

The Concept of Urban Social Sustainability:

Co-ordinating Everyday Life and Institutional Structures in London

Thesis submitted for the Ph.D. degree

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ABSTRACT

The aim of the thesis is to clarify the meaning of sustainable development by addressing the underlying causalities of sustainability issues — urban social sustainability. This thesis redefines sustainable development as a fundamental interdependency between people's life-chances and their environments. This requires a distinction between the external physical aspect, and the internal social aspect of sustainability. The former is mainly concerned with the interrelationship between the natural environment and human society as a whole; the latter is particularly concerned with the interrelationship between the created environment and individual life-chances.

By virtue of the origins and the consequences of sustainability issues, this thesis argues that a proper conception of sustainable development should recover the human scale of development. A socially unsustainable society will inevitably increase exploitation of the natural environment. In other words, to achieve physical sustainability must achieve social sustainability first. Accordingly, the purpose here is to explore the practical meanings of urban social sustainability.

Having argued that the expanding logic, and the utilitarian tendency of industrial capitalism, is the underlying cause of the current unsustainable trends, this thesis is mainly concerned with the time-space relations between productive and reproductive activities in a capitalist industrial society. Based on the theory of structuration, the key to understanding the internal social aspects of sustainability is the concept of 'duality'. Individual actions and social structures are not two given sets of entities, a dualism, but represent a duality: the created environment is both the medium, and the constantly reproduced outcome of individual actions. Based on this conceptual framework, the empirical analysis of the concept of urban social sustainability is focused on the time-space connections of the 'institutional webs' in relation to employment, housing, retailing and transport in a concrete urban context — London. It stresses the necessary time-space co-ordination of everyday household life and institutional structures in London.

While acknowledging that an integrated, holistic approach to a socially sustainable city is desperately necessary, this thesis concludes that a simple, singular prescription of 'spatial integration' within the existing urban boundaries is inadequate. Rather, what is needed is to place the debate of sustainable cities in a wider regional, and, most importantly, social context, through which the time-space connections between everyday life and institutional structures are more likely to be adequately channelled. Moreover, the stress of households, not individuals, as the links between different institutions also opens up a fresh research scope for urban policy and strategic planning.

Key Words: sustainable development; social sustainability; physical sustainability; industrial capitalism; time-space; production and reproduction; cities; everyday life; institutional structures; urban planning; London; employment; housing; retailing; transport

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PART I

CHAPTER ONE

THE CONCEPT OF SUSTAINABLE DEVELOPMENT

The aim of the thesis is to advance the concept of social sustainability from both theoretical and practical perspectives. Since the publication of the Brundtland Report in 1987, the term *sustainable development*, or simply *sustainability*, has gained popularity in both academic debates and political agendas (see WCED 1987). Many ingredients of sustainability conceptions have been added on to mainstream sustainability debates, such as social, cultural, and political perspectives. Ten years after the publication of the Brundtland Report, the core concept of sustainable development remains to be a reconciliation between the goals of environmental protection and economic development. The problem of conventional conceptions of sustainability is the neglect of a deeper explanation of sustainability issues: they are neither the problems of economic development nor the problems of the environmental process *per se*, but the problems of people themselves. While arguing that a proper conception is the prerequisite for an effective implementation of sustainability policy, the central theme of the thesis is to explore the deeper explanation of sustainability issues by recovering their human scale — the emphasis of *social sustainability*.

By virtue of their origins and through their consequences, sustainability issues should be reconceptualised as an interrelated issue of the socio-environmental and the socio-economic, an issue which is centrally concerned with the interdependency between people and their environments. Accordingly, there are two aspects of sustainability which should be distinguished from each other: (a) the external, physical dimension of sustainable development, which is concerned with the interdependency between human society as a whole and the overall material basis of the natural environment; and (b) the internal, social dimension of sustainable development, which is concerned with the interplay between individual actions and the social conditions (the created environment). Since a socially unsustainable society will inevitably increase its exploitation of the natural environment, this thesis argues that the internal, social dimension of sustainable development is the prerequisite of the external, physical condition of sustainable development. However, this internal, social perspective has been largely ignored in conventional sustainability debates; therefore, it is the issue of social sustainability which this thesis focuses on.

It would be of little value if the discussion of sustainable development is restricted

to an abstract category without any practical applicability. A second task of this thesis, therefore, is to elaborate the concept of social sustainability in a concrete urban context — London. Among other things, the issue of a growing scale of transport, in particular those trips made by car, as well as the associated problems of resource depletion, pollution, and social exclusion, have all been the central concern of sustainability debates at both local and global levels. Moreover, the sustainability strategy adopted by the former Conservative Government¹ can be described as a policy of urban re-concentration. This requires a co-ordination of land use and transport concentrating in existing urban areas. The empirical analysis of the thesis is thus focused on the time-space co-ordination between institutional sectors, and most importantly, via the co-ordination between individual household's everyday life and the overall institutional structures in London.

This thesis argues that sustainability can be understood as an issue of 'reproduction' in space and time, including the reproduction of individual life-chances (a momentary matter, i.e. consumption) and the re-production of the production system as a whole (a continuous process). Accordingly, it is the time-space connection, not spatial proximity or temporal proximity alone, which is the key to addressing the underlying causes of sustainability issues. Issues regarding the time-space connections between employment, housing, retailing, and transport structures are used to explore the practical implications of social sustainability on the grounds that they represent the most basic moments of everyday life and the foci of urban policies. These issues can highlight the potential conflicts between productive and reproductive activities in contemporary urban society.

This chapter is divided into five sections. The first section briefly reviews the history of, and the main arguments within, the sustainability debate, illustrating that the sustainability debate is concerned mainly with the relationship between environmental protection and economic development. The second section argues that the prevailing approach to sustainability strategies — a neo-classical economic view — is inadequate on the grounds that it ignores the very meaning of sustainable development: an issue of social

¹ The empirical analysis of this thesis was undertaken between 1994 and 1997. As might be expected, change of government from Conservative to Labour Parties in 1997 might result in a subsequent change of policies. At the time of writing this final draft, it is still unclear whether the newly elected Labour government will have any radical change in sustainability policy, it must be pointed out that government policies mentioned in this thesis were mainly those policies devised by the former Conservative government in the late 1980s and early 1990s.

equity rather than a matter of market efficiency. The third section tries to reconceptualise sustainable development by addressing the role of people in environment-development interdependency. It suggests that an internal, social dimension of sustainability should be distinguished from the external, physical dimension of sustainability. The fourth section focuses on the underlying causes of sustainability problems, arguing that it is the utilitarian logic of industrialism and the expanding tendency of capitalism which are responsible for the problems of unsustainable development. It suggests that, in order to reverse the unsustainable trends from their deeper roots, we have to explore the meaning of sustainable development from the angle of time-space connections between productive and reproductive activities. The chapter concludes with an outline of the overall structure of the thesis.

The Sustainability Debate: A New Conception of an Old Story

Concern for environmental issues has become widespread in the 1980s. This is reflected in the now popular and widespread use of the term *sustainable development* which stresses the need for the simultaneous achievement of developmental and environmental goals. In the decade since the publication of the Brundtland Report in 1987 by the World Commission on Environment and Development (WCED), a mass of literature has been generated in various fields, giving rise to more specific applications, such as sustainable agriculture, sustainable forestry, sustainable ecological systems, sustainable energy patterns, sustainable economic development, sustainable transport, sustainable land use, sustainable industry, and sustainable foreign trade (see, for example, Alam 1994; Salih 1995; Conca et al. 1995; Hoogendijk 1996; European Commission 1996; Jacobs 1993; UN, Economic Commission for Europe 1996; Worrell 1997).

Within the debate on sustainable development, not only has the interest and scope of application grown substantially, but there has also been an increasing diversity of interpretations concerning the central concept itself. It is estimated that there are at least 160 different definitions of sustainable development (Holding and Tate 1996: 25). Within these definitions there are many different understandings of what is meant by the words 'development' and 'sustainable'. In a nutshell, the term *sustainable development* has been

used to bring together two strands of thought about the management of human activities — one focuses on developmental goals, especially the goals of economic development, and the other focuses on controlling the harmful impacts of human activities on the environment (see Redclift 1987; Cleveland 1987). Unfortunately, despite the extensive debates and discussions on the issue of sustainable development, there appears to be more controversy than agreement on the meaning of sustainable development, and the ways to achieve it.

The advance of both concepts and practices of sustainable development is a process of ‘learning by doing’; however, given the urgent need to prevent unsustainable development, the consequences of which might be very severe and truly irreversible, a proper conception of sustainable development is desperately needed. Accordingly, the main purpose of this thesis is to clarify the meaning of sustainable development and, in turn, to explore its policy implications by linking it to existing urban questions. Dykeman (1990: 3) suggests that the concept of sustainability consists of “older, established ideas that are wrapped in new terminology.” Although the term sustainable development gained popularity after the publication of the Brundtland Report in 1987, it was originally used by the International Union for Conservation of Nature and Natural Resource (IUCN) in the *World Conservation Strategy* in 1980 to recognise the challenge of integrating development and environment (IUCN 1980). However, it focused on developing countries where people are often forced to destroy the very resources on which their future well-being depends, highlighting the vicious circle of poverty and environmental degradation. Accordingly, sustainable development is conceived as follows:

Development and conservation are equally necessary for our survival and for the discharge of our responsibilities as trustees of natural resources for the generations to come (IUCN 1980:1).

The report outlines what might be characterised as the ecological approach to sustainable development (Hardoy et al. 1992: 177). In this work, three objectives are regarded as necessary for living resource conservation: the maintenance of essential ecological processes and life-support systems; the preservation of genetic diversity; and the sustainable utilisation of species and ecosystems. Although rightly pointing out the need to care for the environmental bases, the *World Conservation Strategy*, as Pearce et al. (1989: xi) argue, did

not succeed in integrating economics and environment: it did not show what conservation might mean for economic policy, how misguided economic policy could degrade the environment, or how better economic policy could act as a major force to improve the environment.

The Brundtland Report: Institutional Co-ordination

As might be expected, the most widely cited definition of sustainable development is that of the World Commission on Environment and Development (WCED 1987), also known as the Brundtland Commission. The Brundtland definition is used by many as the bench mark in subsequent interpretations. In the Brundtland Report, *Our Common Future*, sustainable development is defined as:

... development which meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED 1987: 43).

Most discussions of sustainable development fall broadly within this definition, although some groups choose to emphasise different aspects. However, this definition has been criticised as being too vague. Some commentators argue that it gives no indication of the time horizon ('future generations'), nor the scope and substance of human needs or the role of environment (not even mentioned in the definition) (Bartelmus 1994: 69). Others see it more as "a device for mobilising opinion rather than as an analytical concept for developing specific policies" (Blowers 1993b: 5). Even the Brundtland Report itself is not consistent as to what it means by sustainable development (Pearce et al. 1989: xiv).

A large number of sustainability discussions focus on the *biophysical environment* which comprises the Earth's life-support system. However, an increasing number of writers and organisations have begun to focus on the *socio-economic environment* which encompasses people and their cultural activities and the economic processes through which they are all interrelated. Concepts like 'social sustainability', 'economic sustainability', 'community sustainability', and even 'cultural sustainability' are increasingly considered to be part of sustainable development (Hardoy et al. 1993, cited in Mitlin and Satterthwaite 1996:25). This diversity in interest suggests that the nature of sustainability is complex,

dynamic and, most importantly, all-encompassing. As O’Riordan (1988) notes, sustainable development is a contested concept that is so widely used precisely because of its ‘slippery’ nature.

A key theme in the Brundtland Report is that environmental problems do not only result from the process of development itself but also from the lack of development. In both cases, development and environment are no longer understood as mutually exclusive. Accordingly, the Brundtland Commission argues that environmental protection should not be seen as an obstacle to growth so much as an integral and supportive element in that growth. In other words, the Brundtland Commission attempts to merge environmental issues with mainstream policy rather than to change this policy from the periphery of the environmental movement (Bartelmus 1994: 8). The Brundtland Report, therefore, concludes that environment and development are inextricably linked. Current policy responses are handicapped by the fact that existing institutions tend to be independent, fragmented, narrowly focused, and overly concerned with addressing effects rather than causes; so they tend to focus on issues such as acid pollution as discrete policy problems (WCED 1987: 310-12). Therefore, the major issue of the sustainability debates is not the definition *per se*, but an issue of integration between environment and development. What is consequently urgently needed is an institutionally integrated approach to the interrelationship between environment and development.

The issues of sustainable development were much discussed throughout the 1970s, even if they were not termed ‘sustainable development’ at the time. There are two strands of argument which are closely related to the current sustainability debates, or the environment-development interrelationship. One is the United Nations Conference on the Human Environment, held in Stockholm in June 1972 (the Stockholm Conference). The second is the publication of the book *The Limits to Growth* (TLTG) by the Club of Rome, also in 1972. Although these two arguments have slightly different emphasis — the Stockholm Conference tended to focus on the environment, while TLTG was mainly concerned with development. However, both of them emphasised the interdependency between human aspirations for development and the need to protect the environment.

The Stockholm Conference: Conservation vs. Economic Development

The Stockholm Conference was the key event in the growth of the global environmental movement. It was the first occasion at which the political, social and economic problems of the global environment were discussed at an inter-governmental forum with a view to actually taking corrective action (McCormick 1995: 107). An unofficial report was commissioned and later published by Ward and Dubos as *Only One Earth* (Ward and Dubos 1972). The theme of this book is the basic situational interdependence between economic growth, human development, mass poverty, the living conditions in low-income residential areas, and everyday environmental problems. This book was one of the first works to stress that present human needs must be met without compromising the needs of future generations. The definition of sustainable development used by *Our Common Future* in 1987 draws from this much earlier book: the “charge of the U. N. to the [Stockholm] Conference was clearly to define what should be done to maintain the earth as a place suitable for human life not only now, but also for future generations” (Ward and Dubos 1972: 25).

Although the concept of the “human environment” had emerged before the Stockholm Conference, it was the emphasis on this theme that distinguished Stockholm from previous international gatherings at this level (McCormick 1995: 119). “Before Stockholm”, Ward (1982: xii) observes, “people usually saw the environment . . . as something totally divorced from humanity . . . Stockholm recorded a fundamental shift in the emphasis of our environmental thinking.” However, among the proponents of sustainable development, there is a large gulf between those whose primary concern is conservation — the More Developed Countries (MDCs) — and those whose primary concern is meeting human needs — the Less Developed Countries (LDCs) (Adams 1990).

In the Stockholm Conference, the only view rich and poor countries shared was the conviction that environmental conservation and economic development were in conflict with each other.

The Limits to Growth Debate: Growth vs. Anti-growth

Before the Stockholm Conference, conspicuous pollution incidents in the 1960s, and neo-Malthusian responses to demographic and economic growth, had led to the appearance of environmental ‘doomsday’ literature. Titles like *Silent Spring* (Carson 1965) and *Blueprint for Survival* (Goldsmith et al. 1972) are indicative of the environmental mood at that time. However, among the first considerations of the possible links between global economic growth and natural resource scarcity was the report, *The Limits to Growth* (TLTG) published by the Club of Rome in 1972 (Meadows et al. 1972). Although the reactions to its conclusions were more controversial than agreeable, TLTG did provoke a widespread concern throughout the 1970s. It was based on a then new computer model of the world economy — established by a work group at the Massachusetts Institute of Technology (MIT) — that included a representation of the economic system’s extractions from the environment, its use of natural resources, and its insertions into the environment in the form of waste discharges. The essential thesis of the MIT model was that the roots of the environmental crisis lay in the *exponential growth* of people and material consumption. Five basic factors were identified as determining and ultimately limiting growth: population, agricultural production, natural resources, industrial production and pollution. Three main conclusions were reached by the MIT team:

- (1) If the present growth trends in world population, industrialisation, pollution, food production and resource depletion continue unchanged, the limits to growth on this planet will be reached sometime within the next one hundred years. The most probable result will be a rather sudden and uncontrollable decline in both population and industrial capacity.
- (2) It is possible to alter these growth trends and to establish a condition of ecological and economic stability that is sustainable far into the future. The state of global equilibrium could be designed so that the basic material needs of each person on earth are satisfied and each person has an equal opportunity to realise his individual human potential.
- (3) If the world’s people decided to strive for this second outcome rather than the first, the sooner they begin working to attain it, the greater will be their chances of success (Meadows et al. 1972:29).

This analysis strongly challenged the conventional wisdom about the position of

technological solutions by questioning the notion that scientific and technological changes and free market mechanisms could be sufficient to resolve whatever problems might arise. It pessimistically suggested that under current trends of population growth and material consumption, resource bases could not be sustained over a few decades. Accordingly, these assertions led to a demand for controls on population growth and economic growth. This is now characterised as an *anti-growth* proposition of the steady-state economy.

**From TLTG to the Brundtland Report: A Shift from a Pessimistic
View of Environment-development Conflict to an Optimistic
View of Environment-development Interdependence**

As might be expected, the prospects of sustainability implied in the TLTG report were widely unappealing: the reaction to it by economists was generally either dismissive or hostile. This can be compared to the widely praised and little criticised Brundtland Report. In fact, both reports tell very similar stories and reach somewhat similar conclusions. In both cases, environmental constraints on growth/development are identified and discussed. Both report agree that current trends cannot continue far into the future; they both conclude that radical changes are required to manage world economy and world environment. However, the difference in the bottom line conclusions of the two documents is what sets them apart.

On the one hand, what the TLTG report explicitly offers is sustainability in the sense of a constant level of total world output which can be maintained into the indefinite future. Implicit is the continuing existence of pressure for redistribution from rich to poor nations. What the Brundtland Report offers, on the other hand, is quite different:

Far from requiring the cessation of economic growth, it [sustainable development] recognises that the problems of poverty and underdevelopment cannot be solved unless we have a new era of *growth* in which developing countries play a large role and reap large benefit (WCED 1987: 40, emphasis added).

In other words, the TLTG position takes the view that the potential for reducing the demands on environmental functions by the substitutions between different environmental capital, and between environmental and human capital, is quite limited. By contrast, the

Brundtland Report position takes the view that, by virtue of such substitutions, it is possible for the world economy to continue growing without increasing the demands made on the environment beyond the limits that it can tolerate.

From the TLTG report to the Brundtland Report, the nature of the sustainability argument has shifted. The environment-development discourse of the 1970s was concerned mainly with the ecological limits to economic growth, and focused on the probable exhaustion of non-renewable natural resources. In the late 1980s and 1990s, the relationship between development and environment has been seen as both interdependent and complementary: the Brundtland Report stresses the need for global environmental management and puts faith in scientific solutions to perceived environmental and ecological crises (Brown et al. 1993; Auty and Brown 1997). In other words, in the 15 years between the TLTG report and the Brundtland Report, the concept of sustainability has shifted from a more pessimistic neo-Malthusian view of anti-growth, steady-state economy to a more optimistic view — sustainable development — which is arguing for managing the environment in sustainable ways that meet the goal of further economic growth (De la Court 1990: 10).

No consensus has been reached on which view is correct. Nevertheless, given that sustainability problems are both irreversible and global in nature, no society can afford the costs of being unsustainable. Only prevention is possible. Therefore, a precautionary attitude is necessary (see Pearce 1989). The definition of sustainability will probably remain ambiguous because “its beguiling simplicity and apparently self-evident meaning have obscured its inherent ambiguity” (O’Riordan 1989: 93); but the fundamental concern with sustainability, a concern with the interconnections between development and environment, “is becoming accepted as the mediating term which bridges the gap between developers and environmentalists” (ibid.).

The Rio Summit: Local Agenda

While the operational implications of sustainable development often remain unclear, it is certainly true that sustainability problems have emerged as an issue at the top of the international agenda of developmental concerns. Despite the recognition of the

interconnections between environmental and developmental objectives in the Brundtland Report, an integration has not taken place because developed and developing countries have quite distinct agendas. For the former, affluence (over-development) is the driving force behind environmental degradation and resource depletion; for the latter, poverty (under-development) is the problem to be blamed (Bartelmus 1994:11). Taking this into consideration, in developing countries, the negative impacts of urban life are acutely felt by local inhabitants, and their primary concerns are based in the present and not with the future, while in developed countries, sustainable development can be addressed from the urban level up to the global level (Stren et al. 1992:2).

However, given the urgency of sustainability problems, action has been called to redress unsustainable trends. In December 1989, the UN General Assembly passed a resolution agreeing to call a conference. It was the United Nations Conference on Environment and Development (UNCED), which drew representatives from 178 countries to Rio de Janeiro during two weeks period in June 1992. It was the largest international conference ever held, and it became known as the Earth Summit. At this time, the idea of sustainability had a significant international forum. At the Rio Summit, general principles were set for ongoing international, national and intellectual agendas on sustainable development in the *Agenda 21* — a local action plan for sustainable development. It argues that the goals of environmental protection and economic development could be integrated on the basis of local community and free market principles (see Quarrie 1992). However, this meeting has been criticised by some for failing to come up with policies of a sufficiently radical nature to tackle effectively the problems confronting the world. Among the five agreements signed in the Rio Summit, only the Framework Convention on Climate Change and the Convention on Biological Diversity are binding under international law. Agenda 21, the Rio Declaration and the Forest Principles, are non-binding statements of intent which solely provide guidelines for future development (Jordan and Brown 1997: 271).

From Stockholm to Rio: Contrasting Perspectives on the Environment-development Debate

In 1972, the Stockholm Conference called attention to the deteriorating international

environment. Twenty years later, the Rio Summit explicitly recognised the link between environmental protection and economic development. The links between environmental protection and economic development had been clarified at the Stockholm Conference, illustrating that these two concepts are not necessarily incompatible (Holdgate et al. 1982:7). However, it was not until the 1987 Brundtland Report that the interrelationship between environment and development was fully recognised. Turner et al. (1994) have summarised the spectrum of the various views about the concept of sustainability to date (see Table 1.1).

There are both strong and weak concepts and definitions of sustainability. They are most easily distinguished from one another with reference to often unstated assumptions about how effectively technology and human ingenuity (human or technological capital) can substitute natural resources and ecological services (natural capital) (Pearce et al. 1989; Turner et al. 1994). Strong sustainability positions hold that human-made capital and natural environmental capital are not always interchangeable, so that the possibility for such a substitution is limited enough, or at least uncertain enough, to make continued industrial growth ecologically precarious. In this manner, some proponents of the strong sustainability camp see a total incompatibility between continued high levels of economic growth and sustainable environment, as the one systematically undermines the other (Seabrook 1990). Weak sustainability positions, by contrast, regard natural environmental capital as potentially replaceable with human-made capital and thus tend to assume that efficiency in use of resources, reflecting the substitution of ingenuity for resource inputs, will continue to increase as it has done in the past (Cairncross 1991: 47; Daly and Cobb 1989: 72-73). It so follows that weak sustainability views economic growth as necessary to sustainability.

In practice, as suggested by Houghton and Hunter (1994), strong versions of sustainable development would include an approach to economic development that begins from a position of uncompromising restraint on the use of some resources. However, from a social perspective, this is not appealing since it does not distinguish human society from other systems and it cannot relate those (eco)systems to human interests in any direct and simple way (Common 1995: 55). Most importantly, strong sustainability positions fail to recognise that environmental crises are problems of social organisation and cultural forms.

Table 1.1 Ideological Camps in Sustainability Debate

TECHNOCENTRIC		ECOCENTRIC	
‘Cornucopian’	‘Accommodating’	‘Communalist’	‘Deep Ecology’
GREEN LABELS			
Resource exploitative, growth-oriented position	Resource conservationist & ‘managerial’ position	Resource preservationist position	Extreme preservationist position
TYPE OF ECONOMY			
Anti-green economy, unfettered free markets	Green economy, green markets guided by economic incentive instruments	Deep green economy, steady-state economy regulated by macro-environmental standards	Very deep green economy, heavily regulated to minimise ‘resource-take’
MANAGEMENT STRATEGIES			
Primary economic policy objective, maximise economic growth (max GNP)	Modified economic growth (adjusted green accounting to measure GNP)	Zero economic growth; zero population growth	Reduced scale of economy and population
SUSTAINABILITY LABELS			
Very Weak Sustainability	Weak Sustainability	Strong Sustainability	Very Strong sustainability

Source: Turner et al. (1994: 31), Box 2.1.

A weak environmental political economy would, by contrast, emphasise the adoption of the status quo. This has been argued as feasible, realistic and adequate. Ecologists, however, criticise human management in narrowly conceived human interests as neglecting considerations which relate to the functioning of the biosphere and its constituent systems (ibid.).

Hardoy et al. (1992: 174) argue that there are at least three changes in emphasis regarding the environment-development debate between the Stockholm Conference and the Rio Summit. The first is the much increased concern about damage of global ecosystems. The second is that, while the concern about the depletion of non-renewable internal resources has to some extent receded, the concern about the finite nature of many renewable resources (especially fertile soil and freshwater resources) has increased. The third is the wider acceptance among many environmentalists of the need for economic growth within many nations and regions (especially the poorest ones) for the achievement of necessary basic human needs. In other words, at least one important consensus has gradually been established between 'developers' and 'environmentalists': that unfettered economic growth and extreme preservation are unsustainable. This change can be characterised as a move away from an uncompromising antagonism between extreme sustainability positions (*very strong* and *very weak* sustainability) and towards a mutual understanding between *strong* and *weak* positions of sustainability. Taking into account the different developmental and environmental agendas in both developed and developing countries, in particular under the conditions of the current global political economy, a commonly accepted path to sustainable development will be a compromising position between strong and weak sustainability camps. The question is whether such a compromise solution, i.e. as an issue of 'uneven development' between developed and developing countries, can really contribute to *global* sustainable development.

Global Consequences and Local Origins: Concept and Implementation

The global consequences of environmental crises are local in origin; in turn, global environmental problems, such as global warming and ozone depletion, will have local impacts. A comprehensive understanding of sustainability issues at global level is

necessary, but the existence of a global problem does not necessarily imply a global solution. While ‘think globally and act locally’ has become one of the most popular catch phrases of sustainability debates, we must recover the necessary connections between the global and the local, as well as between the consequences and origins of sustainability issues. In this regard, the difference between strong and weak sustainability positions is not a question of degree regarding the possibility of substitution between human and environmental stocks, but fundamentally a philosophical gulf between ecocentric and anthropocentric views, as well as a question of ‘uneven development’ between developed and developing countries. It could be argued that a commonly accepted position of sustainable development is unlikely to be reached between these two world views except a compromising global political-economic solution. As might be expected, this top-down approach can at best reach a limited degree of success and, at worst, enlarge the ‘unevenness’ of development between rich and poor countries/regions on the grounds that they are occupying very different positions in the global community. In other words, different societies and regions are facing different environments, and thus have different sustainability agendas. While the issue of equity (both inter- and intra-generational equity) stands at the centre of sustainability debates, it is both unjust and counterproductive to resolve sustainability issues in this way.

Because these two positions are so different in their underlying assumptions, to reconcile these conflicting views requires a fundamental rethinking of the meaning of sustainability. This thesis argues that what sets these two sustainability positions apart is also the key to bring them together — i.e. we need to re-examine the interrelationship between environment and development by looking at the fundamental interconnections between people and their environments. While recovering this defining character of sustainability issues, it might be possible to weave together these two conflicting positions. This also suggests that a proper conception is crucial for the adoption of policy and action. The policy and action based on inappropriate conceptions are unlikely to achieve the goal of sustainable development. For the sake of illustration, as well as to justify the re-conceptualisation of sustainable development, it is important to highlight the inadequacy of current sustainability policy before moving on to explore the underlying interconnectedness between environment and development.

Sustainable Policies: The Neo-classical Economic Approach

Since the publication of the Brundtland Report in 1987, the UK government has shown its support to the concept of sustainable development by publishing a series of environmental documents (DoE 1989; 1990; 1992; 1993; 1994a; 1994b). In summary, the UK government's conception of sustainable development can be characterised as a neo-classical economic view, i.e. one which emphasises the price mechanism of the free market on environmental issues. Neo-classical environmental economists hold the view that improvement, or at least maintenance, of the material standards of living is desirable but should not destroy or reduce the environmental and resource bases which are critical to the welfare of current and future generations. This view is represented by the *Blueprint for a Green Economy*² (Pearce et al. 1989). The purpose of this book, and the subsequent Blueprint series (see Pearce, ed. 1991; Pearce 1993; 1995), is to consider the implications of sustainable development for the UK economy by setting it in context to the global economic and environmental systems. While arguing that "future generations should be compensated for reductions in the endowments of resources brought about by the actions of present generations" (Pearce et al. 1989:3), the central idea of these Blueprint series is on the trade-offs between environmental and economic goals, and on valuing the environment. Pearce argues that:

... solving environmental problems necessarily requires solving economic problems first, especially by removing those distortions that arise from the failure to place an economic value on environmental assets and their services, and the failure to reflect those economic values in the workings of the market-place (Pearce 1993: xiii).

In other words, the neo-classical economic approach argues that sustainability problems arise because the values of the services provided by the natural environment are not properly taken into account as part of the existing economic decision-making. The price mechanism has wrongly recorded environmental goods and services as having zero, or very

² This report was commissioned by the Department of Environment (DoE) and prepared by the London Environmental Economics Centre (LEEC), a joint venture established by the International Institute for Environment and Development (IIED) and the Department of Economics at University College of London.

low prices when they serve economic functions which should attract positive prices; so the economic system tends to over-use the under-valued environmental services. What Pearce and his associates suggest, is to value the environment by establishing market-based incentives and to allow the market to decide the levels of resource exploitation and economic development.

In practice, this corresponds to the application of the principle of 'polluter pays' (environmental taxation), as, for example, taxes on emissions and discharges, deposit-refund systems, tradeable emissions, and resource-use permits, as extensions to the principle of 'user pays' in neo-classical economic thought (Pearce et al. 1989:156-66).

It is believed that to make the polluter pay by assigning some pollution tax to the prices of environmental services can encourage rational use of scarce environmental resources and avoid distortions in international trade and investment. In other words, sustainability issues are dealt with within the conventional boundaries of economic analysis except the underlying assumptions about environmental goods and services are modified. To use economic jargon, a neo-classical economic approach to sustainability issues is to internalise the environmental externalities into market mechanisms. For example, the definition of capital has been extended to include not only man-made capital but also natural capital (environmental assets); suggestions have been made to replace the conventional monetary valuation of national well-being and measure of economic growth, such as Gross National Product (GNP) and Gross Domestic Product (GDP), with some environmental-sensitive indices of welfare and development, such as 'Gross Natural Product' (see Agarwal and Narain 1991) and 'Net National Product' (GNP minus depreciation of natural assets, minus defensive expenditures against environmental damage, minus the costs of unmitigated environmental damage) (see IUCN et al. 1991).

However, it could be argued that neo-classical economic concepts of sustainable development are misleading, and the associated market-based measures can only have a limited degree of success. The major problem of the neo-classical economic approach to sustainability is *economic reductionism*. While neo-classical environmental economists rightly criticise that 'development' should not be conflated with 'growth' by separating the qualitative dimensions of economic development apart from the quantitative ones, they fail to recognise that economic life is only a part, though a very important part, of social life.

