given that the 'geographical spaces' analysed above tended to be abstract conceptions of space concerned more with regional and distributional analyses that appear to be antithetical to the concrete *architectural* analysis presented by Foucault in *Discipline and Punish*. Furthermore, Foucault's prolonged concern with the 'spaces' of the body and the treatment of the

³ A notable exception being Markus' 1954 work discussed below.

body suggest a scale of analysis of greater resolution still than that typically associated with a geographical, even a 'human geographical' scale.

What is at issue once again, therefore, is the precise use and understanding of 'space' in the work of Foucault. Following the now established pattern of questioning and rebuilding through empirical example I hope to show that a configurational understanding of space may help to counter some of the substantial empirical concerns of many of Foucault's critics and in so doing may open the possibility of a more complete dissolution of the boundaries between not only geography and architecture but also history that Foucault himself hoped to have achieved but, as we shall see, did not fully realise. In so doing the configurational approach to space derived from Space Syntax will be seen to be stretched to its conceptual limits as the scale of analysis slides from statistical 'population' to the Foucauldian 'body', prefiguring a necessary reworking of the original theory. The confluence of both geographical and architectural debates locates Foucault's work at the fulcrum of this argument, constructing a bridge to the subsequent section [chapter 10] where a more speculative discussion of the scope of a configurational theory of space will (among other things) seek to resolve the theoretical sublimation from geographical to architectural scales identified by Hägerstrand.

8.1 "So the key was architecture!": critical approaches

In *The Eye of Power* [Foucault, 1980; chapter 8] Foucault summarises the physical principles of Bentham's scheme, prompting the exclamation from his interviewer (Michelle Perrot) "So the key was architecture!" Foucault's response exposes not only the essence of his argument's strength but also its problematic and controversial nature. For while he begins by discussing the increasing politicisation of architectural responses during the 18th century he goes on (famously) to assert that;

A whole history remains to be written of *spaces* – which would at the same time be the history of *powers* (both these terms in the plural) – from the great strategies of geopolitics to the little tactics of the habitat, institutional architecture from the classroom to the design of hospitals, passing via economic and political installations [Foucault, 1980; p 149, sic].

This passage is critical for it highlights firstly the great contribution of this work - the thematic alliance of space and issues of power relations - and the dissolution of the restrictive disciplinary boundaries of perhaps more 'traditional' scholarship. But in so doing it equally highlights

frustrating difficulties with his project. For behind the superficially exciting prospect of presenting a spatial analysis ranging in scale from the geo-political to the 'micro-political', a range geographical in its upper limit and architectural if not corporeal in its lower, lies the fundamental question as to whether there is indeed an approach to space that can sustain such a meta-theoretical project "from bedroom to battlefield" [Driver, 1985; p 425].

Such a challenge itself needs to be sensitive to Foucault's own approach, which is defiantly antiessentialist and particular (the significance of his qualifying remark "both these terms [*spaces* and *powers*] in the plural") and therefore resistant to such totalizing theorizations. According to Driver, Foucault,

would reject the label of 'abstract theoretician' with which he is sometimes saddled. Within his work, one finds a vigorous championing of the particular and the concrete, alongside a rejection of all forms of explanation which seek to reduce reality to a single essence, such as a 'spirit of the age' or the 'mode of production' [Driver, 1985; p 426].

Furthermore, his work neither conforms to an established 'school', "nor forms a progressive and coherent ensemble on its own terms", leading White to complain that his work;

...is extraordinarily difficult to deal with in any short account. This is not only because his oeuvre is so extensive, but also because his thought comes clothed in a rhetoric apparently designed to frustrate summary, paraphrase, economical quotation for illustrative purposes, *or a translation into traditional critical terminology* [White, 1979; p 81, emphasis added].

Whether this 'subversion' of the conventions of history and philosophy is seen as positive [Driver; op. cit.] or in part as a deliberate attempt " to render his discourse impenetrable to any critical technique based on ideological principles different from his own" [White, ibid.] it poses an academic minefield laid primarily in the path of critical analysis from the historical or philosophical traditions.

Inconsistencies in Foucault's approach to space have been highlighted already, particularly by the editors of *Hérodote*⁴. Although many commentators focus on the final statement that, "Geography must indeed necessarily lie at the heart of my concerns" [ibid.; p 77], few note that this is something of a recantation and that in the earlier part of the interview Foucault has some

⁴ See the much quoted discussion published as *Questions on Geography* [Foucault, 1980; chapter 4]

difficulty in understanding the direction that the questioners are taking⁵. In particular they raise this issue of the use of spatial and geographical terms (territory, geopolitics etc) contrasted with the "uncertainty about spatialization", referring here to a perceived imbalance in Foucault's 'methodological discontinuity' in the treatment of time and his "nebulous or nomadic spatial demarcations [Christendom, the Western World, Northern Europe, France] whose uncertainty is in contrast with [his] care in marking off sections of time, periods and ages" [ibid.; pp 67-8].

However, the interviewers' approach founders because Foucault is able to demonstrate that these terms are themselves essentially neither geographical nor spatial but are equally political and strategic. In trying to demonstrate that Foucault's historical discourse draws him into spatial difficulties they fall foul of his subversion of historical conventions identified above by White and Driver that make his discourse so resilient to 'traditional critical terminology'. Furthermore, they highlight the surprisingly contested spatial notions at the heart of geography (territory, region for example) which are (as Foucault notes) perhaps too polluted with political, strategic, historical concepts to be an effective device with which to navigate Foucault's minefield.

More promising, I believe, is to reverse the approach of Hérodote and to examine how the spatial and in particular the architectural analysis within *Discipline and Punish* impacts back on Foucault's writing of history. This is particularly pertinent in the section dealing with the Panopticon where I hope to show we find [following Driver] "unexpected, [and worse, dangerous and inaccurate] abstractions where we look for local detail" [Driver, 1985; p 429]. This approach will prove to be more robust because it relies on a 'clean' understanding of space free from historical and geographical association; the idea of space as configuration to which Foucault is seen already to be sympathetic through the importance he places in the later part of his analysis on the spatial structure of disciplinary institutions.

The direction of *this* analysis, therefore, outflanks the traps encumbering any historical critique and focuses on Foucault's treatment of space and architectural concerns. This is not a petty 'territorial' approach, for paradoxically, the rapprochement between history and geography which Foucault facilitated allows us to rejoin the historical debate from a renewed perspective, arguing that there are considerable inconsistencies in his treatment of the two subjects whose closer union he has sought to promote. For while he expresses aversion to an epistemic understanding of

⁵ See for example the penultimate paragraph, "I have enjoyed this discussion with you because I have changed my mind since we started.... *Now* I can see that the problems you put to me about geography are crucial ones for me"

history it is hard to view his description of the development of a 'disciplinary society' in anything other than those terms. However, rather than uncovering a fracture in the continuity of his well defended approach to history, I believe that this can be explained by his erratic understandings of space and simplistic treatment of the architectural themes that come to the fore in this work.

Foucault's Panopticon

In Discipline and Punish [hereafter DP] Foucault's argument follows the historical evolution of the penal system from a focus on the torture of the body to the institutional attempts at reform of the soul. This can be seen also to have a spatial expression; a change from the urban arena to the interior, from spaces of spectacle (implying spectators) to spaces of introspection, from public space to architecturally defined private space. For Foucault space is a reflection of the forces of power operating within society. He treats space as a manifestation of these structures of power and consequently sees built forms and spatial strategies as testament to the social structures that produced them. However, he sees a discursive relationship between power and space in which space is not only the passive expression of power relations but is also an active 'technique' of power. This logic runs through the entire work although the spatial scale of interest narrows as the historical narrative progresses.

In the first part of the book, *Torture*, it is the public space of the scaffold and the spectacle of punishment that is central. Foucault summarises the first section in the following passage, which highlights some of the confusion over spatial metaphor and direct spatial reference that characterises his work.

If torture was so strongly embedded in legal practice, it was because it revealed truth and showed the operation of power. It assured the articulation of the written on the oral, the secret on the public, the procedure of the investigation on the process of the confession; it made it possible to reproduce the crime on the visible body of the criminal; in the same horror, the crime had to be manifested and annulled. It also made the body of the condemned man the place where the vengeance of the sovereign was applied, the anchoring point for a manifestation of power, an opportunity for affirming the dissymmetry of forces [DP; p 55].

The public arena is central to torture, therefore, because it is only through the presence of spectators that the "physico-political force of the sovereign" can be reinforced [DP; p 48]. "In the

[[]ibid., emphasis added].

ceremonies of public execution, the main character was the people, whose real and immediate presence was required for the performance", where they acted as guarantors of the punishment [DP; p 57]. Urban space is an arena for the expression of power relations at an individual level, "a micro-physics of power, whose field of validity is situated between these great functionings [of institutional bodies] and the bodies themselves with their materiality and their forces" [DP; p 26].

The 'space' of torture has two components, therefore. The first is the object of the torture, the body of the condemned, where power is manifested as is evident in his definition of political anatomy; "a set of material elements and techniques that serve as weapons, relays, communication routes and supports for the power and knowledge relations that invest human bodies and subjugate them by turning them into objects of knowledge" [DP; p 28]. However, the 'object' of power ought not to be privileged over the other body in this power system: that of the King – the author of power. These polarised manifestations of the power structure of mediaeval society Foucault speaks of in terms of their materiality; "...the King's body wasn't a metaphor, but a political reality. Its physical presence was necessary for the functioning of the monarchy", just as the material presence of the vicitm's body was necessary for the functioning of justice [*Body/Power*, Foucault, 1980; p 55].

The second component of the 'space' of torture is the urban space that forms the arena of the affirming spectacle. This space, by contrast, has no material significance for Foucault in the way that later the Panopticon does. The 'space' is a metaphorical one, which acts as a magnifying medium, translating the assertion of power between Monarch and regicide as individual people into the subjugation of the populace through knowledge of that power. The city space is not literally an arena where spectators watch and take heed (although this certainly happened as Foucault demonstrates) but it is a metaphor for the citizenry, and their conscious knowledge of the power of the King. It is primarily an institutional rather than physical understanding of space, therefore, similar to the idea of 'parliament' for example.

The approach to space, however, evolves with his historical narrative. As the exercise of power extends from a bipolar confrontation between Monarch and regicide to a pervasive "disciplinary society", based on temporal and spatial constraints, Foucault becomes concerned with the 'materiality' not of the author and objects of power but with the techniques by which power is exercised. The object of power is no longer the body of the condemned which itself becomes little more than a spatial technology to access the soul, and the figure of the King is replaced by a

transcendental notion of social justice. The spatial focus becomes the mediating techniques of power.

In section three of *Discipline and Punish* ('*Discipline*') Foucault outlines the "micro-physics of power" that constitute the "machinery of power" over the body [DP; p 139]. It is significant that the first of these is entitled "The Art of Distributions". He states that,

In the first instance, discipline proceeds from the *distribution of individuals in space* [DP; p 141, emphasis added].

and continues that several "techniques" are employed; enclosure in heterogeneous spaces of disciplinary monotony; partitioning into "as many sections as there are bodies or elements to be distributed" [DP; p 143]; and functional ordering of bodies in space according to the needs of the institution. Foucault's thesis describes a transition in architectural terms from an urban space of spectacle to an interior space of individuation and control.

A whole problematic then develops; that of an architecture that is no longer built simply to be seen (as with the ostentation of palaces), or to observe the external spaces (c.f. the geometry of fortresses), but to permit an internal, articulated and detailed control - to render visible those who are inside it; in more general terms, an architecture that would operate to *transform* individuals; to act on those it shelters, to provide a hold on their conduct, to carry the effects of power right to them, to make it possible to know them, to alter them [DP; p 172, emphasis added].

It is this ordering of bodies in space which allows the functioning of the body/power relation through surveillance which is central to Foucault's work. He makes this relationship explicit,

Thanks to the techniques of surveillance, the 'physics of power', the hold over the body, operate according to the laws of optics and mechanics according to a whole play of spaces, lines, screens, beams, degrees and without recourse, in principle at least, to force or violence [DP; p 177].

The treatment of space is somewhat confusing, therefore, and reaffirms the concerns of Driver and White expressed above. It is a 'puzzling book', as Driver notes, which "presents us with minute particulars when we expect generalisations, and unexpected abstractions when we look for local details" [Driver, 1985; p 429]. He moves from a concern with the 'materiality' of the body (corporeality) to a concern with the materiality of the techniques of discipline (architecture); from an understanding of space as the corporeality of the body (King and regicide) to space as distribution *of* bodies; in essence, a move from a relative, corporeal space (defined by the embodiment of power relations in the King and regicide) to an abstract space defined by distributional and hierarchical relations diffused through society [see figure 8.1].

Paradigm of control:	Torture	Discipline
Power resides in:	King	Diffused through society
Power exercised on:	The body (torture)	Soul (reform)
Power expressed through:	Direct physical punishment	Spatial techniques
Spatial manifestation	In King and Regicide	In distributional techniques
Paradigm of space	Relative (embodied in King/	Abstract, distributional,
	Regicide duality)	network

Figure 8.1 The "Architecture of moral purpose"; Foucault's changing approach to space

It is Bentham, the "Newton of legislation" [Evans, 1971; p 23], who is singled out by Foucault as the agent of this transformation, his "Columbus's Egg" more a 'discovery' than simply an architectural design⁶. It is only on page 200 that Foucault addresses the architecture of the Panopticon directly; an annular building comprising tiered cells, back lit to afford the guard strategically placed in a central tower complete knowledge of prisoners, while himself remaining unseen [see figure 8.2]. The effect; "to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power" [DP; p 200]. However, unlike the vengeful destruction of the regicide, "the prison was linked from its very beginning to a project for the transformation of the individual", a project achieved, "[w]ithout any physical instrument other than architecture and geometry, it [the prison] acts directly on the individuals" [*Prison Talk*, in Foucault, 1980; p 39 and DP; p 206].

Of immediate concern, however, is the mechanism by which such a transformation is effected⁷. It is clear that his argument in *Discipline and Punish* relies on a basic functionalism of two kinds; an associational functionalism in which aesthetic and psychological factors impact upon perception and behaviour, and spatial functionalism reliant on the manipulation of architectural space for moral outcomes [Driver, 1993; p 13 drawing on Schmiechen, 1988]. The former is

⁶ Foucault attributes the phrase to Bentham himself (without reference); [1980; p 148]

⁷ That for Foucault the transformation *is*, somehow, achieved is clear by his own lack of consideration of the possibility of resistance; his inconsistent attitude to this subject is tackled in greater depth below.



Figures 8.2 and 8.3 Bentham's Panopticon (top) and the reformatory at Mettray, external and internal views (below) [Source: Bentham's Panopticon, from Markus, 1993; Mettray exterior from Driver, 1990, interior from Foucault, 1995].

associated with the "economy of signs" active in the disciplinary regime - "semio-techniques" to be interpreted by the presumed rational and 'semio-literate' onlookers. It is a repetition of the familiar 'building as sign' theme in the understanding of relations between architecture and individuals, encountered above in the work of Koolhaas and Harvey in particular [see above, chapters 3 and 6 respectively]⁸.

The latter, spatial functionalism, is most clearly apparent in Foucault's insistence on the idea of the Panopticon as a machine. It is an "architectural *apparatus*...a *machine* for creating and sustaining a power relation independent of the person who exercises it...The Panopticon is a *machine* for dissociating the see/being seen dyad...[in which] subjugation is born *mechanically*...also a laboratory; it could be used as a *machine* to carry out experiments, to alter behaviour, to train or correct individuals [DP; pp 201-3]. As Evans notes in similar vein, it was a building to achieve a moral outcome, not as language or symbol (the associational functionalism employed elsewhere) but, "as part of a purely mechanical operation [perhaps] the most significant monument to a forgotten creed that linked human betterment with architecture above all else" [Evans, 1971; p 21].

