SLIPWAY CULTURES

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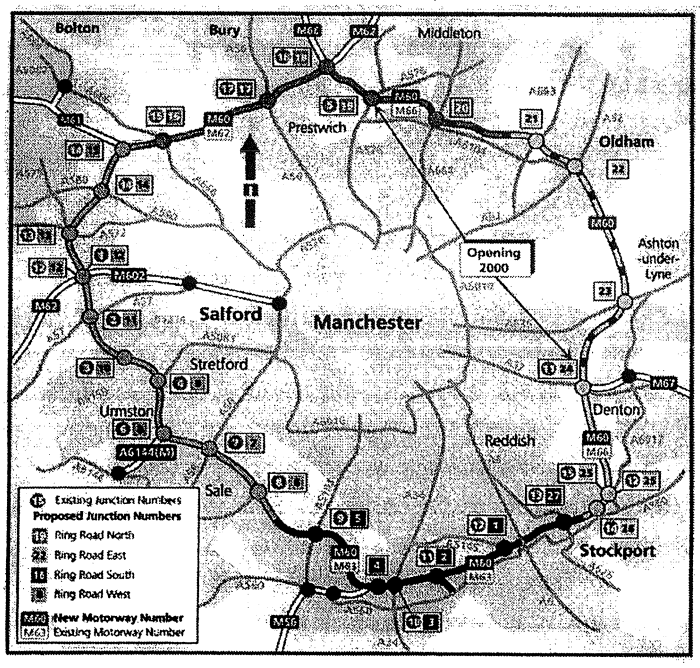
The work of urban morphologists and urban fringe researchers demonstrates the need for a radically different methodological approach to halt the process of cultural dilution within the urban fabric. Slipway Cultures result from the dissolving of genius loci into mono loci. The Manchester Outer Ring Road (M60) provides the case study upon which the paper is structured. Manchester was the world's first industrialized city and forms part of a major belt of urbanization stretching into Western Europe. Portwood, an inner urban-fringe belt of Stockport on the M60 corridor, exhibits the extreme characteristics of a place undergoing rapid cycles of development in line with changes in infrastructure. It illustrates shifting land-use patterns and the degree of transience in human occupancy. In order to find a re-identification of place the paper introduces a conceptual strategy of Thermographic Boundary Layers. A strategy that identifies those characteristics of land-use and density that are integral to the developmental process. An informed programme of investment brings consistency within a fluxial landscape that is directed by economic and political forces. The resultant dialectical framework allows for a changing conception of cultural value intrinsic to the nature of place.

Motorway Culture, Urban Morphology, Boundary.

Introduction



Manchester Outer Ring Road. Fig. 1

The work presented is a methodology developed from my MA thesis, which looked at the spatial results and cultural conditions in relation to the Manchester Outer Ring Road (M60). The relevancy of this work to the conference is that Greater Manchester being the world's first industrial landscape has a rich history of urban development. An area was located which showed the extreme form of an existing fabric changing to accommodate a new accessibility pattern. Portwood is dominated by Junction 27 on the M60 Fig. 1. This inner urban-fringe belt within the borough of Stockport displays a long period of formation. A visual survey of the area showed disparities between adjacent areas of high economic growth surrounded by urban decay. Stockport is a satellite town lying on a main radial and the outer ring road of Manchester. The Greater Manchester conurbation forms part of a large urbanized belt stretching East to West across the north of England. Accelerated

change is a consequential aspect of the indirect effects of motorway insertion. The aim is to develop a methodology that assesses the process of change within the landscape and from these findings, to provide a framework for urban regeneration within which a social and cultural content may develop. From the cumulative knowledge stored within this landscape we may learn and develop techniques in managing future changes. A 'sense of place' may be encouraged whilst allowing for the continued development of an economic landscape.

Transformation

Stockport originated as an early bridging point across the River Mersey just below its confluence with the Rivers Goyt and Tame. Presently the narrow river valley is tightly enclosed by the M60 to the north, a main radial road into Manchester (A6) and railway line to the west and the steep sides of the Mersey Valley to the south. In the 1770's despite its proximity to Stockport, Portwood was still rural and had been held by the Dukenfield family for 450 years. In the 1780's, on the extinction of the family line, the manor was bought by cotton merchants and speculators, being strategically placed for sourcing waterpower. Portwood showed the most striking population explosion between 1811 to 1841, and by the late nineteenth century had emerged as a thriving industrial landscape of mills, terraces, shops, utilities, churches and parks. The cotton industry made Stockport one of the most important manufacturing towns in the country. During Stockport's expansion limited accessibility by canal or rail to other regions, notably Liverpool, reduced the town's independence, forcing it to rely on Manchester as its main service provider. The problem of communications in Stockport lay in its topography. By the 1940's increasing road traffic demands had outgrown the capacity of the town's natural focal point.