It might be necessary to include environmental goods and services into price and market mechanisms in order to make the best use of the increasingly scarce common goods (or to avoid the growing scale 'common bads'). However, what is also needed is to recognise the limits and the distortions of price/market mechanisms on 'valuing' the states of 'being', such as quality of life and other survival needs. These basic needs should not be seen as merely 'tradable goods' in the first place. Moreover, market mechanisms, no matter how efficient they are for the allocation of resources, can only deal with 'effective demands' which are supported by the purchasing power of people, but not necessarily by people's 'real needs' which may not be included in the market mechanisms. While economists often accept the Keynesian maxim that 'in the long run we are all dead' and that the short-run is the only reasonable time horizon over which to operationalise economic and political decisions, Harvey (1996: 229) argues that the purpose of the rhetoric of sustainability is to direct public policy towards thinking about time horizons well beyond those encountered in the market. Moreover, Mehmet (1995: 125) argues that: "In pragmatic trade terms, monetisation is more likely to facilitate the process of pro-Western capitalisation of Third World resources, thus widening rather than narrowing global inequality and unsustainability." In this view, while the neo-classical economic approaches to sustainability issues try to resolve the issue of inter-generational equity by improving market efficiency, it is likely to be achieved at the expense of intra-generational equity.

Whereas Pearce explains sustainable development in terms of neo-classical economics, a contrasting view (see Jacobs 1991) holds that the environmental crisis can not be resolved by economic means alone, but is in effect an economic crisis. In his view, it is the overly emphasised economic logic which leads to 'development' being unsustainable. While equity (both inter- and intra-generational equity) is conceived by many to be the upmost goal of sustainability, conventional economic analysis thus reaches its limits: the monetary valuations of non-economic effects of economic growth and of other human activities and natural processes become arbitrary, because these processes and consequences cannot fit into the economic demand-and-supply system.

The problem of the neo-classical economic approach to sustainability issues is also reflected in the price mechanism *per se*. Like Pearce and his associates, I take the view that environmental considerations should be integrated into the processes of socio-

economic decision-making. But an integration of environmental and economic policies is not sufficient. The complex, dynamic and multifaceted nature of sustainability issues requires a holistic conception to address the interconnections between environmental and developmental goals. It cannot be further clear that certain actions must be taken to reverse unsustainable trends, but effective corrective actions are only possible when we have a proper conception of sustainable development. The neo-classical economic approaches attempt to integrate both environmental and economic issues in the market mechanism, but their core atomistic conception is unable to address this multi-faceted nature of sustainability issues. Society is not the sum of a mass of homogeneous individuals, but is constituted by a web of institutions. To see the individuals as the final unit of decision-making in neo-classical economic analysis will obscure the significance of the interdependent and multifaceted nature of sustainability issues. Hence, a re-conceptualisation of sustainable development is necessary.

Sustainable Development: A Re-conceptualisation

In much of the writing on sustainable development there is a common thread, a fairly consistent set of characteristics that appear to define the close relationship between *people* and their *environments*. Conventional conceptions of sustainable development stress either *ecological* sustainability (the fallacy of strong sustainability view) or *economic* sustainability (the fallacy of weak sustainability view), but they share a common blind spot: a lack of focus on *people*. The concepts of both environment and development cannot be separated from people's thinking and doing; it is people's environment and people's development. As noted in the Brundtland Report, "the 'environment' is where we all live; and 'development' is what we all do in an attempt to improve our lot within that abode" (WCED 1987: xi). In other words, sustainability issues are not the problems of the environment (as a natural process) or the economy (as a human activity) *per se*, but an interrelated issue of people *and* environment (people's intervention in environment and environment's impact on people). What is needed in the discussion of the environment-development interrelationship is to make explicit the *human* scale, or the *social* dimension, in sustainability debates: as socio-environmental issues and socio-economic issues.

The trend towards an emphasis on the *human* scale has been stressed as early as in the Stockholm Conference of 1972 by virtue of the title of the conference — the United Nations Conference on the *Human* Environment. To re-conceptualise sustainable development, therefore, one should begin with a broad and fundamental rethinking about the meanings of *environment*, *development*, and most importantly, *people*. With the emphasis on the role of people in the interconnections between environment and development, what appears central to the re-conceptualisation of sustainability issues is the concept of ‘duality’: i.e. environment, development, and people, not as discrete entities, a dualism, but representing an interdependent whole, a duality: an interdependence between people and their environments. The concept of duality will be explained in chapters 2 and 3. However, in the remainder of the chapter, let us see how the re-conceptualisation of the notions of environment, development, and people, can help to clarify the meaning of sustainable development.

The Concept of Environment: The Nature and the Society

The relationship between people and environment has long been a central theme in geographical studies. Dunford and Perrons (1983, chap. 3) argue that geographical writing on this issue tends to under-emphasise the role of social factors. Naturalistic ideologies dominate: theoretical frameworks are concerned with the conditioning of human individuals by nature and with the determination of geographical forms by natural conditions (see Smith 1990, chap. 1). The natural environment is seen as given, pre-existing to human beings, and external to society. It is a realm of impersonal objects, to be studied, then conquered or exploited by humans. By contrast, the socially constructed society, which is sustained and made to happen by human beings, is regarded as fundamentally discontinuous with nature (see Fuller 1988). Orthodox economics also regards environmental resources as ‘given’ (i.e. exogenously derived in theory building) and thereby not being brought into full explanation and significance. As far as sustainability is understood as an interdependency between people and *their* environments, it is inappropriate to see the natural environment and the social conditions as totally separated entities. Environment is not separate from where we live. Harvey (1996: 118), in examining the relationship

between social process and practical politics, as well as the geographical difference embedded in place, space, and environment, argues that:

‘Environment’ is . . . whatever surrounds or . . . whatever exists in the surroundings of some being that is *relevant* to the state of that being at a particular place and time. The ‘situatedness’ of a being and its internal conditions and needs have as much to say about the definition of environment as the surrounding conditions themselves, while the criteria of relevance can also vary widely (emphasis added).

In other words, environment is always related to people, or the human society. In the late twentieth century, while the utilitarian logic of industrialism and the expanding tendency of capitalism radically changed the nature and scale of people-environment interdependency, the boundaries of people’s activities have gone beyond the immediate, local surroundings and reached the global scale. For example, ‘fresh’ vegetables and fruits grown in remote areas, and in different seasons, are occupying a large space of shelves in the 24-hour supermarkets; synthetic materials and artificial surroundings are common to our daily lives, including the created space of ‘virtual reality’. It is inappropriate to reduce ‘environment’ to ‘natural environment’, or ‘nature’, as something discrete, remote, and external to our society.

Clearly, there are pre-existing conditions of the *natural environment*, such as the atmosphere, oceans, land, and ecosystems as a whole, of which human society is an integral part. However, there also exists the *man-made environment* in which humans do not exist in a state of mere adaption to the material world; by contrast, people seek to master their environment rather than adjust to it as given. People change themselves by changing the world around them, and people change in accordance with the changing world, in a continual and reciprocal process. After millions of years of hunting and gathering and thousands of years of tilling the soil, humans are now entering a new era where the created environment is the dominant structure of their surroundings. In such times, most areas of the environment are subject to the intervention of (intended and unintended) human activities. In Britain, for example, social and economic change over a period of six thousand years has removed all but 7 per cent of the natural forest cover of the British Isles (McCormick 1995: 161). Very little, if any, true wilderness remains, and only the vestiges of once great natural forests remain in places such as Sherwood, the New Forest and the

Forest of Dean (ibid.). The significance of the man-made environment can be illustrated by a lengthy quotation from the words of Beck. He stresses that:

. . . at the end of the twentieth century, it means the end of the antithesis between nature and society. That means that nature can no longer be understood outside of society, or society outside of nature. The social theories, which understood nature as something given, ascribed, to be subdued, and therefore always as something opposing us, alien to us, as non-society, have been nullified by the industrialization process itself. . . . At the end of the twentieth century, nature is neither given nor ascribed, but has instead become a historical product, the interior furnishings of the civilizational world, destroyed or endangered in the natural conditions of its reproduction. But that means that the destruction of nature, integrated into the universal circulation of industrial production, ceases to be 'mere' destruction of nature and becomes an integral component of the social, political and economic dynamic (Beck 1992: 80).

In other words, while conceptually it is necessary to distinguish between the man-made environment and the natural environment, in reality they co-exist as an integrated whole — the *living* environment of human society.

The Concept of Development: Economic Development and Socio-economic Development

In the sustainability debates, the notion of development has been clarified by making a distinction between the qualitative and the quantitative dimensions of development, or simply the distinction between *development* and *growth* (see Redclift 1987; Pearce et al. 1989; Turner et al. 1994). For example, it is often argued that 'development' is confused with 'growth': growth conveys the idea of quantitative expansion of the economic system, and development, by contrast, is a qualitative process involving the improvement of cultural, social, as well as economic aspects of society (IUCN et al. 1991). Most commentators would now accept that there is more to development than rising real incomes — i.e. economic growth.

It is generally acknowledged that economic growth is at best an 'essential' or a 'mere' means of development rather than an end in itself (World Bank 1992:34; UNDP 1992: 2). Development is judged not only by the production of goods and services, the accumulation of wealth, but also its respective implications for individual well-being. Affluence, or economic development, itself, does not necessarily promote human welfare

if certain social groups (usually the poor) are excluded from the access to resources. In other words, human development also involves an indispensable dimension of distribution and positioning. In some circumstances, economic development actually creates scarcity rather than reduce it because it generates additional needs. It is necessary to expand the analysis of development from focusing on its 'means', economic growth, to addressing its 'ends', quality of life. These two dimensions are closely related, but not equivalent.

In this manner, the concept of development must be understood in a wider context of *socio-economic* dynamics rather than in a narrowly-conceived notion of *economic* growth. The conventional notions of sustainable development are controversial partly because they do not explicitly distinguish between the sustainability of economic activity and the general substance of human life. The reason is obvious: human 'assets' (beings) are not owned and traded and thus valued in the markets as is the case of produced assets (material goods). In other words, there exists a fundamental incompatibility between different people's 'utility functions'. They cannot be 'summed up' or 'averaged out', as the monetary evaluations of commodities and productions.

However, it could be argued that for a full and proper understanding of the meaning of sustainable development, simply to distinguish the qualitative dimension of development from the quantitative one is insufficient. Rather, to re-conceptualise the meaning of development, we have to explore the relationship between different kinds of development. In so doing, first we must understand the roles of production and reproduction in relation to human aspirations for development. Production is about the transformation of materials; reproduction, by contrast, is about the transformation of beings. However, the meaning of reproduction is twofold. On the one hand, reproduction is understood as a momentary happening, a single event — i.e. consumption, or in Marxist terms, the reproduction of labour power. On the other hand, reproduction is understood as a cyclical or repetitive process — i.e. re-production, or the continuity of the production system. As might be expected, consumption necessarily involves production, and re-production cannot be sustained without consumption. The relationship between production and reproduction, consequently, can be understood in two senses. One is a substitute dualism: as production and consumption; another is a complementary duality: as production and re-production. Progress in the transformation of materials, or the re-production of the production system,

is referred to as *productive* development, or simply *economic* development; and improvement in the transformation of beings, or the reproduction of labour power, is referred to as *reproductive* development, or *socio-economic* development. For example, the breakthroughs in production technology and the growing scale of productive activities can be seen as a productive development. However, this does not necessarily mean that people within the same society consume more or better products, for example, if these products are produced for export. In turn, the production system cannot be sustained over time if the producers cannot find the buyers to finance the resources required for production in the next cycle.

The difference between *productive* and *reproductive* development, or between *economic* and *socio-economic* development, as might be expected, is more than a simple dichotomy between the quantitative and the qualitative. Clearly, both involve quantitative and qualitative dimensions. In the late twentieth century, the relationship between *productive* and *reproductive* development can be seen to be mutually exclusive and complementary; mutually exclusive due to the constraint of space and time (presumably people can either undertake productive activities or consume goods and services at a specific time/space, but not both). They are complementary because both production and reproduction cannot be sustained without input from another. Consequently, *overall* development requires an adequate channelling between *productive* and *reproductive* development to assure that both systems can be sustained into the future. It could be argued that the notion of sustainable development can be understood by exploring the duality relationship between productive and reproductive development via the interplay between man-made and natural environment. Nevertheless, to address the environment-development duality, it requires a rethinking about the notion of people via the distinction between individual persons and the social collective.

The Concept of People: Individuals and Society

Strictly speaking, in everyday life there is no environment which is truly 'natural' or 'artificial'. The relationship between human society and environment is neither one of a simple part nor one of a complete whole (the ecocentric view), and neither is it the

dominance of human society over natural environment, so the latter is an object to be controlled (the anthropocentric view). Rather, it is an interdependency between them: the social and the natural environments which are in effect the two sides of the same living ‘environmental’ coin. While what is called the natural environment is increasingly shaped by human action (both directly and indirectly), human activities are increasingly conditioned not only by natural processes but also by what humans themselves have made of nature. The issue of sustainability must be understood as a *social* problem, a problem created by, and eventually having its final impact on *people* themselves. Commoner (1973: 23) argues:

When any environmental issue is pursued to its origins, it reveals an inescapable truth — that the root cause of the crisis is not to be found in how men interact with nature, but in how they interact with each other . . . (cited in Singh 1989: 155).

This human scale (or social dimension) is important for the re-conceptualisation of sustainability since the meanings of both environment and development are value-laden, involving people in the decision-making and management processes of our society, including the formulation and implementation of sustainability strategies. In other words, the interdependency between development and environment cannot be separated from people’s asserts and actions. Manning (1990:291) stresses that “the concept underlying sustainable development is . . . a human perspective relating to human use of the biosphere”. In one sense, modern civilisation was established on the transformation of natural materials via the transformation of social relations. At the end of the twentieth century, and in particular in the Western societies where large-scale human intervention on the environment has a longer history than in other societies, it seems unrealistic to talk about the relationship between environment and development without addressing the role of people themselves. “Environment problems”, Beck (1992:81) argues, “are not problems of our surroundings, but — in their origins and through their consequences — are thoroughly *social* problems, *problems of people*” (original emphasis). In other words, environmental issues and developmental issues are related to each other by virtue of human mediation.

While sustainability issues are conceptualised as a social problem in terms of their origins and consequences, the concept of people should be clarified. Traditionally there are

two categories of human conceptions: one is the individual persons; the other is the social collectivity, or the society as a whole. Within the social sciences, there are many differing views held on the relationship between individuals and society. The voluntarist camp, which is represented by Weber, argues that society is constituted by individuals and their intentional behaviour; the reificationist camp, which is represented by Durkheim, argues that society possesses a life of its own, external to and coercing the individuals. A third camp, the dialectical model developed by Berger and his associates, argues that society forms the individuals who create society and society produces the individuals who produce society in a continuous dialectic reproduction (for a summary of the individual-society relationship, see Gregory 1981; see also Walmsley and Lewis 1993; Bhaskar 1989b). However, these three individual-society theories have a common problem: they all subscribe to the dichotomy between individual behaviour and the structure of society. A fourth camp, which tries to resolve the individual-society dichotomy is represented by Giddens' structuration theory (for a summary, see Giddens 1984). Central to the theory of structuration is the concept of 'the duality of structure'. Giddens argues:

The constitution of agents and structures are not two independently given sets of phenomena, a dualism, but represent a duality. . . . the structural properties of social systems are both medium and outcome of the practices they [agents] recursively organise (Giddens 1984: 25).

This theory sees the relationship between individuals and society as one whole: human action creates the structures of society, those structures providing the context for the socialisation of humans, and, in turn, the human action which will reflect and re-create these structures. In Bhaskar's words, "society is both the ever-present *condition* (material cause) and the continually reproduced *outcome* of human agency" (Bhaskar 1989a: 34-35, original emphasis). Arguably, this individual-society duality is the key to building the sustainability connections between different concepts of environment and development: as dualities of environment—people—development.

The Interconnectedness Between Environment and Development: The External and the Internal Dimensions of Sustainability

Having understood that the concepts of environment, development, and people cannot be reduced to single, undifferentiated entities of natural environment, economic development, and human society respectively, the meaning of sustainable development can be re-conceptualised as interconnections between environment, people, and development. Two dimensions of sustainable development should be distinguished from each other (see Figure 1.1). The first dimension is the external, physical interconnections between natural environment, human society, and productive (economic) development, referred to as *physical sustainability*, an issue which has been widely discussed in mainstream sustainability debates. The second dimension is the internal, social interconnections between man-made environment, individual persons, and reproductive (socio-economic) development, referred to as *social sustainability*, an issue which has been largely ignored in mainstream sustainability debates. In a way, this can be compared to Ward's conception of 'sustainable development' as meeting the 'inner limits' of human needs and rights without exceeding the 'outer limits' of the planet's ability to sustain life, now and in the future (see Ward 1976). Arguably, social sustainability is the prerequisite of physical sustainability: to achieve physical sustainability social sustainability must be achieved first. This is because a socially unsustainable society will increase its exploitation of the natural environment, and the aim of a sustainable environment is to improve the quality of life for all people in society. *Overall* sustainability, consequently, requires a harmonious channelling between social and physical sustainability.

This thesis does not intend to deal with the all-encompassing question of sustainable development in general. This would be a task which would require one to make insights from a wide range of disciplines, in particular an interdisciplinary collaboration across natural and social sciences. Such a task is beyond the scope of a single thesis. Rather, this thesis is focusing on the internal, social perspective of sustainability, arguing that it is a deeper explanation of sustainability issues. This social focus can be easily justified. In the vast amount of sustainability literature to date — whether it is concerned with developed or developing countries, a historical analysis or a theoretical economic argument, a practical application of sustainability concepts or a political agenda — most of these debates are

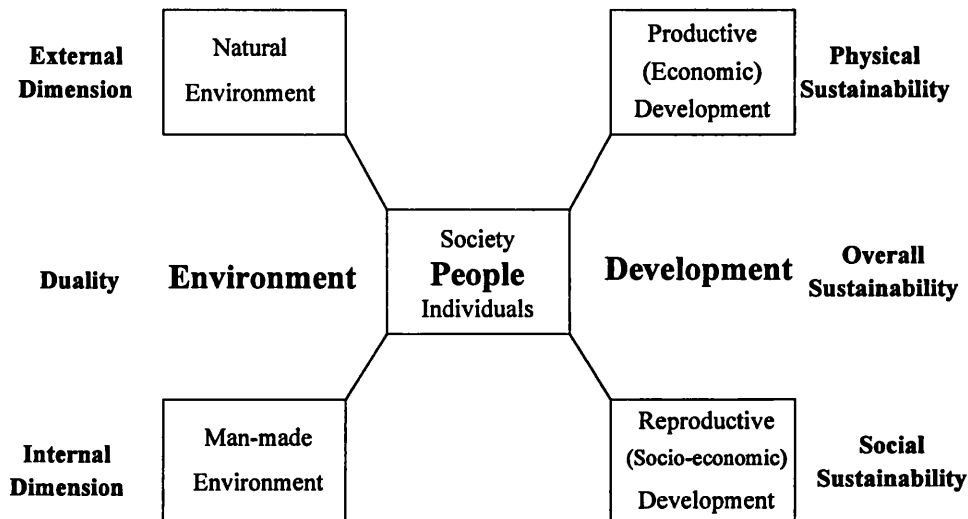


Figure 1.1 External and Internal Dimensions of Sustainability

centrally concerned with the issue of physical sustainability, arguing that a robust economic development is embedded in an ecologically healthy and resource-bound environment (for a summary, see Van den Bergh and Van den Straaten 1994). The internal, social aspect of sustainable development is largely ignored, although it might be implicitly accepted in some sustainability debates, and some passing comments have been made on this matter. However, as far as sustainability problems are understood as a social problem, a problem which cannot be separated from people's thoughts and actions, this social aspect of sustainability is important. This thesis argues that to explore the meaning of *social* sustainability, as well as its practical implications, is crucial to the understanding of sustainability issues in general, including the formulation of effective sustainability strategies in practice.

Social Sustainability: A Deeper Explanation

The significance of the internal, social aspect of sustainability is that it addresses the generative essentials of the issue of sustainable development. A *real*, overall sustainability, which simultaneously and constantly channels the external, physical properties of sustainability with the internal, social conditions of sustainability, will not have the problems of *sub-sustainability* and *pseudo-sustainability*. A sustainable overall development will not seek a sustainable path of development for some regions at the expense of unsustainability in other regions — the fallacy of *sub-sustainability*; nor will it pursue a sustainable condition of development for society's production system as a whole at the expense of certain social groups' welfare, in particular the welfare of the less advantaged groups — the fallacy of *pseudo-sustainability*. The former is seen as an issue of uneven development between the more developed Western countries and the less developed Third World countries or between the core and the peripheral regions; the latter is usually understood as an issue of social exclusion of certain disadvantaged groups in a particular society. Since the internal, social aspect of sustainability is of a common interest for all societies, as well as the deeper explanation of the sustainability concerns in general, to explore this *generative essentials* of sustainability issues can provide a meeting ground which will bring together the diverse interests of both developers and environmentalists, developed and developing countries, the local and the global, as well as some different social groups.

However, cautions should be taken to explore the internal, social aspect of sustainability. It needs to be pointed out that social sustainability defined in this thesis is not understood as a constituting element of, or an add-on to, conventional sustainability debates, i.e. as environmental sustainability, economic sustainability, *and* social sustainability. This constituting approach to social sustainability tends to focus on issues like poverty, health, participation, and so on. As might be expected, research of this kind has a great interest in Third World countries and cities (see United Nations Centre for Human Settlements 1989; 1991; see also James 1996). These issues are important and urgent, requiring quick and adequate policy responses. However, this thesis is mainly concerned with the underlying causalities of sustainability issues; as a result, the meanings

of social sustainability should be explored with reference to the origins of sustainability problems. This is why this thesis sees social sustainability as the internal dimension, as well as the deeper explanation of, sustainability issues.

Accordingly, the theoretical analysis of the thesis focuses on reconceptualising sustainable development via a distinction of the internal, social dimension of sustainability from the external, physical dimension of sustainability. By virtue of the origins and through the consequences of sustainability issues, the empirical analysis of the thesis focuses on Western cities. In this context, urban social sustainability is defined as a time-space channelling of everyday life and the created environment in the cities between productive and reproductive activities. Due to the expanding logic of Western industrial capitalism, social sustainability is understood as ‘uneven development’ between production and reproduction, that requires adequate time-space channelling between individual life-chances and overall institutional structures. This social conception of sustainability may be unable to deal with some of the most pressing issues like environmental degradation and economic downturn directly; however, as the remainder of the thesis will demonstrate, this urban social dimension is the deeper explanation of the broader sustainability issues. To tackle other social issues such as poverty, health, and participation, we must address this underlying causality first.

In the sustainability debates, many have rightly noted that environmental problems must be traced to dominant modes of production, consumption, and reproduction (Johnston 1989; Robertson 1989; Singh 1989). This thesis argues that sustainability problems are in essence a *Western* problem, a problem closely associated with the process of Western modernisation³ by virtue of the utilitarian logic of Western industrialisation and the expanding logic of the capitalist mode of production. It is the combination of Western industrialism and capitalism which go hand in hand in the appropriation of natural resources and the transformation of social systems that should be responsible for the current trends of unsustainable development. This does not mean that sustainability problems are

³ Western modernisation refers to the process of social and economic changes resulting from the diffusion and adoption of the characteristics of industrial revolution taking place in the late eighteenth-century and early nineteenth-century Europe and North America. This period was also the history of fast urbanisation in many Western cities and the history of imperialism and colonialism in Africa, Southeast Asia, and Central and South America.

problems that only exist in the more developed Western countries. On the contrary, the world as a whole is moving towards Western style of development, i.e. industrialisation, market economy, and democracy, that is characterised by the desire to 'be developed' in Third World countries. Such an ideology of development, as Harvey (1989: 373) notes, roots in the deeper and wider tendency towards modernisation associated with the "remarkable . . . historical geography of capitalism." A full and proper understanding of the issue of sustainable development, either in Third World countries or on the globe as a whole, requires an understanding of the process of Western industrialisation and associated socio-economic changes. A complete theory of capitalism and a historical analysis of the evolution of industrial revolution would show how and why current development is unsustainable. But this is beyond the scope and the focus of this thesis. Nevertheless, with highlighting the transforming, expanding, and destructive character of the capitalist mode of production, alongside a brief historical review of the process of Western industrialisation, one can demonstrate why development under industrial capitalism is unsustainable. Moreover, such an analysis will shed light on the interwoven character of sustainability issues in relation to current social, economic, and environmental problems.

Industrial Capitalism: A Growth Machine

In the last two centuries the rise of industrial capitalism, with industrialism as the machine, and capitalism as the power, has transformed the world in ways that natural processes and previous civilisations would have taken millennia to achieve. Taking this into consideration, to explore the deeper explanation of sustainability problems, we must understand why the term development is prone to be reduced to material accumulation and consumption, i.e. economic development.

First and foremost, it is necessary to clarify the meaning of *industrial capitalism*. Broadly speaking, *industrialism* and *capitalism* are two distinctive things operating under different rules and conditions in the course of Western modernisation. Giddens (1985: 123) argues that they should not collapse into one another either conceptually or empirically. On the one hand, *industrialism* mainly refers to the transformation of the means of production which is characterised by the process of industrialisation that alters the human-

nature relations in a created environment via the large-scale use of machinery and energy (especially non-renewable fossil fuels) in both production and everyday life (Giddens 1990:60). It denotes a utilitarian logic that human societies attempt to use the results of scientific-technological advances as the means for human and social aspirations, mainly through the appropriation of nature.

In Western societies, several historical periods can be identified in the process of industrialisation. Firstly in Britain, a major mechanisation of production and massive increases in energy consumption took place in the late eighteenth century and the early nineteenth century, i.e. the initial Industrial Revolution. Then in Western Europe and North America, the Second Industrial Revolution took place at the turn of the twentieth century. It was characterised by the industrial process of scientific management, or Taylorism, and lately the organisation of mass production, or Fordism, which dominated the post Second World War period till the mid-1970s. In the late 1970s, a new kind of 'flexible accumulation' was emerging on a global scale (see Harvey 1988), resulting in what Blim (1992) terms the 'global factory', i.e. industrial production for the capitalist world market is now found in every continent and in most regions of the world.

For some writers, industrialism, or the so-called 'scientific-technological revolution', has been thought to have been responsible for the major structural changes of modern society — i.e. as the primary motor of social development (Scase 1989: 2). But industrialism without capitalism, for Marxists, could only exist as a local phenomenon and could not be sustained over a long period of time. Capitalism, on the other hand, as Marx said, "preceded the development of industrialism and indeed provided much of the impetus to its emergence" (Giddens 1990: 61). In this view, capitalism is the driving force which has extended the arena of Western industrialisation to a global scale. Capitalism, in short, refers to a historically specific form of economic and social organisation in which (a) the direct producer is separated from ownership of the means of production and the product of the labour process; and where (b) this separation is effected through the transformation of labour power into a commodity to be bought and sold on a labour market regulated by price signals (Gregory 1994: 40-41). In other words, capitalism has facilitated, and has been reinforced by, the separation between productive and reproductive activities in both space and time.

There are two main strands of Marxist-influenced political-economic accounts of this concern: class conflict theories and capital accumulation theories (see Gottdeiner 1985, chap. 3). However, the collapse of Marxist-Leninist socialism as basic forms of economic and political organisation in Eastern Europe, in the former Soviet Union and elsewhere, has nullified the thesis of class conflict and has given rise to much (dangerous) self-congratulation in the West, regarding the victory of capitalism. While Alperovitz (1996: 55) argues that neither of the two major ‘systems’ of the twentieth century — capitalism and socialism — are organised in ways compatible with sustainability goals, the danger is that the urgent need for a re-examination on the direction of industrial capitalism, and on the implications for a sustainable future, will be deferred because Western industrial capitalism can temporarily find more space to expand. Amin (1997:14-15) points out that “Capitalism is not ‘a system of development’. . . [since] the logic of capitalist expansion does not imply any result that can be identified in terms of development.” Rather than unquestionably accepting capitalist society as the most desirable social system for the years to come, to explore the internal, social dimension of sustainability requires a full understanding of the driving force of capitalist society — the expansion of capital. Hill (1977) notes:

Capital accumulation, the production of surplus value, is the driving force of capitalist society. By its very nature, capital accumulation necessitates expansion of the means of production, expansion of the size of the wage labour force, expansion of circulation activity as more products become commodities, . . . (Hill 1977, cited in Gottdeiner 1985: 87).

While the globalisation of the capitalist system has exploited the natural resources and environmental services to an unsustainable level, it could be argued that the central question regarding the issue of social sustainability lies in the underlying logic of industrial capitalism: the overriding tendency of expansion guided by the search for profit (surplus value). To use Fukuyama’s (1992) words, capitalist expansion is the ‘accumulation without end’, or what Saunders (1995) terms the ‘growth machine’. It is the capitalist mode of production, which provides the energy for expansion, and the scientific-technological revolution of industrialism, which serves as the engine for growth, these going hand in hand, should be responsible for the crisis of our current unsustainable development. The

capitalist growth machine, in Saunders' (1995: 54) words, is like "a monster created by Frankenstein, something powerful, out of control, destructive and seemingly uncontainable." Therefore, knowledge of the practical manifestation of industrial capitalism's expanding tendency is critical to the understanding of the concept of social sustainability.

Industrial Capitalism and its Time-space Implications

Rather than entering into debates about the consequences of global capitalist expansion as an issue of *uneven development* which characterises the geographical hallmark of the capitalist mode of production, i.e. the geographical unevenness in capitalist growth⁴, this thesis tries to explore the defining character of industrial capitalism by examining its time-space implications from *both* productive and reproductive perspectives. This thesis argues that to explore the geographical consequences of the capitalist mode of production as uneven development at international, regional, and urban levels — i.e. as *over-development* and *under-development* between developed and developing countries, between the cores and the peripheries, and between suburbs and inner-cities (see, for example, Smith 1990; Webber 1982) — only scratches the surface of sustainability problems; the underlying causes remain untouched. Such arguments tend to deal with the issue of different degrees of growth in terms of capital accumulation and their roles in the process of capitalist production, the reproductive aspect is largely ignored.

As argued above, in a sense sustainability can be understood as a matter of reproduction, including the reproduction of individual life-chances (consumption) and the re-production of the production system as a whole (social reproduction). Accordingly, this thesis is centrally concerned with the unevenness between productive (economic) and reproductive (socio-economic) development, not with an overriding concern about the narrowly defined term: economic development. In so doing, it would transcend the overriding concern about the *environment* and address the fundamental need for a concern

⁴ The issue of uneven development is manifested on several scales, for example, the opposed but connected processes of *development* and *underdevelopment* between the Western World and the Third World at global scale, or the regional divide between the North and the South in the British case.

about the *people* who create and change their environments. As stressed above, it is the social aspect of sustainability concerns which distinguishes this thesis from other mainstream sustainability debates. This thesis argues that one should explore the meanings of sustainable development from its deeper roots. While addressing this internal, social dimension of sustainability as an ‘uneven development’ between productive and reproductive activities in a particular society, one is more likely to integrate the diverse, and often conflicting, interests between different regions and social groups.