Hillier demonstrates that such a conception of buildings having a direct and unmediated effect upon individuals is the pernicious basis of what he calls the 'organism-environment paradigm' that is in turn the foundation of environmental determinism. However, he draws a distinction between the 'metaphor' and the 'paradigm of the machine'. Contradicting popular belief, he shows that Corbusier's description of a house as 'a machine for living in' is surprisingly an example of the innocent 'metaphor of the machine' as nothing in Corbusier's description equates to the organisation of matter that characterises a machine and would be represented architecturally in the plan as determinant of life. Corbusier's treatment of plans concerns symbolic more than mechanistic potential, founded on a belief in rationalism rather than determinism, and his interest relates to the aesthetics rather than mechanics of machines [Hillier, 1996; p 377].

By contrast, the Panopticon, in Foucault's analysis, clearly conforms to the *paradigm* of the machine, that is, that the building has a direct and unmediated effect on the people within it - "[w]ithout any physical instrument other than architecture and geometry, it acts directly on the

⁸ In this context it appears in the work of Tittler, *Architecture and Power*, focusing on the significance of the English Town Hall where he draws on Geertz's techniques of 'thick description' in an attempt to search for symbolic as well as
individuals" [op. Cit.]. What Hillier shows is that this architectural determinism (and the environmental determinism that foreshadows it in geographical literature [see chapter 1]) is a relic of 18th and 19th century pre-Darwinian theories of speciation, rooted in a logic originating from an Aristotelian system of physics, reliant upon a chain of causation and ultimately an 'unmoved mover', replaced by the elegance of Newtonian inertia, just as environmental determinism was by Darwinism.

And yet the form-function relationship that lies at the heart of Bentham's Panopticon is still intuitively credible, not only for us but clearly for Foucault. Hillier argues that this relationship has been "structurally excluded from thought" as a result of the unmediated deterministic predicate at the heart of the paradigm of the machine. What Space Syntax proposes is a system of natural movement in space that is patterned by the configuration of space, a move from an Aristotelian to a Newtonian mode of understanding [ibid; 393, see above, chapter 5]. Rather than direct effects there are system effects of the space structure of buildings on the probabilistic distribution structure of individuals which has consequent social effects realised through copresence⁹. It is these social effects of the structuring of co-presence that allows space to express social potentials (the second key proposition for behind the existence of a society/ space relationship [see above p 130 and Hillier and Netto, 2001; p 5]. Society is expressed, therefore, in its spatial output and how that output seeks to control the interface between social groups, either in weak programmed situations (for example the urban street where cultural differences in morphology embed different norms of social interaction), or in strongly programmed environments where the potential for natural movement and co-presence is deliberately controlled, perhaps the ultimate example being the strict spatial seclusion of the Panopicon¹⁰.

Space Syntax overturns, therefore, the deterministic stance of the paradigm of the machine, which posited a direct (Aristotelian) relationship between the [built] environment and individuals, to focus on the systemic effects of the distribution of bodies in space, and importantly the structuring of the interface relation through the opportunities for co-presence. In so doing, Hillier redirects attention away from trivial properties of building layouts in terms of their specific functions (that is cells and watchtowers, or offices and canteens) to focus on the properties of 'generic function' which focuses on the way that spatial configuration within building types limits the potential encounter field between different groups of space users [see Hillier, 1996;

literal meanings in apparently mundane objects and practices [Tittler, 1991; p 4].

⁹ For a full description of this argument see *Space is the Machine* [Hillier, 1996] chapter 10.

chapter 8, especially pp 313-327]. In moving from specific to 'generic' functioning of spatial layouts in buildings, he is able to demonstrate the common principles that underpin building types with apparently different [specific] social functions, for example prisons and hospitals.

This seems to offer the greatest possibility of a common ground between Foucault's approach and that of Space Syntax, for Foucault too places great emphasis on the importance of the spatial configuration of the Panopticon and the distribution of individuals within the space. The Panopticon is a "royal menagerie" of individualising observation achieved through the "analytical arrangement of space" using the twin tools of "axial visibility" and "strict spatial partitioning" [DP; pp 203, 200, and 195]. Perhaps the greatest convergence is seen in the following passage from *Space, Knowledge, and Power* [Rabinow, 1984; 239-257]. Foucault is asked what the difference in approach is between architects, who are "primarily concerned with walls" and his own approach, "perhaps more concerned with space". He replies;

I think that there is a difference in method and approach. It is true that for me, architecture, in the very vague analyses of it that I have been able to conduct, is only taken as an element of support, to ensure a certain allocation of people in space, a *canalization* [sic] of their circulation, as well as the coding of their reciprocal relations. So it is not only considered as an element in space, but is especially thought of as a plunge into a field of social relations in which it brings about some specific effects [ibid.; p 253].

This is extraordinarily close to the position described by Space Syntax with, however, one crucial exception. While he understands the congruence of spatial and power relations and sees that the Panopticon is "polyvalent in its applications" [DP; p 205] he still lacks a versatile tool with which to understand the configuration of space that is the corner stone of his argument. The Panopticon is, as he continually repeats, an ideal form [e.g. DP; p 205] but one that is also "a generalizable model of functioning" [ibid.]. However, when he attempts to make this leap from Panopticon to 'Panopticsim' his argument collapses under the weight of his generality. Statements such as, "[i]s it surprising that prisons resemble factories, schools, barracks, hospitals, which all resemble prisons?" are patently exaggerated; there are clearly some spatial similarities but these are far more subtle than Foucault's description suggests or his analysis can cope with [DP; p 228].

What Foucault has done is to mistake the Panopticon for a spatial *genotype*, when in fact it is an extremely particular *phenotype* [see Hillier and Hanson, 1984; chapter 4]. The genotypical

¹⁰ The notions of strong and weak programmed buildings are discussed in depth in Hillier, 1996; pp 250-55.

relation between configuration, distribution and power is not to be found in *any one* building form but in the *commonalities* of abstract spatial relations in the many apparently distinct configurational phenotypes, of which the Panopticon is just one. That is to say, that in an arrangement of space where individuals are absolutely isolated and in fixed relation to the controller of the space (i.e. the Panoptic space), Foucault is able to conceive of the importance of spatial configuration. But in anything other than this extreme case, for example the penal institution at Mettray described by Foucault as the disciplinary form at its most extreme, he is unable to tackle the spatial aspects of the institution in anything other than the most general descriptive terms for want of an analytical tool, despite spatial configuration apparently lying "at the heart of my [Foucault's] concerns"¹¹.

Empirical concerns

This difficulty extrapolating out from Bentham's Panopticon raises serious concerns about the empirical validity of his argument. Foucault places enormous importance on the Panopticon as an architectural and technical blueprint of what develops, he argues, into a 'carceral archipelago'. He claims that;

Although the panoptic procedures, as concrete forms of the exercise of power, have become extremely widespread, *at least in their less concentrated forms*, it was really only in the penitentiary institutions that Bentham's utopia could be fully expressed in a material form. *In the 1830s, the Panopticon became the architectural programme of most prison projects* [DP; p 249, emphasis added].

This passage itself conceals some of the vagaries of Foucault's empiricism; "less concentrated forms" refers to his amalgamation of "the Benthamite Panopticon in its strict form, [with] the semi-circle, the cross-plan, the star shape" following the general principle that all have a central inspection tower [DP, p 250]. However, Space Syntax (as applied to all situations, architectural and urban) demonstrates that small changes in the spatial morphology can result in far more fundamental changes in the configurational arrangement of spaces [see for example Hillier's principles of partitioning, Hillier, 1996]. An obvious example, yet devastating from Foucault's point of view, would be that in a cross or star shaped system the *axes* of cell blocks are visible to a centrally placed tower but the *cells* and prisoners themselves are not. This is emphatically *not* a

¹¹ Foucault's description of Mettray focuses on the correspondence between hierarchies of authority and their spatial associations. "In it [Mettray] were to be found 'cloister, prison, school, regiment'" [DP; p 293]. However, he makes no comment on the actual built form of the colony in marked contrast to his analysis of the Panopticon.

spatial equivalent of the Panopticon because it violates its most basic postulate; that the prisoner should at all times remain within a field of potential visibility.

Many authors have also questioned Foucault's claim that "the Panopticon became the architectural programme of most prison projects" [op. Cit]. Objections form into two defined camps, which again express the resilience of the analytical and scalar divisions between geographical and architectural approaches and demonstrate the failure of those discourses to gain any serious critical purchase on Foucault's argument. The geographical camp raise valid [spatial] concerns about the historical geography of penal reform. Driver argues that, "[h]is constant recourse to the language of boundaries, locations, separations and colonisations highlights the relative neglect of questions of space and spatial strategies in the history of social policy", pointing particularly to a 'struggle for spatial control' in the north of England, and clear regional disparities which are overlooked in the empirical cracks between localised, particular histories and national histories focusing on legislative and policy aspects [Driver, 1993; pp 15-16]. These concerns mirror the criticism raised by the editors of Hérodote over Foucault's spatial "vagueness", and concern a neglect of the 'geographical space' of regional difference [Foucault, 1980; p 67]. Harris also joins this camp, writing of the importance of Foucault's work for human and historical geography and drawing parallels with Giddens' work, citing in particular the ideas of locale and time/space distanciation that were discussed in the preceding chapter [Harris, 1991; p 678; see above chapter 7.1 for discussion of Giddens']. Finally, Philo points to an "institutional geography" of the "mad business", informed by differing cultural and professional understandings of madness, producing a variegated historical geography of asylum forms [Philo, 1987; pp 402-4].

A different, but equally 'spatial', critique is raised by those who are concerned with Foucault's empirical research on penal architecture. In this context Philo worries that Dear (of the 'geographical camp') "paints a picture of an institutional history full of asylums whose internal spaces have been neatly chopped up into the minute portions demanded by Bentham's 'Panopticon' design" and ignores (in the case of asylums) the internal chaos that he demonstrates was typical [Philo, 1989; p 261]. He goes on to question the examples used by Foucault and demonstrates that the penal colony at "seemingly very un-Panoptic" Mettray does not follow Foucault's archetype [see figure 8.3, p 251]. He argues that in the case of asylum design the focus rather was on the congregation of patients in small cottage units dispersed in the asylum

grounds, and that of those asylums proposed, modified or built "few followed the letter of Bentham's Panopticon" [ibid.; p 266].

Driver also presents a detailed study of Mettray and notes the absence of confinement as a key feature (although he remains sympathetic to Foucault's argument) [Driver, 1990, see figure 8.3]. Similarly, Evans argues that it was the idea of the Panopticon more than the form that was 'ingested' and points out that Bentham himself abandons unmitigated seclusion on the basis of evidence that it would be detrimental to mental health and because of the extreme cost of construction [Evans, 1971; pp 23-26].

This accusation of a selective reading of Bentham by Foucault is central to Semple's argument which aims "to lift the shadow that has fallen across Bentham's reputation". She argues that "when considered as a work of historical scholarship, *Discipline and Punish* does indeed leave much to be desired" pointing to Foucault's "limitations as a historian" [Semple, 1992; pp 105-6 and 109-10]. She argues that Foucault treats the Panopticon less as an historical artefact than as a philosophical concept, and in so doing has treated the historical record "as a quarry for facts to construct his theory… Like a magpie, Foucault selects his glittering evidence to construct his baleful picture of the present" [Semple, 1993; p 17 and 1992; p 110]. The Panopticon, she points out, was never built, the closest example being the Western Penitentiary in Pittsburgh (1820-26), demolished as unworkable after ten years¹².

Panopticon and Panopticism

This might appear as a rather petty argument between historians, both working in the monograph form, but one focused on a more conventional history of individuals and buildings and the other on the history of ideas and discourse¹³. However, the relation between the Panopticon and Panoptic*ism* is crucial because rather than a historical argument it is in fact a *spatial* argument. Indeed, in selecting 'glittering evidence' to construct the 'baleful view of the present' that is Foucault's hallmark, expressed in language which Sheridan describes as "verging on the hyperbolic", we find resurface the related ideas of the ecstatic and alephic visions presented

¹² Markus [1954; p 253] also notes another near perfect example; Latrobe's State Prison for Virginia in Richmond of 1797 although this was based on a semi-circle as was the Edinburgh Bridewell of 1791 [Markus' 1993; pp 15-18]. The other example, not mentioned in any of these commentaries, is Richard Rodgers' Seeley History Faculty library in Cambridge, based on an almost perfect panoptic segment.

¹³ See Foucault's comments regarding return to the monograph form based around discourse in *Prison Talk* [Foucault, 1980; p 37].

above, founded upon the interlaced themes of a partisan understanding of space which precludes a material analysis [Sherdidan, 1980; p 71].

Driver makes a clear distinction between the Panopticon and Panopticism. While he agrees with Semple that "*Discipline and Punsih* contains little concrete discussion of the ways in which such models [the Panopticon] were put into practice", he does not dismiss Foucault's work but stresses the difference between the Panopti*con*, as a particular architectural project, and Panoptic*ism* as a range of spatial techniques that transcend any one built form [Driver, 1993; p 13 and 1985; p 433¹⁴]. Indeed, he argues against reducing *Discipline and Punish* to an abstract architectural type and quotes Foucault as saying; "There can be no question here of writing the history of the different disciplinary institutions" [Driver, 1985; p 42, DP, p 139].

And yet Foucault continues that, "I simply intend to map on a series of examples some of the essential techniques [defined earlier in spatial and architectural terms] that most easily spread from one [disciplinary institution] to another", and himself talks of the Panopticon as;

"a generalizable model of functioning...[which] must not be understood as a dream building: it is the diagram of a mechanism of power reduced to its ideal form; its functioning...a pure architectural and optical system...[DP; p 205].

The argument in *Discipline and Punish* is instinctively compelling (even Semple admits as much), and it seems clear that there must be some explicit spatial correspondence between the Panopticon and 'panopticism'; between Bentham's design and more contemporary concerns with surveillance described by Foucault as a 'carceral archipelago' as well as by (Davis, Sinclair and others). However, the relation between the Panopticon and panopticism will not be resolved through historical debate over the significance of idiosyncratic built forms. Nor will it be resolved by the 'spatial' analysis of historical geographers who focus on distributions of these same forms. This is neither a historical nor geographical but a *spatial* problem, that highlights the inadequacies of both historians' and geographers' approaches to space at an architectural scale. The problem originates with Foucault's instinctive realisation of the importance of spatial configuration but his lack of a methodology with which to tackle spatial morphology in an analytical rather than descriptive way, and in anything other than extreme manifestations such as the Panopticon. He lacks, in other words, a way to understand the relation of spatial phenotypes

¹⁴ Philo likewise insists that panopticism should not be 'conceptually collapsed' to the internal workings of the Panopticon or any other model institution [Philo, 1989; pp 264 and 283].

(the particular forms that fixate critics such as Semple) to the *genotypical* relation that is the *spatial* (not historical or geographical) essence of his panopticism.