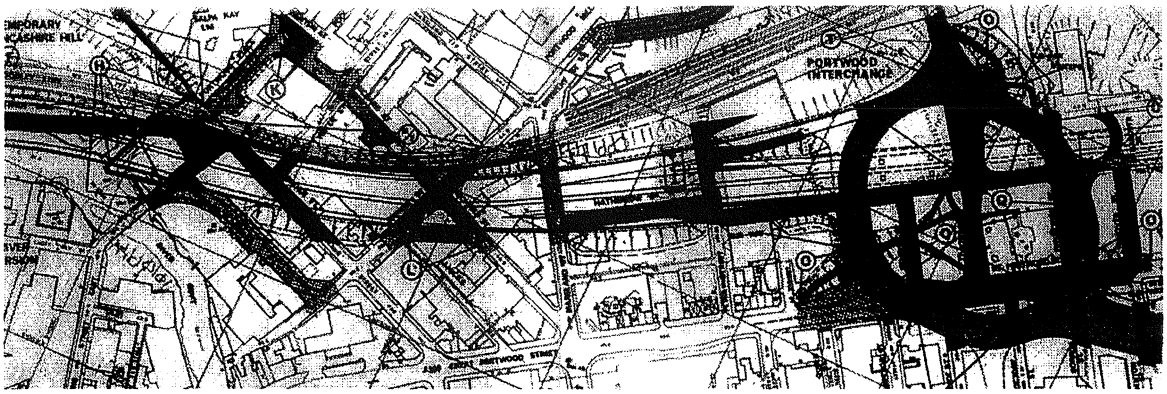
Attitudes

The Stockport E-W Bypass was originally intended to form part of the Intermediate Ring Road proposal of the Manchester 1945 plan. The bypass, when completed in 1982, had become the Outer Ring Road due to cost limitations placed on the preceding highway schemes. The main purpose of the bypass was to transfer east-west traffic from the existing routes forming part of the southern section of the MORR and the national motorway network thereby relieving environmental problems associated with the rising congestion. The bypass was thought to provide opportunity for comprehensive highway improvement and reconstruction within the Metropolitan Borough and "form part of a continuous route connecting the Greater Manchester conurbation to the country's major ports and industrial areas."(DoE 1978, p.21) The three main objectives of the then Government transport policy were that schemes were to contribute to economic growth, secure personal mobility and minimise damage to the environment. The DoE claimed the bypass met all these requirements adding "the environmental disadvantages of the scheme are remarkably few, particularly as the scheme goes right through a town centre."(DoE 1978, p.15) The environmental benefit was quantified only in terms of congestion and the DoE estimated an economic return of 27.6% by 1986. In prospect of access to the national network approval had been given by the council for a number of industrial developments "the extension will greatly assist industry and commerce in the eastern part of Greater Manchester." (DoE 1978, p.13)

Direct Effects: Obliteration and Severance

By the 1970's the Outer Ring Road scheme was well established in the planning processes relating to both the network of the Greater Manchester and of the Borough Council. Since 1945 the urban fabric had undergone transformation with reconfiguration of the road network

in respect of the imminent bypass. The 1948 Cheshire plan aimed "to abolish old, outmoded properties and redevelop in conformity with modern standards and principles."(Chapman 1948) In order to attain this, the council proposed "that the whole of the Portwood area between the Goyt and Tame be scheduled for industrial use." Large areas of housing were cleared prior to 1978 under slum clearance powers and the Council acquired other properties under planning blight provision. The extent of anticipatory obliteration is clear in that by 1978 construction of the bypass required the demolition of just over 97 houses and 5 shops with four businesses needing re-location. The secretary notes that this "is remarkably little when one considers the densely urban area through which the route passes."(DoE 1978, p.7) Functional zoning classified Portwood as industrial ejecting the community that had evolved and settled within the district. "No residential properties will remain in these areas, and no serious detrimental effect on commercial properties is expected." (DoE 1978, p.18) The motorway removed any transitional areas. The bypass required a total 18,852m^2 of public space, which was replaced by the DoE but without consideration of those areas required by the subsequent re-settlement of community after motorway insertion.