Research over the internal, social dimensions of sustainability begs one to ask the question: ‘Why should the industrial capitalist mode of production, driven by the expansion of capital, be responsible for the “uneven development” between productive and reproductive activities?’ To answer this question, we must understand the time-space implications of the capitalist mode of production. First and foremost, in the process of Western modernisation in the last two hundred years or so, industrial capitalism has helped radical institutional changes in the structure of everyday life: the separation between productive activities and the otherwise concurrent counterpart of reproductive activities in both *space* and *time*. In hunting and gathering society, production and reproduction were by and large the same thing because reproduction (consumption) was taking place almost at the same place and the same time in the process of production. In agrarian society, production and reproduction also took place in a rather narrow span of time-space zones because the livelihoods of most people were bound to the land. Even the ‘urban’ inhabitants in agrarian society were living and working in a small area within the city walls. In other words, in agrarian society, both production and reproduction were localised activities. When entering into an industrial capitalist society, the productive activities (especially manufacturing) and the reproductive activities (the consumption of manufactured goods) increasingly take place in different places and times, resulting in an obvious separation of the work place and the living place, and furthermore with an associated division between work time and leisure time. The time-space disparities between productive and reproductive activities are not only restricted to the working class — those who sell their time and labour in the market — but also applicable to capitalists who own the means of production.

One significant consequence of such time-space disparities between production and

reproduction has been the creation of an economic entity with its own 'life' — the capitalist production system is one which is geared by the search for profit, by companies operating separately from the basic institution of social reproduction — i.e. family life and the reproduction of labour power. Marxists tend to explain the potential conflicts between production and reproduction as a class conflict. However, with the development of the stock market in the twentieth century, the means of production has increasingly been shared by public shareholders rather than being controlled in the hands of a small number of capitalists. As a result, the line between capitalists and workers has become increasingly ambiguous. In other words, the conflict between capitalists and workers as a class conflict is diminishing, although some disputes might occur between the management and the workers. Consequently, the time-space disparities between productive and reproductive activities in a capitalist society should be understood as an *institutional* conflict (between productive and reproductive institutions) rather than a class one, shared by both capitalists and workers.

The Significance of Time-space Connections to Sustainable Development

In *A Contemporary Critique of Historical Materialism*, Giddens employs the concept of 'time-space distancing' to articulate the driving principle of modernity, describing how societies are 'stretched' over shorter or longer spans of time and space (Giddens 1981: 90). In this view, progress in the production system, or productive development, mainly relies on its ability to stretch over wider space and longer time. Capitalist expansion, accordingly, is to be found in a society with a higher degree of time-space distancing. In the realm of history, continuous progress in productive activities have evolved from a primary society, to an agrarian society, through to industrial society.

However, in reproductive activities, 'time-space co-presence' is as important as 'time-space distancing'. Things as basic as eating, sheltering, and other such activities of consumption are mainly a matter of 'here and now' that can hardly be deferred (in time) or undertaken from afield (in space). In primary and agrarian societies, the basic units of societal organisation are those of high presence-availability, including productive organisation, therefore the issue of 'uneven development' between productive development

and reproductive development is less marked, although there might be a problem of *underdevelopment*. In a capitalist industrial society, progress in the production system as a whole has produced more and better goods than ever before; however, it does not necessarily mean that the same degree of progress has been achieved in the reproduction of individual life-chances. This is because productive and reproductive activities are increasingly separated in both space and time. In the late twentieth century, productive activities have become highly globalised, and reproductive activities, on the contrary, have remained more or less at a local level. Therefore, the issue of time-space channelling between productive and reproductive activities is becoming a major challenge facing a capitalist industrial society today.

The time-space tension between productive and reproductive activities has been vividly depicted in Ward's discussion on urban settlement. Ward (1975: 39) declares that "the very word 'settlement' is in some measure a contradiction. In many ways modern man is living with 'unsettlement'". While the cities themselves continually change and develop in both form and function, Haughton and Hunter (1994: 9) add, "our places of work, recreation and residence all differ and change over time, so that in our assorted roles as residents, commuters, producers, consumers, migrants, leisure-seekers and tourists, we are always on the move within and between our cities." For many, the 'mobile society' created by the separation of the locations of work, residence, shopping, and leisure, as well as by the large-scale use of motorised vehicles, represents the very antithesis of sustainable development in terms of waste (of non-renewable energy), the generation of pollution, together with social problems of exclusion and injustice (see, for example, Breheny 1992; Newman and Kenworthy 1989; CEC 1990; DoE 1994b; Andersons et al. 1996). In other words, the time-space consequences of industrial capitalism are closely related to the concern about sustainable development. To explore the internal, social aspect of sustainability, therefore, we must dig into the deeper explanation of industrial capitalism's expanding tendency to both space and time.

As noted above, the capitalist production system reproduces itself via the pursuit of surplus-value in the process of capital circulation, or what Marx calls the capitalist mode of production: production, distribution, exchange, and consumption. With the help of scientific and technological advances, including progresses in transportation and

communication, industrial capitalism is pursuing a continuous expansion in circulation either by stretching over space (i.e. developing new markets) or by increasing the times of circulation (i.e. stimulating consumption), or both. Industrial production has increased by a factor of 50 in the last one hundred years and of that four-fifths of this increase has come since 1950 (Saunders 1995:56). Industrial capitalist society, in Harvey's (1985a: 1) words, is founded on the principle of "accumulation for accumulation's sake, production for production's sake." It is not an exaggeration to say that economic performance, economic growth, economic expansion, and so forth have become the abiding interest, if not the obsession, of all modern societies. Consequently, an inherent problem of the capitalist mode of production is over-accumulation of capital and over-production of commodities. The way to avoid over-accumulation and over-production is either through a massive expansion of consumption or the process of 'creative destruction' characterised by an acceleration of the turnover time of fixed capital by replacing it before its economic lifetime is out (Harvey 1985b: 27). Taking this into account, what industrial capitalism does best — stimulating rapid growth — is what the world can no longer afford. In the late twentieth century, with increased cross-border trade and the growth of multinational enterprises (MNEs), we have a Japanese car designed in Europe, with parts imported from Southeast Asia, assembled in the United States, and sold in Africa. With the advance of storage and growing technologies, local 24-hour supermarkets provide vegetables and fruits which are grown in areas thousands of miles away and in seasons which are far in advance of 'natural' times of consumption. With the breakthroughs of gene engineering and the wide use of medicine, animals are growing faster and bigger while people's life expectancies are extended. In other words, people are living longer and consuming more resources. On the one hand, it has created enormous pressure on the environment in terms of resource depletion and pollution generation that is threatening the reproduction of the production system itself — the problem of physical sustainability. On the other hand, it has also created many co-ordination problems between, and within, individual life-chances and the institutional structures at large, in terms of social exclusion that has hampered the reproduction of everyday life — the problem of social sustainability. It so follows that, to resolve the problem of unsustainable development, we must resolve the problem of industrial capitalism first.

An early, perhaps the most renowned, response to the capitalist expansion is Schumacher's seminal work *Small is Beautiful*, published in 1973. Schumacher argues that economies, political units, societies and industry, have become too big, and therefore lose their human scale. He criticises 'the idolatry of giantism', arguing that inhuman scale both suffocated and debilitated human nature, and warning that a way of life that bases itself on materialism, i.e. permanent, unlimited expansionism in a finite environment, cannot last long. He believes that industrial capitalism is destructive both to the human spirit and to the environment. Therefore, he strongly supports the idea of restoring a human scale to institutions and processes, and giving technology 'a human face'.

As far as sustainable development is concerned, this thesis argues that this human dimension is embedded in the concept of reproductive (socio-economic) development. Western modernisation is seen by Giddens (1984; 1990) as a process of 'time-space distancing' in which time and space 'empty out', become more abstract; whereas things and people become 'dis-embedded' from concrete space and time (Lash and Urry 1994: 13). Rather than rashly accepting a U-turn to the small-scale, localised mode of development as suggested by Schumacher's 'small is beautiful' argument, this thesis argues that the key to sustainable development in a capitalist industrial society is to restore the human scale by 're-embedding' things and people into concrete space and time. Sustainability issues and the crises of industrial capitalism are not just a question of scale but also a more fundamental issue of time-space channelling between productive and reproductive activities, as well as between individual life-chances and the surrounding social conditions and environmental bases on which the reproduction of everyday life depends. It could be argued that to understand economic development and environmental problems, we need to understand the social origins and consequences of economic and environmental changes. It is precisely these perspectives that are conceptually and empirically ignored by conventional analyses and policies in the sustainability debates. Hence, this thesis is focusing on this internal, social aspect of sustainability by examining the time-space connections between productive and reproductive activities in the duality of people's life-chances and the created social environment.

Structure of the Thesis

The thesis is comprised of two parts. The first part is an abstract, theoretical analysis. With the contention that a proper conception of sustainable development is critical for the effective adoption of an action for sustainable development in practice, it aims to construct a solid theoretical ground to deepen our standing of socio-environmental processes in the sustainability debates. Chapter 1 sets the overall context of analysis, arguing that conventional conceptions of sustainability are inadequate on the grounds that they ignore the generative essentials of sustainability issues: the interdependency between people and their environments. In addressing this issue, one needs to analytically reorientate one's position towards the internal, social dimension of sustainability, stressing that it is the time-space dimension, embedded in the duality of people-environment connections between productive and reproductive activities, that is the deeper explanation of sustainability issues. Chapter 2 focuses on the overall theoretical framework regarding the concept of social sustainability. It clarifies the philosophical stance, theoretical base, and methodological strategy of the thesis. While refuting conventional conceptions of sustainability in normal (positivist) science, it is characterised as a marriage of critical realism and structuration theory. Chapter 3 attempts to operationalise the concept of social sustainability by situating the debate in a concrete urban context. It explores the time-space relations between productive and reproductive activities in the duality of social structure and human agency; and translating the theoretical account of social sustainability into concrete urban question.

The second part of the thesis is a concrete, empirical analysis. It is comprised of two methodologically contrasting, but theoretically consistent approaches: extensive analysis and intensive analysis. Chapters 4 and 5 are extensive analysis, dealing with the institutional structures in London. Chapter 4 focuses on the overall patterns of informal institutions. Drawing upon census and other statistic data, it highlights the structural features of London's employment, housing, retailing, and transport structures. It demonstrates that under the general trend of decentralisation, these structural properties are increasingly detached from each other in space and time. Chapter 5 focuses on the mediation of formal institutions, analysing the former Conservative government's

sustainability strategy and policy, in particular, via the practice of land use planning. It argues that the Government's urban re-concentration strategy of coordinating land use and transport can only have a limited degree of success on the grounds that it lacks a dimension on the necessary, internal connections between institutional structures in the dynamics of people's daily lives at micro level. Therefore, chapters 6 and 7 are intensive analysis, highlighting the significance of household dynamics in the co-ordination of institutional structures. A project of intensive interviewing with selected households in different parts of Greater London is used as the means of information collection. Chapter 6 focuses on the issues of employment and housing; chapter 7 focuses on the issues of shopping and transport. Finally, the concluding chapter, chapter 8, draws together the emerging themes from both abstract and empirical analysis developed in earlier chapters and sets them in a wider context, and introducing new areas for possible future research.

CHAPTER TWO

DEVELOPING THE CONCEPTUAL FRAMEWORK: A MARRIAGE OF CRITICAL REALISM AND STRUCTURATION THEORY

The aim of this chapter is to develop the general conceptual framework for the analysis of sustainability issues by clarifying the philosophical position, the theoretical body, and, consequently, the methodology of the thesis. This thesis demonstrates the significance of a proper conceptual framework for conducting empirical research: empirical research without an adequate philosophical stance, theoretical ground, and suitable methodology, could only at best produce common sense knowledge and in many cases result in misleading conclusions. This is especially crucial for the analysis of sustainable development because sustainability issues are both complex and dynamic and, most importantly, their consequences have system-wide and very long-term influences. Rather than automatically accepting conventional conceptions and methodologies, we need to critically re-evaluate existing conceptual frameworks in order to develop a holistic approach to the complex issue of sustainable development.

As noted earlier, conventional conceptions of sustainable development can be characterised as a reconciliation between *environmental* sustainability and *economic* development, or to use the terminology developed in chapter 1, an overriding concern with *physical* sustainability. Such conceptions of sustainability have a blind spot in their analysis: i.e. they tend to focus on the phenomena *per se* (the symptoms) rather than on the deeper causes. It could be argued that the trends of unsustainable development are partly caused, or at least are reinforced, by conventional (positivist) conceptions of environment and development inherent in normal science on the grounds that positivist approaches to sustainability issues tend to focus only on observable phenomena.

For example, in sustainability debates many researchers focus on the relationship between transport and the environment, arguing that the growing reliance on the use of private cars is closely related to environmental degradation and wasteful energy consumption (see, for example, Banister and Button 1993; DoT 1988; TRANSNET 1990; Transport and Environment Studies 1991). In order to reduce the adverse effects of motor vehicles, their solutions tend to be a combination of improving the efficiency of motor vehicles via technological breakthroughs (the US approach) and discouraging the use of private cars at all via either taxation and regulation or, more radically, via manipulating the

patterns of land use (the European approach). These methods only touch the surface of sustainability problems by linking environmental problems directly to the scales and patterns of car usage; nevertheless, they fail to question causalities: such as the type of trips made and the reasons, why car trips are undergone. If it is agreed that sustainability is in essence a social problem, then the stress on social sustainability in the re-conceptualisation of sustainable development opens up a distinctive terrain of debate. However, this begs one to question the adequacy of conventional conceptual frameworks in normal science. In other words, to tackle key philosophical and theoretical problems is also essential for conducting proper empirical research in the social sciences.

In order to address the inadequacy of conventional approaches to the social sciences in general, and to the issue of sustainability in particular, the thesis devotes a rather lengthy space — a whole chapter — to clarify the philosophical, theoretical, and methodological issues of sustainability studies which are largely ignored in many empirical studies. In many studies, these issues are either briefly mentioned in the introductory section, relegated to an appendix, or omitted all together. The need to devote such a large space in the thesis to conceptual issues is partly because an alternative approach — critical realism — to the orthodox position, namely, positivism, is adopted in the analysis of social sustainability. Although critical realist thinking is now not so foreign to social researchers as it was some twenty years ago, many still consider it as a non-orthodox approach in the light of the difficulty of putting realist epistemology into practice. However, as this thesis will demonstrate, it is necessary to employ such a complex view of social reality in order to explore the deeper explanation of sustainability issues. For these reasons, it is worth an extended discussion of philosophical issues before a theoretical account of sustainability can be unpacked, and an empirical study be deployed, to explore the internal, social dimension of sustainable development. In summary, in order to attain a proper understanding of sustainable development, the purpose of this chapter is to strengthen the theoretical and methodological bases of the thesis by clarifying the philosophical positions of social science in general.

This chapter is divided into three sections. The first section justifies the critical realist position as a useful alternative to positivist approaches. This thesis argues that it is a more appropriate conceptual framework for the study of the social world, including the

issue of sustainability. This argument is built from the debate about naturalism on philosophical grounds: i.e. a discussion on the relationship between the social sciences and the natural sciences. The second section elaborates the theoretical basis of the thesis by introducing a philosophically compatible and theoretically informative theory — structuration theory — into realist framework. It focuses on the relationship between individual and society, i.e. the debate over the nature of the social world. This is characterised by a marriage of critical realism and structuration theory. The third section tries to put critical realist conceptions into practice, dealing with the methodological issues of social research. It suggests that, to explore the underlying causes of sustainability issues, we have to examine the two ends of the structure-agency duality by incorporating both extensive and intensive research programmes in the constant engagement of both theoretical and concrete analysis.

On Philosophy: Critical Realism as an Alternative to Positivism in Social Research

In the 1980s and the early 1990s, there has been a serious engagement by social scientists in general and human geographers in particular with the philosophy, theory, and methodology of realism. Although the realist debates are fundamental to the construction of credible social theories, as well as crucial to the undertaking of substantive social research, this thesis does not attempt to join such grand debates. However, it would be helpful to highlight two major themes in the social science debates where the realist argument is triggered: one is the debate over the relationship between the social sciences and the natural sciences, another is the debate over the relationship between the individual and society. The chapter makes the point that the philosophical problems between naturalism and humanism, as those between determinism and voluntarism, are closely related to the conceptualisation of sustainable development where sustainability is understood as dualities between people, development, and the environment.

A commonly quoted and generally accepted definition of realism is provided by Gregory (1994: 499) who claims that realism is understood as “a philosophy of science based on the use of abstraction to identify the (necessary) *causal powers and liabilities* of specific *structures* which are realised under specific (contingent) *conditions*” (original

emphasis). In order to distinguish the contemporary concerns of realism from the earlier versions of naive realist philosophy (for example, Locke's conception of a real world), here the term 'critical realism' will be used to refer to the realist approaches advanced especially by Bhaskar (1975; 1979; 1986; 1989b), Keat and Urry (1975), and Sayer (1981; 1982; 1984; 1985a; 1985b). This thesis argues that critical realism is a useful and, a more adequate, conceptual framework for the study of social science in general and for the study of sustainability issues in particular.

Critical realism emerged in the early 1980s as a critique of positivism. Its origin can be traced back to the mid-1970s when Bhaskar developed the argument of a realist theory of science (Bhaskar 1975). The philosophical groundwork for critical realism was carried out by Harré and Bhaskar himself. Harré's work is mainly situated over the debates on the history of science and social psychology (Harré 1970; 1979; 1984; Harré and Secord 1972; Harré and Madden 1975). However, it is Bhaskar's extension of this project in a philosophical mode that is of key significance to this thesis. The overall position of Bhaskar's conception of realism can be characterised as *critical realism*, a term which is not an invention of his own. It arises out of the two phases, *transcendental realism* (or *scientific realism*) and *critical naturalism* by elision. The former refers to the general ontology which Bhaskar derives from his analysis of scientific practices by stressing the stratified nature of scientific knowledge between domains of the *real*, the *actual*, and the *empirical*; and the latter refers to his development of the possible implications of transcendental realism for the social sciences in the argument that the same methods of analysis can be applied across the natural and the social sciences (Collier 1994: xi; Pratt 1994a: 14-15).

Critical realism is built first and foremost on a rejection of positivism. Critical realists insist that the natural science model is a valid exemplar, but positivism has mischaracterised and mis-represented the form and operation of this exemplar (Layder 1990: 90). This focus of interest distinguishes critical realism from another alternative of positivist social science — humanism. For the humanists, the subject matter of the social sciences — conscious intentional human beings — is so radically discrepant from that of the natural sciences — inanimate material objects — that it requires a very different approach (ibid.). As far as sustainability issues are concerned, the humanist conception is

dismissed because it tends to prioritise human awareness and human agency, as well as the social constructions of place, space, and landscape. It ignores the fact that sustainability issues are essentially an interdependency between people and their environments, that necessarily involve mutual influences between people and the environment: as socially constructed environment and environmentally constrained human action. By contrast, a critical realist conception of the social world, which stresses the transformational character of society but avoids the dualism of both *structural determinism* and *idealism*, is more able to address the defining character of sustainable development: a complex, dynamic, and multifaceted duality between human action and the thus created environment. A brief review of the development of critical realism, as a critique to positivism, would justify this argument.

Explanation, Prediction and Confirmation

Positivist approaches are basically involved with the making of empirical generalisations and with the statements of a law-like character which are related to phenomena that are empirically recognised. As such, positivist approaches are essential to the methodology and philosophy of the natural sciences (Johnston 1986: 11). Positivism holds the view that the scientific study of society, in method and procedure, should resemble as closely as possible the scientific study of natural phenomena, for instance, as in mechanics (see Harré and Secord 1972, chap. 2). In summary, the epistemology of positivist approaches is that knowledge is gained through experience, but through experience which requires to be firmly established as verifiable evidence on which all will agree; their ontology is thus one of agreed evidence and the methodology is one of verifying factual statements (Johnston 1986: 5).

The origins of positivism are traced back by many to the French nineteenth-century social philosopher Auguste Comte (Lacey 1976: 165), but the major development of positivist thinking, to which most contemporary work refers, was undertaken by a group of philosophers working at the University of Vienna in the 1920s and early 1930s (known as the Vienna Circle). Their debates and statements are central to what is known as *logical positivism* (or *logical empiricism*), which is a philosophy concerned with the development

of knowledge in the form of general statements, obtained by accepted procedures, about observable phenomena (Johnston 1986: 12). This incorporates what is widely known as *scientific method* or what Keat (1981: 17) calls ‘the positivist conception of science’. Having established that the positivist conception of science is built around empirical hypotheses (propositions with factual contents), a central feature of that science is the testing of hypotheses: the verification principle. Phillips (1987: 39) argues that “this is truly the heart of positivism.”

For critical realists, positivist explanation is misleading and its methodology is problematic. The positivist notion of explanation is often called ‘the covering law model’: to explain is to identify the relevant generalisations which cover the case to be explained (Hollis 1994: 62). It “. . . enables us both to explain them and foresee them, each by means of the other” (Comte 1844: 20, cited in Keat and Urry 1982: 73). For positivists, prediction and explanation are the two sides of the same coin on which science can have or could need. Both prediction and explanation rely on generalisations, which are projected forwards for purposes of prediction and backwards for purposes of explanation (Hollis 1994: 49). But for realists, unlike positivists, there is an important difference between explanation and prediction. To explain a phenomenon is not merely a case of showing that there are instances of well-established regularities. Instead, one must discover the necessary connections between phenomena by acquiring knowledge of the underlying structures and mechanisms at work. It is explanation and the necessary mechanisms of structures, rather than prediction and regularities of phenomena, which must be pursued as the primary objectives of science.

Accordingly, the starting point, and the core argument, of a critical realist account of the social world is a distinction between explanation and prediction and between the generative mechanisms of things (which many not be observable) and the appearance of things (which are observable) (see, for example, Harré and Secord 1972; Keat and Urry 1975; and Bhaskar 1978; 1986; 1989a). Realism, in Outhwaite’s (1987: 19) words, “takes seriously the existence of the things, structures and mechanisms revealed by the sciences at different levels of reality.” It analyses causalities in terms of the natures of things and their interactions, their causal powers and liabilities, not of observable, regular conjunctions of events. For critical realists, a true explanation must go beyond the establishment of

observable empirical regularities and posit causal or generative mechanisms which underlie these regularities (conjunctions of events) and actually produce them. In other words, realists argue that if we wish to explain why certain things behave in a certain manner, then we must understand both their internal structures and the mechanisms and properties that enable them to produce or undergo particular changes when placed in contexts where they interact with other things (Cloke et al. 1991: 136).

The critical realist conception of true explanation is articulated by Bhaskar's claim that the world and science (including social science) are stratified. There exist three domains of reality: the *real* (mechanisms, which are unobservable), the *actual* (events, which are observable phenomena), and the *empirical* (experiences of events) (Bhaskar 1978: 56-57). By distinguishing these three separate but overlapped domains of reality, Bhaskar insists that one chief mistake of positivist approaches is to oversimplify and collapse these three domains (ibid.). Following this distinction of the real world, Keat and Urry (1982: 232) note that positivists tend to adopt an ontology of *events*; critical realists, by contrast, stress an ontology of entities and their inner relationships. For critical realists, one important objective of science is to discover the often unobservable structures and mechanisms which causally generate the observable phenomena.

The word 'real', in many contexts, draws its content from its contrast with the word 'apparent'. Critical realists do not deny the reality of events and discourses; on the contrary, they insist on them. In Bhaskar's view, we will only be able to understand, and so change, the social world if we identify the structures at work that generate those events or discourses. Such structures are irreducible to the patterns of events and discourse. They are not the human constructs imposed on phenomena (as viewed by idealists); but they are supposed to be real structures and mechanisms that exist independently of our knowledge and experience and of the circumstance that permit us access to them (Cloke et. al 1991: 138). In this sense, critical realism can be characterised as a 'depth realism' (compared to 'shallow realism' or 'empirical realism', which is common to positivism) which asserts that various kinds of entity — molecules, trees, people, societies — have certain powers of their own, as a result of their respective inner structures.

However, since realists' only access to reality is through their own apprehension of it, an immediate response of critics of critical realism is 'How do realists know that their

three-tiered version of how reality works is true?’ This criticism can be dismissed by the following arguments, based on the critical realist conception and interpretation of ‘truth’. First, it must be understood that Bhaskar’s transcendental realism is not a claim to necessary truth; rather, it is open to refuting arguments. It is more like an explanatory ‘must’ than a ‘must’ of logical necessity (Collier 1994: 27). This is why the word ‘critical’ is so important to realist conceptions. Second, because of the impossibility of a theory-neutral observation, Bhaskar’s distinction between necessary causal powers and contingent conditions suggests that the causal explanation of social phenomena should be verified in terms of the effects of causal powers in conjunction with the presence or absence of certain contingently related conditions. Third, this is related to the second point, the concept of ‘truth’, as Sayer (1992: 69) suggests, should be replaced by the concept of ‘practical adequacy’, i.e. knowledge must be situated in contexts in which the necessary relations (though not necessarily realised) and the (important) contingent conditions are both recognised. It must be noted that a critical realist account of ‘practical adequacy’ does not rule out the existence of other powers or mechanisms at work; on the contrary, it stresses the existence of the multiplicity of generative mechanisms: the contingent are contingent because they are not themselves analysed or analysable by the particular theory concerned. In other words, a critical realist account of social reality is a contextual analysis of social phenomena, with the necessary mechanisms situated in a contingency. Accordingly, the outcomes of events are co-determined by the necessary mechanisms and the contingent conditions, i.e. critical realist research is theoretically laden. This must refer to a critical realist distinction between closed and open systems in scientific research.

Closed and Open Systems

The distinction made by Bhaskar between closed and open systems in science can be used to explain why empirical regularities pursued by positivist approaches are considered as misleading in the social sciences. One of the initial premises of critical realism is that the social sciences in general tend to deal almost exclusively with *open systems*, thus positivist analyses encounter significant difficulties in handling these open systems in an assumed *closed-system* fashion (Cloke et al. 1991: 145). Positivism, as the

search for, and the prediction of, empirical regularities, seeks to make universal statements and to conceptualise both (a) a constant mechanism for causing regularities; and (b) a set of constant conditions in which a causal mechanism operates. Thus positivism is suited to, and often assumes the existence of, closed systems. In other words, empirical regularities do not necessarily tell us *why* an event did or will occur. By contrast, because social entities presuppose a natural environment and natural components (i.e. not purposefully constructed), and because they exist only in symbiosis with social entities in other strata (societies, people and so on), we can find only open systems in social research. In this view, Collier (1994: 161) suggests that social science must search in the open systems of social life for the various emergent mechanisms that co-determine them.

However, in a real social world there exist no absolutely closed or open systems; rather, it is a question of degree. Given that social events or objects are constituted by a combination of diverse elements of forces, the social sciences deal with open systems but lack the advantage of their equivalents in the natural sciences, which have relevant closed-system sciences on which to draw. It follows from this that decisive test situations are almost impossible in the social sciences, so that the criteria for theory-choice and theory-development must be exclusively explanatory and non-predictive. One major reason for the openness of social systems lies in that “people can interpret the same material conditions and statements in different ways and hence learn new ways of responding, so that effectively they become different kinds of people” (Sayer 1992: 123). In this view, the significance of agency has to be addressed when the scientific account of social reality is placed on the domain of the real (causal mechanisms and structures). This leads to the very nature of social activity — the interrelationship between social structure and human agency. This thesis argues that a social theory is valid only if the structure-agency relationship is properly understood. The next section will demonstrate that a relational conception of social reality is important for the study of the social sciences in general and for the understanding of sustainability issues in particular. But before turning to that point, it would be helpful to summarise the main arguments of the critical realist philosophy and link them to geographical inquiries and sustainability issues.

Critical Realism, Geographical Inquiries and Sustainable Development

While rejecting the ‘atomism’ and monistic characteristics of both positivism and empiricism — the simple connections between cause and effect, real and observed, and the implicitly assumed existence of closed systems, critical realism offers an alternative approach to social reality. Critical realism assumes a stratified and differentiated world made up of events, experiences, and structures/mechanisms in open systems. In this social world there exist complex, reproducing and sometimes transforming interactions between structure and agency whose recovery will provide ‘answers’ to questions posed about processes and dynamism. In other words, the notion of ‘unpacking’ is an integral part of critical realism’s conceptual vocabulary: the task of a critical realist science is to tease out causal chains which situate particular events within these ‘deeper’ generative mechanisms and causal structures. Hence, a critical realist explanation must be based on substantive social theories which are able to identify the relations between different ontological domains, while recognising their integrity as differentiated features of social reality (Layder 1981).

As might be expected, a critical realist explanation is attractive to human geographers since geographical inquiries are basically concerned with the interrelations between people and their environments: an issue which cannot be reduced merely either to the ‘objective’ — the error of positivism, in particular functional structuralism — or the ‘expressive’ — the error of humanism (see Massey and Allen 1984; Gregory and Urry 1985; Peet and Thrift 1989; Macmillan 1989; Johnston et al. 1990; Johnston 1993). The former pays no attention to the role of human agency and the latter ignores the role of social totality and the material world. Critical realism, on the contrary, promises a useful meeting ground to allow the dialectics between different views of reality. This is crucial for the understanding of sustainability issues.

First and foremost, critical realism’s stress on a scientific inquiry in the open system vividly captures the complex, dynamic, and multifaceted characteristics of sustainability issues which cut across economic, social, political, cultural, and environmental boundaries (functional boundaries), transcending different spatial scales, such as local, regional, national, and global scales (spatial boundaries), and affecting the survival needs of different

generations (temporal boundaries). Positivist approaches, by contrast, assume a closed or controlled system in which empirical regularities and generalisations are expected. As far as sustainability issues are concerned, this is totally misleading because empirical regularities can neither be used forwards to predict, nor backwards to explain, the complex relations of sustainability issues.

Secondly, critical realism's stress on the generative mechanisms and causal structures rightly addresses the need to dig into the deeper layers of sustainability issues: it is the internal, social aspect of sustainability (the underlying causes), rather than the external, physical aspect of sustainability (the symptoms), which should be the primary concern of sustainability debates. As far as sustainability is defined as a *social* problem, positivist conceptions of sustainability, on the contrary, have an analytical blind spot on the grounds that they conflate the domain of the real with that of the actual, i.e. positivist conceptions of sustainability do not distinguish the underlying causes (the internal, social aspect) and the symptoms (the external, social aspect) of sustainability issues. This thesis argues that social sustainability is the deeper explanation of sustainability issues; accordingly, corrective actions focussing on the underlying causes are more likely to succeed. By contrast, to resolve sustainability problems in reactive ways based on the symptoms of contingent relations is totally misleading and can at best have a marginal effect. For example, the calls for stricter regulations on car emissions and higher taxation on the use of car can only alleviate the symptoms of environmental degradation and energy consumption. They fail to recognise the changes of life-patterns regarding the organisation of time and space in our daily lives. Likewise, the calls for a co-ordination of land use and transport, though rightly capturing the interconnectedness between different types of land use in terms of their time-space relations, are subscribed to the problem of nominalism. They fail to address the necessary connections between transport and other sectors: i.e. the significance of agency. This suggests that a conceptual reorientation from positivist approach towards critical realist approach is necessary.