Furthermore, this is not simply a problem of substantiating evidence in a perhaps unfamiliar discourse that is marginal to the whole. For I suggest that Foucault's difficulties in understanding space undermines not only his spatial argument but also his approach to history. Foucault maintains, "a distrust of histories which revolve around empty abstractions such as the 'spirit of an age'; he has, in contrast, sought to indicate the significance of the particular, the local, and its articulation with the 'whole'", such that to reduce *Discipline and Punish* to a set of theoretical ground rules "fails to recognise Foucault's abhorrence of 'totalizing' forms of explanation" [Driver, 1985; pp 425-6]. And yet in *Discipline and Punish* it seems that he has over-stated the importance of the particular [the Panopticon], ignored the significance of the local [the regional concerns of Driver and Philo] and has failed to articulate clearly the relationship between the particular [Panopticon] and the whole [panoptic*ism*]. The result is that it is difficult to understand his panopticism and 'carceral archipelago' as anything other than a totalizing 'spirit of an age' akin to just the essentialist history to which he is so opposed. Space is, then, perhaps more central to his thesis than even he realises for ultimately it is in conflict with, and undermines, his most fundamental epistemological position.

8.2 Buildings and Power

To validate both the idea of panopticism and the claim that space lies at the heart of his concerns, Foucault needs to found both on more than metaphor and rhetorical brilliance. Critically, he needs an approach to spatial configuration that is not simply based in building form but that is able to distinguish genotypical abstract relations among varied phenotypes. The more empirically grounded approach of Markus is perhaps suggested by the title of his work *Buildings and Power*, juxtaposed to the more common Foucauldian construction of 'space and power' [Markus, 1993]. He begins from the assertion that buildings "are not primarily art, technical or investment objects, but social objects" and argues that there is a need to probe beneath the surface appearance of buildings to uncover "the way that relations are established in and through buildings" that is the heart of his concerns [ibid.; pp xix-xx]. He is critical, therefore, of standard discourses on architecture, arguing that architects themselves tend to treat architecture as either a work of art without social implications or as simply a utilitarian object. While social historians tend to be sensible to works of art but to undervalue architecture, architectural historians tend to treat architecture as art and to ignore its social aspects, neither offering an adequate approach to buildings as social objects [pp 26-27].

This focus on the social aspects of built forms, and particularly the power relations that are established 'in and through them' makes his approach similar to that of Foucault. He also posits an epochal change from 1750 to 1850 when a typological explosion occurs. In earlier work on the Scottish Enlightenment he similarly identifies the period 1730 to 1830 as critical, when "almost overnight completely new building types were called for", defined not only stylistically but also in terms of spatial structure in response to the new social forms emerging during that period [Markus, 1982; p 1]. Furthermore, like Foucault he focuses on the relationship of bodies to building space and in particular the ordering of individuals through spatial structure¹⁵. He argues that, "it is reasonable to regard buildings as material classifying devices; they organise people, things, ideas in space so as to make conceptual schemes concrete" [ibid.; p 19].

However, unlike Foucault he maintains a much more consistent and analytically productive approach to space. He argues that space should be approached topographically rather than geometrically; that is in an a-formal manner distinct from the characteristic 'formal' understanding concerned with the symbolic, semiotic and abstract content of style and geometry based in the "analysis of such properties as axial composition, proportion, scale, rhythm, regularity and articulation" [1982; p 5]. In making this clear distinction between form, function and space he avoids Foucault's overloading of the term 'space' and his subsequent difficulty in linking spatial and social phenomena through an analysis of 'space' which derives more from 'formal' analysis despite his distinction between 'architecture' (as walls) and 'space' (as distribution) [see above, chapter 8.1]. The understanding of the relationship between formal attributes and social outcomes has always been mired in the problems of determinism and Foucault's confused treatment confounds the potential of the configurational ideas that he touches upon.

For Markus buildings are a particular form of social practice which, along with texts and language, complete a critical triangulation between social practice, social relations and the

¹⁵ Although for Markus this interest in the body in space comes through an engagement with Husserl's notion of the 'Lifeworld', "a world in which I experience myself and to which I belong, through my body" [Markus, 1993; p 10].

experiencing individual, together forming 'society-in-history'¹⁶. Space, considered topologically rather than geometrically, is critical in this articulation of experience, practice and relations because through 'nextness' space expresses the functional requirements of the building, such that "not only who did what, when and with whom, in what form of space but where and next to whom" is prescribed. Buildings are, therefore, "more than passive containers for relations. Like all practices they are formative, as much through the things that happen in them, their functional programme, as by their spatial relations and their form" [1993; pp 9-11].

He draws a distinction between two types of human relations; the first, power relations, are constituted through rules, structures and control of resources; the second, bonds, are not controlled by rules and include love, friendships and solidarity. However, both are produced and modified through 'concrete' social settings [pp 10-11] and Markus relies heavily on the ideas of Space Syntax in analysing this impact, focusing particularly on the relations between 'inhabitants' and 'visitors', 'controllers' and 'controlled' within the social and spatial structure, following closely the ideas of strong and weakly programmed space introduced above [see above p 253 and Markus, 1993; pp 13]¹⁷. His use of the techniques of Space Syntax are, by his own admission, limited to the most elementary, and centre on the techniques of the justified graph as a tool by which to relate configurations of spaces to a relativized measure of strategic importance and control; "Depth indicates power" [p 16].

He provides two examples. Analysis of plans of three hospitals from the mid to late 18th century (the period of interest for both Markus and Foucault) show the gradual systemisation of techniques of spatial control [see figure 8.4]. The earliest example, 1738, shows patients on varying levels of depth within the spatial system and also on circulation routes shared with other patients and staff. By 1797, however, all patients are individuated, isolated both from one another and staff [Markus, 1993; p 17-18]. This perfectly illustrates the development of what Foucault would term the "disciplinary society" based upon the spread of spatial techniques of power, yet here it is described within a historicist and spatially sensitive analytical framework of which Foucault seems incapable.

¹⁶ See Markus, 1993; p 8 for his explanation and diagrammatic representation.

¹⁷ Markus' profound debt to Hillier and Hanson's work, in particular *The Social Logic of Space* [1984] can clearly be seen.



Figure 8.4 The spatial structures of three hospitals analysed by Markus; from top, Edinburgh Infirmary (1738), the London Hospital (1752) and the Manchester Infirmary with extensions (1797) [Source: Markus, 1993, figure 1.7 pp 17-18 in original].

Markus's other example, closer still to Foucault's project, is an analysis of the Benthamite Edinburgh Bridewell prison of 1791. He focuses on the apparent contradiction of the plan which shows two observation towers, one where Hillier and Hanson's theory would predict, in a shallow position controlling the prisoners in their cells, the other inexplicably deep in the plan, placed to oversee the exercise yards. However, the two surveillance points are connected by a tunnel in the basement, not shown by the principal ground floor plan. A configurational analysis taking account of this route of access shows both points of surveillance and power to be where one would expect, shallow in the spatial structure controlling the interface between the outside world and the prisoners in the deep recesses of the prison [see Markus, 1993; pp 15-16]. Furthermore, Markus overlays the structure of spatial configuration with the visual linkages that cut across the spaces and are of vital importance to the functioning of this panoptic space. As was pointed out above, had Foucault performed a similar technique he would have seen that the star and gallery shaped variants on Bentham's proposal do not exhibit the same continuity between spatial and visual characteristics that allows the maintenance of discipline through the presumption of continuous surveillance.

Space Syntax provides, therefore, the technique by which to approach the problem of spatial configuration which Foucault lacks. Furthermore, it resolves the problem of the genotypical power relations in built forms. Rather than lying in any one building type, where Foucault mistakenly tries to locate it, the genotype is found in the abstract relations between people as they are manifested in all built forms, which themselves can only ever be more or less idiosyncratic phenotypes of this more basic relation. To quote directly;

A building may therefore be defined abstractly as a certain ordering of categories, to which is added certain systems of controls, the two conjointly constructing an interface between the inhabitants of the social knowledge embedded in the categories and the visitors whose relations with them are controlled by the building. All buildings, of whatever kind, have this abstract structure in common; and each characteristic pattern that we would call a building type typically takes these fundamental relations and, by varying the syntactic parameters and the interface between them, bends the fundamental model in one direction or another, depending on the nature of the categories and relations to be constructed by that ordering of space [Hillier and Hanson, 1984; p 147].

Markus' study develops this theme of control through spatial structuring far more convincingly than Foucault's across a range of differing building types; those that Foucault would include in his 'carceral archipelago' such as, of course, prisons, schools, courthouses, factories; but also buildings such as commercial exchanges, museums, and lecture theatres. While Markus's work itself certainly owes much to Foucault's schema, his less abstract and more historical and taxonomic approach complements Foucault's well, both in terms of the historical development of building types and discourses about buildings. I use it here as an example of the potential for more contextual extrapolation (in the vein of that offered by Foucault) than Hillier and Hanson typically provide, thus opening up perhaps a more palatable mediation to their essentially abstract ideas on building genotypes.

Theory of Reversed buildings

Hillier and Hanson do, however, provide a detailed analytical discussion of the building types that so concern Foucault [see *The Social Logic of Space*, pp 183 - 197]. The object here must not be to reproduce that discussion, rather necessarily to paraphrase it to demonstrate the considerable parallels and weaknesses within Foucault's work. The aim then, as with the preceding discussions in this second section, is not to deny the validity of Foucault's work, but to demonstrate that a configurational understanding of space clarifies the spatial components of his argument.

Hillier and Hanson make a distinction between two broad types of building. The former ("elementary type") is characterised by power or control increasing with depth in the spatial structure. Inhabitants (or 'controllers') occupy these deeper spaces while visitors are kept in shallower spaces of interaction. Examples might be a church, where the priest occupies the deep space at the altar and the congregation enter directly from outside to the nave, or a domestic building, where private spaces (bedrooms, study areas, bathrooms) are recessed deeper into the configuration while spaces of interaction (halls, living rooms, kitchens) are typically shallower¹⁸. The latter, which they loosely describe as "public institutional", exhibit the opposite characteristic. As we have seen, an example would be the Panopticon or indeed all prison forms, where the controllers (guards) are shallow in the space, while the prisoners (controlled) are deep in the space.

While this equates roughly to the analytical extent of Foucault's approach, Hillier and Hanson develop the theme considerably further. Like Foucault they argue that buildings are reflections of, and constitutive of, society but while the mechanism of this mediation for Foucault is unclear (though implicitly spatial), Hillier and Hanson are able to articulate it. They argue that the former

¹⁸ I am aware that this is a great over simplification of their argument, both generally and specifically in relation to church and domestic spaces. A full discussion can be found in *The Social Logic of Space*, chapters 4 and 5.

building types embody knowledge of social relations and by the spatial control of the inhabitant/visitor interface act as rule systems that reinforce social solidarity. Buildings are concretised social knowledge and replicate and reinforce the social rules found outside the building's boundary [Hillier and Hanson, 1984; p 184].

However, the latter 'reversed building types' are "about the pathology of [social] descriptions" and are concerned not with the reinforcing of established relations through enactment but with the "restoration, purification and instillation of descriptions" through a highly controlled domain of 'overwriting' in which social knowledge is suspended to allow its reconstitution [ibid.; pp 184-5]. The distinction is apparent in the function of the primary cells and circulation spaces in the spatial structure. In the elementary type the primary cell defines a social category by defining its permissible relations – in a domestic house, for example, bedrooms of family members are highly segregated because of the powerful incest taboo, exceptions being permissible relations such as spouses and young siblings. In the reversed type, the primary cell is a singularity *without* relations, which have been deemed detrimental. Similarly, while in the elementary building circulation spaces permit inhabitant/visitor interaction and define through their asymmetries the heterogeneity of social status, in the reversed type circulation spaces allow the inspection and control of prisoners/patients, thus defining their homogeneity [ibid.; pp 184-5].

This is perhaps only one level of sophistication beyond Foucault's analysis, which as I argued above, one feels intuitively grasps many of these spatial refinements but lacks a system by which to understand and articulate them. However, Hillier and Hanson then demonstrate that there are two distinct types of reversed building with an entirely different socio/spatial logic; those dealing with the pathology of individuals and those dealing with the pathology of society. I wish to suggest that it is Foucault mistaken elision of these two subtypes within his 'carceral archipelago' that lies at the core of his misunderstanding of the role of space.

The first type of building is typified by the infirmary, in which individuals interact directly and in a controlled environment with "those whose knowledge of the inner workings of nature can restore them to their proper state" [ibid.]. This is the basis, Hillier and Hanson argue, for the professional relationship of doctor and patient in hospital; the doctor comes (at the bedside) into direct physical yet unequal relationship with the patient. To allow this interaction the control function of the space must be weak compared to the circulation function, the professional relationship his authority by withdrawing to a segregated space.

In the second type, dealing with the pathology of society, the control function is exaggerated and the interface structure weak, the building centring on the need to remove from society undesirables. The building is reversed in the interests of spatial control more than the interests of redemption, the visitors are maximally segregated both from each other and from the controllers though the absence of an interface [ibid.; pp 186-7].

Hillier and Hanson rehearse two examples of the building types, but I wish to return to Foucault and suggest that the characteristic similarities and yet configurational differences between Foucault's pivotal examples of Mettray and the Panopticon can be explained by these two related but quite distinct types. At Mettray there was close association between 'inmates' as well as between inmates and overseers. Foucault shows us the dormitory systems at Mettray [see figure 8.3, p 251], and Driver provides us with considerably more detailed information from his review of the dozen and more pamphlets published between 1855 and 56 in Britain [Driver, 1990]. They both concur that although surveillance and record taking was still central, there was an absence of physical confinement, surveillance being carried out by a 'chef de famille' who lived with the young boys in the reformatory [Driver, 1990; pp 272-6; Foucault, 1995; pp 293-6]. Furthermore, these foremen were themselves "subjected as pupils to the discipline that, later, as instructors, they would themselves impose" [ibid.]. This clearly corresponds to the first type, that was concerned with the pathology of the individual (as one would expect with a 'reformatory'). The spatial structure is centred around the circulation spaces in which the pathologies of individuals are 'cured' through 'unmediated, direct and physical relation' with mentors.

In contrast, the Panopticon represents the second type of institution. Here I disagree with Hillier and Hanson who argue that the Panopticon is "an attempt to have both aspects of the genotype of the reversed building at once" [1984; p 188]. While I agree that in its conception the Panopticon aimed for the reform of the individual, I disagree that as well as its strong control dimension characterised by segregated prisoners, at the same time, "through direct visual links from centre to periphery it attempts to construct a direct interface between the inhabitant possessors of knowledge and the prisoners" [ibid.]. Hillier and Hanson are perhaps forgetting that the visual link between the central watch tower and the peripheral cells operated in only one direction. It is central to Bentham's vision that the prisoners should never know whether or not they were being observed and so they become trapped by the fear of constant potential surveillance. Great pains were taken that no shadow or sounds should give away the presence of the overseer and so the direct interface with the 'reflexive knowledge' embodied in the socialised inhabitant/controllers of the space breaks down. It was perhaps in denying the interaction of prisoners, even with those in authority over them, that Bentham made his greatest spatial and criminological error, earning him the reputation of 'tyrant' rather than 'reformer'.

Coda: Foucault and the alephic and ecstatic visions.

The previous sections have attempted to show that while Foucault has perhaps an intuitive sense of the importance of spatial configuration he lacks the rigour of approach that the methodologies of Space Syntax provide. In approaching buildings in formal rather than 'spatial' terms he misses the subtle similarities and configurational differences between plans, eliding structures such as Mettray and the Panopticon which are in reality quite different. This refinement is expressed in Hillier and Hanson's analysis of the modern hospital, in which they identify four different sociospatial genotypes at work [ibid; p 192]. In so doing they uncover the parallels between the hospital form and other types of building, a far more sophisticated spatial analysis than that presented by, say, Foucault or the huge taxonomic work of Thompson and Goldin [1975]. Furthermore, without fully grasping the mechanism by which space has social significance, his account carries unsatisfactory deterministic overtones and misses not only the spatial but also the social differences between such buildings.