Approved side road closure for M60 bypass through Portwood. Fig. 2

The bypass route uses the relatively level valley of the River Mersey running 300m from the town centre. To minimise physical severance the motorway is parallel to the existing railway line and A560. The DoE stressed that the motorway would not cause any greater severance to north/south communications than did the already existing rivers and railway. In reality this only occurs within the central area of Stockport. Built as a rural motorway, it causes a more extreme example of spatial severance in Portwood. The raised embankment of the M60 blocked the permeable railway viaduct. In Portwood a number of small streets serving industrial properties passing under the rail viaduct to the south were to be closed. Figure 2 illustrates the degree of route manipulation by side road closure (black) and reconfiguration (grey). With the eradication of the transitional zone between the living, employment and commercial areas that existed prior to motorway insertion, secondary functions have had to relocate. The polarisation into strict functional zones does not allow for densification of the urban fabric. With the loss of the transitional areas, small incremental amounts of investment for development are not encouraged. The question is how do you try to integrate a sustained cultural fabric across the network? During the 1980's, large areas of Manchester suffered industrial decline and restructuring. In severing the northern section of Portwood from the main distributor road this area has seen a protracted phase of vacancy and dereliction whilst sites to the south received renewed investment for commercial growth.

Indirect Effect: Extension of Commercial Core

The Portwood and Travis Brow interchanges were to link the motorway directly to the town centre peripheral distributor road system acting as a "vital component in the continued success of the town's shopping and commercial activities." (DoE 1978, p.18) What was not envisaged was the stretching out of commercial activity from the compact core. Without available space in the centre to meet the demand for large-scale retail uses the only alternative sites without topographical constraints are amalgamated plots to the north-east in Portwood. Slowly encroachment is taking place across the River Goyt, which previously acted as a natural boundary. Portwood exemplifies the shift from fragmented landownership in the industrial period, through council CPO's to speculative developers and the dominance of fewer initiators. Fringe accessibility is a key to the development of this area but other factors such as planning restrictions, land retention and market ignorance have caused inconsistencies in the landscape.

The adopted Stockport Unitary Development Plan 1998 states that provision of large retail stores with their own dedicated parking are only accommodated within or adjacent to an existing centre where they can be adequately served both by private and public transport. The Peel Centre in Portwood is regarded in the UDP as an integral part of Stockport town centre. "Peel Centre is the busiest retail-park in the Greater Manchester region if not the busiest in the North West." (Mr. Nutall, Peel Holdings, development manager, interviewed 1999) and is regarded as an "established" retail space. Therefore the Peel Centre has the highest non-food retail rates in Manchester and at $\$31/ft.^2$ building cost, the recuperation period for investment is 4-5 years. The Peel Centre has gone through four phases of growth but with parking space as the limiting factor on expansion this undermines an overall planned intensification. As centres of "economics and politics" Peel developers believe that as the government restrict car borne trade these sites will become less attractive investments. The problem for developers is conflicting ground rules from planners and policy makers. There is a lack of certainty over consent being granted on the basis of market need or impact. With a short recuperation period for investment and with the possibility of yields dropping, Portwood is yet again under the continual threat of redundancy followed by total transformation. The short life span of the total urban fabric within which economic and cultural capital has been invested does not allow for a sustainable agenda to be developed.

Stagnation and blight to the north of the M60 corridor is accountable to road proposals and speculative land retention. "The Council will normally resist the use of employment land for retail developments.... however, the importance of the area as a gateway to the Town Centre, its proximity to a motorway junction and the necessity for environmental improvements means that the Council will accept other forms of development in the area."(Stockport M.B.C. 1998, p.116) If the trend in retail growth continues, Portwood will become a homogenous zone of commercial enterprise initiated not by the actual user but based on investment decisions of a few non-local companies. Landscape as by-product to conflicts between developers and planners over preservation and change of land-use has led to a piecemeal management of the landscape rather than the implementation of an holistic strategy.