However, apart from critical realism, a recent, and perhaps quite fashionable, movement in philosophy and the social sciences since the 1980s which challenges the monistic theory of positivism is the rise of *postmodernism*. Postmodernism and critical realism have many things in common. For example, postmodernism, like critical realism,

is built first and foremost on a rejection of positivism. It criticises the monistic characteristics of positivist approaches, stressing the significance of multiple positioning by placing an openness to a range of voices in social inquiry. Both postmodernism and critical realism emphasise the need for new interdisciplinary, hybrid knowledge — such as gender studies, ethnic studies, urban studies, and cultural studies — that cuts cross conventional disciplinary boundaries like economics, sociology, politics, history, and geography. However, while both postmodernism and critical realism have identified an object of human studies that comprises the multiple tiers and complex relations of social reality, it is their attitude about the possibility of integrating these workings that sets them apart. Peet and Thrift (1989b: 23-24) note that postmodernism is a confusing term because it represents a combination of different ideas; it is most often seen to be concerned with the issue of method. In this regard, postmodernism is basically arguing for a pluralist position, thinking more in terms of *disorder*, *incoherence*, and *difference*. Its attitude is inherently suspicious of ‘grand’ intellectual positions, such as structuration theory and critical realism. Postmodernism can therefore be considered to be a move, intended or unintended, towards *fragmented* knowledge of social reality. On the contrary, critical realism, based on the ‘complex ontology’ of social reality, seeks to integrate the stratified conceptions of reality via the search for a middle-ground approach to social science.

As long as sustainability issues are understood as a social problem linking people and their environments, an issue with system-wide and long-term consequences, postmodernist explanations, which stress fragmented, open-ended voices and multiple positioning, are dismissed on the grounds that they are unable to address the necessary connections between different domains of reality except for bringing out their complexity and dynamism. Rather, it is the critical realist conceptions which offer a conceptual framework for an integrated social science incorporating geographical inquiries. To explore the complex and dynamic characteristics of sustainability issues, in Dear’s (1988: 270) words, “we need to move beyond the deconstruction urged by postmodern thinkers to a reconstruction of human geography designed to embed the discipline more securely . . . to establish a new ‘internal order’ for it.” The next section will demonstrate that a constructive way to weave together the diverse views in geographical inquiries in general and in the study of sustainability issues in particular is to explore the duality relationship

between social structure and human agency.

On Theory: A Marriage of Bhaskar's Transformational Model of Social Activity (TMSA) and Giddens' Theory of Structuration

As noted earlier, sustainability issues should be analysed as a social problem in the light of its origins and through its consequences. That means social sustainability is a deeper explanation of sustainability issues and, accordingly, should be a central concern, of sustainability debates. It is the interconnections between people and the created environment, not people or the environment *per se*, which should be responsible for the conflicts between the goals of environmental protection and economic development. In other words, sustainability is an issue of duality, not a dualism, between people and their environments. As might be expected, such a relational conception of sustainability does need a proper theoretical framework to address this interconnectedness between people and their environments. Sustainability is not something which can be 'summed up' or 'averaged out'. Accordingly, this thesis argues that the subject matter of sustainability debates should be neither the collectivity of social structure nor the individuality of human agency alone, or the sum of them as unrelated and fragmented knowledge suggested by postmodern approaches, but should be the interrelationship between social structure and human agency.

While critical realism's stress of the stratified domains of reality is opening up the possibility of theoretical integration, a very important, but relatively neglected, tenor in the critical realist debate that can fill this theoretical gap is Bhaskar's elaboration on his relational conception of society. He calls this account the *transformational model of social activity* (TMSA) (Bhaskar 1975; 1986; 1989a). Bhaskar argues that social reality should be understood as essentially consisting of, or depending on *relations*. But Bhaskar's discussion on structure and agency sounds more like a series of warnings about the complexity of the issues concerned rather than a deeper engagement with the issues themselves. In view of this, Bhaskar's TMSA should be read in conjunction with another middle-ground social theory — Anthony Giddens' theory of structuration (Giddens 1979; 1981; 1984). It tries to solve the dualism of what Dawe (1970) calls 'two sociologies' (or 'two anthropologies', 'two human geographies', and the like, all produced by this basic

dualism) or what Fielding (1988) calls the 'micro-macro problem' in the social sciences. Hauer (1990: 87) notes that one of Giddens' major contributions to the development of social theory is his ability to bridge the gap between the theories about human agents and the theories about institutions, or voluntarism and determinism, or subjectivity and objectivity. He brings the two together by situating behaviour in both a local context and a compositional ordering (Johnston 1986: 150; Thrift 1983: 41). However, Bhaskar's TMSA and Giddens' structuration theory are different on several grounds. On the one hand, critical realism has much to do with the philosophical question which is centrally concerned with the attitudes and methodologies for the acquisition of scientific knowledge in both the natural and the social sciences. In other words, it is an epistemological question, concerning the fundamental 'building blocks' of social reality and how we can acquire knowledge about these building blocks. However, it is relatively silent in the discussion of substantive social theories. Structuration theory, on the other hand, focuses mainly on the elaboration of general social theories. It is essentially an ontological question, a grand social theory which is concerned more precisely and concretely with what human societies or social systems contain. However, it is reticent about the application in research problems (see Gregson 1986; see also Moos and Dear 1986; Dear and Moos 1986). The different foci between critical realism and structuration theory on the conceptions of the structure-agency relationship should be seen as complementary to each other, rather than as contradictory. It is possible and, in effect, desirable, to combine these two strands of argument into one philosophically compatible and theoretically reinforcing conceptual framework in the discussion of the interdependency between people and their environments. In other words, the conceptual framework adopted in this thesis can be described as a marriage of critical realism and structuration theory.

Such a theoretical marriage can be justified on two grounds. First, both critical realism and structuration theory are working on the middle ground between structure and agency; this dimension is crucial for the understanding of the deeper causes of sustainability issues in terms of the internal, social dimension of sustainability. Second, Giddens' writings on structuration theory are seen as a *research programme* developed through a continuous dialogue between the theoretical and the empirical (Gregory 1989: 185). Such a process exactly coincides with the theorising procedure proposed by critical realists — the

idea of *retroduction* (see Sayer 1992: 107; Pratt 1994a: 202-204). Rather than adopting one argument and abandoning the other all together, this thesis considers these two conceptions of social reality as one consistent theoretical framework, capable of ‘getting at’ the deeper explanation of sustainability issues which are embedded in the complex, dynamic relationship between individual life-chances and the created social environment. In other words, critical realism provides a useful philosophical foundation for an alternative scientific explanation of the underlying causality in sustainability debates. But its effectiveness does need a theoretical input from structuration theory in order to construct a substantive theoretical explanation of the relational conception of social sustainability.

The Structure-agency Debate: TMSA and Structuration Theory

While rejecting both the voluntarist and reificationalist views of the structure-agency relations, Giddens argues that “the basic domain of study of the social sciences, . . . is neither the experience of the individual actor, nor the existence of any form of societal totality, but social practices ordered across space and time” (Giddens 1984: 2). In a nutshell, structuration theory tries to approach both structure and action under one coherent theoretical framework of time and space. This can be characterised as a *contextual theory* of action in which social structures are held to be continually reformed through the rhythms of daily life: human action creates the structures of society; those structures provide the context for the socialisation of humans; and, in turn, human action reflects and re-creates the structures. In other words, Giddens’ structuration theory provides promise of a comprehensive explanation that considers how the theories of agency and structure come together in the production, reproduction, and transformation of society.

Developed almost at the same period (in the mid-1970s), the twin-star of Giddens’ theory of structuration in the debate of the society-people connection is Bhaskar’s TMSA. Society, for Bhaskar, is not the product of conscious human activity — to believe this leads to the error of voluntarism. However, society could not exist independent of conscious human activity — this is to commit the error of reification. Not only arguing against both collectivist (Durkheimian) and individualist (Weberian) ontologies of social relations, Bhaskar also rejects the ‘dialectical’ position of Berger and his associates, arguing that dialectical interaction cannot occur between radically different kinds of things. For Bhaskar,

it is not true to say that human agents *create* society; rather, they *reproduce* or *transform* it (see Bhaskar 1989b: 74-77). In other words, Bhaskar's TMSA distinguishes itself from another three models on the grounds that "on Model I [voluntarism] there are actions, but no conditions; on Model II [reification] conditions, but no actions; on Model III [dialectical reproduction] no distinction between the two" (Bhaskar 1989b: 37).

The basic idea shared by Bhaskar's TMSA and Giddens' structuration theory lies in the evolutionary and continuous nature of society: on the one hand social reproduction is synonymous with change, which occurs through the structuration of social systems across time-space; on the other hand the remarkable continuity that exists in society occurs because of the routinisation of day-to-day activities. In TMSA, "society is both the ever-present *condition* (material cause) and the continually reproduced *outcome* of human agency (Bhaskar 1989b: 34-35, original emphasis). This echoes Giddens' argument of the structuration of society. Via the concept of 'duality of structure', Giddens defines society as connecting "the production of social integration, as always and everywhere a contingent accomplishment of knowledgeable social actor, to the reproduction of social systems across time-space" (Giddens 1981: 27). One of Giddens' favourite, and perhaps most frequently cited, examples of his duality conception of social life is his quotation from Marx which says that "human beings make history, but not in circumstances of their own choosing" (Giddens 1984: xxi; after Marx and Engels 1960: 115). In like manner, Bhaskar (1989b: 80) stresses his relational conception of society by arguing that "people do not marry to reproduce the nuclear family; or work to reproduce the capitalist economy. But it is nevertheless the unintended consequence (and inexorable result) of, as it is also the necessary condition for, their activity."

Towards a Theoretical Convergence: Linking Critical Realism and Structuration Theory

As noted above, we know that both critical realism and structuration theory are against idealism and reductionism and both Bhaskar and Giddens are keen to solve a perennial question in the social science: the problem of structure and agency. The similarity between Bhaskar's TMSA and Giddens' structuration theory — in terms of their acknowledgement of knowledgeable human actors operating within some form of

conscious and unconscious structure, and in terms of their attempt to avoid the simple dualism of structure and agency — suggests a theoretical convergence between the two. However, although there are realist elements in structuration theory, Giddens has never endorsed Bhaskar's transformational model of the social/person connection with its notions of ontological depth and the stratification of reality (see Bryant 1992). In fact, Giddens has been criticised for lacking a concern about the articulation and justification of his philosophical position (ibid.). In other words, the theoretical convergence between critical realism and structuration theory does need to overcome a philosophical incommensurability over the debate of naturalism in the social sciences. Critical realism holds the view that it is possible to conceive of basic similarities between the concepts and practices of the social and the natural sciences — i.e. an advocate of *naturalism*. Bhaskar's TMSA suggests that there exist social forms that are fundamental or necessary conditions for any intentional action. Social forms, like the natural world, exist before we have knowledge of them, and therefore have autonomy as objects of knowledge and investigation. Structuration theory, by contrast, accentuates that there is a fundamental discontinuity between nature and the social construction of society. For Giddens, nature pre-exists human society, and society is sustained and 'made to happen' exclusively by human beings; i.e. an *anti-naturalist* position. Giddens' structuration theory stresses the mediating concept of institutions, through which social structures are reproduced by practices. In other words, there exists a problem of incommensurability between critical realism and structuration theory regarding the nature of social structures (Gregson 1986; Pratt 1994a: 58-59).

Can the philosophical incommensurability between critical realism and structuration theory be resolved, or does a choice have to be made between them? This thesis argues that critical realism and structuration theory can be as compatible on philosophical grounds as on theoretical grounds. There are two reasons. First, there is a philosophical common ground between critical realism and structuration theory by virtue of Bhaskar's recognition of three ontological limitations on naturalism:

1. Social structures, unlike natural structures, do not exist independently of the activities they govern.
2. Social structures, unlike natural structures, do not exist independently of the agents' conceptions of what they are doing in their activity.

3. Social structures, unlike natural structures, may be only relatively enduring (so that the tendencies they ground may not be universal in the sense of space-time invariant) (Bhaskar 1989a: 38).

Bhaskar himself maintains that these all indicate real differences in the possible objects of knowledge in the case of the natural and the social sciences (ibid.). In other words, the reservation of critical realist conceptions of the social sciences is in sympathy with structurationist conceptions of the social world. By contrast, Giddens' stress on *unacknowledged* conditions and *unintended* consequences of action in the theory of structuration suggests that there exists a possible object of social structure which is independent of our knowledge and beyond our intention (Giddens 1984:7-16). In other words, this position reserves a space for realist conception of social reality in the theory of structuration. Consequently, both arguments suggest that there exists a grey area between naturalism and anti-naturalism in the social sciences. The problem is that Bhaskar tends to stress the structural end of social reality, and Giddens puts considerable emphasis on the agency end of social activity. While the very spirit of both structuration theory and the TMSA is to avoid the pitfall of structural dualism, i.e. not to prioritise either structure or agency, this thesis argues that this common ground could and should activate a theoretical convergence between them instead of setting them apart.

Second, this is related to the first point, Collier in his critique on Bhaskar's ontological divide between the natural world and the social world argues that to recognise that it is impossible to reduce social to natural, or indeed social to biological, or biological to physical, and so on, does not imply that the social and the natural worlds are so much different (Collier 1994: 242-48). "The hermeneutic moment is so prominent in the human sciences", as Collier (1994:148) argues, "not because it is a more essential stage or a more reliable or informative source than in the natural sciences, but because, in the absence of experiments, we have so little else." To recognise the significance of subjectivity and intention does not exclude the possibility of objective knowledge of social reality, although such a reality is simultaneously the medium and outcome of intentional action. Giddens himself admits, however loosely, that the interpretative endeavour of social science is also a moral intervention in the social world: in the continual slippage in exchanging theory for data and data for theory in the social sciences (Giddens 1976: 8). In other words, the

ontological differences between the social sciences and the natural sciences could, and should, be resolved at a methodological level rather than at a philosophical level because the grey area between the social and the natural sciences in general, and between structure and agency in particular, is in effect the very meeting ground of different domains of social reality. Accordingly, it is the key to unpacking the complex causal links between different domains of social reality, as the issue of sustainable development suggests.

Structure-agency Debate, Geographical Inquiries and Sustainable Development

As noted earlier, sustainability issues are complex, dynamic, and multifaceted by virtue of the interconnections between *social* sustainability and *physical* sustainability: a fundamental concern about the interdependency between people and their environments. This is the common interest of both geographical inquiries and sustainability debates. In the light of its generative significance, this thesis is only focusing on the issue of social sustainability. However, conventional social theories characterised by the dichotomy between voluntarism and functionalism reach their limit for being unable to address the interconnectedness between people and their environments. This requires an insight into the duality of social structure and human agency. In social theory, voluntarism rightly points out that social structures are constituted by active agents, but ends up denying that social structures determine reality. Functionalism, by contrast, sees social structures as real because they have real effects, but ends up denying that they are the product of active agents (Manicas 1980:66). In this regard, the relational conception of social reality envisaged by the marriage of Bhaskar's TMSA and Giddens' structuration theory is suitable to the task of digging into the deeper explanation of sustainability issues which is embedded in the duality relationship between social structures and individual actions.

Via emphasising the importance of both social structure and human agency, such a realist social theory promises a theoretical convergence between different domains of reality in a holistic conceptual framework. It incorporates structure and action, intention and practice, context and composition, individual and society, and constraint and enablement. Therefore, it is useful for an integration of geographical *patterns* and social *processes* (Kellerman 1989: 5). This theoretical integration is also the key to a proper

understanding of the deeper explanation of sustainability issues. While sustainability issues are conceptualised as social problems created by, and having impacts on, people themselves, they cannot be analysed without a reference to the various contexts of social dynamics. The stress on inter- and intra-generational equity in sustainability debates suggests that sustainability is essentially concerned with the continuity of day-to-day life across space and time via the social practice of appropriating environmental resources. In other words, sustainability is concerned with the continuous production, reproduction, and transformation of both social and material conditions — the very notion of the created environment — on which individual actions and life-chances both draw and shape.

Accordingly, to understand the underlying causes of sustainability issues, we need to consider both social structure and human agency. However, not in a dualistic fashion, as trade-offs between the goals of environmental protection and economic development, but rather, as a duality, as an interdependency between individual life-chances and the created social environment. Bernstein (1985: 240) notes that structuration theory is powerful and attractive because it expresses a deep understanding of what we are, as reflexive knowledgeable human agents, always conditioned by, and constantly reproducing social structures. As far as social sustainability is considered to be the deeper explanation of sustainability issues, it is the unintended consequences and the unacknowledged conditions which are the primary concern of sustainability debates. This dimension is also the central concern of geographical inquiries. Therefore, this thesis is focusing on this key issue, of what mainstream sustainability debates largely ignore and conventional social theories fail to address. This dimension is not only the starting point for a proper conception of sustainability issues, but also the only way leading to a sustainable overall development.

On Methodology: Putting Critical Realism into Practice

As a critique to ‘orthodox’ approaches to the social sciences, i.e. as an anti-positivist, a serious challenge facing critical realism, as might be expected, is not its philosophical argument, but rather, as Pratt (1995: 62) puts it, “it concerns the inadequately worked through *practice* of critical realism” (original emphasis). Partly because critical

realism promotes a 'complex ontology' which emphasises the coexistence of different levels of reality and partly because the relational conception of social reality highlighted in structuration theory requires the incorporation of both structure and action, both critical realism and structuration theory have been criticised for lacking a simple, straightforward framework for conducting empirical research (see Gregson 1986; 1987; 1989; Sarre 1987; Pratt 1995). The methodological implications of critical realism and structuration theory are important on the grounds that they are the only way to build a constructive alternative from the critique, rather than merely a negative critique of the positivist approaches (England et al. 1987). And this is truly a serious challenge to critical realism if such an alternative view is to be widely accepted and, most importantly, broadly *applied* at an empirical level instead of just as an abstract theory or a philosophical debate.

Soja (1989) observes that a lack of formal epistemology makes any simple and direct translation of Giddens' ontology into demonstrative empirical research rather difficult, especially among those who seek such direct and simple empirical insights from Giddens' work. Rather, structuration theory only provides an overall theoretical framework for analysis, its effectiveness requiring a substantive elaboration of the theory, i.e. a methodological question is, in essence, a question of *operationalisation*.

Although proper social research should include both theoretical and empirical categories, nevertheless, theorising is one thing and putting theory into practice is quite another. These two things should not be conflated with each other. In other words, empirical investigation must be theory-informed. In this view, this is in effect the strength (instead of a deficiency) of critical realist social theory. It is unlikely that the stratified domains of social reality can be explored in a simple and straightforward manner, either theoretically or empirically. While stressing the concept of multiple realities promoted by critical realist philosophy and the concept of duality of structure advanced by Giddens' structuration theory, this thesis argues that sustainability issues do require a more sophisticated methodology which is able to address the dynamic and multifaceted characteristics of the necessary causalities embedded in the internal, social perspective of sustainability. This implies the use of a combination of methods in empirical analysis in order to bring out the diverse mechanisms at work in the multiple dualities between different conceptions of people, environment, and development. However, a radical

departure from traditional philosophies and social theories does not necessarily imply a radical departure from conventional methodologies, or imply a revolutionary invention of complicated research procedures. In order to illustrate that both critical realist philosophy and structuration theory can be, and should be, used in empirical investigation of complex social phenomena, in particular the all-including issue of sustainability, this section is focusing on the issue of putting critical realism and structuration theory into practice.

It is widely recognised that it is Bhaskar who has led the way in contrasting the empiricist approaches of positivism with the emergent philosophy of critical realism (Outhwaite 1987; Cloke et al. 1991; Collier 1994). Nevertheless, it is Sayer (1982; 1984; 1985a; 1985b) who contributes most on the methodologies and the practices of critical realism. He tries to bridge the traditional gap between what philosophers and methodologists *say* and what researchers actually *do* by addressing the practical issues raised by critical realist philosophy of social science (see Sayer 1992). For Peet and Thrift (1989b: 17), critical realism's greatest impact has been in promoting the thoughtful conduct of empirical research. But even Sayer's painstaking work on 'putting critical realism to practice' has been criticised as a rather vague 'recipe book' approach (Pratt 1995: 67). It is not surprising that critical realists themselves, such as Allen (1983), have admitted that "the realist epistemology is *under-equipped* for its task" (Cloke et al. 1991: 168). Hence, an important question that may be legitimately asked is 'How can we effectively put critical realism into practice in the exploration of the deeper causalities of sustainability issues?' To answer this question, it may be necessary to divide the question into two sub-questions: one concerning the research programme at a general level; the other concerning the specific research methods which can be used to explore the social duality of sustainability issues, i.e. the internal, social aspect of sustainability.

Realist Research Programme: A Retroduction Between Abstract Research and Concrete Research

For critical realists, the task of social science is to discover the generative mechanisms underlying and explaining the social phenomena. Critical realist social research is not restricted to the, probably unrealised, underlying mechanisms and properties of social structures, nor to the messy contexts of contingencies. Rather, its aim is to link the

(necessary) underlying mechanisms with the (contingent) conditions in which those underlying causalities are situated. By virtue of the disjunction between domains of the real (mechanisms and structures), the actual (events) and the empirical (experiences), critical realism's epistemological challenge is to allow for varying relationships between the necessary causalities and the contingent conditions. Via the identification of both underlying structures and contingent conditions in concrete social research, critical realist methodologies allow us to avoid the pitfalls of both crude determinism and undifferentiated eclecticism. The purpose of critical realist research is not to seek the universal laws (or the law-like regularities) in order to *predict*; nor to record the nuances of local and individual contexts in order to *describe*. By contrast, its purpose is to provide a *practically adequate explanation* of social phenomena by distinguishing the internal causal mechanisms from the external contingent conditions in a concrete context. To do this, we need to distinguish two types of research: *abstract* and *concrete* research.

Sayer (1992: 87) argues that critical realist understanding of concrete objects requires a double movement: concrete → abstract, abstract → concrete. Abstract research is a theoretical category, in order to 'get at' necessary relations. It refers to a particular relationship between causal powers and the object of study. Sayer refers here to a *one-sided* or partial aspect of that relationship. It is characterised by a process of distinction between essential and incidental characteristics, or between internal (necessary) and external (contingent) relations. By this distinction, Sayer (1981: 9) argues that there are good ('rational') and bad ('chaotic') abstractions. A good, or 'rational' abstraction, should isolate necessary relationships, while a bad abstraction, or 'chaotic conception', is one which is based on a contingent relationship, or one which divides the indivisible by failing to recognise a necessary relationship. Concrete research, by contrast, is an empirical study, so as to 'get at' contingent conditions. Concrete research is required in order to discover the actual contingent conditions under which the causal mechanisms we are interested in are triggered. By 'concrete', however, Sayer (1981) means something real, but not something which is reducible to the empirical: what is empirical depends on our knowledge and sensory powers; what is concrete does not. Rather, the concrete object is concrete because it is a combination of many diverse forces or processes; so it is referred to as a *many-sided* object of study (Cloke et al. 1991: 148).

Figure 2.1 summarises the relationships envisaged by Sayer between abstract and concrete categories and between the domains of events, mechanisms and structures. Figure 2.2 reprises Figure 2.1, but indicates how events, mechanisms and structures can be combined in different ways through abstract theoretical research, concrete practical research, empirical generalisation, and synthesis research.

Abstract theoretical research deals with structures and mechanisms; events are only considered as possible outcomes. *Concrete practical research*, on the other hand, deals with actual events and objects, treating them as phenomena that have been brought about by specific mechanisms and structures (each of which has been isolated and examined through abstract research). *Empirical generalisation*, by contrast, only seeks to establish regularity at the level of events, but not involving abstraction. As might be expected, different philosophical positions tend to adopt different research programmes. For example, Marxism is usually associated with abstract theoretical research; humanism tends to use concrete practical research; and positivism is closely in line with empirical generalisation. Finally, a fourth type, *synthesis research*, can be added by combining all three research types as an attempt to explain major components of whole systems.

Sayer (1992: 238-41) reminds us that one type of research should not be 'over-extended' by doing the job of the others. For example, abstract theories should not explain events directly without looking into the contingent forms of a combination of abstract elements which comprise the concrete — the common fault of Marxism. Concrete research, by contrast, should not give undue prominence to localised, unique findings, without any reference to the broader necessary relations that have brought them about — the common fault of humanism. Moreover, empirical generalisation should not conflate the necessary relations and the contingent conditions by focusing only on empirical regularities — the common fault of positivism. As might be expected, social research which focuses only on abstract or concrete research alone is problematic: either one sticks to theory about mechanisms and never 'dirties one's hands' with empirical material, or one works at the empirical level alone and never bothers about the underlying mechanisms. Critical realist methodology views *a priori* knowledge (abstract research) and empirical understanding (concrete research) as complementary to each other; most importantly, this should be an on-going process rather than a one-off engagement. The realist terminology for this research

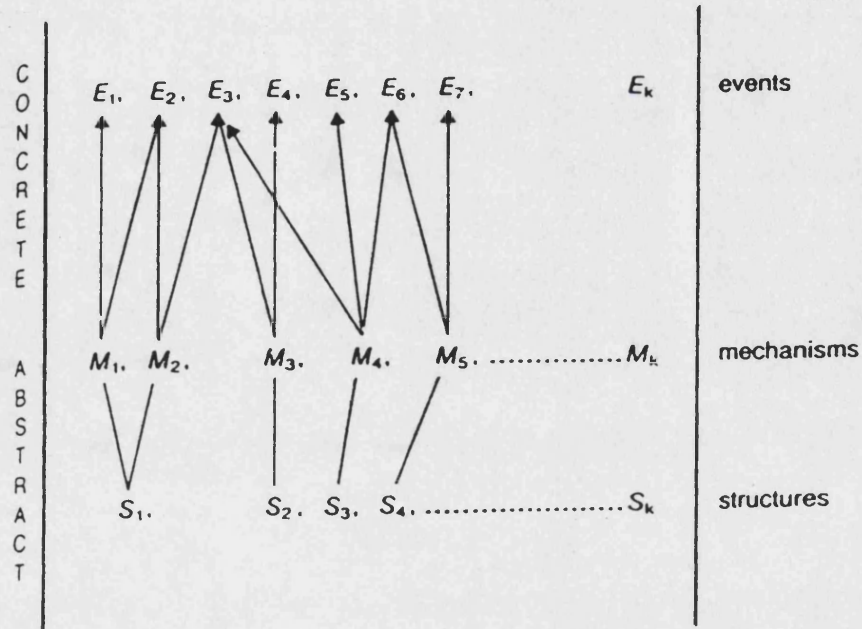


Figure 2.1 Structures, Mechanisms and Events

Source: Sayer (1992: 117)

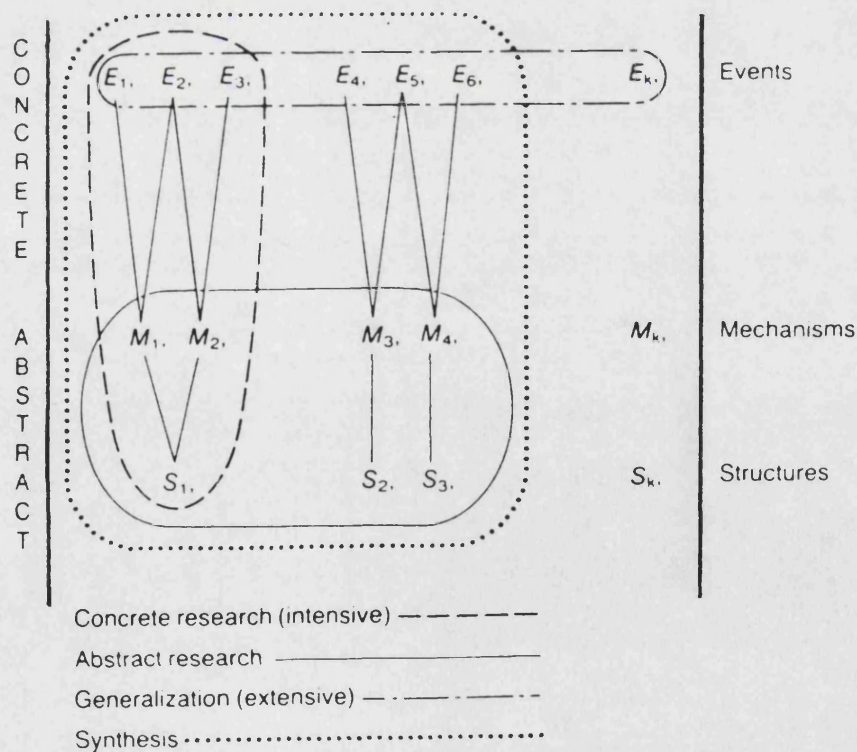


Figure 2.2 Types of Research

Source: Sayer (1992: 237)

process is *retroduction*: the use of causal mechanisms to explain concrete events (Bhaskar 1978: 135-36; Sayer 1992: 107).

Pratt (1994a: 12) argues that critical realism can only be effective if it is developed as part of an on-going dialogue between abstract and concrete research: a consecutive engagement of theory and methodology, spiralling between the abstract and the concrete (see Figure 2.3). The 'reiterative' model of critical realist research is in contrast to the more linear and rigid form of social research proposed by the positivist approach (see Figure 2.4). The latter has been considered by many as a standardised procedure of, or the orthodox approach to, scientific study under positivist methodology. For example, Johnston (1986:152) observes that there is a substantial volume of journal articles following this format: review of the literature on a topic, derivation of hypotheses to be tested, conducting an 'experiment' (or experiment-like observation), and evaluation of results. Hence, what sets critical realist research and orthodox (positivist) research apart, as a research programme, is the stress of *practical adequacy* in critical realist research. On the one hand, it suggests that there exists an irreducible empirical dimension to social analysis on the grounds that social phenomena cannot be studied in a vacuum. Otherwise, social analysis based exclusively on abstract categories may end up with impractical theories which cannot be related to the real world or local knowledge and/or experience. On the other hand, empirical research must refer to the deeper mechanisms and causal structures on the grounds that these factors are the deeper explanations of observed phenomena. Otherwise, social analysis based exclusively on empirical categories may end up with undifferentiated experiences which have little explanatory power. In this manner, Pratt (1994a: 42) argues that a critical realist social research must be a *theoretically informed empirical programme*.