In this respect it should be recognised that Space Syntax, often misrepresented simply as a methodology for analysing spatial configuration, is as much a social as a spatial theory. In confronting Foucault's work with this alternative approach to space, his understanding of society, as much as space, is therefore brought to the fore. Hillier and Hanson propose a fundamentally unified approach to the understanding of social and spatial forms in which it is from the experience of our built forms that we are able to retrieve the basic description of what society is. For Foucault, by contrast, buildings are signs *of what society has become*. While he understands there to be a reciprocal relationship between built form and society the two are not equal. For Foucault, space follows society *de facto*. I question, therefore, the assertion of Driver and others that space is of central importance to Foucault. Rather, space is a technique, not only in the sense in which he presents it in his historical narrative, but also in the sense of a rhetorical technique of persuasion within his own discourse. That is to say, that rather than setting out to understand the relationship between society and space (as do Hillier and Hanson), Foucault uses space as evidence to consolidate his already formulated understanding of society. Space is not central,

therefore, because for Foucault it is never part of *the question*, rather it is an 'alephic' technique mobilised in providing the answer

It is not possible therefore to abstract Foucault's understanding of space from his wider picture of the world. In opening this avenue we see further parallels with the second underlying theme of this thesis, what I have referred to above as an 'ecstatic vision'. We have already encountered Semple's criticism of Foucault's scholarship, that he quarries evidence from the past to construct his theory [Semple, 1992; p 110; and above, chapter 8.1] but she goes on to argue that his evidence is not simply selective but sensationalised. "Like a magpie [she argues,] Foucault selects his glittering evidence to construct his baleful picture of the present" [ibid.].

There are two issues at stake here. Firstly, Foucault's view of the world. Semple's theme – that Foucault has done Bentham a "grave injustice" - is based on his vastly truncated reading of Bentham' writings. She argues that in fact there is a great deal of similarity and sympathy between the two authors, and argues that Bentham would have shared Foucault's understandings and fears of "secret, furtive power" [Semple, 1993; p 321]. Likewise, she notes that Foucault entirely ignores Howard, who was Bentham's precursor in the invention of the Panoptic space. "Howard, humdrum, sensible, religious and genuinely altruistic was far less suitable for Foucault's polemical purposes", she argues [ibid.]. Furthermore, Driver notes that Foucault seems not to consider the less sensational possibility that such regimes could be neutralised through practises of resistance. This possibly seems to contradict Foucault's approach to the converse of discipline, freedom, which he says cannot be separated not only from social relations and spatial distributions but also the "practice of freedom by people" [Driver, 1993; p 4 and Foucault in Rabinow, 1984; pp 246-7].

We see in Foucault the distopian vision that was encountered in so much popular writing about modern spaces reviewed above [see chapter 4]. His discourse on space, just as those encountered above, is rhetorical rather than analytical and simply bolsters Foucault's narrative. As Semple argues, "Foucault had a *revelation* of a new meaning of human existence which must be either accepted or rejected – we are in the realms of the unverifiable" [ibid.; p 109].

The second issue is the style in which Foucault writes. Again, like much of the more popular writings on cities and architecture examined above it is polemical and declamatory. "[I]t is impossible to argue against such oracular declarations", Semple claims, but notes that, "They say

more about Foucault's claustrophobic distrust of the world than they do about Bentham's theory of representative democracy" [Semple, 1993; p 329].

Postscript: Beyond Foucault

Before leaving Foucault and issues of space and power I want to demonstrate the continued influence that his work has, particularly among architectural and urban theorists (reminiscent of the impact Bentham's own work had almost two centuries earlier), and its pertinence to the suggestion of a 'structure of feeling' towards space. Following the concern of this thesis to draw parallels between more theoretical and abstract academic works and populist writings on cities and architecture, I want to turn briefly to the work of Mike Davis who perfectly straddles this divide.

In his enormously popular book, *City of Quartz* [hereafter CQ], Davis, like many who cross the boundaries between academic and populist literature, does not provide a bibliography¹⁹. However, we must assume that in the chapter "Fortress LA" [pp 223 to 263] there is an unacknowledged debt to Foucault. Davis' examples resound with Foucauldian imagery;

Downtown, a publicly-subsidised 'urban renaissance' has raised the nation's largest corporate citadel, segregated from the poor neighborhoods around it by a monumental *architectural glacis*. In Hollywood, celebrity architect Frank Gehry, renowned for his 'humanism', apotheosizes the siege look in a library designed to resemble a foreign-legion fort. In the Westlake district and the San Fernando Valley the Los Angeles Police barricade streets and seal off neighborhoods as part of their 'war on drugs'. In Watts, developer Alexander Haagen demonstrates his strategy for recolonizing inner-city retail markets: a *panopticon* shopping mall surrounded by staked metal fences and a substation of the LAPD in a central surveillance tower [p 223, emphasis added].

However, Davis' focus is not upon a Foucauldian notion of power as exerted at the level of the body but at the level of class and economic interests. He continues;

Welcome to post-liberal Los Angeles, where defense of luxury lifestyles is translated into a proliferation of new repressions in space and movement, undergirded by the ubiquitous 'armed response'. This obsession with physical security systems, and, collaterally, with the architectural policing of social boundaries, has become a zeitgeist of urban restructuring, a master narrative in the emerging built environment of the 1990s [ibid., emphasis added].

¹⁹ Semple, rather pettily, raises the same issue in relation to *Discipline and Punish* as evidence of Foucault's "limitations as a historian" [Semple, 1992; pp 109-10].

The themes are reminiscent of Foucault's 'disciplinary society', and architecture is seen to serve a similar role as a strategy of power relations which forms the basis of a new model of society, a "zeitgeist" in the same way that the form of the Panopticon becomes the basis for Foucault's 'panopticism'.

As with Foucault the built environment is seen as a text that describes the society in which it was formed;

The 'Second Civil War' that began in the long hot summers of the 1960s has been institutionalized into the very structure of urban space [p 224]. [...] Indeed the *totalitarian semiotics* of ramparts and battlements, reflective glass and elevated pedways, rebukes any affinity between different architectural or human orders.... [T]his is the *archisemiotics of class war* [p 231, emphasis added].

Furthermore, like Foucault architecture is seen as a strategy, here geared to the political and economic exercise of power;

The observations that follow [Davis states in the introduction to Fortress LA] take as their thesis the existence of a new class war (sometimes a continuation of the race war of the 1960s) at the level of the built environment. Although this is not a comprehensive account, which would require a thorough analysis of economic and political dynamics, these images and instances are meant to convince the reader that urban form is indeed following a repressive function in the political furrows of the Reagan Bush era. Los Angeles, in its prefigurative mode, offers an especially disquieting catalogue of the emergent liaisons between architecture and the American police state [CQ, p; 228, my emphasis].

The built form is not only a reflection of these social changes but also a technique or strategy of repression. Again, the rhetoric is distinctly Foucauldian:

[T]he 'fortress effect' emerges, not as an inadvertent failure of design, but as a deliberate socio-spatial strategy [p 229].

Davis understands society in a Marxian framework of duality and conflict between a repressive hegemon and subversive counter-culture. Like Foucault he sees the socio-spatial strategy as being entirely successful and does not countenance the idea of the architectural environment being subverted.

Like Foucault he implicitly understands there to be a direct relationship between the physical structure of cities and buildings and behaviour. He takes on-board uncritically the work of William Whyte [*The Social Life of Small Places*, Whyte 1985, see footnote 11, CQ p 232] who advocates such a relation between form and use, and also Midler [*Crime and Downtown Revitalization*, 1987 in *Urban Land*, see CQ p 231] whose design proposals for reducing crime are reminiscent of Jane Jacobs' determinism. His descriptions of LA rely heavily on what Foucault would refer to as 'semio-techniques', particularly in relation to the corporate architecture of the new downtown areas and the suburban architecture of Frank Gehry and mall environments;

the neo-military syntax of contemporary architecture insinuates violence and conjures imaginary dangers. In many instances the semiotics of so-called 'defensible space' are about as subtle as a swaggering white cop. Today's upscale, pseudo-public spaces – sumptuary malls, office centres, culture acropolises, and so on – are full of invisible signs warning off the underclass 'Other'. Although architectural critics are usually oblivious to how the built environment contributes to segregation, pariah groups...read the meaning immediately [CQ, p 226].

However, like Foucault this approach via semiotics sits uncomfortably with the central issue in his work; the permeability of the physical space of the city, particularly in relation to the differential movement possibilities and distributions of opposed class groupings. Once again there are two approaches to architectural and urban space here that Driver referred to as 'associational and spatial functionism'; firstly as the decodable sign and secondly as the material realm of action where the response to decoding is manifested [see above p 250]. And once again the former is handled fluently in the language of semiotic analysis, leaving the latter to be taken for granted through rhetorical force; "[they] read the meaning immediately" and presumably act, but there is little evidence presented that this is the case.

Their approaches to spatial and architectural issues are parallel therefore, and Davis finds his Panopticon in the 'fortified' development of Bunker Hill [see figure 8.5]. His concern is partly semiotic and partly with what he terms the loss of 'pedestrian democracy'; "the current bias against *any* spatial interaction between old and new, poor and rich..." [CQ; pp 229-30]. However, beyond emotive references to an "architectural glacis", the "fascist obliteration of street frontage" and the removal of the historic Angels' Flight funicular railway, there is no discussion of the urban and architectural forms that apparently have such an impact on pedestrian movement. Very









Figure 8.5 Views around Bunker Hill, Los Angeles; Clockwise from top left, the view up to Bunker Hill from Hill St, towards 'Skid Row'; the 'pedestrian' streets of Lower Grand Avenue; office workers looking out over 'Skid Row' area from the viewing platform (visible in first image); Lower Grand Avenue [Source: author's own photographs].

basic research was conducted in 1996 to correct this lack²⁰. Although not using the more sophisticated techniques of spatial analysis offered by Space Syntax (which were not familiar to me at the time) it did confirm Davis' thesis, demonstrating that there was considerable spatial isolation between the Bunker Hill area and the poorer immigrant districts immediately adjacent. Although a configurational approach was not employed, certainly the severing of all direct pedestrian linkages between the two zones (access to Bunker Hill from the east is by way of two narrow staircases scaling the three storey basement parking structure) and the tunnelling of all road connections below the new development would lead to a high degree of segregation between the two.

As with all the authors discussed in this section, Harvey, Giddens, Goffman and Foucault, as Davis moves from geographical to architectural spaces his analysis begins to fragment and he patches the link between social and spatial phenomena with implication, didacticism, hyperbole and sensationalism. At root there is a critical lack of an empirical methodology with which to approach the material spaces of social experience which nonetheless have critical importance to the overall arguments of authors proposing the 'reassertion of space in critical social theory'.

Conclusion: Part of the way modern men think?

I wish to return to the quotation with which I opened this chapter, taking some liberties with Giedion's original. Following Hillier and Hanson's assertion that built form provides us with the description retrieval of society, and Foucault's focus on discourse, I wish to suggest that;

Everything in [*architectural discourse*], from its fondness for certain shapes to the approaches to specific building problems...reflects the conditions of the age from which it springs.... However much a period may disguise itself, its real nature will show through in its [*discourse*] [op cit.].

Discipline and Punish is less an historical analysis than a discourse on socio-spatial relations, and if we are to follow Semple and credit Foucault with being 'part of the way modern men think', then one would expect *Discipline and Punish* to reflect commonly held ideas on social and spatial forms, forming what Giedion describes as "an index to a period".

²⁰ This research, a dissertation on the idea of 'Fortress Cities', was undertaken as part of an undergraduate degree in geography at the University of Cambridge.

I have sought to make these reflections explicit, and ironically for one intolerant of epistemic histories, we find *Discipline and Punish* 'indexing' precisely the spirit of the age in relation to its understandings of space. Not only is space presented as the 'Columbus' Egg' (another ironic twist of history!) that revitalises historical and social understandings, the trademark of the respatialization theorists, but the conception of space is as muddied as ever. It is at once literal and metaphorical; geographical, architectural and corporeal; relative and abstract²¹.

If indeed there has been a détente between the disciplines of history and geography and a diffusion between their respective analytical preferences of time and space, this is surely based on a view of space rooted in the absolutism of conceptual distributions and the subjectivism of semantics that typifies the bipolar approach of geography. It only opens an alternative chasm between historico-geographical understandings of space and material (dare I say 'common sense' or at least 'popular'?) understandings based on the physical space of our experience. It does little, therefore, to realise Hägerstrand's ambition of uniting approaches to space at a geographical and sub-geographical scale. With Foucault, as with the other players in the 'reassertion of space in social theory', as the skein of spatial concerns expand to cover new subject areas, the concept of space has become over-stretched and the material understanding of physical space has been lost.

What is needed, therefore, is a new approach to space that is not only elastic enough to underpin such a wide structure, but also is not an analytical 'add-on'; not a 'revelatory' approach to overcoming a theoretical bottleneck but a theory in which space and society are implicitly linked, more than simply reciprocally related.

Space Syntax has been proposed as a theoretical perspective that has the strength of an associated methodology by which to address the architectural-scale analysis of spatial configuration that Foucault can only allude to. Whether, therefore, Space Syntax might fulfil Hägerstrand's ambition of a unitary approach to spatial problems across geographical and architectural scales, and what the implications of such a suggestion might be, will be discussed in the final chapter.

²¹ Indeed, further parallels could be drawn for with the analysis of other authors presented above. For example, there is clearly some correspondence between Foucault's view of space captured by the diagrammatic representation of the Panopticon, and Harvey's conception expressed diagrammatically as the process of capitalism [see above, chapter 6 and figure 6.1, p 153]. Furthermore, there are parallels between Foucault's analysis of webs/ networks and circulation of power and the spatial approach of, for example, Castells [see above, chapter 4.4].

Chapter 9 Pas de Rapport sans Support¹

The previous section has aimed to build on the assertion of a new 'structure of feeling' towards the understanding of space and the city in both academic and more populist literature that was the subject of section 1, by developing both a common critique and alternative approach to the work of a number of authors associated with the widespread reassertion of space as a lever by which to approach questions of society. This second section has aimed to demonstrate, through a series of theoretical deconstructions and empirical reconstructions, the possibility for a theory of sociospatial interaction based upon the idea of the configuration of built space. Configuration, and its impact upon the structuring of probabilistic movement, and therefore encounter, and social patterns of urban and architectural forms, was shown to address the ongoing problems experienced in dealing with the influence of the physical realm without encountering deterministic objections.

This penultimate chapter, before the more speculative conclusions and extrapolations of the final chapter, aims to accomplish two things. Firstly, I aim to condense the arguments presented in this second section and to reinforce my insistence on the possibility of a mutual common ground between the approach of Hillier *et al* and those contributors to the wider socio-spatial discourse. However, rather than reiterating what has gone before I hope to achieve this by introducing one final, and perhaps many would argue most significant (and thus far most conspicuously absent) 'spatial player'; Henri Lefebvre. Having made a case for a common ground with this, perhaps, most unlikely of theorists, I wish secondly to examine the responses, such as they have been, to the propositions of Space Syntax by those better known socio-spatial 'pioneers' who themselves draw heavily on Lefebvre's work, thereby bringing the thesis full circle by focusing particularly on recent contributions from Ed Soja.

It is perhaps not inappropriate to use the work of Henri Lefebvre in this summational capacity, as his writings on cities, and more recently specifically space, is a tangible undercurrent through much of the literature examined thus far (the notable exception being the work of Foucault, which

¹ This phrase is Lefebvre's, referring to the spatial contextuality ('support') of social relations ('rapport') [Lefebvre, 1991, quoted and translated in Shields, 1988 p 43].