An 'urban fringe' exhibits "a higher rate of increase in population density, land-use conversion and commuting."(Thomas 1990, p.135) Portwood has a high rate of land-use conversion but an increase in it's *transient* population coupled with a decrease in residential density as exhibited by inner city areas establishing it as an inner urban-fringe belt. Planners have tended to focus on the changing aspect of land-use in rural-urban fringes negatively and thus attempts have been made to control development. Green Belts are unable to cope with

population movements and changing location of pressure *within* city growth and may be inappropriate for inner-urban fringes. Green Belt is not regarded as the stagnation of land-use processes within it but the weak or diverse objectives it has to fulfil often create conflicts in boundary definition. Could the differentiation in cycles of use in relation to the economic market augment and perpetuate a continued heterogeneity within the urban-fringe?

Urban Morphology

The aim of morphological analysis is to identify and describe the constituent parts of urban form and their interaction in the process of formation. For Conzen management of proposals are seen as an outgrowth from the *existing* landscape, "the nature and intensity of the historicity of the urban landscape that provide his main basis for devising proposals for its management."(Whitehand 1992, p.173) This is through the division of the urban landscape into morphologically homogenous areas, which are grouped to form various hierarchical units within the intra-urban region. These elements tend to change at different rates in response to social and economic forces. Conzen believes that the accumulation of elements gives a cultural context or historicity and defines two types of relationship within the town, static and dynamic. The static shows the hierarchical relationship, "the town plan 'contains', and forms the general frame of, the land utilisation pattern, and the land-use units or plots in turn 'contain' the building fabric."(Conzen 1975, p.79) The dynamic defines the relationship between the elements in response to functional demand with town plan, building fabric and land-use arranged in decreasing stability. "The existing framework of plots and streets acts as a constraint on the process of infill and redevelopment but this is by no means a guarantee that the new landscape forms created respect the existing urban landscape."(Whitehand 1992, p.198) Developments in Portwood no longer fit within the boundaries of traditional plots and after initial investigation, there are few visible *existing* features. There are difficulties in defining homogenous cells other than the current conditions of retail space. A study was made to ascertain any latent edges that may be inherently forging this landscape. Remnant analysis found that early definitional boundaries had remained in dislocated sections that were being continually eroded. There are no inert elements only leftover fragments. These lines act more as datums through a shifting fabric relating to an historical culture. These are not boundaries encouraging a re-inculturalisation that can be sustained. Portwood exemplifies a situation where the Conzen hierarchical arrangement has slipped. The town plan is no more inert than the building fabric or land-use. This landscape seeks not to define itself through inertia of elements (the disinclination to act) but through the possibility of change. The elements displaying an inherent ability to insist on, not resist, motion. "The accent is on the historically and geographically informed transformation, augmentation and conservation of what already exists."(Whitehand 1992, p.173) That which already *exists* is not overtly visible. *Existing* is perhaps recognised as the latent reading of an informed process of change. This led to the development of a methodology that could identify the most dynamic areas of change in use i.e. thermographic hotspots.

Methodology: Thermograph of change

Temporary stability in the space-time process manifests itself as a state giving us the notion of a *thing*. We tend to concentrate on these states rather than seeing them as part of an unfolding morphological process. "Material form of society at any moment of time *is* not that society, it *is the means by which that society is transmitted into the future*."(Hillier 1996, p.402) Scientific analysis brings to light urban patterns not revealed by intuition alone.