Extensive and Intensive Research: A Synthesis

If critical realist research must be theoretically informed concrete research, a question which is immediately raised is that of: 'What theories and what methods?' As noted earlier, as far as *social* sustainability is considered to be the deeper explanation of sustainability issues and, a major concern of sustainability debates, the thesis is arguing for a critical realist philosophy which stresses the *stratification* conception of social reality

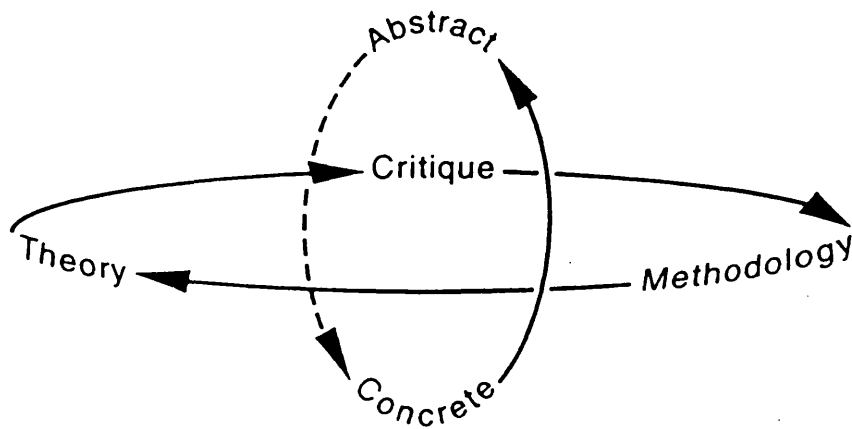


Figure 2.3 The Reiterative Model of Critical Realist Research

Source: Pratt (1994a: 203)

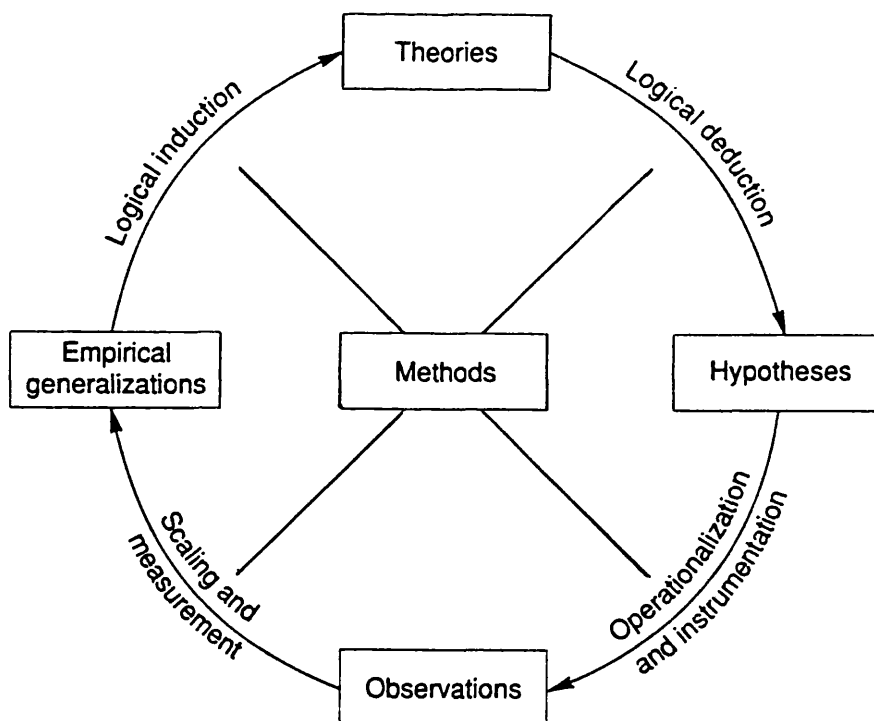


Figure 2.4 The Linear Model of Positivist Social Research

Source: Hollis (1994: 60)

dividing the domains of the real, the actual, and the empirical. In other words, it is against positivist philosophy. Moreover, while social sustainability is conceptualised as a duality between individual life-chances and the created social environment, this thesis is arguing for a *structuration* conception of social relation which requires the inclusion of both social structure and human agency. In other words, it is against the dualism of both voluntarism and determinism. Accordingly, the empirical analysis of sustainability issues needs to build the connections between necessary causal mechanisms and contingent conditions in the duality relationship of social structure and human agency. By virtue of complex epistemology and ontology highlighted in critical realist philosophy and structuration theory, as one might expect, the empirical analysis of the internal, social aspect of sustainability cannot be achieved via a single engagement in a research project.

The problem with the structuration concept of sustainability — as a dualities between people and their environments, between the natural and the man-made environment, between productive (economic) and reproductive (socio-economic) development, and between society and individuals — lies in the difficulty of translating abstract theories into concrete questions. At a theoretical level, the duality between social structure and human agency can be conceived of more easily because of the fact that we have the advantage of being able to constantly change our ‘analytical lens’, i.e. we can shift between different levels of realities simply via the change of analytical foci between structural properties and human actions.

At an empirical level, by contrast, social structure and human agency are very different entities by nature, and it is very difficult, if not impossible, to examine two things with very different ‘ontological depth’ simultaneously without the need to change the foci of our ‘analytical lens’. The question shows that changing the foci of analysis in empirical research involves not only different methods, but also fundamentally different questions. In other words, a theoretical duality (constitutional duality) necessarily involves an empirical dualism (compositional dualism). However, to reject positivist philosophy and the social theories envisaged by both structuralists and individualists does not necessarily lead to a rejection of their methodologies all together. This thesis argues that a synthesis of existing research methods will do the job. As far as structure and agency are concerned, the empirical investigation of the internal, social aspect of sustainability may need to

employ both *extensive* and *intensive* methods in order to explore the dynamics at both ends of the duality spectrum.

Extensive research studies a large number of individuals, but also restricts the number of properties used to define them. Intensive research, by contrast, studies a large number of properties on a small number of individuals. Sayer (1992: 242) stresses that distinction between these two types of research is much more than a question of scale or ‘depth versus breadth’. Rather, they ask different sorts of question, using different techniques and methods and defining their objects and boundaries differently. Table 2.1 presents Sayer’s summary of intensive and extensive research. In intensive research, the primary questions concern how some causal processes work out in a limited number of cases. The research techniques employed are qualitative methods — participant observation, informal and unstructured interviews, life-histories, and so on — that permit the detailed study of the individual in his/her or its causal context, and in so doing establishes connections between the ‘necessary’ and the ‘contingent’. Extensive research, by contrast, asks the more common question of whether there are general properties and patterns to be discovered over the whole population. Research techniques involve formal, large-scale surveys, such as formal questionnaires, descriptive and inferential statistical analyses, etc., in order to uncover empirical regularities. Accordingly, extensive research prioritises information about patterns, while intensive research prioritises information about processes (Sayer and Morgan 1985: 152).

Nevertheless, there are inherent weaknesses associated with both intensive and extensive methods. The main weakness of intensive research methods is that it lacks representativeness and may therefore be subscribed to the problem of *over-extension* in concrete research. Extensive research, by contrast, is the weaker explanatory tool as far as concrete events are concerned: it lacks sensitivity to details; it will not permit the identification of causal mechanisms; and, by favouring generalisation over abstraction, it is likely to be subscribed to the twin problems of *chaotic conceptions* (i.e. ascribing causality to a category that has little or no internal logic or structural interaction, for example, the idea of ‘service sector’), and *distributive unreliability* (see Harré 1979: 108-109). While the issue of social sustainability demands us to consider both structural patterns and individual dynamics, the methodological challenge to the empirical analysis

Table 2.1 Intensive and Extensive Research: A Summary

	INTENSIVE	EXTENSIVE
Research question	How does a process work in a particular case or small number of cases? What produces a certain change? What did the agents actually do?	What are the regularities, common patterns, distinguishing features, of a population? How widely are certain characteristics or processes distributed or represented?
Relations	Substantial relation of connection	Formal relations of similarity
Types of groups studied	Causal groups	Taxonomic groups
Type of account produced	Causal explanation of the production of certain objects or events, though not necessarily representative ones	Descriptive 'representative' generalisations, lacking in explanatory penetration
Typical methods	Study of individual agents in their causal contexts, interactive interviews, ethnography Qualitative analysis	Large-scale survey of population or representative sample, formal questionnaires, standardised interviews Statistical analysis
Limitations	Actual concrete patterns and contingent relations are unlikely to be 'representative', average or generalisable Necessary relations discovered will exist wherever their relata are present, e.g. causal powers of objects are generalisable to other contexts as they are necessary features of these objects	Although representative of a whole population, they are unlikely to be generalisable to other populations at different times and spaces Problem of ecological fallacy in making inferences about individuals Limited explanatory power
Appropriate tests	Corroboration	Replication

Source: Sayer (1992: 243)

of sustainability issues is not a choice between extensive and intensive methods, but are of how to synthesise these two types of research in order to recover the ‘duality picture’ from the ‘dualistic jigsaws’ of structure and agency. Giddens (1984: xxxi) himself notes that “what is especially useful for the guidance of research . . . is the study of (a) the routinised intersections of social practices which are the ‘transformation points’ in structural relations, and (b) the modes in which institutionalised practices connect social with system integration.” In other words, the empirical analysis on the internal, social perspective of sustainability should focus on the significance of *contextuality* through which the duality between structure and agency can be dis-embedded. This needs to employ a research strategy which combines both extensive and intensive research techniques. The former aims at identifying the structural patterns of events; the latter aims at exploring the processes of action in which the production and reproduction of structural features are embedded.

Realist Methodology, Geographical Inquiries and Sustainable Development

Critical realists argue that the purpose of social science is to discover the underlying causalities of social phenomena. It involves both theoretical and empirical categories: the purpose of abstract theoretical analysis is to identify the necessary relations between objects of interest, and the purpose of concrete empirical analysis is to specify the important contingent conditions in which the underlying causalities are situated. In other words, critical realist methodology stresses a *practically adequate explanation*: research requiring both proper theoretical accounts and adequate empirical investigations. To put it more precisely, critical realist methodology emphasises the significance of *theoretically informed concrete research*.

This is truly the primary concern of geographical inquiries. Johnston (1993: vii) notes that geography is both an empirical discipline — which is concerned with understanding the world and transmitting that understanding to a wide audience — and a practical discipline, for its transmitted understanding of value to those who would change the world at all scales. Their foci, accordingly, are neither an overriding concern about the preexisting material world (the environment), nor an overriding concern about the varied

experiences of individual life-chances. Rather, geography is centrally concerned with the interrelationship between people and their environments. To understand such an interconnection, we must address the underlying causalities of the people-environment connection while at the same time paying due attention to the contingencies in which those necessary causalities are situated. Accordingly, this is the value that a critical realist methodology can contribute to geographical studies: i.e. not only to focus on either space/place or human actor, but on their interconnection.

As stressed throughout the chapter, a relational conception has been a common view shared by both geographical inquiries and sustainability debates. But the interconnection between people and their environments is complex, dynamic, and multifaceted. A full understanding of sustainability issues must distinguish between the internal, social dimension of sustainability and the external, physical dimension of sustainability. By virtue of its generative power, this thesis argues that the internal, social aspect of sustainability represents a deeper explanation of sustainability issues. However, addressing this internal dimension is not enough. What is also needed, is to explore the underlying causalities. In this regard, the structuration conception of social relation advanced by Giddens' structuration theory is the key to unpacking the people-environment interconnection: a duality between social structure and human agency. This theoretical breakthrough provides an adequate conceptual framework for a proper understanding of sustainability issues.

However, sustainability is not only about conceptions, it is also concerned with the survival needs of hundreds of millions people, of both current and future generations. Accordingly, the building of a link between sustainability conceptions and sustainability practices is necessary. In other words, the issue of *operationalisation* is crucial to a proper understanding of sustainability issues: it moves forwards to construct a proper theory of sustainability by addressing the necessary causalities of sustainability issues; it moves backwards to examine the manifestation of sustainability mechanisms by identifying the important contingencies in real conditions. Therefore, a practically adequate explanation of sustainability issues must involve both theoretical and empirical categories: a *retroduction*, i.e. the process of constant engagement of abstract and concrete research, spilling over theories and practices.

As noted earlier, social sustainability is a deeper explanation of sustainability issues.

Moreover, this deeper explanation is embedded in the duality between individual life-chances and the created social environment. This suggests that sustainable development cannot be reduced to trade-offs between sustainable environmental bases and continuing economic development: the issue of physical sustainability, but should be understood from its underlying causalities: the issue of social sustainability. However, social sustainability cannot be reduced to either social structure or human agency alone. Sustainability cannot be 'summed up' or 'averaged out'. It is fundamentally concerned with the interrelationship between these two domains. Thus, the empirical analysis on the internal, social aspect of sustainability needs to build the connections between the necessary causalities and the contingent conditions in the duality of social structure and human agency. The question is that in practice, social structure and human agency are very different entities, and hence an empirical investigation of their interrelations needs to ask very different questions and, consequently, use very different methods. This suggests that a combination of both extensive and intensive research techniques is necessary: the former identifying the structural patterns of the people-environment duality; the latter highlighting the dynamic processes of the people-environment duality. By exploring both ends of the duality spectrum in concrete situations, we can understand both the 'becoming' and the 'outcome' of sustainability issues via the constant production, reproduction, and transformation of social structures embedded in the routinised practices of individual people's day-to-day lives. This thesis argues that this is a more appropriate way to explore the deeper explanation of sustainability issues, both theoretically informed and empirically embedded.

Conclusions: Towards a Contextual Explanation of Sustainable Development

This chapter discussed three fundamental issues regarding the study of sustainability issues: philosophy, theory, and methodology. This thesis argues that these issues are the key to achieving a proper understanding of sustainability issues. Without them, any painstaking work on the discussion of sustainability issues might end up with, at best, commonsense knowledge or, at worst, misleading conclusions. In other words, a proper conceptual framework is the prerequisite for a proper understanding of sustainability issues.

The overall conceptual framework of the thesis can be characterised as a marriage

of critical realism and structuration theory. First and foremost, by virtue of the complex, dynamic, and multifaceted characteristics of sustainability issues, this thesis argues that the stratification concept of social reality promoted by critical realist philosophy is a more appropriate philosophical stance for the understanding of the internal, social perspective of sustainability issues. It is the underlying causalities (the causes), rather than the empirical regularities (the symptoms), which should be the primary concern of sustainability debates. However, since critical realism is in essence a philosophical debate concerning the acquisition of scientific knowledge, i.e. an epistemological question, its effectiveness does need a theoretical input, i.e. an ontological question. In this regard, the structuration conception of structure-agency duality advanced by Giddens' structuration theory is a suitable theoretical framework which is capable of 'getting at' the underlying causalities of sustainability issues. Structuration theory rightly addresses the interconnection between people and their environments via the concept of structure duality. It provides a theoretical convergence between different domains of social reality in a holistic theoretical framework. In this view, sustainability is conceptualised as a continuous production, reproduction, and transformation of both social and material conditions on which individual actions and life-chances both can draw from and shape.

Having said that a proper conceptional framework is the prerequisite for a full understanding of sustainability issues, critical realist methodology argues that a theoretical explanation must be re-embedded into concrete situations: social phenomena cannot be studied in a vacuum. There is an irreducible empirical dimension to sustainability debates. In this regard, critical realist methodology is a useful guidance for conducting empirical research. The overall research programme adopted in this thesis is characterised as a process of retrodution: with the use of causal mechanisms to explain concrete events. The research strategy for this empirical investigation of the internal, social aspects of sustainability issues is a combination of extensive and intensive methods. The inclusion of both abstract theoretical analysis and practical concrete analysis is important on the grounds that sustainability issues are complex, dynamic, and multifaceted; we need both abstract theoretical categories and practical concrete categories to build the link between necessary causalities and contingent conditions. In other words, the research programme for the understanding of sustainability issues must be 'theoretically informed concrete

research'. The adoption of both extensive and intensive methods is important on the grounds that social sustainability is centrally concerned with the interconnection between social structures and individual actions; hence we need both extensive and intensive methods to bring out the structural patterns and individual processes in which the duality between people and their environments is embedded. In other words, the empirical investigation of the internal, social perspective of sustainability must be a contextual analysis that links structures and actions. The next chapter will illustrate how the deeper explanation of sustainability issues can be explored via a translation of the theoretical explanation of social sustainability into concrete urban questions.

CHAPTER THREE

LINKING SOCIAL SUSTAINABILITY AND URBAN QUESTIONS: TOWARDS A CONVERGENCE OF THEORY AND PRACTICE

The aim of the chapter is twofold: (a) to develop the theory of social sustainability via a discussion on the duality between social structure and human agency, and (b) to link the theoretical account of social sustainability to the empirical investigation of sustainability issues in a concrete *urban* context.

As argued earlier, by virtue of their origins and through their consequences, sustainability issues should be understood with reference to their deeper causalities: the internal, social aspect of sustainability. This view was justified in chapter 2, where the marriage of critical realism and structuration theory has provided the philosophical foundation, the theoretical base, and the methodological guidance for the deeper explanation of sustainability issues: i.e. it must be a theoretically informed empirical research. This thesis argues that theorising sustainability is the prerequisite for a concrete empirical investigation of sustainability issues. Nevertheless, theorising (to address the underlying causalities) must be embedded in concrete, contingent conditions. In other words, a critical realist empirical investigation of sustainability issues must be a contextual analysis which can bring together the internal, necessary causalities and the external, contingent conditions. As far as social sustainability is conceptualised as a time-space connection between individual life-chances and the created environment in the process of production and reproduction, the empirical analysis of the internal, social aspect of sustainability is going to be situated in a concrete urban environment — London — by translating abstract concepts of social sustainability into substantive urban questions. In turn, the existing urban questions can be answered with reference to the concepts of social sustainability.

This chapter is organised into three main sections. The first section justifies the urban focus of the empirical analysis of sustainability issues. Via a critical appreciation of Giddens' theory of structuration, the second section focuses on the theoretical explanation of social sustainability: the time-space connections between productive and reproductive

activities in the duality of institutional structures and individual daily practices. Finally, based on this theoretical framework, a research project is devised to translate sustainability hypotheses into substantive urban questions: the time-space dynamics relating to employment, housing, shopping, and transport in London.

Sustainable *Urban* Development: The Spatial Dimension

As argued earlier, theorising sustainability needs an appropriate conceptual framework. But an appropriate conceptual framework alone is not enough. Sustainability debates are illuminating only if they are linked to the real world. In order to bridge the gap between the theoretical account and the empirical investigation of social sustainability, one key dimension in the social analysis — space — must be specified at the outset.

In the social sciences, there has been a strong and almost overwhelming predisposition to giving time and history priority over space and geography. Marx, Weber, Durkheim, and Marshall all have that in common. Harvey (1985: xiii), for example, observes that historical materialism appears to license the study of historical transformations (when Marx said that human beings wrote their own history), while ignoring how capitalism produces its own geography. Social structures cannot be separated from spatial structures. Urry (1985: 23) argues that the social world should be seen as comprised of space-time entities having causal powers which may or may not be realised depending on the patterns of spatial/temporal interdependence between them. Massey (1985: 17) also seriously questions the validity of social theories without reference to spatial structures. It is not surprising that a similar criticism is also registered in sustainability debates. Breheny (1992: 1), for instance, notes that “whereas time is an explicit dimension in most notions of sustainability, space is generally ignored.” He therefore points out that it is necessary to be explicit about the spatial dimension in sustainability debates, arguing that there is an urban focus to sustainability issues in the light of cities’ contribution to pollution and waste (ibid.: 2). Having said that social theories in general have not paid due attention to space and spatiality, a contrasting mistake has been found common to

geographical and planning studies: a lack of *temporal* dimension. Gregory (1979), for example, notes that the lack of convergency between human geography and social theory has been due to the excess of *spatiality* in geography and the deficiency of it in the social theory of sociology and anthropology. In other words, social science should not prioritise either *time* or *space*, but should focus on *time-space*. In as much as the deeper explanation of sustainability issues is considered to be embedded in the duality of social structure and human agency, by virtue of the time-space conflicts created by industrial capitalism in the organisation of individual and society's time and space, the significance of time-space is self-evident: social relations are in essence embedded in the spatio-temporal system that links people and things both *here and now* and *there and then*.

It might be an exaggeration to say that conventional sustainability debates are space-blind, but, arguably, their conceptions of space are naive. While the temporal dimension has been elected as a defining character of sustainable development, known as the issue of *intergenerational* equity, the spatial dimension of sustainable development, known as the issue of *intragenerational* equity has largely been interpreted as an issue of *uneven development* between regions. For example, sustainability issues are seen as conflicts between meeting basic survival needs in the Third World and improving the quality of life in the Western World (see, for example, WCED 1987; Smith 1990; Mainwaring 1991; Jalal 1993). Although this global perspective is important, especially when some global issues such as global warming and ozone layer depletion are taken on board, it is inadequate on the grounds that (a) the *spatio-temporal* interconnections between the global and the local and (b) the *social* interconnections between production and reproduction are largely ignored. The 'uneven-development' thesis tends to lump together a variety of issues on a global scale by identifying the degrees of development, in particular in the realm of production, between more developed countries and less developed countries. Most importantly, it tends to marginalise the interdependency between productive and reproductive activities which necessarily involves an interplay between global and local sustainability. While emphasising the significance of spatio-temporality to sustainability debates, this thesis argues that to set the debate of sustainability in the *urban* context could

address this global-local connection by virtue of the links of socio-economic and environmental processes.

The Global-local Connection of Sustainable Development

One might suspect that the global significance of sustainability issues would be marginalised if the spatial dimension of sustainable debates is focussed on the urban scale, rather than on the global scale. This thesis argues that, when the concept of 'open systems' is taken on board, the discussion of sustainable *urban* development can address the sustainability connection between the global and the local. The global consequences of sustainability are local in origin and, in turn, the global environment, both physical and socio-economic, has significant local impacts. This global-local connection is especially important in contemporary capitalist society. As Cronon (1991: 378) puts it:

Living in the city consuming goods and services in a market place with ties to people and places in every corner of the planet, people and places that remain invisible, unknown and unimagined as we consume the products of their lives.

In the late twentieth century, economic and environmental issues have become increasingly global in scope. It has become more difficult to view cities meaningfully in isolation from each other, or simply in conjunction with their less urbanised hinterlands.

Cities are not islands. They have to import resources from outside and export outputs, wanted or unwanted, to other areas. It is more appropriate to see the cities as open systems, integrated into broader systems of, both local and global, economy and environment (MacNeill et al. 1991; Girardet 1992). Haughton and Hunter (1994: 14) note that cities and their hinterlands are increasingly indistinct from each other, linked by better communications and increasingly exposed to similar (global) cultural influences. Cities are connected to each other by an increasingly complex web of links, in production systems, in finance, in resource usage and in the environmental problems which they both create and

face. Urban residents, businesses and politicians can play an important role in shaping their economies, societies and environments, but they cannot do this in isolation from their role in the global economy. Hence, a sustainable city is not only an end result, but also a process of contributing to global sustainable development.

But before we can move on to discuss how the theory and practice of sustainable development can be applied to cities, it is important to consider exactly what constitutes a city. Elkin et al. (1991: 4) note that the physical city (the mass of buildings, streets and people) is just the visible focus of the complete urban system. The social and economic impacts of the contemporary urban system are of a truly global context. In Britain, for example, while the processes of economic restructuring have eroded the traditional manufacturing base of urban areas since the 1970s, the processes of counter-urbanisation, inner-city regeneration and re-urbanisation, as well as continuing urban sprawl all suggest that the *urban* contexts should never be restricted to the physical boundaries of *cities* but rather should be considered as the *urban regions*, or more precisely, the *urban societies*. Nevertheless, at the local *urban* level issue-linkage and the adoption of actions aimed at fostering sustainable development can be more 'manageable' than at the global level. In the meantime when the openness of urban *social* contexts is included into analysis, it provides a broader scope of issue-linkage than if merely restricted to the physical boundaries of local urban areas. In other words, a naive spatial conception of sustainable development as 'either global *or* local' is substituted by a more sophisticated one as a combination of 'the local in the global' *and* 'the global in the local'. This global-local interconnection is an essential dimension that any sensible discussion of sustainability should not ignore. The term *glocalisation*, invented by Swyngedouw (1992), is a useful connotation which catches the changing interplay between the global and the local. Before engaging in the theoretical analysis of social sustainability, this urban focus of sustainability analysis can be further supported by the argument that cities represent (a) the most serious threats to, and, accordingly, the greatest opportunities for, sustainable development; (b) the dominant forum of modern civilisation; and (c) the very manifestation of the created space.

Cities as Pressure Points

The reasons for adopting an urban focus on sustainability analysis are compelling. First and foremost, it is in the urban areas that many environmental and social problems take root and are experienced at their most intense. It is not surprising that many sustainability debates are focused on the urban contexts (for example, CEC 1990; Elkin et al. 1991; Haughton and Hunter 1994; Council of Europe 1994; ECMT 1995; Ciuffini 1995; Badshah 1996; see also Cadman and Payne 1990; Breheny 1992). Many critics argue that cities represent the very antithesis of sustainable development: cities are major consumers of natural resources and the main producers of pollution and waste (Girardet 1992: 86; Owens 1992: 79), i.e. cities are regionally unsustainable. Moreover, cities are closely associated with crime, vandalism, deprivation, unemployment and all sorts of socio-economic problems, including deteriorating infrastructure, inner-city decay, and neighbourhood collapse, i.e. cities are socially unsustainable. However, it is in the cities that we find the greatest concentration of population and activities. To resolve urban problems would contribute significantly to the alleviation of the most pressing problems confronting the world as a whole. Haughton and Hunter (1994: 12) argue that cities are also potentially more environmentally friendly than many realise (the environmental economies of scale). However, most debates over urban sustainability tend to focus on *physical* sustainability, treating *social* sustainability as unrelated or implicit. For example, research has been focused on issues relating to urban form, energy consumption, transport infrastructure, and environmental impacts (for example, Newman and Kenworthy 1989; CEC 1990; Breheny 1992; DoE 1994; Banister 1992; Owens 1992; Elkin et al. 1991; Anderson et al. 1996); but these debates did not penetrate to the underlying causalities of sustainability issues: why the movements of people and goods/services are required? This thesis is not arguing that these issues are unimportant or irrelevant; on the contrary, as Singh (1989: 155) argues, “when any environmental issue is pursued to its origins, it reveals. . . that the root cause of the crisis is not to be found in how men interact with nature, but in how they interact with each other.” In this view, Haughton and Hunter (1994: 22) add that

“the problems of the environment must be traced to dominant modes of production, consumption and reproduction.” Accordingly, as argued earlier, sustainability issues should be explored via the interrelationship between structure (the created environment) and agency (people) in the processes of production and reproduction. Nonetheless, here I want to take a step further by arguing that it is the created urban environment which exhibits the most serious symptoms of unsustainable development and at the same time provides the greatest opportunities for its remedy. The concentration of population and activities in the cities provides a greater latitude of intervention. Elkin et al. (1991: 6) argue that “we cannot make the same mistake of garden-city movement which in fact bears the opportunity costs of ‘losing’ improvements to existing cities and leaving the large cities with increasing social problems and a lower tax base on which to fund action.” Sustainability debates and, consequently, the corrective actions, should begin with the problems facing the most serious pressure point of sustainable development — the cities. MacLennan and Mega (1992: 6) argue that in reality it is politically difficult to prioritise global sustainability problems in the face of local unemployment, poverty, poor housing, and deteriorating infrastructure. Accordingly, to resolve existing urban questions is to pursue global sustainability from within.

Cities as the Dominant Forum

By virtue of the close relationship between the city-based capitalist industrial economy and the processes of Western urbanisation, as well as the fast growth of urban population, the significance of the urban settings in sustainability debates is self-evident. The rise of industrial capitalism in the last two centuries, which has been argued earlier in the thesis as a major cause of unsustainable development, finds its manifestation mainly through, or in conjunction with, the processes of urbanisation in the course of Western modernisation (see Harvey 1989; Clarke 1991). Cities are the foci of production, distribution, exchange, and, increasingly, consumption in which the heart of capitalist mode of production lies (Johnston 1989). Harvey (1982) sees the function of urban life in the

West as the reproduction of the capitalist economic system. The world is becoming economically and environmentally more interconnected. Cities are the nodal positions of unprecedented flows of resources, wastes, traded products and services, finance capital and labour. Accordingly, the issue of managing sustainable cities, and eventually managing sustainable urban societies, is one of the greatest challenges to sustainable development (WCED 1987: 235).

The significance of sustainable cities is also reflected in the increase of urban populations. After two hundred years of development, most industrial countries nowadays are virtually totally urbanised. In the year 1800 just 5 per cent of the world's population was urban; by 1900 the proportion had risen to around 15 per cent. By the year 2000 the proportion will have increased to around 50 percent (McMichael 1993). An estimated 80 per cent of world population increase between 1990 and 2000 will be in the urban areas (Houghton and Hunter 1994: 32). While 42.6 per cent of the world's population was urban in 1990, there had been an obvious skewness to the developed world: 72.6 per cent of the population in developed countries was urban and 33.6 per cent in developing countries (Hardoy et al. 1992). Although the growth of urban population in the developed, industrial world has been stabilised in the last few decades; however, more than ever before world population as a whole is now living in urban areas as a result of the fast growth of urban population in Third World countries. There are few signs that such trends will slow down or even reverse. If current trends hold, most of the urban population increase will be in developing countries. In other words, in the next century a more uniform level of urbanisation will spread around the globe, moving towards the current levels of urbanisation prevailing in the industrial countries. Given that the total urban population in developing countries is already larger than the total population of Europe, North America and Japan combined (Hardoy and Satterthwaite 1991), the problems of Third World cities will be a serious challenge to sustainable development (WCED 1987). Given that to be *developed*, i.e. to be industrialised and capitalised, is among the top priorities of many developing countries, to focus on sustainability issues facing Western, industrialised cities can provide useful lessons for Third World cities in their search for a sustainable route of development,

although the nature of scope of sustainability problems might be very different between Western cities and Third World cities.

Cities as Created Spaces

Bertilsson (1984: 48) argues that “Modern man no longer stands in direct relationship with organic nature, but lives in a mediated and manufactured space, the culmination of which is the creation of the modern city.” In this view, this thesis argues that sustainability should be conceptualised as an interrelationship between ‘created environment’ (which involves both *natural* and *man-made* environment) and ‘real development’ (which involves both *economic* and *socio-economic* development, or *productive* and *reproductive* development) that involves not only an issue of *physical* sustainability but also, more fundamentally, an issue of *social* sustainability. Moreover, in terms of the origins and the consequences of sustainability issues, social sustainability should be the deeper explanation of sustainability issues. In the discussion of spatiality, this *social* orientation is supported by the argument for a distinction between *objective* space and *social* space (Schatzki 1991), or between the physically based *contextual* space and the socially based *created* space (Soja 1989). Haughton and Hunter (1994: 10) argue that “cities are in themselves a unique form of natural, built and cultural environment.” Accordingly, cities represent the very manifestation of the *created spaces* in which a variety of major social interactions are taking place. In the late twentieth century, where we work, rest or play depends more on the spaces we have created or modified than on the natural or inherent characteristics of different locations, be they the noisy factories or air-conditioned offices, the cosy semi-detached houses or small flats in high-rise buildings, or the beautiful seaside resorts or artificial downtown shopping centres.

Although urbanism, as a way of life, should not be conflated with urbanisation or cities (for the sake of increasing blurring between urban and rural boundaries as the consequence of advanced transportation and communications) and the *created environment* should not be equated with the *built environment* in towns and cities (since the created

environment of modern urbanism is everything and everywhere, including the ‘green’ farmland and the ‘wild’ national parks), nonetheless, the urban space still carries the very spirit of the created environment in terms of its massive scales, versatile functions, and, most importantly, the roles that the cities have been playing in social transformation. Cities are not the static structures of mortar and bricks; rather, they are built by and for *people*. Elkin et al. (1991: 241) suggest that “cities are about human contact.” Human activities ‘take place’ by appropriating and transforming nature, nowhere more evidently so than in the created spaces of modern cities where such influences reach far beyond their immediate boundaries. Cities are the major locations of social, economic, political, and cultural interactions; cities are important for their roles in capital accumulation, information dissemination, consumption of goods and services and reproduction of waged, and unwaged, labour. Accordingly, cities are the key settings of social transformation that the discussion of the deeper explanation of sustainability issues should be focused on.