Lefebvre criticised for its loose metaphoricity in its approach to space [Lefebvre, 1991; p 4; see also Kofman and Lebas, 1996; p 5]). Indeed, a genealogy of the seemingly pervasive but undercurrent nature of his 'millpond' influence can be assessed through the comments of his reviewers. Shields notes that, although often uncited, Lefebvre's work underpins the discourse of the midtwentieth century French intellectuals, those same French philosophers and social theorists whose work has been the subject of an "uncontrolled international intellectual exportation", particularly to the United States [Kofman and Lebas, 1996; p 4; quoting Wacquant, 1993; pp 254-5]. So it is, then, that he is now described as a "cult figure" in Anglo-American intellectual circles, although interestingly Merrifield argues that his pre-eminent status owes as much to the particular attention he has received among Anglo-American geographers such as Soja, Harvey, Jameson and Gregory, as to his prior independent influence [2000; pp 168-9].

Despite Lefebvre's long association (beginning as early as 1935) with urban analysis, his work remained little known (and translated) outside France, meriting only passing reference in critical works in the development of 1970s Marxist geography such as Harvey's *Social Justice and the City* [1973; see the analysis of Lefebvre's contributions pp 305-14]. However, it was the translation into English of the 'second moment' of Lefebvre's analysis, moving from discourse *on* space towards "the diachronic discovery of the process by which meta-level discourses *of* space are socially produced" that was to have the most profound impact [Shields, 1988; pp 3-4]. For the publication in English of *The Production of Space* has been described as "*the* event within critical human geography of the 1990's" [Merrifield, 2000; p 170, sic].

Given this genealogy of relevance, it is perhaps important to justify why such a critical figure has not appeared earlier in a thesis whose subject has been as much about tracing such bloodlines in recent writing on the city as addressing new perspectives. My justification is twofold, and nested. Firstly, as has already been indicated above, Lefebvre forms a theoretical underpinning for many authors discussed above, perhaps the most important being Soja who develops Lefebvre's ideas almost religiously. In a very real sense, therefore, we have already encountered many of Lefebvre's contributions, albeit in a 'pre-digested' form. However, this in itself is important, for one of the strengths of Soja's work is in dragging Lefebvre's theoretical framework into the more tangible context of 'Soja's LA'. It has been the explicit approach of this thesis to attempt theoretical extensions through empirically based reworkings. My second justification for relegating Lefebvre's work to this concluding stage, therefore, is that he offers little material with which to open up such an empirical approach. This is in part due to his style, accurately described as "tantalizingly loose, prolix and episodic", proceeding through a series of 'approximations' in a manner parallel with a musical score [Merrifield, 2000; p 170, Borden, 1998; Shields, 1988; Soja 1989]. Although this undoubtedly makes it difficult to draw comparisons with authors such as Hillier, raised very much in the Anglo-American tradition of logical empiricism, I hope to show in what follows that although perhaps Lefebvre's *Production of Space* does suggest a 'sensibility' more than the 'closed system' of Hillier's work, nonetheless these antithetical authors do share considerable common ground². However, more than a stylistic impasse, the difficulty in approaching Lefebvre's *Production of Space* in the same way as I have the other work examined in this section is that the analysis itself deliberately frustrates what Lefebvre might well have seen as 'empirical hijacking' by geographers and other 'spatial scientists' to whose approach to space he would have been (mistakenly, I aim to show) resolutely opposed. As Markus generously argues, "[I]t was not his task to push the analysis of concrete experience further" [Markus, 1993; pp 12-13], while Harvey, discussing the spatial triad of *The Production of Space*, demands more bluntly, "Where is it, Henri?!"³

Lefebvre's interest in space and the urban realm develops, much as did Harvey's and Soja's, in response to the changing global circumstances, economic and social, of the post war era, particularly the 1960s. His concerns moved increasingly from his earlier focus on rural life to engage with the reorganisation of the capitalist system and its impact upon both the urban and social systems. Passages from *Le Droite à la Ville* [1968] are reminiscent of Harvey's analysis in *Social Justice and the City*, and indeed Harvey's debt to Lefebvre is clear. Lefebvre writes; "The projection of the global on the ground and on the specific plane of the city were accomplished through mediations...Global processes, general relations inscribe themselves in the urban text only as transcribed by ideologies, interpreted by tendencies and political strategies" [Lefebvre, 1996; pp 107-8]. Lefebvre's project bore similarities therefore to the work within geography at the time, his aim being the redirection of historical materialism towards a spatial problematic that was later to resurface as the central theoretical concern of Soja [Soja, 1985; 1989; Shields, 1988; p 3, Kofman and Lebas, 1996].

And yet despite this, his work remained largely ignored, even commentators such as Harvey paying only passing attention [see the concluding remarks in Harvey, 1973]. Kofman and Lebas advance two explanations for this isolation during the 1970s and 80s. Firstly, they note that

² Kofman and Lebas suggest that "being a Lefebvrian is more a sensibility than a closed system" [Kofman and Lebas; 1996; p 8].

Lefebvre was antagonistic to the perspectives of the structural Marxists which was the dominant discourse of the time, and further, that by the 1980s there was a waning of interest generally in all such Marxist approaches. Secondly, however, they identify an antagonism surrounding the issue of space. They argue that, "[o]n the whole, geographers were concerned with concrete space, while much sociology has spoken of space in metaphorical terms" [ibid.; p 37]. Neither was concerned with the "production of space" in the sense that Lefebvre was to develop.

Indeed, if Lefebvre's work opened up in a sense a 'new space' between that of the geographers and sociologists, it must be clear that despite his intention to promote discourse across disciplinary boundaries, even a 'unified idea of space', he was himself deeply antagonistic towards the 'space' of other disciplines. He is quite explicit; "the theory of space refuses to take the term 'space' in any trivial or unexamined sense, or to conflate the space of social practice with space as understood by geographers, economists and others" [Lefebvre, 1991; p 420]. He is, furthermore, scathing of the putative 'science of space' which he argues has been struggling to emerge for some time. "To date", he continues [writing in the early 1970s], "work in this area has produced either mere descriptions which never achieve analytical, much less theoretical, status, or else fragments and cross-sections of space" [ibid.; p 7]. This failure of what he calls a 'science of space' he relates back to the basic philosophical problems of the nature of space. "It [the 'science of space'] disperses itself and loses itself in various considerations about what there is in space (objects and things), or over an abstract space (devoid of objects and geometrical)" which in turn he linked to disciplinary fragmentations, and hence to the epistemological problems of knowing space [1996; p 196]. For although these approaches may provide inventories of what exists in space, or generate discourse on space, Lefebvre argues that they, "cannot ever give rise to a knowledge of space" [1991; p 7].

He is similarly antithetical to the extremes of semiological approaches, despite in earlier work arguing for the conception of the city as a 'semantic system', "urban language or urban reality considered as a group of signs" [from *Le Droite à la Ville*, reproduced in Lefebvre, 1996; p 108]. He goes on to argue for a more nuanced semiology, one that is sensitive to the context of the urban [ibid., and pp 115-6], and it is this less orthodox position that is further developed in *The Production of Space*, where he asserts that such approaches likewise do not penetrate beyond the descriptive level and "must surely reduce that space itself to the status of a *message*, and the inhabiting of it to the status of *reading*" [p 7]. He describes the work of Kristeva, Derrida and

³ Comment made during a public lecture at the London School of Economics, 1999.

Barthes as dogmatic, and guilty of the basic sophistry of fetishizing what he describes as a "philisophico-epistemological" notion of space, in which "the mental realm comes to envelop the social and physical ones" [p 5]. As with his critique of a 'science of space' he argues that ultimately we are, "bound to transfer onto the level of discourse, of language *per se* - i.e. the level of mental space - a large proportion of the attributes and 'properties' of what is actually social space" [ibid; p 7].

Lefebvre's central concern reflects to a remarkable degree the central thrust of this thesis. Conceived of within the more conventional format of a thesis, Lefebvre's 'problem statement' is that, "the modern field of enquiry known as epistemology has inherited and adopted the notion that the status of space is that of a 'mental thing' or 'mental place'". How then, he asks are "transitions to be made from mathematical spaces (i.e. from the mental capacities of the human species, from logic) to nature in the first place, to practice in the second, and thence to the theory of social life - which also presumably unfolds in space?" [1991; p 3]. The parallel should be clear with my own concerns with the dematerialzed space uncovered through the preceding two sections and its relation to the physical realm of experience. The familiar tone of Lefebvre's frustration and his sense of paradox almost parodies my own earlier arguments;

We are forever hearing about the space of this and/or the space of that: about literary space, ideological spaces, the space of the dream, psychoanalytic topologies, and so on and so forth. Conspicuous by its absence from supposedly fundamental epistemological studies is not only the idea of 'man' but also that of space - the fact that 'space' is mentioned on every page notwithstanding [ibid.].

We are, then, confronted by an "indefinite multitude of spaces, each one plied upon, or perhaps contained within, the next: geographical, economic, demographic, sociological, ecological, political, commercial, national, continental, global" [ibid; p 8]. To the end of this perhaps predictable list, Lefebvre adds, separated for emphasis, "[n]ot to mention nature's (physical) space" [sic], for it must be clear that Lefebvre's resolution to the problem of space as he conceives it is to propose a rapprochement between mental, social *and* physical spaces to achieve what he refers to as a "unitary theory of space" [ibid.; p 11]. In uniting these fields he aims not to reinforce the distinctions between them but rather to open mediations between them that can counter entrenched disciplinary subdivisions [Shields; 1988, p 6].

It should be clear that in intention at least this offers opportunities for parallels with the work of Hillier. Both aim to illustrate the mediations between the three fields of physical space, mental

space and society, which Lefebvre clarifies as the space of social practice, the space occupied by sensory phenomena and logico-epistemological space [1991; pp 11-12]. Indeed, Lefebvre's own summary of the [then forthcoming] *Production of Space* reflects many of the central tenets of Hillier's approach; the close relationship between 'urban reality' and 'practico-social activities' which revolves around a mutually constitutive reciprocity, producing and reproducing patterns of social and spatial relations. Lefebvre writes;

This theory of social space encompasses on the one hand the critical analysis of urban reality and on the other that of everyday life. Indeed, everyday life and the urban, indissolubly linked, at one and the same time products and production, occupy a social space generated though them and inversely [sic]. The analysis is concerned with the whole of practico-social activities, as they are entangled in a complex space, urban and everyday, ensuring up to a point the reproduction of relations of production (that is social relations). The global synthesis is realized through this actual space, its critique and its knowledge. [Introduction to *Espace et Politique* (2nd part of *Droite à la Ville*), 1973, reproduced Lefebvre, 1996; p 185, sic].

Lefebvre places great emphasis upon 'spatial practice' as does Hillier. His project is described by Shields as an attempt to build a "radical phenomenology" of space, which focuses on the level of body and behaviour in what Merrifield calls a "humanist-naturalism", in which 'space', "does not consist in the projection of an intellectual representation, does not arise from the visible readable realm, but is first of all *heard* (listened to) and *enacted* (through physical gestures and movements)" [Shields, 1988; p 4; Merrifield, 2000; p 177 quoting Lefebvre, 1991; p 200]. So it is that Lefebvre's approach to the urban, again resonating with Hillier's, focuses on what in the latter's terminology would be syncroneity and co-presence. The urban form is based in simultaneity, "which socially involves the bringing together and meeting up of everything in its environs". "It [the urban] is a mental and social form, that of simultaneity, of gathering, convergence, of encounter (or rather encounters)" [Kofman and Lebas, 1996; p 19; Lefebvre, 1996; p 131].

However, this is not to suggest that Lefebvre reduces space to "an element ensuring a certain allocation of people in space and a canalization of their circulation" in the same way as he accuses Foucault of doing, and as Space Syntax is often accused of doing [Kofman and Lebas, 1996; p 5]. Lefebvre attempts his unitary theory of space by constructing what Soja refers to as a trialectic; spatial praxis, representations of space and spaces of representations. Lefebvre is clear that this trialectic cannot be resolved into a binary opposition between the lived and conceived, and the latter terms cannot therefore be bracketed. Representations of space refers to discourses

on or about space and is therefore concerned with systems of knowledge and ideology embedded within socially dominant understandings of space. Spaces of representation are "spaces experienced through complex symbols and images" linked to more clandestine and underground dimension of social life which prompt alternative representations of space and new modes of spatial praxis [Merrifield, 2000; p 174; Shields, 1988; p 7].

Without wishing to disrupt this 'trialectic', my concerns lies with understanding the status of physical space for Lefebvre, and its relation to the social and mental. For although the emphasis on spatial practice producing a society's space, that is in turn the key to deciphering the rule structure of that society, has many close parallels with Hillier's approach as outlined above, there can be little doubt that Lefebvre would dismiss Space Syntax as just the sort of reductionist 'spatial science' to which he is adamantly opposed. In his analysis of *The Production of Space*, Merrifield reminds us that Lefebvre remains a Marxist and argues therefore that the critical term in his conception is perhaps '*production*' rather than '*space*' [pp170-171]. He argues that the focus on production in both Marx and Lefebvre is an expression of a radical desire to expose the root causes and inner dynamics, in Marx's case of capitalism, and for Lefebvre of capitalist social space. This search for 'generative moments' focuses on production as a process with the difficulty that, it is "never easy to get back from the object [the present space] to the activity that produced and/or created it" [Merrifield, 2000; p 171; Lefebvre, 1991; p 113].

This theoretical construction and difficulty is important, for Merrifield shows that it exactly parallels the analysis of the fetishism of commodities within Marx. The objective 'thing-like' character of commodities in the market place masks (fetishizes) the social relations that are inherent to the productive process. There is, therefore, a parallel transformation in Lefebvre's analysis from 'things in space' to the 'production of space' as in Marx's transition from 'things in exchange' to 'social relations of production' [ibid.; p 172].

This in turn has profound implications for the way space (or indeed commodities, objects, within Marx's analysis) are treated, for the key must be to remove the opacity of fetishism to reveal the *truth* of commodities, of space, that is to reveal the social relations of production. Lefebvre cautions us;

instead of uncovering the social relationships...that are latent in spaces, instead of concentrating our attention on the production of space and the social relationships inherent to it...we fall into the trap of treating space 'in itself', as space as such. We come

to think in terms of spatiality, and so fetishize space in a way reminiscent of the old fetishism of commodities, where the trap lay in exchange, and the error was to consider 'things' in isolation, as 'things in themselves' [1991; p 90].

What then is the status of space? It, like commodities, is a 'concrete abstraction' - that is it is abstract and yet real, concrete "though not in the sense that an object or product is concrete...social space is constituted neither by a collection of things or an aggregate of (sensory) data, nor by a void packed like a parcel with various contents, and that is irreducible to a 'form' imposed upon phenomena, upon things, upon physical materiality" [ibid.; p 27].

This is surely the defining difference in the approach of Lefebvre and Hillier, for while Lefebvre's space is a 'concrete abstraction', the two oxymoronic terms working in counterpoint to avert the condensing of space within either the physical, mental or social field, for Hillier space is concrete *and* abstract in a crucially different sense which places space within the physical realm but reveals, *precisely through* treating 'space as a thing in itself', its abstract and social potential. Therefore, for Hillier social codes are produced and reproduced through spatial practice, and the codes themselves 'exist' within the physical spatial form, recoverable through our lived experience and ability for description retrieval. This is a condensation around one pole of the physical:social:mental triad which Lefebvre always tries to resist.