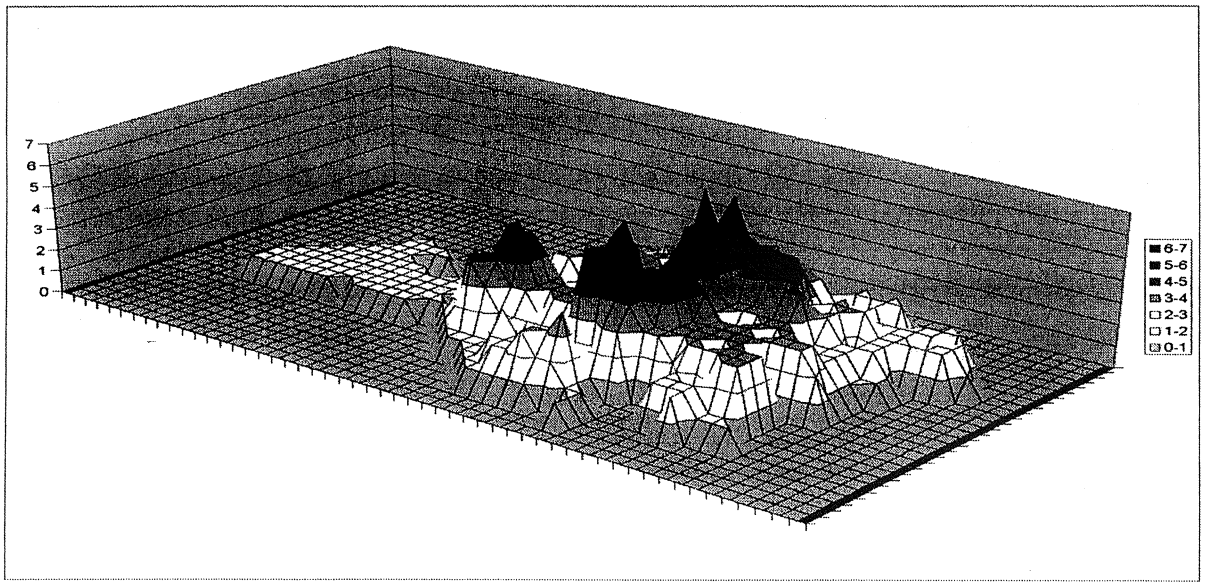
In trying to assess a system of change, similarities to chaotic systems suggested an approach used in thermodynamics, which led to the application of a more abstract analytical method. There are a large number of dynamical systems that exhibit chaotic behaviour. "A central task of the theory of chaotic systems then is to find adequate forms of description that are able to grasp the most important and characteristic features of the system." (Beck 1995, p.16) A technique has been developed for the thermodynamic formalism of a dynamical system. It was not an intention to use methods developed out of statistical mechanics, rather it was the realisation that a thermodynamic tool was needed for the complexity involved in the non-linear system shown in Portwood's development. To analyse chaotic behaviour in a quantitative way, notions of entropy and probability distribution are used as concepts. The probability distribution is related to the relative frequency of an "ensemble of realisations" (Beck 1995, p.21). If a sample set of phases is analysed empirically the relative frequency of a trajectory of change can be found for a particular cell or 'microstate'. Therefore the aim is to find an adequate probability distribution which gives an expression of the *expectation* within a cell.

Thermograph of Portwood 1696-1999. Fig. 3

The sample study area was bounded by the rivers Goyt and Tame, linking into the commercial core of Stockport and out to green belt and residential areas. As no generating partitions i.e. boundaries exist in Portwood itself then a grid is used. The level of resolution depends on the research required. A more localised analysis will give a richer detail of characteristic qualities in the area. As analysis is in simple numerical form it more readily reveals patterns. The cell size has to be of sufficiently small scale, in this case 10m x 10m, in order to locate the trajectory of change within the sample area. These small contiguous changes gradually cause abrupt alteration in the physical system from one morphological period to another. A binary system for registering change was used for each selected morphological period. Various qualities could have been identified as to the nature of a landscape change. In consideration of urban morphological hierarchy it was decided that a change in land-use, which includes here the changes to the town plan i.e. street, plot and building, was the determinant of a cell registering due to the limited data relating to building fabric. In studying the urban morphological process the scale of the phenomena relative to the form to be identified and the level of temporal resolution of the analysis are to be considered. Difference in the time scale of analysis alters the detail in the pattern of change. Each resolution will possess forms from different evolutionary periods relating to a narrative of formation. Problems exist in the availability of data for a series of equal time periods. Portwood analysis avoids these associated problems by accounting for a cumulative effect of change i.e. *expectation*, each selected time period or phase compounds the characteristic inherent in each cell. As the resolution increases i.e. the smaller time periods, a greater differentiation between cells is made apparent. The aim is for a comparative analysis, thus trajectories may be drawn between hotspots.

Thermo-boundary

When drawing a boundary of administrative regions, changes in locational characteristics and cultural divisions are important considerations. Portwood has seen the division of landscape by functional and formal approaches. A boundary line influences the uniformity or homogeneity of an area and the level of movement and information links between all locations. In identifying linkages, boundaries can be drawn to divide areas into regions keeping the cost of information and movement flows to a minimum. Classification of a boundary is linked to its timing in relation to the landscape's evolutionary sequence. An antecedent boundary is that which is drawn before a cultural landscape has developed such as the USA and Canada border. The question then is what type of flows are critical in the understanding of a cultural landscape and how are boundaries made manifest? Functional regionalism seems inappropriate in an area whose land-use patterns are continually changing. Legal bounded space seeks to minimise, hence internalise, positive spillover effects but with transport and communication improvements, the significance of the inert legal boundary is undermined. Non-legal bounded spaces change as supply and demand situations fluctuate. It is clear that there is a polemic between the need to have a dynamic boundary to meet changing characteristics and the need to define a boundary to draw out significant identities and enforce certain regulations.