Last but not least, the urban focus of sustainability analysis has important theoretical and practical implications. It provides a *meso* scale of socio-spatial analysis in which the notion of structuration can be comprehended more easily in the concrete empirical analysis of social sustainability. So it can dismiss the critique of Giddens’ tendency to polarise scale in his work: either the micro-world of day-to-day and face-to-face interaction or the world system at large (Cloke et al. 1991: 129). This thesis demonstrates that to situate the empirical analysis of social sustainability in an urban context can link together the abstract propositions of time and space to the detailed investigations of the specificity of history and geography and, accordingly, allow a more hierarchical appreciation of the notion of *locales*, a key spatial concept of the theory of structuration.

Urban Social Sustainability: A Convergence of Theory and Practice

In chapter 1 it was argued that an appropriate conception of sustainability should distinguish the *external* and the *internal* dimensions of sustainable development, i.e. a distinction between *physical* and *social* sustainability. An *overall*, or a *real*, sustainability

requires a harmonious channelling between *physical* and *social* sustainability. Conventional sustainability debates tend to focus on the external, physical aspect of sustainability, leaving the internal, social aspect of sustainability largely unexplored. Some authors (see, for example, Yiftachel and Hedgcock 1993; Taylor and Pieper 1997), though quite rightly addressing the significance of 'social sustainability', tend to see 'social sustainability' as something 'added-on' to current sustainability debates, a very different enterprise which is characterised by the distinction between *environmental* sustainability, *economic sustainability*, and, *social* sustainability. In other words, this conception of social sustainability is a compositional understanding of sustainability issues that might have broadened the breadth of sustainability debates but does not dig into their deeper explanation. By virtue of its generative causalities, this thesis argues that *social sustainability*, as the internal dimension of sustainability issues, should be the primary concern of, and not an addendum to, sustainability debates.

Because all sustainability issues are social in origin, and having impacts on people as consequences, this thesis argues that it is the utilitarian tendency of *industrialism* and the expanding logic of *capitalism* which go hand in hand that are responsible for the current trends of unsustainable development. Harvey (1996: 233-34) argues that one major consequence of the capitalist mode of development has been the creation of a binary structure: contrasting the various intricately interwoven spatio-temporalities to be found in the 'lifeworld' of individuals and the abstract 'rationalised' spatio-temporalities attributed to the capitalist production system. The reproduction of capitalist production systems is increasingly dependent on the acceleration of turnover time (the moments of production, circulation, exchange, and consumption all tend to change faster) and on the shrinking of space horizons (the 'markets' of many products and services are now truly global in nature) via the search for surplus value in the process of economic production and re-production. In other words, the growth of industrial capitalism relies very much on the 'disembeddedness' of time and space (or the elimination of time-space barriers) in the process of production and re-production. However, the reproduction of individual life-chances in capitalist society, though being expanded considerably in both space and time

due to the advance of transportation and communications, remains a localised affair by virtue of the constraint of human bodies. In other words, the maintenance of people's day-to-day lives relies very much on the 'embeddedness' of time and space in the process of production and reproduction (consumption).

As might be expected, there is a close connection between the re-production of capitalist production systems and the reproduction of individual life-chances: one cannot survive without input from the other. Accordingly, sustainability can be understood as a channelling between these two domains of production: system reproduction and individual reproduction. While physical sustainability, or the concern about the reproduction of the material bases of capitalist production system that is characterised by the argument of both environmental and economic sustainability, is understood as a matter of system reproduction, there exists a more fundamental concern about the reproduction of individual life-chances: the issue of social sustainability. This concern can be justified on two grounds. On the one hand, in terms of the origins of sustainability issues, a socially unsustainable society will inevitably increase its exploitation of both natural resources and environmental services. For example, the growing scale of transport which has created enormous environmental, economic, and social problems is the result of increased mismatches between the locations of facilities and services, employment, and housing for individuals. The need to co-ordinate an increasingly fragmented life is the origin of many sustainability problems. On the other hand, in terms of the consequences of sustainability issues, sustainability problems, no matter whether they are environmental problems, economic problems, or social problems, will eventually have impacts on individual lives. It is misleading to argue for a sound environment and a robust economy at the expense of individual life-chances. In other words, the means should not be confused with the ends of sustainable development; a meaningful sustainability debate cannot be justified without any mention of the consequences of sustainability issues.

Accordingly, this thesis argues that to focus on the internal, social dimension of sustainability — as an issue of time-space channelling between the individual life-chances of individuals and the overall structure of capitalist production system — can provide a

deeper explanation of sustainability issues by virtue of the origins and the consequences of sustainability issues. In summary, the main arguments¹ of the thesis are:

1. Social sustainability, a duality between socio-economic development and the created environment, is the prerequisite of physical sustainability, a duality between economic development and the natural environment.
2. This internal, social perspective of sustainability is ingrained in the duality of social structure and human agency, in which the created environment (social structure) is both the medium and the outcome of individual actions (to live day-to-day life).
3. The underlying causes of unsustainable development are traced to the utilitarian tendency and the expanding logic of industrial capitalism which have resulted in a separation of the reproduction of the individual's everyday life and the reproduction of a capitalist production system as a whole in both space and time.
4. Social sustainability, therefore, is conceptualised as a time-space channelling between the everyday practices of individuals and the institutional structures of industrial capitalist society as a whole.

Chapter 2 demonstrated that the theory of structuration, when integrated into critical realist framework, is illuminating for the exploration of the internal, social perspective of sustainability by virtue of its emphasis on the relational conception of social relation. However, based on different disciplines and interpretations, there are, in effect, several versions of structuration theories: for example, Bourdieu (1977) on structures and habitus in social anthropology; Touraine (1977) and Dawe (1970; 1979) on the sociology of action; Bhaskar (1975; 1979; 1986) on the transformational nature of social activity in the philosophy of social science; Archer (1988) on culture and agency in cultural studies; Thrift (1983; 1995) on social action in time and space in geography; and Giddens (1976;

¹ Some might prefer the term 'hypotheses' on the grounds that they believe the purpose of social research is to test these hypotheses with empirical data so as to verify or falsify them. However, this thesis adopts a critical realist view which emphasises that the purpose of social research is to search for a practically adequate explanation of social phenomena. Accordingly, the abstract theoretical category only focuses on the underlying causalities of the objects we are interested in; and the purpose of a concrete empirical research is to see the manifestation of these necessary causalities in the context of contingencies.

1979; 1981; 1984; 1985; 1987) himself on the constitution of society in a broader arena of the social sciences in general. For the sake of clarity and in the light that Giddens' account of structuration is best known, as well as because Giddens borrows (or 'imports') substantially from geographical thinking, especially that of time geography developed by Hägerstrand (known as the Lund school), this thesis is exploring the notion of social sustainability via a critical appreciation of Giddens' discussion of structuration.

Although complex in both details and implications, the theory of structuration can be summarised as a social theory emphasising the interdependence between social structure and human agency in the context of space and time. On the one hand, Giddens argues that society and individuals cannot be theorised in isolation. Instead, they must be theorised together, as 'individuals *in* society' and 'society *in* individuals'. On the other hand, Giddens stresses that structure and agency are temporally and spatially specific: societies and individuals are embedded in a particular configuration of time and space which itself is the creation of society and individual action (Gregson 1986: 185). The intersection of social structure and human agency in time-space, or the discussion of *regionalisation*, provides a theoretical framework for a practical understanding of the issue of social sustainability.

Agency and Structure: A Duality

The starting point of Giddens' theory of structuration is his stress on how the concepts of action, meaning and subjectivity should be specified and how they might be related to notions of structure and constraint. While sustainability is conceptualised as an interdependency between people and their environments, this structuration conception of social relations is a key to the understanding of the complex relations of how human aspirations for development (to live everyday life, a better life) are related to the means and conditions of people's actions (i.e. the created environment).

The premise of Giddens' conception of agency is that people are both knowledgeable and capable, so the changing circumstances of social life are a skilled

accomplishment by these intended subjects. He says that the production of society is a skilled accomplishments of its members, but it does not take place under conditions wholly intended, or comprehended by them. Accordingly, what is fundamental to the conception of agency in structuration theory, according to Giddens (1984: 6), is the notion of *practical consciousness* and associated *routinised daily practices*. On the one hand, the idea of practical consciousness is that the everyday actor, however cognizant, is not necessarily capable of rationally justifying or even comprehending his or her undertakings (discursive consciousness). On the other hand, the repetitiveness of activities which are undertaken in like manner day after day is the material grounding of the recursive nature of social life. *Routinised practices of everyday life*, therefore, are the prime expression of the duality of structure in the continuity of social life. By virtue of its recursive nature, the structured properties of social activity are constantly recreated out of the very resources which constitute them. In other words, routinisation implicates social reproduction, and hence social transformation, in the very production of these social conditions.

This thesis argues that the reproduction of everyday life should be the primary concern of sustainability debates. It is unrealistic to talk about intergenerational equity without any reference to the reproduction of *day-to-day* life: to sustain the day-to-day life is not only the prerequisite but also the very end of sustainable development. However, acts have unintended consequences; and unintended consequences may systematically feed back to be the unacknowledged conditions of further acts. Accordingly, social sustainability should be concerned with the interrelationship between the acknowledged/unacknowledged conditions and the intended/unintended consequences of people's routinised daily practices.

In rejecting the structuralist view of structure which is understood as some kind of 'patterning' and 'constraining' of social relations, Giddens sees structure as a relation between the past as a totality and the new movement of generation in which structure is perpetuated and modified as a result of human agency (Carlstein 1981: 41). The structural properties of social systems are both the medium and the outcome of the practices they recursively organise. Structure is not 'external' to individuals, and, therefore, it is both constraining and enabling by virtue of the inherent relationship between structure and

agency. Giddens (1984: 24) argues that the most important aspects of structure are rules and resources recursively involved in *institutions*. Institutions by definition are the more enduring, though changeable, features of social life. Families, organisations, markets, industries, and nation-states are all institutions. Archer (1982: 458) argues that what Giddens is seeking to enfold here are two views of social institutions: institutions as causes of action (which have certain deterministic overtones) and institutions as embodiments of action (which have more voluntaristic connotations). While sustainability is mainly concerned with the reproduction of both social structures and individual agent's everyday life, Giddens' conceptions of structure can connect the origins of environmental issues to the process of everyday life. It bridges the theoretical gap between the conceptions of environment and people with their many underlying connections. In other words, the meaning of social sustainability can be comprehended in the *helix* of structuration between the routinised practices of day-to-day life and the institutionalised social conditions in space and time.

The structural properties of social systems are not effected overnight but are 'made' through the constant repetition of characteristic time-space routines, through which the structures of institutions are fleetingly engaged and regularly reconstituted. Giddens' key conceptual innovation in this regard is his contention that the constitution of agents and structures are not two independently given sets of phenomena, a dualism, but represent a duality: the structural properties of social systems are both the medium and the outcome of the practices they recursively organise. In other words, structuration refers to the dynamic process whereby structures come into being. Giddens calls this the *duality of structure*. As far as sustainability issues are concerned, this structuration conception rightly captures the generative character of the internal, social dimension of sustainability, through which the routinised practices of everyday life (people and socio-economic development) are linked to the institutionalised social structures (as created environment in its widest sense). However, neither the routinised daily practices nor the institutionalised social conditions exist in abstract; they are embedded in time and space. Time and space, in view of this, provide the contexts for the channelling between structure and agency.

Time and Space: The Contextuality of Social Interaction

Apart from the notion of structure-agency duality, another theme which is crucial to the conception of social sustainability is Giddens' insistence on bringing 'time-space relations' into the very core of his structuration theory. Giddens rejects the view of time-space as mere 'environments', 'containers', or 'categories of mind'; he prefers the view that time-space relations are portrayed as constitutive features of social systems: i.e. time and space are socially constructed. While complaining that most social analysts treat time and space as mere environments of action, Giddens draws on the concepts and techniques of Hägerstrand's time-geography (see Hägerstrand 1967; 1975; see also Thrift 1977) to address the significance of time and space in social interaction. Cloke et al. (1991: 108) note that the emphasis of time and space in structuration theory provides the 'language' to capture the interactions of agency and structure while Giddens insists on recognising the grounding of such interactions in everyday 'time-space settings': i.e. at certain moments and in certain locations.

The importance of the notions developed by time-geography, and adopted in structuration theory, lies in the depiction of regularities in how individuals repeatedly draw on — and in how different individuals simultaneously draw on — the resources of time and space. Hägerstrand's approach is based on identifying sources of constraint over human activity given by the nature of the body and of the physical contexts in which human action occurs. It allows structuration theory to keep one eye on the agency of individuals moving about in time and space, and to keep the other on the time-space structures of their lives (their regularised movements between locations and along particular routes) as governed by their economic, social, political, and cultural circumstances. The time-space dimensions that Giddens stresses in structuration theory are, therefore, the *socio-spatial* and the *socio-temporal*.

The spatial extent of social interaction is referred to as *locales*: that means "the use of space to provide the settings for interaction, the settings of interaction in turn being essential to specifying its contextuality" (Giddens 1984: 118). Locales are something more

than just the 'stage' of action; rather, they are an integral part of the constitution of social action. Locales provide opportunities for, and constraints on, human action (Thrift 1983: 40). However, locales are not homogeneous: there are individual spatial practices of daily life and the spatial structuring of social institutions overlapping with one another (Simonsen 1991: 428). In other words, locales are partly defined by the nature of interaction and, hence, are hierarchical. Cities can then be conceptualised as a set of urban locales which on the one hand provide a created setting, a more elaborate built environment, for human interaction expanded in scale, density, social differentiation, and collective attachment to place. On the other hand, cities are also generative locales for what Giddens defines as 'distanciation', the stretching of social systems over time-space from the co-presence of local social integration to the more encompassing and elastic collectivities and reciprocities of system integration.

The temporal aspect stressed by Giddens is 'reversible time'. On the one hand, for a particular agent there exists an individual *durée* of daily life, which refers to the repetitive character of day-to-day life. On the other hand, there also exists a 'supra-individual' *durée* of the 'long-term' existence of institutions, the *longue durée* of institutional time. Although the reversible time more or less coincides with the recurrence of days and seasons as parts of natural rhythm, it has increasingly become a social product ruled by 'clock time' and the daily practices associated with specific time zones (such as the distinction between weekdays and weekends). This phenomenon is originally most apparent in cities where the use of electricity and the concentration of built environment have significantly changed the organisation of both individual time (the *durée*) and institutional time (the *longue durée*) as an inseparable part of the urban ways of living. The opening of 24-hour factories/shops, for example, is constituted by, and reinforces, the shifts of workers that necessarily involve the arrangement of associated activities in wider time-space zones.

The intersections of the *socio-temporal* and the *socio-spatial* with the grounding of the routinised daily practices and the institutionalised social structures provide the contexts of social interaction which are the key to exploring the underlying causalities of social sustainability — the time-space relations between the production and reproduction of the

individual's everyday life and associated social structures as a whole. Time-space is important for the understanding of social sustainability on the grounds that different social interactions take place in different time-space zones: i.e. social interaction is temporally and spatially specific. In order to co-ordinate different moments of daily life by interacting with different groups of people at certain times and places, people have to move in both space and time. Although advanced transportation and communications have facilitated such 'movements' (or non-movements), they have also created extra need to move in time-space. People nowadays are making more and longer trips than ever before for purposes like work, shopping, and leisure. In turn, the increasing need to travel has created enormous pressure for the individuals, the infrastructure, and the environment. While the reproduction of contemporary 'mobile society' is increasingly dependent on the elimination of time-space barriers in both productive and reproductive activities that are heavily dependent on the appropriation of, in particular non-renewable, resources, it should be noted that not every person has the same degree of mobility and equal access to resources in space and time. Accordingly, to explore the time-space dimensions of social interaction is the key to understanding the interrelationship between routinised (in time and space) daily practices and institutionalised (also in time and space) social structures.

Contextuality and Modes of Regionalisation

The inclusion of time and space in structuration theory gives prominence to contextuality in social analysis. In this regard, time and space are not just empty categories in which social activities are taking place (the physical conception of time-space settings held in time-geography, see Hägerstrand 1976; 1984); rather, they are also the constitutive elements of both human existence and social practices. Giddens (1984: 2) holds that the basic domain of social analysis is "neither the experience of the individual actor, nor the existence of any form of societal totality, but social practices ordered across *time and space*" (emphasis added). All societies are constituted by human action taking place in context, so that what goes to make up context is very important to the constitution of human

action and the reproduction, or transformation, of social structures (Thrift 1985: 611). Soja (1989), Simonsen (1991) and others also stress the mediating character of time-space in social relation, arguing that the concepts of temporality and spatiality should be recovered in social theory. So Urry (1991) adds that time and space should be seen as produced and producing, as contested and determined and as symbolically represented and structurally organised.

The contextuality of the socio-spatio-temporal can be brought out with reference to Giddens' discussion on *regionalisation*, in which the concept of presence/absence in time-space turns out to be fundamental to the distinction between *social integration* and *system integration*. *Social integration* is the process that constitutes the individual as a subject. It goes on through face-to-face contact existing between the individuals in their routinised everyday lives; it presupposes circumstances of co-presence between the actors, a domain of *time-space routinisation*. *System integration* then comes into being when these routinised practices are institutionalised over an extended section of time and space. It refers to actors or collectivities which are absent (from each other) in time and space; it therefore constitutes the collectivity as a structured social system, a domain of *time-space distanciation*.

The contextuality of social interaction, accordingly, lies in Giddens' contention that social integration and system integration come together in particular *locales* (and associated time zones). Routine interaction and distanced interaction meet in what he terms the *modes of regionalisation*, which channel and, in turn, are channelled by, the pathways of time-space followed by both the day-to-day activities of individual actors and the institutionalised structures of social systems. The weekend is a time zone implying also a particular set of spaces in, for example, the family house, at church, or at sports events. Regionalisation is not necessarily a reference to geographical region as localisation in space; it is an expression of the 'structuration of social conduct across time-space', referring to the zoning of time-space in relation to routinised social practices (Giddens 1984: 119). Therefore, regionalisation, or the 'situatedness' of interaction in time and space, is the key to understanding how structuration comes about (see Figure 3.1).

While social sustainability is conceptualised as an interrelationship between socio-economic development and the created environment embedded in the duality between routinised daily practices and institutionalised social structures, social sustainability can be further conceptualised as a sustainable condition of *societal integration* that necessarily involves the time-space co-ordination between *social* and *system integration*. This can be understood by referring to the ‘generative bases’ of sustainability concerns — the time-space tension between productive and reproductive activities resulting from the expanding tendency of capitalist industrial society. As argued in chapter 1, the root of unsustainable trends could and should be traced back to the rise of industrial capitalism some two hundred years ago. It is the ‘expanding logic’ of industrial capitalism, or what Saunders (1995) calls the ‘growth machine’, which has transformed the world — by using industrialism as the machine and capitalism as the power — that natural processes and previous civilisations would have taken millennia to achieve. The consequences of such an unchecked growth have created serious threats to both environmental and social orders in terms of resource depletion, environmental degradation, social exclusion, and declining quality of life. In this view, this thesis argues that the rise of industrial capitalism — with industrialism as the machine and capitalism as the power — should be responsible for current trends of unsustainable development by virtue of the time-space factions between productive and reproductive activities and between individuals’ day-to-day lives and the overall institutional structures.

The expanding logic of industrial capitalism has significant time-space implications. Before the rise of industrial capitalism, or at its earlier stages, social integration, or the reproduction of individual life-chances, between productive and reproductive activities and system integration, or the reproduction of social structures, used to be the same thing or were typically co-centred and reinforced one another to define more tightly bounded enclosures of social integration relatively impermeable to interaction at higher geographical scales. In capitalist industrial society, these two domains are increasingly separated from each other: to live everyday life involves still by and large localised practices by virtue of

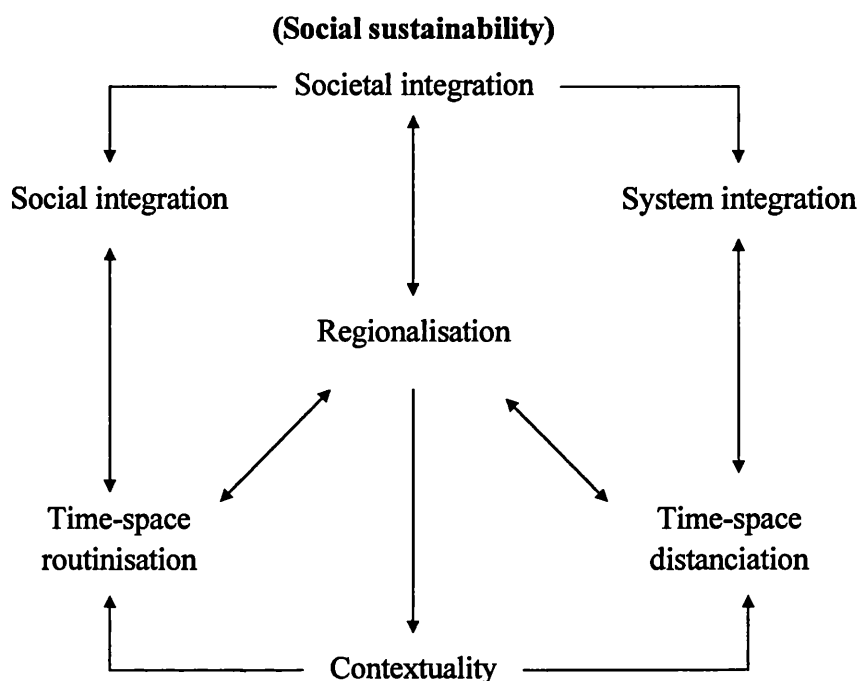


Figure 3.1 A Model of the Structuration of Time-space Relations

Source: Gregory (1994: 601)

the constraint of human bodies; whereas the growth of capitalist production system relies more on the compression of time and space. This change is best illustrated by Leyshon and Thrift's (1997) discussion on the changing geographies of monetary transformation that necessarily involve changed institutions and practices. As a consequence, there has been an increasing time-space gap between the realms of social integration and system integration.

This has significant practical implications. On the one hand, it implies a growing

need to travel: not only goods and services are now exchanged on a global scale, people are making more and longer journeys in their daily lives for assorted purposes, such as work, shopping, schooling, and leisure. Most importantly, an increasing number of these trips are made by car and more and more social interactions are organised in ways based on the assumption of high mobility. It results in a growing number of wasteful journeys which have significant environmental, economic, and social consequences. On the other hand, it implies an increasing difficulty in co-ordinating the routinised daily practices and the institutional structures in both space and time. In other words, there is an increasing fraction between the time-space 'embeddedness' of individuals' everyday lives and the time-space 'dis-embeddedness' of institutional structures in capitalist industrial society. In this view, social sustainability can be conceptualised as *societal integration* which requires the time-space co-ordination between social and system integration, which involves interactive relations between the routinised practices of individuals' day-to-day lives and the institutional structures of social systems (see Figure 3.2). However, individual actions have unintended consequences and, in turn, these consequences will systematically feedback to form unacknowledged conditions for further actions; accordingly, it is the unintended consequences and the unacknowledged conditions between the structuration relationships of routinised daily practices and institutionalised practices of social system which are the key to a practical understanding of the meaning of social sustainability.

Structuration Theory and Social sustainability: Building the Linkage

Before proceeding to the empirical analysis of social sustainability in a concrete urban context, let me at this point summarise the main argument of the section and clarify some doubts about Giddens' elaboration of social structuration. As argued above, the time-space connections between the routinised practices of everyday life and the institutionalised practices of social system in the process of production and reproduction are the material grounding for a practical understanding of the meaning of social sustainability, the deeper explanation of sustainability issues. In this view, Giddens' innovative thinking of social

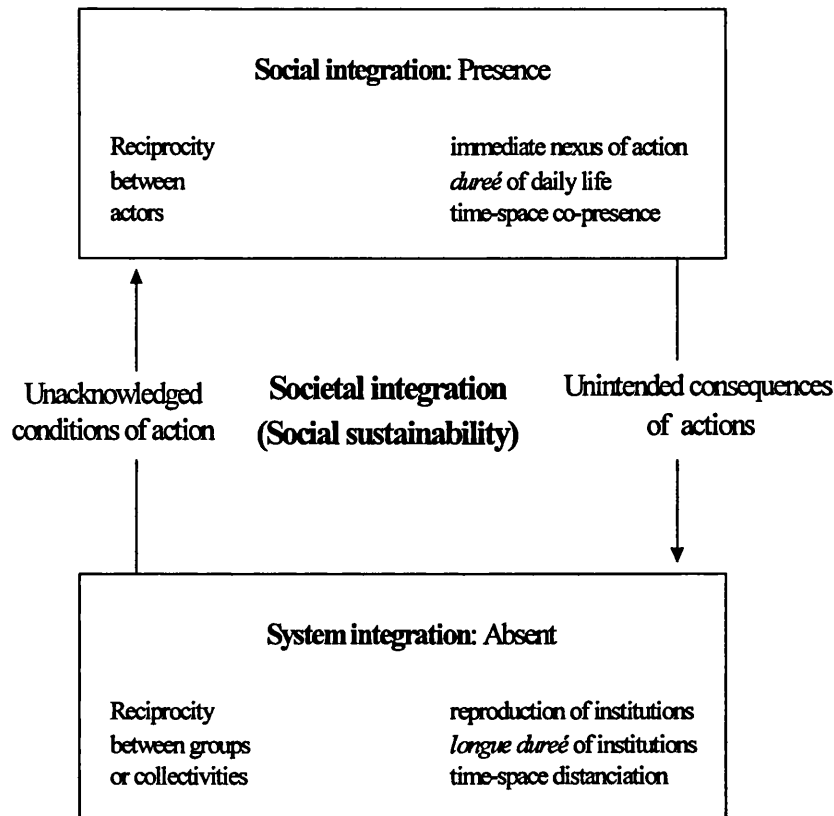


Figure 3.2 Structuration Conception of Social Sustainability

Source: adopted from Jary (1991: 123).

structuration and his discussion on the modes of regionalisation provide an insightful theoretical framework and a stimulating guidance for a concrete empirical analysis by virtue of the intersection of time-space and structure-agency.

However, while the 'spatial turn' has been described as one of the most important achievements of Giddens' structuration theory, some authors consider that Giddens is not

really serious about the spatial structuring of social phenomena and again giving time and history a major primacy (Saunders 1989; Soja 1989: 143). This critique has been taken a step further by Urry and Soja. Urry (1985: 21) argues that Giddens tends to neglect the problems of explaining the causes and consequences of recent transformations in the spatial structuring of late capitalism; Soja (1989: 152) considers that this is because Giddens does not succeed in developing a rich and rigorous theory of urbanisation, choosing instead to focus his projections on the nation-state. As Soja (*ibid.*) argues, urbanisation is one of several major accelerations of time-space distancing that has extended the scale of human interactions without necessarily destroying its fundamental spatial anatomy. Accordingly, urban life and urban structure are an integral part and a particularisation of the most fundamental contextual generalisation about the spatiality of social life that people create and occupy a multi-layered spatial matrix of nodal locales. In fact, Giddens did emphasise the dramatic shifts in the contextuality of the cities which come about with the rise of capital industrialisation and the commodification of time and space in his discussion on the concept of structural properties (see Giddens 1984: 181-93). So the urban focus is in effect quite compatible to Giddens' conception of regionalisation.

Another related, though indirectly, criticism is Gregson's complaint that structuration theory is unable to generate either empirical research questions or appropriate categories for empirical analysis (Gregson 1987; 1989; see also Gregory 1984). As argued earlier, this is because structuration theory is in essence an ontological question concerning the constitution of human society; it is unrealistic and misleading to raise empirical questions directly from an ontological theory. However, because the concept of social sustainability is mainly concerned with the generative causalities of sustainability issues, i.e. it has a strong ontological orientation, when the conceptions of structuration theory are inserted into concrete conditions, they do provide valuable insights for a practical explanation of social sustainability. Accordingly, the criticisms of Giddens' oversight of spatiality and his reluctance to relate capitalism to urbanisation can be dismissed by linking structuration conceptions and sustainability debates in a concrete urban context. As Soja (1989: 151-52) suggests, the urban context is the most important setting to 'get at' the main

threads of structuration theory in terms of its time-space contextuality that integrates the 'distanciation' of global urban systems and the 'co-presence' of local urban practices. Above all, a lack of sophisticated spatial conception is one of the major weaknesses of conventional sustainability debates.

Institutions, Institutional Structures, and the 'Institutional Webs'

Although to address the spatial dimension of the urban focus is a necessary condition for a substantive linkage between the concepts of structuration theory and social sustainability, it is not sufficient. In order to operationalise the concept of social sustainability, several points relating to structuration conceptions need to be clarified. First, the concept of 'multiple dualities' must be addressed. One might have an impression that the concept of 'duality' simply denotes the 'duality of structure' characterised by the interactive relationship between social structure and human agency. But in practice, the boundaries between these two realms are sometimes very vague, depending on the objects of interest and the 'resolution' of analysis. While *institutions* are usually regarded as standardised modes of behaviour which play a basic part in the time-space constitutions of social system, the key note in structuration theory is to look on institutions as composed of practices, recurrent actions forming habits and routines (Carlstein 1981: 46). Moreover, institutions are also reproduced over time in the form of practices. Accordingly, institutions are the mediating grounds between social structure and human agency. On the one hand, institutions may exercise powers as constraining factors over individual actions, i.e. they have structural quality. On the other hand, they may 'act' like individuals in social interactions, i.e. they have acting quality. The intervention of the planning system in land use and the influences of urban policies in local economies are two examples in focus: for the overall structures, they are actors; for the individuals, they are constraining structures. Hence, the concept of institutions may have very different manifestations in practice.

Firstly, there is a need to make a distinction between *formal* and *informal institutions*. Understood in a narrower sense, *formal institutions* represent legally

constituted and regulated institutions, such as nation-states, central and local governments, companies and organisations, and laws and regulations. They may exercise powers like agents, or simply function as mediating conditions which constrain or enable actions. Understood in a widest sense, *informal institutions*, by contrast, represent the less formal, not legally constituted but very often legally regulated institutions, such as labour markets, housing markets, industrial dynamics, land-use patterns, and transport configurations. They are the constantly reproduced social structures, both the results and the pre-conditions of the routinised practices of individuals.

This distinction has profound implications for both the theoretical explanation and the empirical analysis of social sustainability. At a theoretical level, it highlights the significance of the concepts of ‘multiple mechanisms’ and ‘open systems’ in social analysis that are consistently stressed in critical realist debates. At an empirical level, it suggests the need to employ a more sophisticated view of duality regarding both ends of the duality spectrum. That means different concepts of institutions, and their relationships, are the key to understanding the duality between the created environment and people’s life-chances. At the structural end, it is necessary to include both formal and informal institutions into analysis, such as the intervention of sustainability policies and planning practices (formal institutions), and the constraints (and enablements) of institutionalised social practices. At the agency end, it is necessary to include both household and individual into analysis, so that the dynamics of everyday life can be fully addressed. As the empirical analysis of urban social sustainability will illustrate, it is the overlaps of the ‘institutional webs’ at both macro and micro levels which are the key to addressing the time-space connections between routinised everyday life and institutionalised social structures.

The concept of ‘institutional webs’ means that social practices, with different time-space extents, are related to each other on the grounds that routinised practices and institutionalised structures intersect in different modes of ‘regionalisation’: the co-ordination of different daily moments for a particular person, and the co-ordination of different time-space arrangements for a group of people, will necessarily involve social practices taking places at greater time-space extents; and the overall structural properties,

constituted by distanciated social practices, will, in turn, create constraints on (or enablements for) the daily practices for individuals. Accordingly, an adequate time-space channelling between different layers of social practices is a necessary condition for the reproduction of social practices at both micro and macro levels.