Lefebvre concludes by questioning the mode of existence of social relations, and offers the solution, "Pas de rapport sans support" – "Social relations, which are concrete abstractions, have no real existence except in and through space. Their underpinning is spatial" [1991; p 404]. To this simple formula I would seek to add Hillier's enquiry into the mode of existence of *spatial* relations, similarly concrete abstractions whose underpinning and expression is *social* [see above chapter 5 for a discussion of configurations as spatial abstractions which nonetheless exhibit concrete properties, and their reflective and constitutive relationship to social relations].

I have aimed in this argument to approach the 'Lefebvrian sensibility' with a suitably broad brush and to do no more than suggest the commonalities with the approach of Hillier *et al* and the possibility for a mutually expansive common ground. This is perhaps best illustrated by contextualizing Lefebvre's analysis in the way that is a starting point for Hillier. Lefebvre's work has long been associated with the urban unrest of 1968, and Merrifield draws a parallel with the more recent 'Reclaim the Streets' and May Day protests of recent years, arguing that Lefebvre's approach can help to explain these urban, spatial and social phenomena [Merrifield, 2000; p 180]. While this is undoubtedly the case, and I would agree that Lefebvre's analysis adds [particularly] a political dimension that is largely absent in the work of Hillier *et al*, nonetheless there is a sensitivity to the role of space in social (and political) performance that Space Syntax can add. I am thinking here, for example, once again of my work (discussed above) on the behaviour of teenagers within retail centres and the way that they manipulate the physical structure of spatial potential to achieve social (indeed political) ends. Also, of Hillier's anecdote concerning the socio-spatial (once again 'political' in a sense) tactics of a child's disruptive behaviour within a group of adults, using the structuring possibilities of physical space to achieve the social end of receiving attention [see Hillier, 2001].

In opening up these parallels my aim must not be misunderstood as a dispute over the *true* nature of space. Rather it is to demonstrate a *truth* of space, physical space, which indeed reinforces Lefebvre's own perspectives. Once again, this opens a parallel with Lefebvre, who argues that his own project will identify a "*truth of space*, generated by analysis-followed-by-exposition". He distinguishes this from a *true space*, "whether a general space as the epistemologists and philosophers believe, or a particular one as proposed by specialists in some specific discipline" [1991; p 9]. The importance of the Space Syntax approach is in demonstrating that such a specific discipline, which Lefebvre rejects as 'spatial science', can also demonstrate a *truth of space* which similarly has social significance.

There is an opportunity therefore, for the Space Syntax approach to 'dove tail' with that of Lefebvre as well as other theorists, some of whose work I have examined in this section. Regrettably, this possibility is often not taken up or lost for two reasons; firstly, because of the frequent lack of engagement with wider theoretical perspectives within the often introverted and intensely empirical work of the Space Syntax 'camp'⁴; secondly, because when engagement occurs from outside, Space Syntax is often misunderstood and denigrated as a simplistic and reductionist 'science of space' rather than as an attempt to construct an alternative socio-spatial theory based upon an understanding of space at variance with the hegemonic. To address the first difficulty from within Space Syntax has been one motivation behind this thesis, and it is to an example of misreading from outside the discipline that I now turn, bringing the thesis full circle with an analysis of the recent contribution of Ed Soja, who is perhaps among the most dogmatic followers of Lefebvre within contemporary spatial theory, and with whom this discussion began.

⁴ Although I am thinking here more particularly of the empirical work of students and the commercial work of the Space Syntax Ltd which receives more general attention than the theoretical work of Hillier and Hanson among others.

In Different Spaces

Soja makes it clear that the title of his 2001 paper to the Third Space Syntax Symposium, "In Different Spaces", refers to the theoretical domains of Space Syntax practitioners and theoretical human geographers. It is a remarkably partisan paper, and does little to realise Lefebvre's concerns with reducing the fragmentation between disciplines, going so far as to retract the "ecumenical" conclusion that he initially arrives at, that somehow 'residual' disciplines such as Space Syntax should be encouraged "atleast in so far as it stimulates an active engagement with the larger debates on space and social spatiality" [Soja; 2001].

Soja has one essential point, which though perhaps valid is misdirected because of a common misunderstanding of Space Syntax. He argues that theories of socio-spatial relations based upon a physical understanding of space are reductionist, analytically restricted and cannot address the social nature of space. This argument is developed through a discussion of the historical evolution of twentieth century geography, from the rejection of environmental determinism to the development of positivist approaches and their rejection in favour of post-positivist approaches based in a humanist and phenomenological cultural geography and Marxist geography which together form the contemporary critical human geography [see the similar outline in chapter 1].

Positivistic approaches attempted to produce a "new geo-metry", the spatial science so derided by Lefebvre, which Soja argued became difficult to apply to 'noisy' real world situations and hence began to delineate acceptable research. It was in attempting to bring this technique of spatial analysis into the wider context of critical debate on how to explain and interpret the spatial organization of society that the limitations of the approach became apparent.

This is evidently the situation that Soja perceives with Space Syntax, and indeed with efforts such as this thesis, which attempts to describe a role for such analytical approaches within the wider domain of socio-spatial theories. He is, however, adamant that he is not trying to compare directly Space Syntax and mathematical geography, but only for the double-edged reason that "what was happening years ago at Northwestern was *much more academically ambitious*" compared to the Space Syntax movement, "much more pragmatic in its aims" with a clearly defined "professional and practical niche, providing descriptive and modelling tools to assist creative individuals in designing buildings and the small scale urban built environment" [ibid., emphasis added].

The fatal misreading of Space Syntax inherent in Soja's critique, and that of many others, is to reduce it to a methodology of morphological analysis without realising that this in itself is only the expression, and indeed the generator, of an underlying socio-spatial theory. Soja argues that positivist geography, and by extension Space Syntax, suffered from "misplaced concreteness". This critique is inherited from Lefebvre's critique of spatial science that reflects Marx's fetishization of commodities (see above). He argues, then, that in treating space as pure extension, form or geometry, the variable imbued with causal or explanatory authority (in this case space) is itself the consequence of other "unseen and unexamined" social and spatial processes. "Physicalist methodologies are fixed too exclusively on the formal properties of materialized spatial configurations, giving too little attention to the complex social forces that exist behind their appearance".

What he has misunderstood is that Space Syntax is also as suspicious of the "misplaced concreteness" of physicalist approaches. The example which Soja develops as an illustration of these misguided approaches is that of defensible space, apparently oblivious to the amount of critical literature from within the Space Syntax movement on these approaches, with the shared concern over the unmediated relationships proposed between physical space and social behaviours. Space Syntax is based in exactly the approach to space that Soja appeals for; "as a complex social formation, part of a dynamic process that actively and often problematically produces...social spatiality". The difference between Space Syntax and positivistic geography is that, unlike the latter, Space Syntax does not approach questions of the application of techniques to a theory of society in retrospect; rather the techniques are formulated in response to questions posed by a socio-spatial theory. Soja is absolutely wrong, therefore, in stating that, "At the core of these problems [with positivist approaches] is the conceptual autonomy of the physical space described in Space Syntax from the fundamentally social processes that produce spatial form" [ibid.]. In aligning his analysis with that of Giddens' theory of Structuration, and in arguing that in Giddens, unlike Space Syntax, the idea of structure is embedded in the socio-spatial process rather than the physical properties of spatial form and configurations, he has misunderstood that Space Syntax approaches these physical forms as the expression of the socio-spatial process, and indeed the part of it in which social structures can be expressed, retained over time, lived and hence reproduced.

In turning to Lefebvre, "arguably the leading spatial theorist and philosopher of the twentieth century" [another example of Soja's claims to textual authority "disdained" by Moss, 1999; p 249

and see above chapter 2, p 13], Soja reaffirms his adoption of the spatial trialectic examined above. Indeed, he goes as far as to concede that, "Space Syntax and Mathematical Geography provide specialized ways of describing the surface properties of the first space of Lefebvre's triad, the perceived or empirical space created through material spatial practices". He goes on to argue that such approaches have little contribution to the second and third spaces of the triad, and yet his partisan approach seems to prevent him from acknowledging that there is, therefore, perhaps some common ground, and indeed that approaches such as Space Syntax may help to reground theories in danger of 'lifting off' (to return to Chambers' analogy [see above, chapter 4]). I would suggest that Space Syntax is strongly placed to make such a contribution, being already a developed socio-spatial theory, and in fact, far more 'academically ambitious' than positivistic geography, which is in no way its academic ancestor as Soja suggests, since Space Syntax was conceived "in direct and sceptical opposition to this tradition"⁵.

This union between Space Syntax and the wider canon of critical theoretical perspectives on space has always been the limited ambition of this thesis; never to attempt to replace one reading of space with another but rather, through a gradual process of 'tissue-typing' to suggest that there are indeed many parallel perspectives and points of potential integration.

It is implicit in saying this that Space Syntax also stands to benefit much from a more inclusive, less partisan and confrontational debate than that which Soja has offered. Of vital importance is the resolution of the problem of the individual that becomes apparent in tackling the work of Foucault in particular (and also Goffman). As the scale of analysis has been drawn to the conceptual limits at the lower register of Space Syntax, moving from statistical populations to individuals in space, the Newtonian theory of natural movement reliant on distributional probabilities begins to fail. To pursue the possibilities of Space Syntax further, therefore, we must also ease the tension building up within this approach by finding a conceptual way of introducing the individual.

The following and final chapter begins by assessing some of these obstacles that Space Syntax presents to wider acceptance in its current form, before exploring possible future directions and returning to some fundamental debates about the nature of space.

⁵ Hillier, personal communication.

Section 3 – Coda and speculative epilogue

Chapter 10 Beyond 'deep space': towards a spatial ontology?

This final chapter does not intend to follow the convention of restating all that has gone before, but rather seeks to rejuvenate the argument by introducing, if not new material, then certainly new perspectives on the argument, perhaps even standing it on its head. I wish to return to the tentative ideas of the prologue, that bookends this speculative epilogue, where two propositions of 'strategic naivety' were put forward. The first of these 'working hypotheses' related to the approach to space that has been an undercurrent throughout this argument. There I followed Hillier's 'WYSIWYG' approach, asserting both a commitment to empirical enquiry and that our understanding must be accessible to common discourse and relevant to material experience, that is, to 'actual spaces' as well as theoretical spaces [see above pp 17-18]. The ultimate destination of this thesis will be the proposition of a spatialized ontology based in the idea of configuration, a speculative response to that deliberately tentative and naïve proposition that stands on the evidence presented in section 2, thus responding to the intention of making philosophical speculation 'responsible to reality' that was proposed at the outset [see above, p 14].

However, to underpin this speculative epilogue, there is a final piece of 'evidence' to be presented. This relates to the second "naïve, even arcane" starting proposition derived from Tuan. He argues that;

Appreciation for nature or landscape ['actual spaces'] is a principal reason for becoming a geographer. The aesthetic impulse and experience are not, however, confined to any class of individuals. They are a universal human trait, and we find evidence of it in all areas of human life. Satisfaction with life consists largely of taking pleasure in form and expressiveness - in sensory impressions, modified by the mind, at all scales from the smile of a child to the built environment and political theatre [Tuan, 1979; p 233, and above p 19].

The issue of scale has been a deliberate undercurrent throughout the second section of this thesis that offered a series of demonstrations of the empirical and theoretical potential for the ideas of Space Syntax to address the socio-spatial problematic. The aim has been to address the lack of a material conception of space, the 'psychasthenia' if you will, of the 'deep space' of contemporary social theory. To recall Smith's description:

By deep space I refer to the relativity of terrestrial space, the space of everyday life in all its scales from the global to the local and the architectural in which...different layers of life and social landscape are sedimented onto and into each other. Deep space is quintessentially social space; it is physical extent fused through with social intent, Henri Lefebvre's 'production of space' in its richest sense [Smith, 1990; p 160-61, and above p 9].

Section 2 has followed a similar scalar trajectory from the global spaces of Harvey's circuits of capital to the architectural spaces of Giddens and Foucault. And yet the argument thus far has necessarily addressed the socio-spatial problematic, the 'quintessentially social space' resulting from the welding of 'deep space' to social theory. To realise my ambition of a speculative spatial ontology, it is necessary to move beyond the 'deep space' of the socio-spatial problematic, to address the embodied space of the individual, to investigate, in Tuan's words, the realm of "universal human traits" [op. Cit.]. The final step of this trajectory returns, therefore, to Tuan and Lowenthal's concerns with "living at the surface" and "the palpable present, the everyday life of man on earth" invoked in the prologue [op.cit. see above p 18]. In introducing the individual I want to take the perhaps unorthodox step of 'bracketing off' the reworking of the socio-spatial problematic that has formed the substantive part of this thesis. This itself is to stand as evidence for the spatial argument that has been occluded since the beginning; the proposition of configuration as an approach to space distinct from Space Syntax as the iteration of that space in a developed socio-spatial theory.

My aim, therefore, is an approach to space that retains implicitly the social intent of Smith's 'deep space' - won I hope in the argument presented in section 2 - while also moving beyond 'deep space', being sensitive to Tuan's 'geography' of form and expressiveness. I wish to recapture, therefore, the synthesising ambition of Hägerstrand who asked;

How precisely do human beings on the organic level and viewed without the bounds of the conventional scale limitations organise their interaction and non-interaction with objects in the environment including fellow-men? [Hägerstand, 1973; p 74, and above p 206].
In moving to the individual scale I hope ultimately to transcend the scalar limitations of the global, local, architectural and individual [following Smith], and to propose configuration as a 'space' that might offer the possibility of a common approach to the spatiality of the social and material world.

Following these two opening propositions, this chapter is divided into two sections, therefore, the first something of a coda, the second a speculative epilogue. I wish to pursue two areas of research in which the ideas of configuration have been articulated at a 'sub-social' scale and through which the theoretically important notion of the conscious individual is introduced, refining 'configuration' from 'Space Syntax'. It must be clear that in so doing it is not my intention to isolate space from society but to build a case for configuration as being as relevant to the individual as the collective. In so doing the argument will return to the two pivotal "moments" in the genealogy of socio-spatial approaches that were established as the precursors to the current 'structure of feeling' towards space [see above p 11]; the rejection of environmental determinism and of spatial science. This coda will examine Hillier's own response to these two moments, where we will encounter, and hopefully resolve, some inherent conflicts within Space Syntax that impede its integration with much contemporary theory, in particular its epistemological position founded upon an implicit (though modified) structuralist approach and a belief in scientific legitimacy. Both restrict Space Syntax to considering only statistically significant 'populations' within a material space, but one in which 'intrinsic' qualities (surface, texture etc) are neglected as inaccessible to theoretical insight. I wish to question the sustainability of these positions which are, I aim to show, violated in the way Syntax is applied in practice and to argue that the exclusion of both the individual and the sensory experience of space isolates Space Syntax in the contemporary theoretical climate. In this respect it is important that this thesis attempts a rapprochement between Space Syntax and wider social theories, with the bilateral concessions which that implies. There is no intention to propose Space Syntax as revealing the 'true' space, but at most an important and neglected 'truth of space' [following Lefebvre, 1991; p 9 and above p 283], some speculative implications of which are proposed in the final section.

10.1 Coda: Beyond 'deep space' – introducing the individual

The important contribution of Space Syntax lies in its unique formulation of the society-space relation, based in the twin proposition that "society must have or be capable of having spatial necessity of some kind", which is to say that society must be material in some sense and not entirely non-spatial, and that, "space must have, or at least be capable of having, social potentials of some kind", it must express society in some way [Hillier and Netto, 2001; p 5, and above p 130]. However, there is an imbalance in the way in which these parallel propositions are developed in relation to the resolution of 'society' into individuals. For while the 'society to space' relationship implicitly resolves to the aggregative spatial decisions of individuals which collectively form emergent socio-spatial patterns (for example cities), the 'space to society' relationship apparently cannot similarly be resolved to consider an individual in a specific space, for reasons set out below.