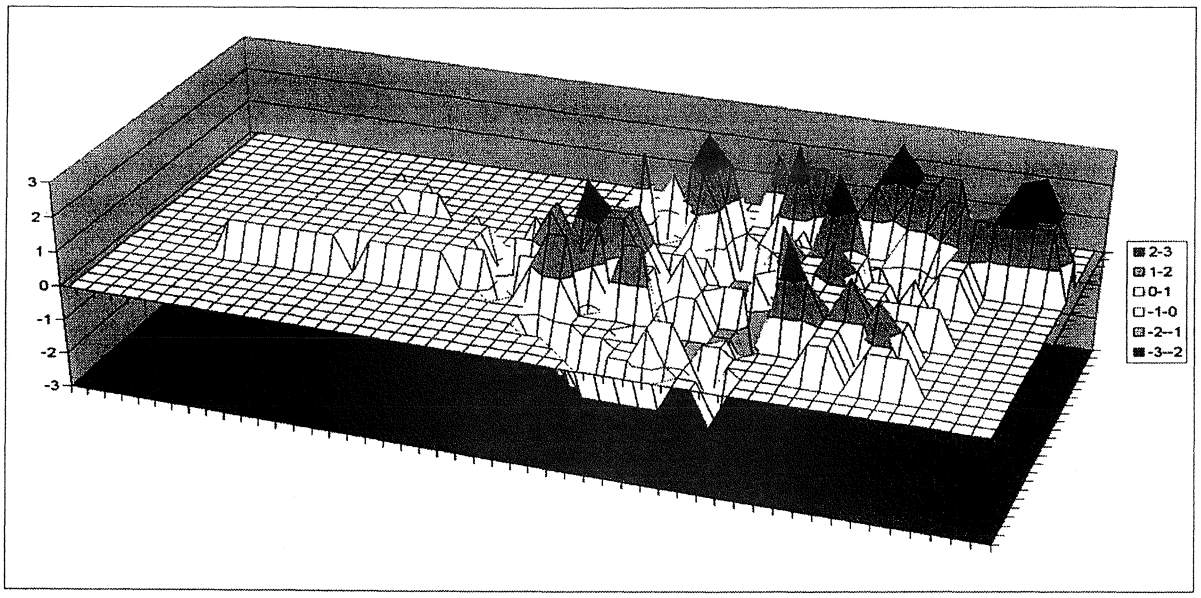
Thermographic Model of Cumulative Change 1696-1999 for Hotspots 1, 2 & 3. Fig. 4

By taking the cumulative thermographic image of change in land-use for Portwood between 1696-1999 the physicality of the present site becomes less identifiable within the system so that a more historically informed view of change in the landscape is determined [Fig.3]. Through modelling the data via 'Microsoft Excel', areas could be identified by their attraction to a hotspot through a 'temperature' gradient and boundaries drawn in the troughs of least change [Fig. 4]. In low viscosity flowing fluids the frictional factors near solid boundaries are more appreciable than at greater distance. The fluid can be divided into two parts where a layer of fluid close to the boundary in which its viscosity value is important is classified as a boundary layer and the portion of fluid outside is considered non-viscus. The thickness of a boundary layer is directly proportional to the kinematic viscosity. Overlapping territories of hotspots in the thermograph of Portwood could then be analogous to boundary layers as these

intermediary areas are affected by longer trajectories from a greater number of hotspots and thus are less dynamically unstable. In geometric terms, squares are the most practical compact shape and are easily aggregated, the analysis cells thus form simple *reference frames*. Reducing boundary and internal movement costs are not only significant, account has to be made of boundary function and the characteristics socially, economically and physically of the bounded area.