Secondly, although Giddens' ideas of locales and regionalisation are to categorise contextuality as inherently involved in the connection between social systems of smaller and larger scope, he does not succeed in developing sophisticated categories of regionalisation but borrows substantially from Goffman's elaboration of 'positioning' in social behaviour to form his own argument of modes of regionalisation, such as the contrasts between front and back regions, or between central and peripheral regions (see Goffman 1959; 1972; 1974; 1981). In some sense, these positional divisions of regionalisation are related to the divisions between productive and reproductive activities: for example, the parallels between front regions (central business districts) and productive activities and between back regions (residential areas) and reproductive activities. Nevertheless, such a linkage is not firmly established. There are many exceptions. For example, central areas could be closely related to both production and consumption whereas peripheral areas may be closely linked to back-office and residential functions. In this view, the positional conceptions of regionalisation are not suitable to the discussion of the time-space relations between productive and reproductive activities because they tend to confuse, rather than clarify, the time-space relations of productive and reproductive activities. Some modifications are necessary.

As argued earlier, the time-space frictions between productive and reproductive activities in capitalist industrial society are the underlying causes of unsustainable development. Accordingly, the contextuality of time-space in the process of regionalisation is crucial to the analysis of social sustainability. In this regard, it is much more contextual, informative, and, most importantly, realistic, to use substantive categories of regionalisation than to use abstract and ambiguous positional conceptions of regionalisation. In other words, the functional divisions of urban space into residential areas, workplaces, market places and the like are more appropriate than the positional divisions of urban space into,

say, front/back regions and central/peripheral regions. The functional conceptions of regionalisation can address the dynamics of everyday life in the process of co-ordinating different daily moments in both space and time. Hence, the functional categories of regionalisation can highlight the issue of 'uneven development' between productive and reproductive activities that is crucial to both the reproduction of day-to-day life at micro level and the reproduction of institutional structures at macro level.

Third, this thesis argues that regionalisation is neither 'pure' nor 'fixed'. To say that regionalisation is not pure means that different 'regions' might overlap with each other at certain places and times by virtue of the differentiation of time-space organisation for different groups of people. For example, the marketplace could mean a locale of reproduction (consumption) for the shoppers but in the meantime it represents a locale of production for shop keepers. To say that regionalisation is not fixed means that the functions of a particular region might be changeable for a particular individual at different times. For example, the same marketplace is a place of production when a person is working as a shop keeper; but when he or she is off and goes shopping as a customer, it will become a place of reproduction. Moreover, the function of a particular region might change over time due to changes in social practices and conditions. For example, the changing roles of the inner-city areas in some large British cities in the last 30 years have demonstrated the changing modes of regionalisation in the processes of industrialisation, de-industrialisation, and regeneration (see Hall 1981; Robson 1988). This suggests that the time-space connections between routinised everyday life and institutionalised social structures are both dynamic and multifaceted, depending on the nature and contexts of social interactions. Accordingly, the empirical analysis of the time-space relations between productive and reproductive activities at both macro and micro levels should be sensitive to the dynamic and multifaceted characteristics of regionalisation.

Having understood the main arguments of Giddens' structuration theory and its limitations, the concept of social sustainability can be re-conceptualised as, to use Giddens' terminology, an issue of *societal integration* which requires a time-space co-ordination between *social integration* and *system integration*, or between the routinised practices of

everyday life and the institutionalised structures of social systems. Moreover, both social integration and system integration can be understood as an issue of *reproduction* that involves a time-space channelling between productive activities and reproductive activities. In the domain of social integration, the reproduction of routinised daily practices requires a time-space channelling between production and consumption, an issue of time-space routinisation which embeds different moments of daily life in concrete time and space. In the domain of system integration, the reproduction of institutionalised social systems requires a time-space channelling between productive activities and the re-production (or continuity) of productive processes, an issue of time-space distanciation which dis-embeds different moments of productive activities from concrete time and space. Accordingly, a socially sustainable city must establish a suitable channelling between (a) productive and reproductive activities, and between (b) individual life-chances and overall social structures in time-space. In other words, a substantive discussion on the issue of urban social sustainability is to see (a) how one category of daily moment is related to other daily moments in time and space to form the routinised practices of everyday life at micro level; (b) how the totality of one category of daily moment as a whole is related to the totalities of other daily moments in time and space to form the overall institutional structures in a particular city at macro level; and (c) how these two domains are related to each other in time and space to form the duality of social structure and human agency, or the duality of socio-economic development and created environment.

A substantive discussion on the issue of urban social sustainability can be understood via the concept of the 'institutional webs'. However, to apply this concept to the empirical analysis of urban social sustainability, we need to be explicit about (a) the substantive categories of both productive and reproductive activities; and (b) the concrete contexts of both routinised practices of everyday life and the institutionalised practices of social structures. Most importantly, these discussions must be linked to concrete urban questions. Having argued that sustainability issues cannot be discussed in abstract, to link existing urban questions to the concept of urban social sustainability can provide a practically adequate explanation of the internal aspect of sustainability issues.

**Linking Urban Questions and Social Sustainability: Towards a
Practical Explanation of Urban Social Sustainability**

As argued above, a practical understanding of urban social sustainability needs to explore the time-space connections between productive and reproductive activities at both micro and macro levels. In practice, however, it involves a wide range of issues, ranging from the most tedious practices of living everyday life to the functioning of global cities and world systems. For example, some authors focus on the structural changes of the cities, such as the link between urbanisation processes and global economic processes (King 1989; 1990; Sassen 1991; 1994; Knox and Taylor 1995; Clark 1996), the circulation of capital and built environment formulation (Harvey 1985a; 1985b; 1989a; 1989b; Budd and Whinster 1992), and the time-space implications of contemporary cities (Soja 1989; 1996). Some others, on the contrary, focus on the changing practices and contexts of everyday urban life (Taylor, Evans and Fraser 1996; Tivers 1985; Wilson 1992; Frick 1986; Smithers 1985; European Foundation for the Improvement of Living and Working Conditions 1986). However, with few exceptions (in particular the work of feminist geographers and sociologists, see, for example, Little and Richardson 1988; Garber and Turner 1995; May 1997; Chant 1996; 1997; see also Pratt 1995), relatively few studies have been focused on the necessary links between the structural properties and the individual dynamics of urban life.

The interconnections of the time-space relations between the structural properties at macro level and the co-ordination of everyday life at micro level are the key to understanding the concept of urban social sustainability. The 'time-space compression' of capitalist production system at global level might have reduced the 'time-space friction' between different moments of production and consumption, in particular between nodal locations; however, the time-space connections between different daily moments might have become more difficult at local level for some social groups who have difficulties gaining access to the nodal locations in capitalist society. In other words, there exists an irreducible time-space connection between the local organisation of time-space and

activities characterised by the practices of everyday life and the global construction of time-space and connections characterised by the institutional structures of world production system. The compression of time and space in global financial transaction, for example, is only possible when the time-space connections between daily moments are adequately channelled at a local scale. The distanced practices of social structures at a global level and the localised practices of everyday life are closely related to each other. Accordingly, to channel the 'embedded' social conditions (because social structures are increasingly related to each other) into the concrete temporal and spatial contexts of the 'dis-embedded' practices of everyday life (because people are living increasingly fragmented lives) is a necessary condition for a sustainable reproduction of the structural properties at both higher and lower levels.

As illustrated earlier, Giddens' discussion on the modes of regionalisation is an adequate theoretical framework for a practical understanding of the concept of urban social sustainability. However, for a substantive discussion on the time-space connections between productive and reproductive activities in the urban areas, this thesis argues that the 'functional' conceptions of regionalisation are more illuminating than Giddens' 'positional' conceptions of regionalisation. As Urry (1977: 913) notes, "reproduction of society begins with the reproduction of material life." Given that the daily practices of working, finding a shelter, eating and consumption, and movement between places constitute the most basic moments of everyday life, the time-space connections between productive and reproductive activities will be discussed with reference in particular to the issues of employment, housing, shopping² and transportation. As might be expected, the issues of employment

² Like shopping activities, leisure activity is considered to be one of the most important aspects of daily reproductive activities. With the increase of personal income and leisure time, nowadays people devote more time and money than ever before in leisure activities. Things like holidays, outdoor activities, sports events (participating or spectacular sports), eating and drinking, and home entertainments are common leisure activities for the British families. However, by virtue of their diversity and associated differentiation in time and space, it is very difficult to include leisure activities into the empirical analysis of the time-space connections between different daily moments. It needs a separate study to examine this issue. Nevertheless, many shopping activities increasingly include the leisure ingredients, known as leisure shopping. For the sake of simplification, this thesis only focuses on the issue of shopping activities, seeing them as the major

dynamics, housing provision, retail development, and a transport system have been the major concerns of urban studies and urban policies. Among these issues, what is central to the debate of sustainability is the issue of urban transportation on the grounds of its close links to environmental concerns, economic development, and social consequences. But transportation issues are not only concerned with the movements of people and goods; rather, they involve a more fundamental concern about the time-space links between different activities: certain activities are taking place at certain times and spaces between certain people. For example, workers *go to work* in order to earning a living; children *go to school* in order to be educated; and people *go shopping* in order to get the goods and services for their consumption. In other words, in order to interact with each other for different functions, people must move in space and time.

As illustrated earlier, these daily locales are becoming increasingly separated from each other in time and space, resulting in co-ordinating problems for the individuals and the households. This issue is especially registered in the urban areas in the light of the concentration of population and activities. The day-to-day practices of working, living, shopping, and commuting constitute both the subject and the social object: the routinised practices constitute people as actors and the institutionalised practices reproduce the social structures embedded in individual actions. Accordingly, the empirical investigation of urban social sustainability can be characterised as a contextual analysis of the time-space connections between everyday life and institutional structures in London, with emphasis on the links between employment, housing, retailing and transportation. However, before moving on to highlight the overall structure of this thesis's empirical analysis, the selection of London as the case of study should be justified.

London is chosen as the case of empirical study mainly because of its scale and history: it represents the very manifestation of the created environment in Western capitalist industrial society. While industrial capitalism is seen as the underlying cause of current trends of unsustainable development and the rise of industrial capitalism is considered to

reproductive activities outside home.

be closely associated with the process of Western urbanisation, London demonstrates both the most serious threats to, and the greatest opportunities for, sustainable development. Its leading position in global, national, and regional economies implies the significance of global-local connections that characterises the very nature of sustainability issues. Many radical green city commentators have seen the advantage of starting from scratch on a new site; on the contrary, this thesis holds the view that it is necessary to focus on existing, and in particular large, cities so that the potentials for changing the internal economic, social and spatial organisation of the cities can be realised in the transformation of our society with the approach of the 21st century (see Mayur 1990: 38; Elkin et al. 1991: 12). In this view, London is a suitable case for the discussion of the issue of urban social sustainability.

Besides, London is selected for practical reasons. On the one hand, it is easier to obtain secondary data. Because London is the capital city of the United Kingdom and one of the largest cities in the world, it has been the foci of urban research and policies, as well as a major receiver of public funding. In so far as the discussion on the structural links between institutional structures requires a wide range of information inputs pertaining to employment, housing, retailing, and transport structures, official statistics and other research findings are more readily available about London than about other smaller towns and cities. On the other hand, it is easier to conduct fieldwork for the collection of primary data. Because London is the largest conurbation in the UK, it exhibits a more sophisticated pattern of land use in terms of physical fabric and socio-economic structures. It is easier to find a variety of contrasting cases within a relatively small area. This is an important factor for the selection of study areas in the intensive research. One should bear in mind that researchers themselves are also constrained by the time-space organisation of their lives. Having argued that the discussion of social sustainability should be sensitive to the time-space connections between everyday life and institutional structures, the time-space constraint is also an important factor for the undertaking of fieldwork. As might be expected, doing fieldwork in London is easier for a research student whose institute and home are both located in London, so the cost and inconvenience of travelling and contacting people can be cut to a minimum.

**A Contextual Analysis of the Time-space Relations Between
Everyday Life and Institutional Structures in London:
A Combination of Extensive and Intensive Research**

As stressed throughout the chapter, the foci of the empirical investigation into the time-space connections between productive and reproductive activities should not only be an overall patterning of the structural features in relation to different daily moments, nor should it merely be the sum of varied contexts and fragmented experiences of individual life-chances. Given that people are living in an increasingly fragmented environment regarding the time-space connections between different daily activities, the purpose of the concrete empirical research should shed light on how these two domains come together via the structuration conception of the 'institutional webs'. As argued above, a theoretical duality necessarily involves an empirical dualism. The empirical investigation of urban social sustainability, consequently, involves two methodologically distinctive but conceptually coherent projects: (a) an extensive survey of London's institutional structures in relation to housing, employment, retailing, and transport (chapters 4 and 5), and (b) an intensive analysis of household daily practices relating to home, work, shopping, and movement between them (chapters 6 and 7).

However, to examine both ends of the duality relationship between institutional structures and individual actions will not automatically contribute to a theoretical convergence; a theoretical channelling between extensive and intensive research is necessary. On the one hand, the extensive analysis of London's institutional structures should be sensitive to its implications to the co-ordination of everyday life for the individuals. On the other hand, the intensive analysis of the varied contexts and the dynamic processes of household life should pay attention to the overall patterns of institutional structures. In other words, the subject matters of the extensive analysis are focused on 'the structures in action' and the subject matters of the intensive analysis are focused on 'the practices in structure'. Structure and agency are very different entities in practice; nevertheless, they are inseparable entities, too. Social structures are disembedded actions and individual actions are embedded in social structures. Accordingly, our aim here

is to bring together the ‘dis-embedded structures’ (the extensive research) and the ‘embedded actions’ (the intensive research) in a concrete urban context. In this regard, the outcomes of both extensive and intensive research are also valuable inputs for each other. For example, the identification of the overall time-space relations between London’s institutional structures in the extensive research is the basis for the selection of study areas in the intensive research. The interwoven character of critical realist concrete research, in this case the awareness of the micro dynamics in the macro analysis and the recognition of the macro aspects in the micro analysis, also demonstrates that critical realist conception of ‘retroduction’ should not be understood as a singular, linear movement from abstract theoretical research to concrete empirical research, or *vice versa*. Rather, it is a helix of movement characterised by ‘the abstract in the concrete’ and ‘the concrete in the abstract’.

Extensive Research: Re-connecting the Missing Linkage Between Institutional Structures

The purpose of the extensive survey of London’s structural features in relation to employment, housing, retailing, and transport structures is to address the overall time-space connections between institutional structures. It draws on a wide range of official statistics, in particular census data, and the findings from individual studies. Different institutional structures may be subject to quite different influences under different contexts. For example, the employment structure in London has been strongly influenced by the process of global economic restructuring and London’s housing market has been largely affected by regional contexts. Nevertheless, different institutional structures are also intrinsically linked to each other by virtue of the need to move between different locales at certain times in the course of a particular person’s daily life and the joint need to channel the time-space relations between institutional structures for the society as a whole. In other words, the purpose of the extensive analysis is not only to provide a ‘snapshot’ of London’s overall institutional structures, but is also to understand the underlying forces driving their changes.

The links between different institutional (or sectoral) structures are not a new

insight. Allen and Hamnett (1991), for example, argue that an analysis of the relationship between industry and housing must be concerned with a conceptualisation both of the objects of interest (in their case, labour markets and housing markets) and their means of connections. They make an important point concerning the significance of examining labour and housing markets, not in isolation, but through their connections. Based on this insight, Pratt (1996) takes a step further by examining the institutional links between employment, transport, and housing via the time-space connections of household life. He argues that the institutional perspective is a key concept which bridges a wide range of concerns spanning environmental, economic, and social issues and linking the structural and the individual, in particular, via the co-ordination of household life in space and time. However, such a holistic thinking has not been taken seriously by the academics. Most researchers tend to follow the traditional lines of academic divisions of labour by concentrating their attention in discrete fields, assuming that a further exploration on the objects of interest would eventually build that connection.

The need to develop a more holistic approach to institutional links has recently gained primacy, in particular, in the debate on sustainability. For example, the environmental consequences of urban transport has urged the rethinking of the connections between transport system and the patterns of land use (Newman and Kenworthy 1989a; 1989b; 1992; Gordon et al. 1988; Owens 1984; 1986; 1990; 1992a; 1992b; Rickaby 1987; 1991). Although many commentators rightly point out the need for a co-ordination between institutional (sectoral) structures, the problem of these lines of argument (represented by the concept of 'compact cities') lies in their 'nominal' and 'wholesale' tendency in analysis: to focus on the symptoms of sustainability problems but not to address their underlying causes. For example, in order to reduce the need to travel, actions have been called to increase the densities of development in the urban areas (DoE 1992e; DoE/DoT 1994). In other words, these lines of institutional co-ordination are characterised by an overriding concern about 'spatial integration'. However, no questions have been asked about why the locales of daily life are separated in the first place. This thesis argues that the structural links between urban institutional structures should be examined in a wider socio-economic

context of 'time-space integration' if we want to dig into their deeper causal connections. Accordingly, while focusing on the structural features of employment, housing, retailing, and transport in London, an important task of such a structural analysis is to 'read into' their time-space implications for the co-ordination of household daily life. This time-space channelling between the micro and the macro aspects of institutional connections is the key to understanding urban social sustainability, which stresses the necessary connections between structure and agency in the processes of system and individual reproduction.

Planning and Sustainability: The Role of Mediation

As highlighted earlier, there exists an issue of 'multiple dualities' in the conceptions of institutions: i.e. the difference between *formal* and *informal* institutions. In practice, urban structures cannot be reduced to the sum of the reproduced conditions of individual actions, i.e. the informal institutions. They are also purposefully 'made' by some formal institutions, such as the intervention of governmental agencies, non-government organisations (NGOs), and other interest groups. Carlstein (1981: 49) argues that "the real code of structuration lies in understanding the time-space grammar of mediation." Giddens himself places considerable emphasis on the role of 'practices' as mediating structures in social reproduction. But social structures are not just reproduced through practices or activities but are also created by intended intervention from formal institutions. As far as urban social sustainability is concerned, it is central government's sustainability strategies, in particular through the practices of planning, which require our special attention. In other words, to examine the structural properties of London's employment, housing, retailing, and transport structures must be sensitive to the intervention from Government's urban policies.

There are several justifications for the planning focus. First, the planning system is included into the extensive research on the grounds that the sustainability concerns and the planning goals have much in common: both of them have a strong tendency of futurity, both of them are concerned about the relationship between people and their environments, and both of them tend to adopt a holistic approach to reconcile the conflicting goals

between different sectors. Second, the mediating function of the planning system, when integrated into central and local governments' policy frameworks, plays a very important role in shaping the paces and patterns of urban development. This mediating factor is becoming more important when the function of the planning system has emerged with a host of other governmental areas (Cullingworth and Nadin 1994: 47; Rydin 1995: 370). Accordingly, the planning policies have profound implications for both the structural co-ordination between institutional structures at macro level and the co-ordination of everyday life for the individuals at micro level. Third, since the publication of the 1990 Environment White Paper *This Common Inheritance*, the British government has argued that the planning system has a pivotal role to play in promoting sustainability. In the revised Planning Policy Guidance notes (PPGs), it has been made clear that "the planning system, and the preparation of development plans in particular, can contribute to the objectives of ensuring that development and growth are sustainable" (DoE 1992e, PPG12: para. 1.8). While welcoming the holistic approach of planning and urban policies in the promotion of sustainability goals, this thesis argues that the integration of sectoral policies does not necessarily imply that urban development will be 'sustainable'. If sustainability problems are truly irreversible and only prevention is possible, then we must be cautious about the possible impacts of sustainability strategies and planning policies.

However, the purpose of analysing the planning practices and urban policies is *not* to evaluate the effectiveness of the planning system for the delivery of sustainability goals. It involves a broad range of issues, such as the structure of the planning system, urban politics, financial considerations and resource allocation, and the processes of implementation, which are far beyond the scope of this thesis. Most importantly, both sustainability issues and planning practices involve a very long time-span between policy-making and the net results of implementation; it is very difficult to evaluate this issue at this early stage. Rather, our aim here is to illustrate the multifaceted characteristic of both sustainability issues and institutional integration. It suggests that a nominal approach of 'spatial integration' in the urban area is insufficient for an adequate channelling between institutional structures; on the contrary, what is needed for a strategic response to the

sustainability challenge is to address the interconnections between the macro and the micro aspects of sectoral integration in a wider regional context.

Intensive Research: A Time-geography of Household Life in London

The purpose of the intensive analysis is to shed light on how different daily moments are related to one another via examining the contexts and processes of different daily moments in household life. Our aim here is *not* to construct a generalised picture of different life-patterns in London from a limited number of sample households. In fact, this ‘overall patterning’ can be better conceived via the extensive analysis of London’s institutional structures on the grounds that it draws on a wide range of official statistics, in particular the census data, which cover broader spatial units and temporal spans, as well as a wider range of different socio-economic contexts. There is no need to repeat this process in the intensive analysis by drawing on a limited number of sample households. By contrast, the aim of the intensive investigation of the ‘time-geography’ of household daily life is to bring out the dynamics, including the varied contexts and the different processes, of the co-ordination of everyday life, although these contexts and processes may not necessarily be ‘typical’ on the grounds of statistical significance. In other words, the information obtained from the intensive analysis of household everyday life is used to demonstrate (a) the processes of the production and reproduction of institutional structures, and (b) how individual households manage to live out their lives under the conditions of London’s overall institutional structures.

In order to highlight those different institutional contexts for the co-ordination of everyday life in London, two London Boroughs are selected as study areas. They are London Borough of Harrow and London Borough of Tower Hamlets. Harrow is chosen to represent London’s commuter suburb; and Tower Hamlets is an example of London’s inner-city area. These two areas are so contrasting in terms of their locations, built environment, transport infrastructure, and the socio-economic compositions of their residents; this thesis expects that very different stories will be told by the households in these two areas.

However, in order to stress the significance of household context in the co-ordination of everyday life, two subareas are further identified in both Harrow and Tower Hamlets. The subareas also reflect the structural variances in the local areas. A procedure of less-structured interviewing with households in the selected areas is adopted as the means of data collection. The details of the selection of study areas and sample households, as well as the procedures of fieldwork and interviewing schedules will be discussed in chapter 6 and the appendices. But two points regarding the intensive analysis of London's household life should be stressed here.

First, the meaning of the 'time-geography' must be clarified. It does draw substantially on the concepts and the techniques of Hägerstrand's time-geography; however, unlike Hägerstrand's time-geography which emphasises the physical movements of our bodies in different times and spaces, the main concerns of the 'time-geography' in this study are the 'social contexts' of the time-space relations between different daily locales/moments. In other words, we are not only interested in the time-space configurations of a particular person's organisation of his or her daily life, such as the distances, the times, and the patterns of movements between different moments of daily life; but we are more concerned about the household contexts and the individual considerations which hide behind the time-space co-ordination of everyday life. These factors are the deeper explanation of the institutional connections at macro level.

Second, in order to address the 'contextuality' of the routinised practices of everyday life, an 'institutional' view of agency is adopted in the intensive analysis. Unlike most micro analyses which take for granted to equate agency with individual persons and individual actions, this research uses *households*, rather than individual persons, as the unit of analysis. Households are considered to be a more adequate conception of agency for the study of the time-space relations between productive and reproductive activities on the grounds that they constitute one of the most important conditions of social interaction — the contexts of family reproduction. While most sustainability debates and urban studies are focusing on the production side of analysis, a more balanced re-focusing on the reproduction side of analysis is desperately needed because the defining character of

sustainability is in essence an interdependency between production and reproduction in the duality of people's life-chances and their environments. Besides, from a practical point of view, the time-space relations between different daily moments become more visible if we are focusing on the household as a whole rather than on individual persons. This is because the need for a time-space co-ordination does not only exist between different daily moments for a particular individual but also exists more fundamentally between household members. It is the need to live together as *one* household which has created the co-ordination problem for different household members in their own co-ordination of different daily moments. In other words, households are the building blocks of the 'institutional webs', which highlight the time-space intersections of the routinised daily practices at localised micro level interwoven with the more elaborated time-space structures between different urban institutions at longer and wider spans of time-space relations. Accordingly, the study of a time-geography of household life in London can illustrate the necessary connections between individual life-chances and the overall institutional structures at higher levels. This interconnectedness is the key to understanding the concept of urban social sustainability.

Conclusions: Towards a Convergence of Theory and Practice in the Pursuit of Urban Social Sustainability

This thesis argues that sustainability issues cannot be fully understood without an appropriate theoretical framework; it also stresses that sustainability theories are of little value if they are not empirically applicable at all. Accordingly, the primary concern of the thesis is to build the connections between the theoretical account and the practical understanding of sustainable development. Three themes have been developed in this chapter to bridge this gap.

Firstly, the spatial dimension of an urban focus was specified to situate the substantive discussion of social sustainability. Due to the concentration of population and activities, cities constitute the most serious threats to, as well as the greatest opportunities for, sustainable development. Cities are the dominant forum of modern civilisation in

terms of their roles in economic, social, political, and cultural development. Moreover, the process of Western urbanisation is closely related to the underlying causes of sustainability issues — the tendency of unchecked growth in industrial capitalism. As the very manifestation of the created spaces, cities also provide the contexts necessary for the unpacking of the interrelationship between the created environment and the human aspirations for development. Most importantly, while the global economy is increasingly built on the complex links between city-led production systems, to situate the discussion of social sustainability in the urban context can address the close links between the global and the local, as well as between productive and reproductive activities at different spatial scales.

Secondly, a theoretical account of social sustainability was developed via a critical appreciation of Giddens' theory of structuration. The premise of a structurationist conception of sustainability lies in the argument that the internal, social dimension of sustainability is the prerequisite of the external, physical dimension of sustainability by virtue of the origins and consequences of sustainability problems. In this regard, Giddens' discussion on the duality relationship between social structure and human agency, his inclusion of time-space dimensions into social analysis, and his contextual analysis of the modes of regionalisation between social and system integration do provide the 'language' for the understanding of the deeper explanation of sustainability issues. Moreover, they also provide a useful guidance for the undertaking of empirical analysis. Based on these concepts, social sustainability was conceptualised as a time-space channelling between productive and reproductive activities embedded in the duality of the routinised practices of everyday life and the institutionalised social structures. Or using Giddens' own terminology social sustainability was conceptualised as a *societal* integration which requires a time-space co-ordination between *social* and *system* integration.

Thirdly, an empirical project was developed to explore the concept of urban social sustainability. The time-space relations between productive and reproductive activities were translated into substantive urban questions, in particular relating to the issues of employment, housing, shopping, and transportation. However, the duality conception of

social relations at a theoretical level do require an empirical dualism to ‘get at’ both ends of the structuration spectrum by virtue of their ontological differences. Accordingly, the empirical analysis on the concept of urban social sustainability is a combination of extensive and intensive analysis in a concrete city: London. It is characterised by a contextual analysis of the time-space connections between everyday life and institutional structures in London. The purpose of the extensive analysis is to identify London’s institutional structures in relation to employment, housing, retailing and transport, including a discussion on the structural implications from the mediation of Government’s sustainability strategy and urban policies, in particular through the practices of planning policy. The purpose of the intensive analysis, on the contrary, is to bring out the diverse contexts and the dynamic processes of household life in the co-ordination of different daily moments. Through the linking of the macro and the micro aspects of institutional connections, this thesis argues that the concept of urban social sustainability can provide a deeper, and arguably a more appropriate, explanation of the interdependency between people and the environment in capitalist industrial society.

Nevertheless, one should bear in mind that the time-space dimensions are only the ‘breaking point’ for a practical understanding of the concept of social sustainability by virtue of the contextuality of embedded social conditions and actions. Those who are focusing exclusively on the time-space configurations of institutional links, may find it disappointing, being inadequate to make sense of the necessary links between the structural and the individual in the processes of social and individual reproduction. In other words, what must be addressed in the channelling between productive and reproductive activities, and between individual life-chances and the overall institutional structures, are issues of the *socio-temporal* and the *socio-spatial*. In so doing, a sustainable relationship can then be established between the embedded social conditions and the dis-embedded individual actions.

PART II

CHAPTER FOUR

LONDON IN CONTEXT: A WORLD CITY DIVIDED

This chapter is the first part of the extensive analysis examining London's institutional structures relating, in particular, to employment, housing, transport, and retailing. It focuses on informal institutions, i.e. the institutionalised structures of people's routinised daily practices. Based on the functional conceptions of urban regionalisation, London is seen as an urban locale which is internally regionalised into, among other things, workplaces, residential places, and shopping (market) places, with transport systems linking them in time-space. In the course of modern urbanisation, in particular under the influences of Western industrial capitalism, these institutional structures have increasingly disintegrated with each other in time and space on the grounds that they have become very different entities under the influences of different socio-economic conditions and, most importantly, different development logics. For example, the chapter will later show that London's employment structures and its housing markets are increasingly separated from each other in time and space. Accordingly, these time-space disparities between institutional structures require great efforts to bridge (in terms of cost and time), and they have significant impacts on the coordination of daily moments for the individuals. As this thesis argues that the 'embeddedness' of time and space in the routinised daily practices is the material grounding for the 'dis-embeddedness' of social practices at higher levels, to understand the patterns and nature of time-space disparities between different institutional structures is a starting point for a practical explanation of the issue of urban social sustainability.

The chapter is divided into three sections. First, the boundary of London is defined. It highlights the significance of the concept of 'open systems' in the discussion of urban social sustainability: i.e. how social and spatial factors are related to each other. Second, London's structural features in relation to employment, housing, transport, and retailing are examined, demonstrating the overall patterns and current trends of these institutional structures. Finally, the time-space connections between these institutional structures are discussed, highlighting that the connections between these institutional structures are in

effect an integrated issue: an issue of sustainable urban development that requires a structural coordination between institutions.

Defining London: A Functional/regional View of the 'Extended London Region' as a Daily Urban System

Like New York, Paris or any big city in the world, there is only *one* London: the capital city of the United Kingdom. However, in different occasions, the same word 'London' has very different meanings and therefore implies quite different 'places'. For example, in UN conferences and international meetings, 'London' is synonymous to the Great Britain. For securities investors, businessmen, and corporations, 'London' means the financial markets of the 'square mile' in the City of London. For politicians and local governments, 'London' represents the Parliament and the central government. For tourists and visitors from overseas and the rest of Britain, 'London' is the sum of Buckingham Palace, National Gallery, Harrods, Tower Bridge, West End theatres, Oxford Circus, and other tourists sites. Nonetheless, for millions of Londoners who live, work, go to school, and entertain in this big city, 'London' is their home; and for many others who only travel into London to work during the day and return to their suburban home in the evening, the 'daytime Londoners', 'London' is the locale that constitutes an important part of their 'dual lives': the workplace. It is not surprising that in social research the definition of London may vary substantially, depending on the purposes of study and the objects of interest. Different interests will inevitably result in very different spatial definitions of London and, therefore, result in very different conclusions. For this reason, it is necessary to be explicit about the definition of London at the outset of the chapter so that the spatial and social contexts can be properly addressed in the discussion of urban social sustainability.