This is most easily described through an example. In chapter 7.2 above I examined the behaviour of teenagers in a Parisian mall. The teenagers in a very real sense became 'visible' to Space Syntax enquiry at the point when they became a 'statistically significant clustering' [see figure 7.17; p 234]. However, while 'significant' this clustering represented no more than a dozen individuals, and was indeed an aggregation of activity patterns through a number of time periods, in any one of which there may have been just one or two individuals in that space. And yet individuals fall beneath empirical insight, as do the experiential aspects of space in which they gather. The reasons for this empirical myopia are epistemological, and crucially relate to Hillier's own response to environmental determinism, the 'first moment' in the rejection of a theoretical role for physical space [above, p 11]. While Hillier has sought to reinvest physical space with theoretical importance, there have been unintended consequences of his approach which need to be resolved, hence this penultimate section as 'coda'.

As was discussed above in chapter 5, environmental determinism for Hillier is the expression of a 'tripartite edifice', which rests on the cornerstone of what he terms the "organism-environment paradigm" [Hillier, 1996; p 390 and above pp 140-41]. This 18th Century system of thought treated the environment as "not only a physical milieu but one which actively and significantly surrounds so that the environed thing in some way is aware of, or affected by, its 'environment' [ibid.; p 380]. His argument continues that it is this formulation of the relationship between

environment and organism that restricts the "common sense" notion that form and function are related to a crude causal determinism;

The three-level scheme constructs an apparatus of thought within which neither the formfunction relation in architecture, nor the role of space in society can be formulated in such a way that research can be defined and progress made in understanding [Hillier; 1996; p 390].

Hillier's resolution to this impasse is to invoke the power of 'random variation', the epistemological equivalent of Newton's concept of inertia, which posits that all bodies move in a 'right line', thus placing motion "on the same level as beings at rest". This epistemological innovation was reintroduced to the organism-environment problem through the work of Darwin who clarifies the mechanism by which the environment influences organisms by removing the direct relation of cause and effect, reliant ultimately on an Aristotelian notion of antecedent order, and replacing it with, "an indirect relation, [....] an abstract statistical mechanism based on randomness and probability" [ibid.; pp 384-5, and above p 142]. This crucial aspect of the theory of evolution has not infused into the commonly held understanding of 'environment', and the theory of architectural determinism can, therefore, be understood as a vestigial feature of the pre-Darwinian 18th Century paradigm, based in a direct causal relationship between the organism and environment.

Hillier's 'common sense' salvaging of the form-function relation relies, then, upon what might be described as a 'Newtonian-Darwinian' paradigm, "the proposition that the form-function relationship in architecture, and the relation of space to society, is mediated by spatial configuration" [p 390]. He argues that, "[t]o caricature Aristotle, in buildings people are the unmoved movers", buildings thus being considered as "probabilistic space machines" [ibid.; pp 392, 395]. This relationship between spatial configuration and the distribution of occupants is the basis of the theory of 'natural movement', "a kind of inertia theory", discussed above in chapter 5.

While this application of Newtonian theory may preserve the form-function relationship in an acceptable form, it does however have important consequences. For as the approach to the relation between society and space is switched from a deterministic to a probabilistic relation, the rigours of statistical analysis need to be met. There are a series of necessary condition that must be satisfied before any Space Syntax analysis can proceed; that movement is pre-existing (as in

Newton's inertia theory); that movement is from all, or most, parts to all others; that there is economy in route selection; and that the system is of a 'significant' size. This has important consequences for the scale at which research is routinely conducted. Movement levels must be 'significant' in a statistical sense and we are therefore concerned with 'populations', again in the statistical meaning of the word. The individual is, quite literally, 'insignificant'.

The theory of Space Syntax is founded, therefore, on an epistemology that negates the legitimacy of discussing an individual as un-statistical, un-systemmatic and hence un-scientific. Hillier makes this clear at the outset of his *Space is the Machine*;

It is not in the nature of science to seek to explain the richness of particular realities, since these are, as wholes, invariably so diverse as to be beyond the useful grasp of theoretical simplifications. What science is about is the dimensions of structure and order that underlie complexity.... Every moment of our experience is dense and, as such, unanalysable as a complete experience. But this does not mean that some of its constituent dimensions are not analysable, and that deeper insight may not be gained from such analysis.

This distinction is crucial to our understanding of architecture. That architectural realities are dense, and as wholes, unanalysable does not mean to say that the role of spatial configuration (for example) in architectural realities cannot be analysed and even generalised. The idea that science as a whole is to be rejected because it does not give an account of the richness of experience is a persistent but elementary error. Science gives us quite a different kind of experience of reality, one that is partial and analytic rather than whole and intuitive [Hillier, 1996; p 85].

While Hillier's rejection of determinism mirrors the 'first moment' in the genealogy of contemporary approaches to the socio-spatial problematic introduced in chapter 1, here he moves in the antithetical direction to the second moment, describing the rejection of scientific approaches as a "persistent but elementary error". We see traces of this rejection of the 'non-scientific' powerfully in the 1996 text, where Hillier argues that "[s]uch relations [directly between the building and individual] do not exist, or not in any interesting sense", and then again, "do not really exist in any systematic sense [which is] amply confirmed by the lack of research results which show such relations, and by the fact that the only relations we can find are those that pass through spatial configuration" [ibid.; p 379, emphasis added].

Statements such as these, which restrict approaches to socio-spatial relations to the empirically verifiable are equally apparent in respect of the approach to spatial experience proposed by Hillier. It is a central proposition of Space Syntax to treat spatial structures as "strongly relational

systems", that is, "systems in which the complex of relations amongst elements is more important than the intrinsic properties of elements in how they function" [Hillier, 1998; p 1, emphasis added]. The intrinsic properties of space, "such as shape scale, proportions and surface attributes" are similarly rejected as insignificant, despite the acknowledgement that, "although the intrinsic properties of space dominate our experience, it turns out that it is the extrinsic properties that are most critical to the way in which space is used" [ibid.; p 2].

This limiting of legitimate phenomena of study to those accessible to scientific and configurational analysis is a feature of Hillier's methodological approach which relies heavily on Hacking's notion of 'the creation of phenomena' - "central to what we do, even though we see as our objective the creation of theory" [Hacking, 1983; Hillier, 1996; p 266]. Hacking re-orientates the hypothetico-deductive model of science proposed by Popper, with its reliance upon the Cartesian primacy of theory over a Baconian empiricist position, and stresses rather the role of the experimentalist. The relation between observed phenomena and theory is more complex, he suggests, than Popper allows. Phenomena are *created by the observer* through processes of observation, representation, calculation and transformation.

However, in practice the 'Space Syntax experimentalist' is constrained through the primacy given to the role of the computer which "can and will hold centre stage" in the creation of phenomena [Hillier and Penn, 1994]. It is important to realise that computers are not simply benign catalysts to explanation, but themselves impose a 'programmatic' viewpoint, particularly when – as in the case of Space Syntax – research relies on a number of 'in-house' software tools. Kuhn's comments on the implications of the education process for independent research are important in this regard, offering (in my experience) an accurate description of training in 'technical' disciplines such as Space Syntax [and mirroring Harvey's concerns with the restrictions of spatial science discussed in Chapter 1, p 12]. Kuhn describes a process beginning with Gestalt exercises which initiate the student into the correct manner in which to view a problem which are then reinforced with simple 'finger exercises' to habituate the use of equipment (software) and textbooks which, "are systematically substituted for the creative scientific literature which gave rise to them" [Kuhn, 1996; p 47]. The effect is that for the individual researcher,

Questions like these [what is a valid question or methodology] are firmly embedded in the educational initiation that prepares and licenses the student for professional practice. Because that education is both rigorous and rigid, these answers come to exert a deep hold on the scientific mind...[to such an extent that research becomes] "a strenuous and devoted attempt to force nature into the conceptual boxes supplied by professional education" [Kuhn, 1996; p 5].

It is unsurprising given this circularity that Hillier and Hanson see Space Syntax as an example of what Lakatos describes as a "progressive problem shift" in which new research results support the general propositions at the core of the thesis [Hillier and Hanson, 1998; Lakatos; 1970]. I would question, therefore, the proposition that computers are potential integrators of different approaches [Hillier and Penn, 1994], and suggest that perhaps their unquestioning use has led Space Syntax to become methodologically entrenched such that theoretical and conceptual questions, such as the role of the individual and the importance of scientific explanation, are seen as part of a "negative heuristic core", to use Lakatos' terminology, made up of the general propositions at the heart of the research programme which the research does not seek to challenge.

Furthermore, this methodological isolating of the theoretical core has inhibited Space Syntax from wider influence by focusing attention on analysis rather than theoretical exposition, and has constrained the mutual recognition of Space Syntax and other approaches to socio-spatial questions. The delineation between 'population' and individual, 'use' and 'experience' of space, legitimate and non-legitimate questions, methodology and phenomena presents many problems for an integration with theories which do not treat the individual's experience as "downwind of this primary correlate" between extrinsic properties of space and the movement structures of 'populations' of users.

Indeed, in practice I would argue that Space Syntax itself struggles to maintain such a distinction. The empirical examples in Section 2 pursued a descending scale from the urban, in which statistical treatments of populations seem intuitively appropriate, to an architectural scale at which they begin to falter, for example in the case of individuals clustering in the Parisian mall cited above. There is therefore a 'cusp of relevance' that is both scale and time dependent which runs like a fault line through the theory. The issue of time is critical because Hillier argues that society can only be considered as a 'thing' with spatial expression if 'thingness' is understood as 'configurational persistence over time'¹. He therefore argues that;

Society is, at the very least, something that outlasts individuals. In spite of the claimed realism of those who reduce society to individuals, this reduction is in fact the one thing

¹ Here he follows René Thom, Structural Stability and Morphogenesis, Benjamin 1972, and Hillier, 1996; p 406

we cannot logically do, since it fails to explain the primary property of society, namely its persistence beyond the lives of any collection of individuals who make it up at any point in time. It follows that we cannot reduce society to individual interactions [1996; p 401].

The importance of time for Space Syntax has been encountered earlier in the importance placed upon the ideas of emergence and the description retrieval of social structures from the material form of society which is "the means by which that society is transmitted into the future" [ibid.; p 402, and above pp 130-31]. There is however, a slippage in the way in which the society to space and space to society relationships at the core of Space Syntax operate. For while the 'society-space' relationship relies on emergent processes that implicitly occur over time and are intuitively resolvable to the aggregate of individual decisions, the 'space-society' relationship cannot be resolved to the scale of the individual (since it acts through the statistical 'population' of Hillier's 'Newtonian-Darwinian' paradigm). However, empirical studies develop an effectively *momentary* analysis of individual behaviours through the 'creation of [instantaneous] phenomena' such as the "snap shot" and gate counts (in which the computer, naturally, "can and will hold centre stage" [Hillier and Penn, op. Cit. p 293]). This instantaneous analysis dissolves Hillier's argument for rejecting methodological individualism and 'precipitates out' the conscious individual, the teenager in the Parisian mall.

Herein lies the coda, for while there is a shared rejection of environmental determinism, the first pivotal moment, it is the response to the second that sets Hillier on a divergent path from the 'respatialization theorists' examined in the previous sections. While their repudiation of the spatial science of the 1960s leads to the 'psychasthenic' rejection of material space, Hillier's reformulation of the 'organism-environment' relationship within the 'Newtonian-Darwinian' paradigm *methodologically* excludes the conscious individual within the space that he has reinvested. This is despite the fact that Hillier's 'environment' is socially active, informational as well as material, and necessarily implies the experience of the conscious individual through the process of description retrieval of the social information embedded in spatial forms through emergent socio-spatial processes. His argument can be understood, moreover, as a 'defence of intuition', since the configurational properties that encode and decode this information, mediating between the organism and environment as Hillier conceives them, are cognitive yet 'non-discursive', that is experiential but beyond easy explication. The paradox, therefore, is that in defending cognitive intuition Hillier invokes an epistemological structure that *methodologically* excludes this implicit conscious individual. Perhaps the circle of the coda is complete, therefore,

since is not the inability to resolve the self from the environment just as much a trait of the psychasthenic as the inability to resolve the environment from the self?

This thesis attempts a double critique and resolution, therefore, bringing material space, society and the individual simultaneously into play. Once again it is through empirical work that theoretical advances will be made towards this resolution with the lever coming from empirical work within Space Syntax itself. My critique above has been in one sense divisive therefore, since recent work has raised both explicitly and implicitly the figure of the conscious individual. The challenge, however, is not to see this as a fracture in the theoretical core of Space Syntax, instigating what Lakatos would term a "degenerating problem shift" [op. cit.] leading to a slow demise of the discipline, but an opportunity for a further paradigmatic shift, perhaps towards a speculative spatial ontology.

10.2 Epilogue: Of cabbages and Kings - towards a speculative spatial ontology?

The first example of a configurational approach addressing a 'sub-social' scale opens new theoretical possibilities through approaching a 'conventional' Space Syntax problem but in an unconventional way. Conroy's work focuses on spatial navigation within spatial systems, but the 'urban' systems that she studies are immersive virtual environments [Conroy, 2001]. This allows her the important freedom of altering the qualities of the environment and observing the behavioural responses of her subjects in a way that is impossible in the 'real world'. Conroy exploits this possibility by constructing two subtly different urban worlds derived from Hillier's proposals for a characteristic urban layout and its deformed 'less urban' counter part [see Hillier, 1996; pp 124-132 and figure 10.1]. Hillier argues that the configurational properties of the first make it more 'intelligible' than the second; that is, in formal terms, that local properties of the connectivity of each space to its immediate neighbouring spaces provides a good guide to the systemic properties of the global network that remains beyond the perceptual realm. To reinterpret this in terms of an empirically testable hypothesis of the kind that underpins much Space Syntax research, the layout whose configurational structure is more 'intelligible' will prove easier to navigate through.

Through constructing an immersive virtual world through which participants are able to 'walk' Conroy is able to test this hypothesis by giving participants a particular destination to navigate to within each 'urban' realm. Her results showed that, indeed, in the layout with greater intelligibility routes to and from the destination were more direct – the environment was easier to intuit [see figure 10.1].

The significance of this result is twofold. Firstly, it shows that the relationship between configuration and behaviour need not be articulated simply through the emergence of patterns of cumulative behaviours but is reducible to the level of the individual. Secondly, and more importantly, it demonstrates at the level of individual consciousness a phenomena that is evident at the statistical scale of the population; that in moving, people behave *as though* they are aware of the entirety of a spatial configuration (even a city) even though they cannot possible be aware of more than their locality.

This is a highly significant stepping stone for my speculative ontology and one that relies upon the presence of the conscious individual within our theoretical framework. For at the statistical level of Hillier's 'Newtonian-Darwinian paradigm' it is demonstrable that a complex spatial system, populated by a 'significant' number of individuals moving randomly from all points to all other points, will come to exhibit the same movement distributions as are found in an urban system. This is the foundation of the theory of the movement economy discussed above [see chapters 5 and 6]. However, we have demonstrated experimentally that *individuals* moving *purposefully* through such a system exhibit the same spatial behaviour. There are two possible explanations. The first is that individuals behave like automata, discountable simply on analytical grounds, the movement of individuals being 'purposive' not random. The second explanation is that individuals have an internalised understanding of configuration.