Density of Occupation

To develop a framework for the culturally driven economic landscape an area of considerable change was chosen signified by the density of hotspots adjacent to the M60 motorway corridor. "The structure of the urban grid, the distribution of land-uses, and built form densities are in the historically evolving city bound up with each other in a dynamic process centred on the relation of the grid structure to movement."(Hillier 1996, p.167) The strong correlation between land-use and density in terms of change suggested that an analysis should be made of the degree to which cells had undergone increase or decrease in the density of occupation over the period of landscape development 1696-1999. Density of occupation is that floor space required per person for a particular activity and a table was compiled showing an hierarchy of increasing density. Account had to be made of development intensity, this is the building plot size in relation to the floor space, and the turnover aspect in frequency of spatial occupation by different users. Changes in density were determined for each successive



Cumulative Density Change 1696-1999 for Hotspot 1, 2 & 3. Fig. 5

morphological phase whether by increase (+1) or decrease (-1) and compiled giving the cumulative value as an indication of the inherent characteristic of each cell [Fig. 5].

Financial Framework: Material investment

Constructional, functional, transportation and planning innovations impact on urban form by varying degrees. Innovations influence the landscape in their accommodation and by developments not directly connected to the innovation. What is crucial is that innovations transform the *potential* of an urban area. Thünan analysis assumes that location decisions are made independent of other prior determinants and cannot be applied to poly-nuclear urban areas such as Greater Manchester. The model assumes that land distant from the centre is

penalised by rising transportation or communication costs (Kivell 1993). Generalisations in assessing land value conceal the complexity of the system in fringe belts. The urban landscape has to be seen as the interaction between life cycles and land economics. Landscapes acquire their genius loci as a product not just of the present occupants but previous inhabitants. Successive societies are placed into a landscape of abandoned experiments and in this sense the landscape is an accumulation of experiences, "the urban landscape is a cumulative, albeit incomplete, record of the succession of booms, slumps and innovation adoptions within a particular locale." (Whitehand 1987, p.145)

From the methodological analysis, judgements can be made as to the probability or *expectation* of a cell undergoing change and the relationship of change with the overall pattern of densification. "Building types and building density have a strong relationship to economic factors" (Whitehand 1992, p.198) The variation in land value is more considerable than building cost over space. "Fluctuation in land values have not been accompanied by commensurate fluctuations in building costs."(Whitehand 1987, p.41) This means that investment in the physical fabric is not as open to fluctuations in the economic cycles. Constructional investment value as opposed to land value therefore could be utilised in maximising energy inputs without determining land-use.

The strategy enables investors to act upon a prior knowledge of the landscape without fixing areas to a particular land-use. The landscape becomes a place of physical action rather than intangible speculation through perceived land value. The proposed system exhausts the potential energy stored within the physical fabric of the landscape at any one moment. Rather than each successive investment phase demolishing totally the existing fabric, the aim is for redevelopment and selective culling. Investors are guided primarily by investment opportunities not land-use ordinances. Spon's Architects and Builders price book provided a list of possible landscape and building facilities, which were arranged in terms of unit cost per m^2. A cell's change and density values can be compared. It follows that a cell that has seen frequent changes in the past and with an overall de-densification characteristic would suit lower investment, thereby allowing its latent quality to continue without excessive future loss

Land Investment £/m²		**Cell Density Change**						
		-3	**-2**	**-1**	**0**	**1**	**2**	**3**
Cell Change Value	**7**	[1]0-14	[2]0-29	[3]0-43	[4]0-57	[5]0-71	[6]0-86	[7]0-100
	6	[8]0-43	[9]0-86	[10]0-129	[11]0-171	[12]0-214	[13]0-257	[14]0-300
	5	[15]0-157	[16]0-214	[17]0-271	[18]0-329	[19]0-386	[20]43-443	[21]100-500
	4	[22]0-357	[23]14-414	[24]71-471	[25]129-529	[26]186-586	[27]243-643	[28]300-700
	3	[39]157-557	[30]214-614	[31]271-671	[32]329-729	[33]386-786	[34]443-843	[35]500-900
	2		[36]380-780	[37]460-860	[38]540-940	[39]620-1020	[40]700-110	
	1			[41]867-1267	[42]900-1633	[43]900-2000		
	0				[0]0			

Investment Chart. Fig. 6

in capital. A table was drawn to give an indication of investment ranges for a cell's characteristic change and density value thereby appropriating a range of facility seed mixes [Fig. 6]. As the redeveloped area matures, each phase has increasing amounts of investment. Fluctuations in constructional activity relate to population and economic cycles, so phases of investment cannot be set at equal increments of time. Each successive investment accounts for that phase which preceded it. The areal extent of a facility is limited by the maximum amount of investment allowed for the adjacent cells. This has repercussions on the type of land-use options available. The number of phases that account for a cycle of development are related to the hotspot value within that thermo-boundary. Each cell cycle of density displays a particular trend dependent on social and economic conditions of a particular point in time. The aim is

not to repeat a trend but maintain a cell's value of density change for each cycle. Each successive cycle will exaggerate not dilute the cell's characteristic found for the period of formation 1696-1999. Complexity arises out of the successive application of simple rules. Initial development is not in areas of least investment but according to which plots become available for development due to piecemeal ownership. In this case study, land left in council ownership under the M60 embankment was targeted as potential stimulant for the area acting as a transitional space. Scenarios were considered where the type of facility chosen for a particular phase of investment was influenced by the political or cultural bias of the investor. In this case commercial, residential and institutional [Fig. 7]. This determined the degree to which the form of the facility was speculative or bespoke. Initial phases provide a fabric that offers an ambiguous definition as to appropriate roles that can function upon it e.g. a low bay warehouse can be used either for storage or indoor basketball. Within a particular cycle there is a critical point at which interchangeability of functions within the fabric is inappropriate for

Cycle 1	**Dept**	**Hotspot 3** Area A	**Hotspot 1** Area B	**Boundary Layer** Area C
Phase 1	EDD	Surface parking	Granite setts	Surface parking
	TS	Bitumen macadam	Forestry planting Fagus Sylvestica	Playground grassed recreation
	HA	Seeding low maintencance grass	Ornamental pond	Seeding wild flora mixture
Phase 2	EDD	Advertisement Hoarding	Ornamental lighting	Advertisement Hoarding
	TS	Fencing/slip resistant surface	Softwood chips path	Playground Furniture
	HA	Maintenance	Pedestrian deterent paving	Maintenance
Phase 3	EDD	Retail Warehouse Shell	Barratt Class 1 'Maidstone'	BiLight Industrial Building +Cat B Fit out
	TS	Agricultural Storage Building	Rehabilitation Housing	Training College
	HA	Garages, domestic	Terrace	2 Storey Terrace
Phase 4	EDD	Fit out extg retail warehouse	Barratt Class 2 'Ascot'	Dining Block
	TS	Cinema fitting out	Nursing Home	Classroom Fit Out
	HA	2 Storey Flats	Semi-detached	Extension college: residential
Phase 5	EDD	Department Store Fit Out	Barratt Class 3 'Harrow'	Leisure Centre; Dry
	TS	Public House	Homes for Mentally Handicapped	Library Resource Centre
	HA	Flats Standard med rise	Detached	Student Residences
Phase 6	EDD	Office high quality refurb	Barratt Class 4 'Hythe'	Exhibition Centre/ Conference Centre
	TS	Hotel 4 star	Convent	Computer Building/ Laboratory
	HA	Luxury flats	Apartment	Student Residences:small collegiate

Framework of Investment for Hotspot 1 and 3 including Boundary Layer. Fig. 7

the level of investment and decisions then are made as to the social, cultural and economic bias. It was decided that hotspot bounded areas would be developed with an economic bias i.e. residential and commercial whilst the intermediate i.e. thermo-boundary layer, which tended to have higher ranges of investment, would serve as an institutional public area. Specificity of investment in institutions causes greater inertia acting as a nodal point within the urban fabric. The institutional area will pass through a series of processes, these being establishment, incorporation, embodiment in built area and expansion onto adjacent sites. Replacement or addition to property will occur if the value of the subsequent structure exceeds the existing use value including the additional costs. There is a limit to the compression of floor space and a point may be reached when capital invested in maintaining areas is less profitable than elsewhere. It is then that a new cycle of development occurs.

Investigation of the M60 corridor has revealed certain development policies and spatial conditions in relation to motorway insertion that neglect the historic urban morphological process. In accepting change as an inevitable process of urban growth, questions arise as to the appropriateness of conservation. The strategy allows for latent qualities and characteristics to be sustained and promoted by informed investment. As the process of transformation of the urban landscape tends to be piecemeal this strategy acts as an overall framework within which areas can achieve sustainable economic potential without a singular phase of comprehensive redevelopment, adjusting to and encouraging the social and cultural content. The strategy attempts to create places that "exist before they are finished, which means in fact they are never finished; they remain carriers of the unexpected...." (Smithson 1973)

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