Again, this is worth clarifying. Individuals behaviour is shown [by Conroy] to be related to the 'intelligibility' of the system. Intelligibility has two components, a *localised* component that relates to the immediate connectedness of congruent spaces, accessible through perception, but also a *global* component, integration, that is based on the configurational properties of the *entire system*, that is the relationship of each space to every other space. This cannot be accessible to perception, since it is by definition a global property of the whole system. Moreover, as Conroy's experiment shows, it is not simply learned since individuals navigating through a system of spaces for the first time exhibit the same ability.



Figure 10.1 Way finding in 'urban' and 'non-urban' immersive environments. Figures a and b show a hypothetical 'urban' and 'non-urban' layout proposed by Hillier. Figures c and d present the integration analysis for the systems. The 'intelligibility' of each system is shown in figures e and f. The closer correlation between connectivity and integration in the 'urban' system suggests that it is more intelligible, that is accessible to intuitive understanding. Figures g and h present Conroy's analysis of movement paths around these virtual environments, the task being to navigate from the starting arrow to the central 'square' and back. Individuals in the 'urban' (and more intelligible) system appear to navigate to and from their goal with greater ease. [Source: Hillier 1996, Fig 3.14; pp 126-8, Conroy, 2001].

I wish to return to the significance of this in the light of the second example. However, I wish to translate this into a more convenient 'conceptual format' to carry forwards. *Individuals navigate through cities as though they were aware of the configurational structure of the whole, responding to not only that which can simply be seen, but also to configurational property of the urban structure that must be to some degree intuitive.*

The second example extends this theoretical opening through the application of configurational techniques to new areas, explicitly in the sub-social scale. Hillier has suggested that 'strongly relational systems', accessible through the principles of configuration, are not confined to spatial systems alone, but are applicable to a wide range of phenomena, reminiscent of Tuan's appeal to the aesthetic impulse and the appreciation of 'landscape and nature' at all scales "from the smile of a child to the built environment and political theatre" that was my second naïve opening proposition [Tuan, 1979; p 233, see above chapter 1 and p 287]. He argues that;

[o]n the contrary, the artificial world in which we live seems to be largely made up of such systems. Societies, cities and even aesthetic phenomena where the problem of the ensemble is so often the key, all seem in some sense to be both strongly relational and characterized by emergence [1998; p 7].

I would like to follow the suggestion of an aesthetic theory as an example of a new area in which the theory of configuration has been applied, explicitly abstracting this approach to spatial phenomena from the socio-spatial problematic addressed through Space Syntax.

Hillier pursues the possibility of applying configurational analysis to aesthetic forms in the wider consideration of 'non-discursive technique'. Drawing on an anecdote of trying to achieve a pleasing a-symmetry on a mantelpiece, Hillier asks whether there is some measurable quality of a-symmetry that can be formally described [Hillier, 1996; chapter 3; 1998; pp 12-13]. Indeed, this is not a new consideration. Both Arnheim and Gombrich attempt to describe simple configurations of diagrammatic and pictorial elements. While Arnheim focuses on 'balance', Gombrich is critical of this attention to order and focuses on disorder or 'restlessness' [Arnheim, 1974; ch1; Gombrich, 1984; p 121]. This is to polarize what is essentially a relative or perhaps gradual quality of more or less order in a configuration, but neither have a methodology for assessing such a quality. Gombrich refers to eye-tracking experiments, while Arnheim's analysis relies on what he terms 'perceptual forces' which define a "structural skeleton" of forms related to the principle rectilinear and diagonal axes. Considering 'the hidden structure of a square',



4.77 (0.738)

4.59 (0.864)

Figure 10.2 'The hidden structure of a square'. Contrast Arnheim's approach (top pair) with Hillier's. Arnheim talk of the circle being unbalanced in relation to the hidden 'induced structural skeleton', right. In contrast, Hillier, using very similar examples but applying the principles of configurational analysis through the theory of 'depth gain' is able to analyse the configurational effects of a series of arrangements. The figure on the right demonstrates the effects of 'grounding' the figure on a notional surface. The figures on the left are the mean depth from each cell, those on the right the number of identical mean depth values divided by the number of cells, such that the lower the value (0-1) the more weak the symmetry present [Source: Arnheim, 1954; Hillier, 1999c].

Arnheim argues that if a circle is placed within a square it will be more at balance (lest 'restless' in Gombrich's terminology) as it approaches an axis of the 'structural skeleton' where fewer perceptual forces are active upon it.

While Hillier's analysis does not ascribe 'volition' to configurational elements wishing to achieve visual balance in one direction or another, it does provide a means by which to access relative a-symmetry. The analysis of depth in spatial forms can provide a measure of symmetry or 'counter-symmetry' by indicating the number of isomorphic j-graphs within the form². His analysis shows the effects of placing a circle within a square and rectangle on total depth, or 'relative symmetry' (interestingly exactly the same illustration, in both senses, used by Arnheim), and further the effects of considering an 'orientated shape' grounded on a representative earth [Figure 10.2].

As well as this analysis of simple configurations, the question of a configurational understanding of aesthetics can be approached from the perspective of the production or construction of more complex aesthetic forms intended to satisfy some ill-defined yet widely appreciated quality of 'rightness' or 'restlessness'. Artists working with configuration properties to produce such effects might include Ben Nicholson or Mark Rothko who expressly deal with the configuration of forms in space. The work of Victor Pasmore, however, is a perfect example for a number of reasons. Firstly, unlike many artists he has spoken about and explained his work, in particular in relation to his approach towards space and configuration, a term that he uses explicitly. Secondly, he has also worked in the architectural realm and has drawn close parallels between his two-dimensional and three-dimensional work, linking this extrapolative epilogue back to the urban roots of this thesis. Finally, his work exhibits a development from a rectilinearity, which is intuitively amenable to configurational analysis, to an organicism which certainly is not, thereby stretching the theory beyond its elastic limit, as is my intention.

Pasmore's work has been described as musical composition, being concerned with "structure and pattern, light and space, shape and colour" more than representation, and has been paralleled with topological mathematics [Bowness and Lambertini, 1980; pp 12, 16]. His artistic concerns reflect the general academic climate of the 1960s, as he was influenced by Bierderman's call for the study of structural process more than visual effect in the creation of a new artistic morphology,

 $^{^{2}}$ The j-graph being the graph of relative topology from each point in the system, see above chapter 5, and the number of identical total depths, which gives a measure of the number of cells from which the general distribution is in balance [Hillier, 1998; p 12].

and attempted to construct, "an alphabet of visual sensations in abstract form" [Victor Pasmore, ibid.; p 14]. Describing his method, he says that;

To implement this [independence of painting] I turned my studio into a kind of research laboratory with the object of establishing a basic and objective alphabet or process from which an independent morphology, appropriate to both painting and sculpture, could be developed. This meant changing the process of painting from one of visual abstraction to that of intrinsic and organic construction [ibid.; p 94].

When in 1955 he was asked to participate in the design of the new town at Peterlee, he insisted that the only difference between a three dimensional relief and architecture was in terms of scale. He conceived, "town planning as a matter of movement though space, and thus a logical extension of the new conception of space that the reliefs and paintings embodied" [ibid.; p 15].

However, Pasmore emphasizes that his approach is not "the result of a process of abstraction derived from nature, but a method of construction *emanating from within*" [ibid.; p 12, emphasis added]. Lambertini argues, therefore, that the later works are a manifestation of his subconscious since despite his "intellectual rigour" and continuous analysis, "there is no preconceived design - not even at the level of ideas" [ibid.; pp 21-2]. Pasmore's interest lies in exploring and exploiting the psychological difference between formal and symbolic attributes of this emergent symmetry, *without being able to explain or rationalize the distinction* [ibid.; p 16].

Pasmore's work is interesting, therefore, because it suggests that as well as configuration being the basis of a common experience of perception (as Arnheim and Gombrich might suggest) it also lies behind a process of construction or production of visual forms which emanates 'from within'. This echoes Gombrich's argument that 'delight' lies somewhere between "boredom and confusion", that is, between symmetry and asymmetry [Gombrich, 1984; p 9] and also Tuan's approach to landscape as aesthetic impulse [see above, p 287].

However, Gombrich questions Gestalt theory's assertion that there is an "observable bias in our perception for simple configurations...and we will tend to see regularities rather than random shapes in our encounter with the chaotic world outside". In contrast to the Lockian "bucket theory" of knowledge, which treats the pre-sensate mind as a tabula rasa, he locates the origins of this delight 'within', turning to Popper's view that we exhibit a priori an "immensely powerful need for regularity" which is "inborn, and based on drives, instinct" [Popper, 1979]. He argues,

therefore, that the simplicity hypothesis at the heart of gestalt theory cannot be learned; "indeed, [it is] the only condition under which we could learn at all" [ibid.; p 5].

This, it should be recalled, was the final conclusion from the previous example, that people move though urban space as though they had a sense of configuration of the whole that itself could neither be perceived nor learned. There are also echos here of 'Freddie's theorem' (Hillier's anecdote about a young child manoeuvring a balloon between a group of conversing adults), as well as resonances with the work of Piaget (which Hillier and Hanson refer to in *The Social Logic of Space*, [1984; p 47]³) and also O'Keefe and O'Keefe and Nadel's work on the 'neurophilosophy of space' [O'Keefe and Nadel, 1978 and O'Keefe, 1993].

"There must be a link, then", Gombrich argues, "between ease of construction and perception, a link that accounts for both the tedium of monotonous patterns and for the pleasure we can obtain from more intricate constructions, from configurations which are not felt to be too boringly obvious but which we can still understand as the application of underlying laws" [Ibid.; p 9]. "What theory of perception would be needed to make this correlation between construction and perception intelligible?" Gombrich asks, mirroring 'Pasmore's predicament' with which I opened this argument; "*By what geometry must we construct the physical world now that Euclid's gone and Newton dead*?"

This thesis has constructed an empirical argument to support the proposition of configuration as being an approach to space that offers *a truth* of the physical realm that seems to offer some insights into the socio-spatial relationship through its extension in the theory of Space Syntax. However, the tentative arguments presented in this speculative epilogue open new areas of importance.

I wish to propose that the idea of configuration may perhaps offer new approaches to a series of embedded philosophical debates surrounding the nature of space. Firstly, I wish to suggest that the idea of configuration brokers a middle-ground between the Newtonian view of 'absolute space' and the Liebnizian view of a 'relative space'⁴. For while spatial configuration is dependent upon the structuring presence of objects, it is nonetheless a systemic view that relies on the simultaneous relationship between all elements of the system and all others. It is relative in the

³ See *The Child's Conception of Space*, Routledge and Kegan Paul, London 1956.

local sense that it constructs a particular view of a system from each element, yet absolute in the global sense that its power lies in examining every particular view at the one time.

This tension between the local and global nature of configuration was above seen to force the 'precipitation' of the conscious individual from the social formulation of Space Syntax. Extrapolating from those tentative examples discussed above, I would propose therefore, that configuration may also be a spatial formulation that we 'think with'. This would appear to suggest configuration as being akin to Kant's space as "synthetic a-priori" – a sensibility fundamental to the possibility of knowledge which could not be verifiable by recourse to empirical investigation.

And yet unlike any other formulation of the idea of space, Hillier shows configurations to have independent properties. Configuration is not passive in the same way as the Euclidean space upon which Kant founded his theory. It is active, and moreover has been shown to be activated in the socio-spatial realm. I would further suggest, therefore, that the idea of configuration may offer the opportunity to recover a neo-Kantian view of space, and that Soja and others were perhaps overly hasty to seek to "[reach] outside [the] traditional Kantian cage" [Soja, 1987b; pp 289 and 291, and above p 32]. Soja argues that Kant's transcendental spatial idealism was culpable for a "vision of human geography ... in which the organisation of space is projected from a mental ordering of phenomena, either intuitively given, or relativized into many different ways of thinking" [Soja, 1989; pp 124-5, and above p 42]. What 'space as configuration' is able to do is to suggest that it was unnecessary to reject Kant's transcendental space on the basis of the discovery of non-Euclidean geometries since configuration offers the prospect of reversing the idealism of Kant's space, being empirically grounded in the socio-spatial relationships of the material realm. Configuration, articulated as a socio-spatial theory in Space Syntax, counters therefore Soja's criticism of Sack's neo-Kantianism whose, "analysis of the 'elemental structures' of 'modes of thought' is virtually divorced from the specific influence of 'socio-spatial conditions'" [ibid; p 125, referring to Sack, 1980].

This is essentially a debate about whether space is 'out there' (in the material world) or 'in here' (a mental construct). What the argument above suggests is that 'space as configuration' is both. There is perhaps a useful analogy between this approach to space and the wave-particle duality in

⁴ I do not propose to offer a detailed survey of these debates which has been undertaken many times. I would refer the reader to excellent summaries in Huggett, 1999, Jammer, 1993, and O'Keefe and Nadel, 1978.

physics. What Space Syntax as a socio-spatial theory based in configuration argues is that the configurational properties of the *material world* embody social information, recoverable through use and experience, and exhibits social potential through the structuring effects that complex emergent socio-spatial systems have on movement and co-presence. These properties, like the wave in the double slit experiment, rely on probability and emergence over time (a wave being a probability function). However, the question of philosophical importance (that importantly arises through empirical results) is how is it that an individual within that world, be it a person within an urban system or photon within the 'world' of the double slit experiment, appears to know how to behave in a way that is only consistent with an a-priori and transcendental (that is global) knowledge of the whole system?

Just as light cannot be a wave and a particle at the one time but is shown experimentally to be so, so the idea of configuration appears to offer a common ground for material and idealist conceptions of space. In doing so I would suggest that it brings us full circle to question the validity of the organism-environment paradigm which was the departure point for both Hillier's Space Syntax and the 'respatialization theorists' examined in section 1. For while the latter have demonstrated an inability to deal with the material realm, focusing perhaps on 'organism' to the detriment of [at least 'physical'] environment, Hillier has recaptured the importance of the material realm through the theory of Space Syntax, but has achieved this by reconfiguring the organism-environment paradigm within his 'Newtonian-Darwinian paradigm'. The effect of this has been to remove the conscious-individual such that the role of space as configuration can be conceived as a socio-spatial (wave) theory but not as an individual-spatial (particle) theory.

His approach, therefore, though certainly clarifying the organism-environment paradigm at a macro (social) level has achieved this by focusing on environment to the detriment of the [individual] organism. This is in spite of three features of the theory of Space Syntax that offer fertile ground for a theory of the embodied individual and should form the focus of future attention. Firstly, despite focusing on 'environment' this is categorically not the passive and a-social environment of the 18th century organism-environment paradigm but an objective material *and informational* environment that embodies human social activity. Secondly, Space Syntax deals implicitly with spatial experience in the process of retrieving this embedded social information, a retrieval process which, thirdly, relies upon the intuitive grasp of non-discursive configurational properties.

By abstracting configuration as an approach to space from Space Syntax, as its iteration as a Social theory, I have sought to offer some inklings of a speculative spatial ontology that might overcome many of the entrenched approaches to space that reinforce this distinction between organism and environment. Certainly, for Space Syntax as a socio-spatial theory to explore further these potentials of the idea of configuration that lie at its core it needs to engage directly with the realms of experience and cognition and to address its hostility to the principles of methodological individualism and of phenomenology. Moves towards a détente with these approaches more attuned to the scale of the individual have already been advanced, using Werlen's reworking of Popper's ontological structure towards phenomenalism [see Michell, 1998, Werlen, 1993]. This now needs to be taken forward in a combined empirical and theoretical reworking that can address Hägerstrand's question;

How precisely do human beings on the organic level and viewed without the bounds of the conventional scale limitations organise their interaction and non-interaction with objects in the environment including fellow-men? [Hägerstand, 1973; p 74, and above pp 206 and 288].

This thesis has sought to prepare for this question by proposing configuration as one possible answer to Pasmore's predicament.

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