Administrative, Physical, Regional and Functional Definitions of London

Traditionally, there are several categories of urban definitions. The four most

commonly used alternative bases are administrative, physical, regional, and functional boundaries. The simplest and most straightforward definition of London can be made in terms of the administrative boundaries that carry the label 'London' on maps. The current basis of this definition is the Greater London Act of 1963 which provided the statutory basis for the formation of the Greater London Council (GLC), which was set up in 1965 and later abolished in 1986. It includes 33 local authorities: 32 London boroughs and the City of London (see Figure 4.1).

A second definition of London is based on the physical extent of London's built-up environment. In this regard, London is referred to as the area within the limits of the Metropolitan (or London) Green Belt (see Figure 4.2). The main purpose of the Metropolitan Green Belt is to restrict the outwards expansion of London's built-up environment, although other objectives have been assigned to it by planners, politicians, and academics, such as the provision of open space for countryside recreation, the protection of agricultural land, the maintenance of amenity in the urban fringe and the creation of a *cordon sanitaire* between the residents of the shire counties and those of London (Munton 1983: 15; see also Elson 1986). So physically, the Metropolitan Green Belt has been the watershed between the huge concentration of the built-up area within London and the less dense development around London.

A regional view of London as an urban conglomeration provides a third definition of London's boundary, referring to the socio-economic boundary of London which includes not only the mass built-up area within Greater London but also the adjacent counties beyond the Metropolitan Green Belt. London has a complex relationship with the surrounding counties on matters such as housing provision, economic linkage, labour markets and transport systems. In this view, London as a region could be referred to as the South East region as a whole (see Figure 4.3).

To be more specific, a fourth definition of London can be added: the functional definition of London as a travel-to-work area. It stresses the local economic linkage of regular journeys to work, as an indicator of Local Labour Market Areas (LLMAs) (see Coombes et al. 1979; Coombes and Openshaw 1982; Champion et al. 1987). By this



Figure 4.1 Greater London

Source: Simmie (1994: 10)

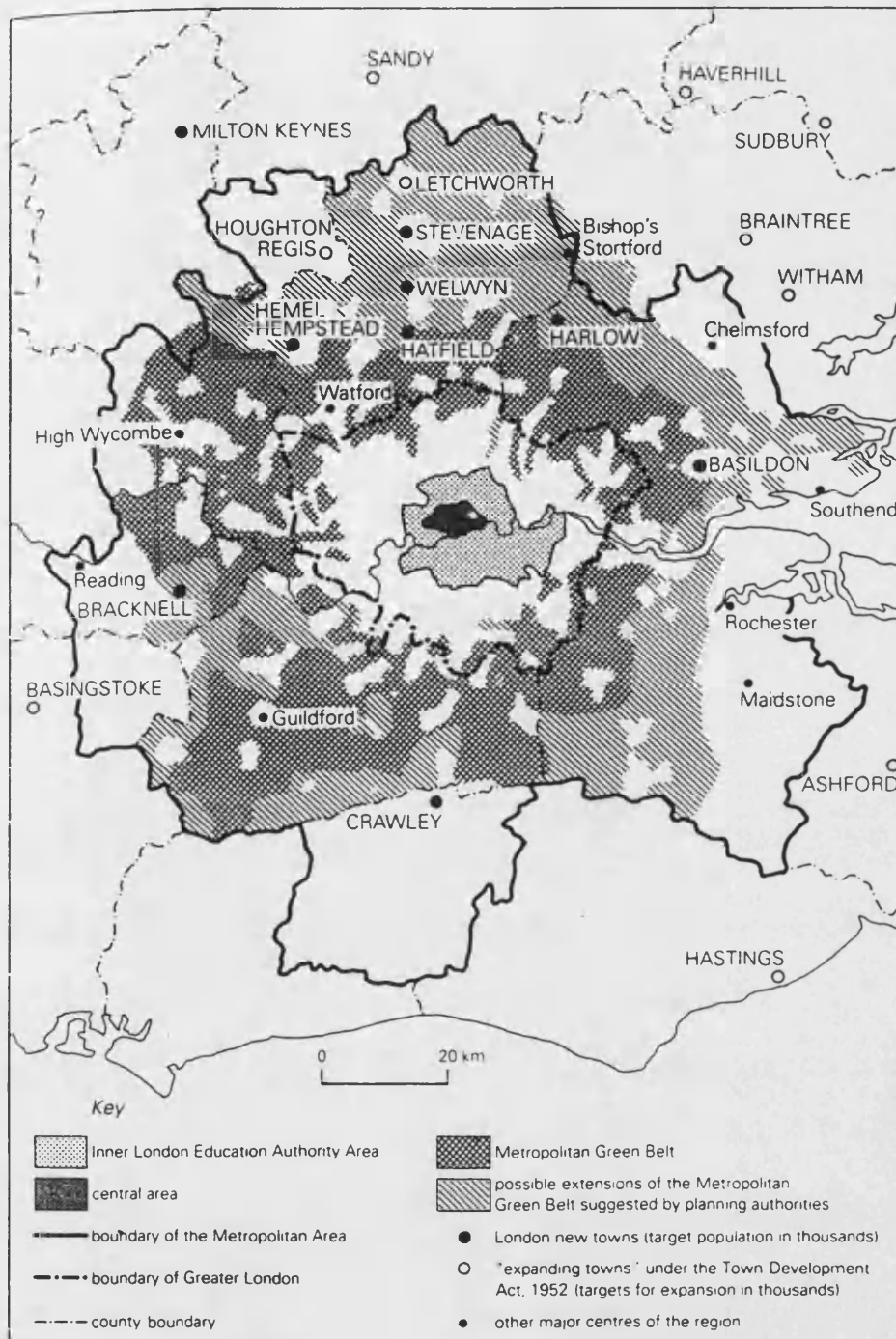


Figure 4.2 London and the Metropolitan Green Belt

Source: Simmie (1994: 11)

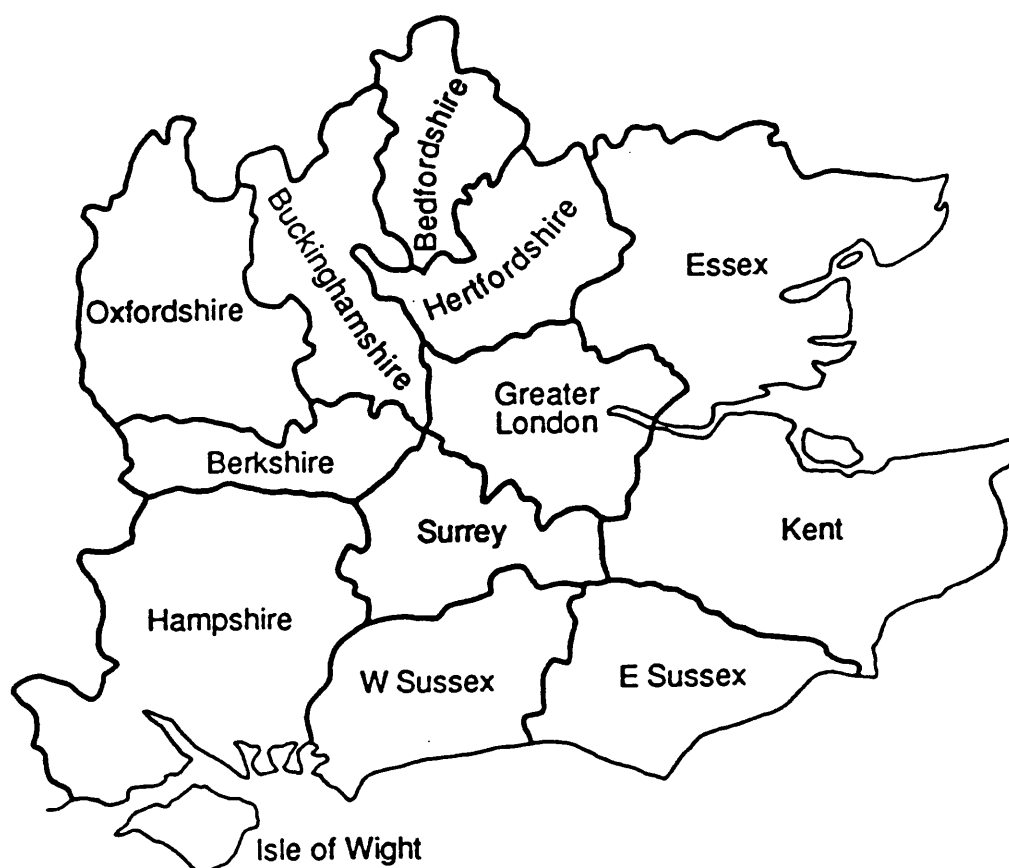


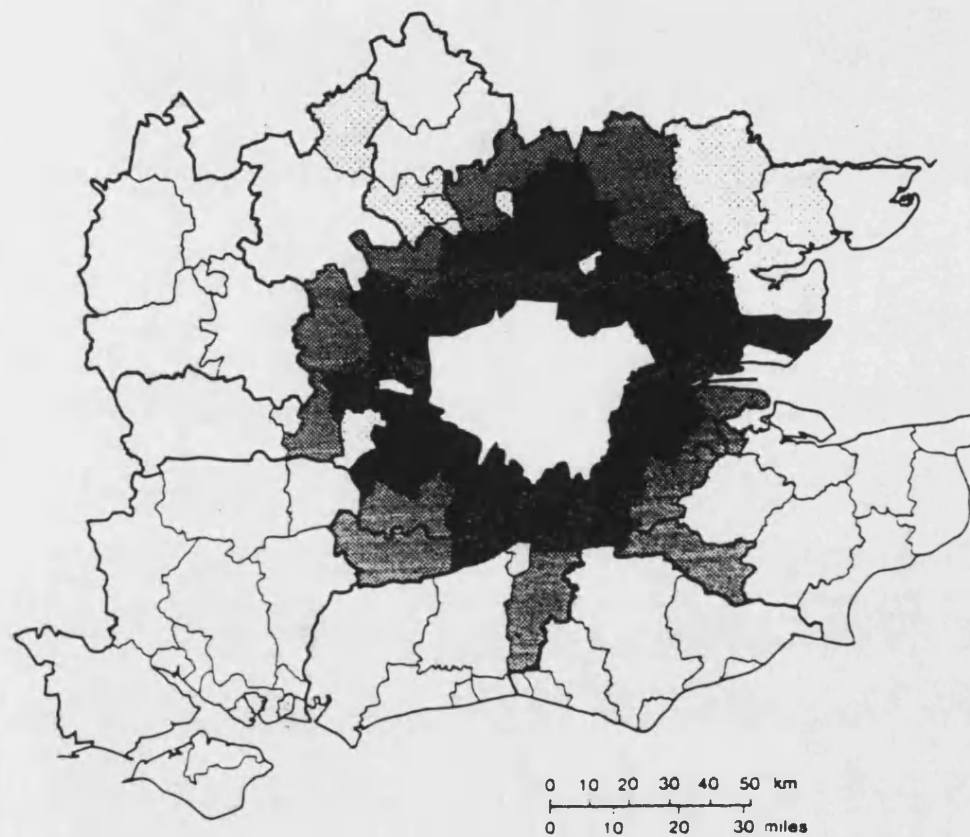
Figure 4.3 London and the South East Region

Source: J. M. Hall (1990: iv)

definition, the London region is referred as the London commuter area, the area somewhere between Greater London and the whole South East region of England (see Figure 4.4).

The Extended London Region: A Functional View of the London Region

It is clear that different definitions of London overlap with one another; and most importantly, they are all changeable. As far as urban social sustainability is concerned, what is important regarding the spatial definition of London is to highlight the significance of the socio-spatial connections. In this view, a suitable definition of London should see London as a *daily urban system* which can bring out the necessary links between structural properties and individual life-chances in the time-space connections of different activities. Theoretically, a combination of the regional and the functional definitions of London is a more appropriate spatial definition of London for the understanding of the practical explanation of urban social sustainability because it takes on board the social processes on a wider regional scale. However, the inherently unstable structure of such an urban definition, the existence of multiple functional areas, and a lack of information collected on this basis are major problems of the functional/regional view of urban definition. The functional definition of London may be conceptually attractive, but it is practically difficult to draw the lines. The criteria adopted to draw the lines are arbitrary and the thus defined urban area is structurally unstable for the sake of changing economic and other social conditions. For example, the travel-to-work area might change considerably between the recession period of the late 1980s and the boom period of the early 1990s. Moreover, a travel-to-work area is only *one* manifestation of the routinised daily practices, although a very important one. There are other functional links between locales that are as important as the home-work linkage, such as travel-to-school, travel-to-shop, and so on. Most importantly, many of London's economic and cultural activities are actually taking place on such a global scale that the proximity between London and its surrounding counties is in effect less relevant.



% Resident workers commuting to Greater London, 1981

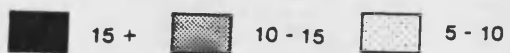


Figure 4.4 The London Commuter Area, 1981

Source: Hall (1989: 8)

Last but not least, a serious problem inherent in the functional/regional definition of London is a lack of information collected on this basis. This problem will inevitably create practical difficulty for an empirical analysis of London's institutional structures. In practice, in effect, we have little choice but to use the administrative/physical definition of London for the sake of data availability and the consistency in spatial units for comparison purpose. The merits of the administrative definition of London are that such boundaries reflect the political divisions of areas (the elected local authorities) which are the bases of resource allocation under current political system. Most importantly, administrative boundaries are the building blocks of most official statistics. However, the problem of the administrative definition of London is that both economic and other social changes at macro level and individuals' daily activities at micro level bear little relation to the administrative boundaries. This reflects the conflicts between conceptual and practical definitions of urban boundaries. To some extent, this also reflects the inappropriateness of current institutional arrangements to deal with the issue of sustainability which is cutting across traditional administrative, sectoral, and physical conceptions of spatial divisions.

Accordingly, rather than adopting any single definition of London and rejecting the others, this thesis adopts a more flexible view of spatial definition by setting the discussion of urban social sustainability in a wider regional context: i.e. to see London as an extended region of a *daily urban system*. To put it more precisely, conceptually we are keeping the functional/regional definition of London in mind, but in practice we are using statistical data collected on the bases of administrative boundaries. Although this approach might be criticised as eclecticism, it has the merits of flexibility, being sensitive to different types of changes while maintaining the consistency in spatial basis. In this regard, it is important to highlight the sources of data relevant to the extensive analysis of London's institutional structures.

The Sources of Data

The information required for the analysis of London's institutional structures

relating to employment, housing, retailing and transport is mainly drawn from official statistics. As might be expected, it is unlikely to obtain such data from primary sources. As far as institutional structures are concerned, this thesis is not only concerned with the general patterns of those structural features but is also concerned with the changes of those institutional structures and the underlying causes behind those changes. This suggests that the information needed should cover a wide ranges of topics, involving different scales of geographical areas, and including an extensive span of time. Although official statistics are collected for general purposes, they are the most reliable data sources which fulfill these requirements. In this regard, census data are the most valuable information pertaining to the structural features of interest. They are conducted on a regular basis, covering all the spatial units, and including the statistics of a wide range of topics. There are two categories of census data which are especially relevant. One is the decennial Census of Population (the latest census was in 1991) conducted by the Office of Population Censuses and Surveys (OPCS); another is the biennial (1987–1991) or triennial (1981–1987) Census of Employment (a sample census) conducted by the Department of Employment and published in *Employment Gazette*. However, one major limitation of census data is that the information drawn on these sources is not so up-to-date because it may take two to three years to process before it can be published. Although the structural changes of those institutional features are a very important part of analysis, nevertheless, the aim of the extensive analysis is not to predict their trends; the somewhat dated census data are tolerable on the grounds that reliability and accuracy are of higher priorities in the understanding of the necessary time-space connections between institutional structures.

Apart from the census data, other official statistics collected on regular bases are very useful inputs, too. They include the Department of Transport's (DoT) *Annual Transport Statistics for London* and *London Area Transport Survey 1991* (collaborating with London Research Centre) and London Research Centre's (LRC) *London Housing Statistics*. In addition, individual research reports conducted or commissioned by central or local governments are another source of information. In this regard, research and survey results published by three organisations are of particular importance. They are London

Research Centre (LRC), a research unit commissioned since the GLC era; London Planning Advisory Committee (LPAC), a joint committee of the London Boroughs and the City Corporation to provide advice on London-wide strategic planning; and the South East Regional Planning Conference (SERPLAN), a consultative body representing district and county planning authorities in the South East of England and London. These institutions have a legitimate interest, among other things, in the structural changes of London's employment, housing, retailing, and transport structures.

Another important issue relating to the sources of data is the issue of temporal coverage. The time span covered in the extensive analysis of London's institutional structures is the 10 to 15 years from 1981 onwards. This is mainly to accommodate the availability of census data. However, not all statistics can be fitted into the time span of decennial Census of Population, nor is it necessary to do so simply because of the temporal structure of census data. Accordingly, instead of using 10 years as the temporal unit, a more flexible time span of 10 to 15 years is adopted. This thesis considers a flexible temporal scale to be adequate for two reasons. On the one hand, such a temporal coverage is updated enough to identify the current patterns of London's institutional structures; on the other hand, the 10 to 15 years time is long enough to be sensitive to any significant changes in structural features. Nevertheless, it needs to be pointed out that many of London's structural changes in the 1980s and the 1990s can be traced back to some 20-30 years earlier. For example, the process of de-industrialisation has happened as early as in the 1960s and 1970s (see McIntosh and Keddie 1979; Evans and Eversley 1980). Accordingly, although the empirical data presented in this thesis is mainly contemporary, a historical perspective of explanation beyond the temporal coverage of 10 to 15 years is also required.

A World City Divided: London and Its Regions

In the last few hundred years, London has evolved from a pedestrian city with its businesses, industries and residents concentrated within walking distance, to a great metropolis with a sprawling hinterland extending tens of miles. With an area over 1,000

square miles, (Greater) London in the late twentieth century is referred to as a region which is comprised of hundreds of places. In such a large area, as might be expected, not every place in London is equally accessible, nor does it play the same role in relation to different aspects of daily life. Before we can move on to examine the structural patterns of London's institutional structures, it is helpful to highlight some of the socio-economic trends in London and the internal spatial divisions of London's region.

London and the Region: A Snapshot

London, the capital city of the United Kingdom, is renowned for its role in the global economy and its richness in cultural and historical heritages, a real world-class city. With a population of nearly 6.7 million in 1991, it is the largest metropolitan centre in Europe, serving the wider South East region of 17.6 million population. As a major centre of employment, London contributes nearly 20 per cent of the Gross Domestic Product (GDP) to the UK economy. It provides jobs for nearly 3.5 million people and the base for nearly a quarter of a million businesses, including three-quarters of the nation's financial and business services (DoE 1993b). Alongside New York and Tokyo, London is one of the three largest centres in the global economy. It is the largest banking centre in the world — nearly one-fifth of all banking transactions in the world are taking place in London, more than the sum of Paris and New York — and the world's largest foreign exchange market — it handles a quarter of the world's foreign exchange dealing. London also has the largest stock exchange business in Europe and is a leading international insurance market. London employs about 735,000 people in financial and business services, nearly 60 per cent of these jobs are concentrated in the central area. The capital city is one of the favourite locations for international and multinational headquarters — 121 of the Financial Times' Top 500 companies have their headquarters in London (ibid.).

In addition to the prominent positions in international and domestic economies, London is also one of the leading centres in education, arts and culture, tourism, and shopping and recreation. It is a major national and international centre for higher education

and research, with the largest concentration of universities and colleges in the UK and accounting for a quarter of public funding for higher education in England. London has more museums and theatres, department stores, boutiques and specialist shops, as well as a wide variety of leisure facilities, than any British city. Over 65 million visitors come to London each year for leisure, business, shopping and other purposes. Fifty per cent of the national income from tourism is spent in London (London Tourism Board 1994).

Nevertheless, one thing that many people might overlook or take for granted is that London is the base of daily life for millions of people who either work or live in London. In 1991, there were some 6.7 million people living in Greater London, accounting for 12 per cent of the total population in Great Britain (OPCS 1993b). Since the early 1960s Greater London's population has been in steady decline. Over the decade 1981–91, for example, it lost nearly 5 per cent of its population. However, while Greater London had experienced a net loss of population between 1981 and 1991, the Rest of South East (RoSE) had a net population increase of 3.1 per cent, with a population of more than 10 million in 1991. In other words, the population in the South East as a whole by and large remained stable between 1981 and 1991, but its distribution has changed considerably — moving towards a more dispersed pattern of distribution. This has significant socio-economic implications. For example, while the central core of London remains to be an important employment base for, in particular, higher-order services, an increasing number of people's homes are located in RoSE. As far as the time-space connections between different daily moments are seen as one of the defining characteristics of social sustainability, it is helpful to divide London into some subareas.

The Internal Spatial Divisions in London

In practice, there have been some commonly used categories of spatial divisions of (Greater) London. Among others, the simplest and the most obvious divisions are the zoning divisions of Inner and Outer London, the physical divisions (by the River Thames) of North and South London, and the socio-economic divisions of East and West London.

Although there is no rigorous theoretical foundations supporting these spatial divisions, there are practical reasons for using these spatial categories. This thesis argues that these internal spatial divisions, when taken into account in conjunction with the functional divisions of London's space into workplaces, residential places, shopping places and the like, can highlight the time-space connections between institutional structures. As might be expected, these spatial categories are not fixed. For example, the redevelopment of London's Docklands, the completion of the Channel Tunnel, and the extension of London's underground network, all will contribute to the changes of the boundaries of these subareas. However, for the sake of facilitating the discussion, these internal divisions are simply used as spatial benchmarks to reflect the time-space dynamics between institutional structures in London.

For policy purposes, Greater London is often further divided into two or three rings, including Inner London, Outer London, and Central London (see Figure 4.5). Inner London includes 13 boroughs and the City of London, with an area of about 200 square miles and accounting for one-fifth the area of Greater London. It covers the area equivalent to Victorian London lying immediately beyond the commercial core of the City of London and the West End. The central core of Inner London is often referred to as Central London, with an area of 17 square miles extending from Regents Park and Kings Cross in the north to the south bank of the River Thames from Vauxhall to Tower Bridge. Central London broadly marks the extent of the pre-Victorian City, covering the whole of the City of London and parts of the City of Westminster and the Boroughs of Camden, Hackney, Islington, Kensington and Chelsea, Lambeth, Southwark, Tower Hamlets and Wandsworth. Outer London, with an area of 782 square miles (about four-fifths the area of Greater London), is formed by the remaining 19 boroughs, comprising the more prosperous twentieth-century suburbs¹ (Hall 1990; LPAC 1988).

In 1991, about one-third of London's population lived in Inner London, the remaining two-thirds lived in Outer London (OPCS 1993b). Broadly speaking, Central

¹ For statistical purposes, Creenwich is sometimes classified as an outer borough; and Haringey and Newham as inner boroughs.

London has been maintaining its pivotal positions in commercial and political activities that can be characterised as the 'commercial London', with an important role in both domestic and international economies. Inner London by and large reflects the structure and scale of Victorian and Edwardian London which was characterised by the 'industrial London', with large-scale manufacturing jobs and residential areas sitting close to each other. Some parts, especially the east half, of Inner London have a disproportionate clustering of environmental decay, squalor, overcrowding, pollution and congestion overlain by the personal and community misfortunes of poverty, vandalism, crime and unemployment that is characterised by the large tracts of Britain's inner cities (GLC 1977; Madge 1981; Jones et al. 1986). Outer London, by contrast, more or less reflects the processes of modern urbanisation in the late 19th century and onwards that is characterised by the more affluent suburbs of London dominated by residential functions.

A second way to divide London is into North and South London. In spite of the bridges and tunnels across the water, the River Thames does form a significant divide of the capital city. Generally speaking, London north of the Thames was developed earlier. Given that London is at the South East corner of Britain, most people coming to London are from the broad arc north of the Thames. So the road and rail approaches between Paddington and Liverpool Street stations on the north side are more familiar to many non-Londoners. In contrast, the south side of the water has a less extensive British hinterland. While the underground network is denser and extends farther in North London, most of the areas south of the river rely mainly on surface trains; and stations in South London are much further apart than the underground counterparts in North London. Living and travelling in North and South London could mean very different experiences. Since the completion of the Channel Tunnel, South London has become an international route connecting London with Paris and other continental cities. Although the significance of South London has increased accordingly, it may take many years to see its influences. For the time being, the North-South divide in London is still obvious.

A third way to divide London, and perhaps the most significant one in socio-economic terms, is into East and West London (see Figure 4.6). Although no physical



Figure 4.5 Inner vs. Outer London

Source: J. M. Hall (1990: 6)

substance or administrative boundaries like the River Thames or the former Inner London Education Authority (ILEA) which could be used as the concrete bases of division between North and South London and Inner and Outer London, for many Londoners, the East-West divisions are well established and self-evident. As early as the 19th century, the East End of London was clustered with crowded small factories, dock jobs, markets and warehouses, and large scale of working-class accommodations; on the west side of London, by contrast, piles of houses and flats, as well as shops and offices, had been built so that the more well-off and the middle-class families could escape from the “fumes, steams and stinks of the whole easterly pile” (Hall 1990: 4). Even today, most areas in East London by and large remain the ‘back regions’ of the capital city, with almost no visitors from the rest of Britain and in particular from abroad. Although the structural changes of London’s industrial bases in the second half of the twentieth century — i.e. a considerable number of industries have been set up in the west side of London and the territories of the ‘commercial London’ have also been taken into London’s Docklands as an extension of the City of London — have to some extent reduced the contrast in physical fabric of the built environment between East and West London, the socio-economic divide seems to be persistent. In terms of economic activities, West London is more closely associated with growing industries, such as high-tech industries, prosperous property markets, and an increasing number of shops and restaurants. East London, by contrast, is more closely linked to declining industries, such as textile factories, ship building, docks, and other manufacturing industries. In terms of the socio-economic backgrounds of local residents, households on the west side of London, generally speaking, are richer and those on the east side tend to be less well-off. It may be an exaggeration, but many would agree that while people in West London are fighting for parking space, many people in East London are taking buses to job centres or benefit offices. Accordingly, these internal divisions of London, when taken into account together with the functional view of London as an extended region, can be used as the spatial categories to characterise the structural features of London’s institutional structures. By examining the intersections between the spatial categories of regionalisation (into Inner-Outer, North-South, and East-West London) and the functional divisions of regionalisation



Figure 4.6 East vs. West London

Source: J. M. Hall (1990: 5)

(into different daily locales), it will be possible to highlight the time-space connections between different institutional structures in London.

The Employment Structure in London

Let us first look at the employment structure in London. Above all, many people have been drawn to London for the huge scale of job opportunities. As one of the largest cities in the world and the hub of both domestic and international economies, London provides jobs for over three million people and the base for nearly a quarter million of businesses (GOL 1995:15). London's employment structure, accordingly, must be understood in terms of its place in both global and national economies, as well as of the regional dynamics of London's labour markets.

In 1991, nearly 3.5 million people worked in Greater London, accounting for 20 per cent of the total employed population in Great Britain (OPCS 1994a). This can be compared to 6.7 million of Greater London's population, which represented just 12 per cent of Great Britain's total population. And so, London's role as an employer is self-evident. But this evident imbalance is just the beginning of the story. If we look more closely at the changes of London's employment structure in the last 10 to 20 years, it is clear that the capital's role in the British labour market, as a whole, is diminishing. While the total amount of employment in the UK as a whole has had a slight increase of just 1 per cent in the decade between 1981 and 1991, London has experienced a 9 per cent decline: that means a loss of more than a quarter of a million of jobs (OPCS 1994a). However, if the employment changes are examined from the regional point of view, the scale of employment in the South East has more or less remained stable between 1981 and 1991. In other words, RoSE has experienced a substantial employment gain in the same period. Accordingly, the employment distribution in the extended London region has exhibited a trend of dispersed development. As might be expected, the employment changes have not occurred evenly across sectoral boundaries. To understand the industrial dynamics in the capital city is a key to a proper understanding of London's employment structure.

The Processes of De-industrialisation

In the 1980s there was a continuing shift of employment structure from manufacturing to the service industry in London. In 1981, nearly one-fifth of the jobs in London were in manufacturing; ten years later, the ratio dropped to one in ten. By contrast, the share of service jobs increased from 74 per cent to 85 per cent in the same period (see Tables 4.1; 4.2 and Figures 4.7; 4.8). Although the shift of employment structure from manufacturing to services was a national trend, it was more marked in London than in the rest of Britain. The skewness of London's employment structure towards service jobs had more to do with the continuing decline of manufacturing employment than with the real growth of service jobs. While the growth of service jobs in the 1980s was just under 3 per cent, the decline of manufacturing jobs was significant: nearly half of the manufacturing jobs had gone in the same period, a loss of more than 350,000 jobs. These processes, i.e. the decline of manufacturing jobs and the shift to service-dominated employment, the rapid growth of producer services, and the further service-intensification of the economy, have been described as the *de-industrialisation* of London's economic structure (see, for example, Martin and Rowthorn 1986; Sassen 1991).

There is no single explanation for the process of London's de-industrialisation. As might be expected, the changes of London's employment structure cannot be properly understood without a reference to the influences of global economic restructuring and national spatial divisions of labour between regions (see Muegge and Stöhr 1987; Rowthorn 1987; Harvey 1989b; King 1990; Sadler 1992; Sassen 1994; Scott 1998; Massey 1984; 1986). However, to oversimplify the employment structure as a dichotomy between manufacturing and service jobs may obscure some significant changes and the inherent characteristics of London's employment structure. For example, while most manufacturing industries have experienced a similar degree of decline, not all service industries have had job gains. Between 1981 and 1991, the sign of growth was most marked in banking and finance, insurance, and business services sector (nearly 30 per cent). The business services sector alone, in particular, had a 45 per cent growth in the numbers employed. Employment

**Table 4.1 Percentage of Employees in Employment by Industry 1981 – 1991,
Greater London, Rest of the South East, and Great Britain**

Sector ^a (SIC)	1981			1984			1987			1989			1991		
	G.L. %	RoSE %	G.B. %	G.L. %	RoSE %	G.B. %	G.L. %	RoSE %	G.B. %	G.L. %	RoSE %	G.B. %	G.L. %	RoSE %	G.B. %
All	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
0	-	2	2	-	2	2	-	2	2	-	2	1	-	2	1
1	2	2	3	1	2	3	1	1	2	1	1	2	1	1	2
2-4	19	24	29	17	25	26	15	23	24	12	20	23	11	18	22
5	5	5	5	4	5	5	4	5	5	4	5	5	4	4	5
6	19	21	19	20	21	20	20	21	20	20	23	21	20	23	21
7	10	6	7	10	6	6	9	6	6	9	6	6	9	6	6
8	16	8	8	18	9	10	21	11	11	23	13	12	23	13	12
9	29	29	28	30	30	29	31	31	30	31	30	30	32	31	31

* Industrial sectors are referred to the 1980 Standard Industrial Classification (SIC).

0 — agriculture, forestry and fishing

1 — energy and water supply

2 — extraction of ore, etc.

3 — metal goods, engineering and vehicles

4 — other manufacturing: food, textiles, etc.

5 — construction

6 — distribution, hotels, and catering

7 — transport and communication

8 — banking and finance, insurance and business services

9 — other services: public administration, education, & other health services, etc.

Source: Department of Employment, *Censuses of Employment 1981 – 1991*

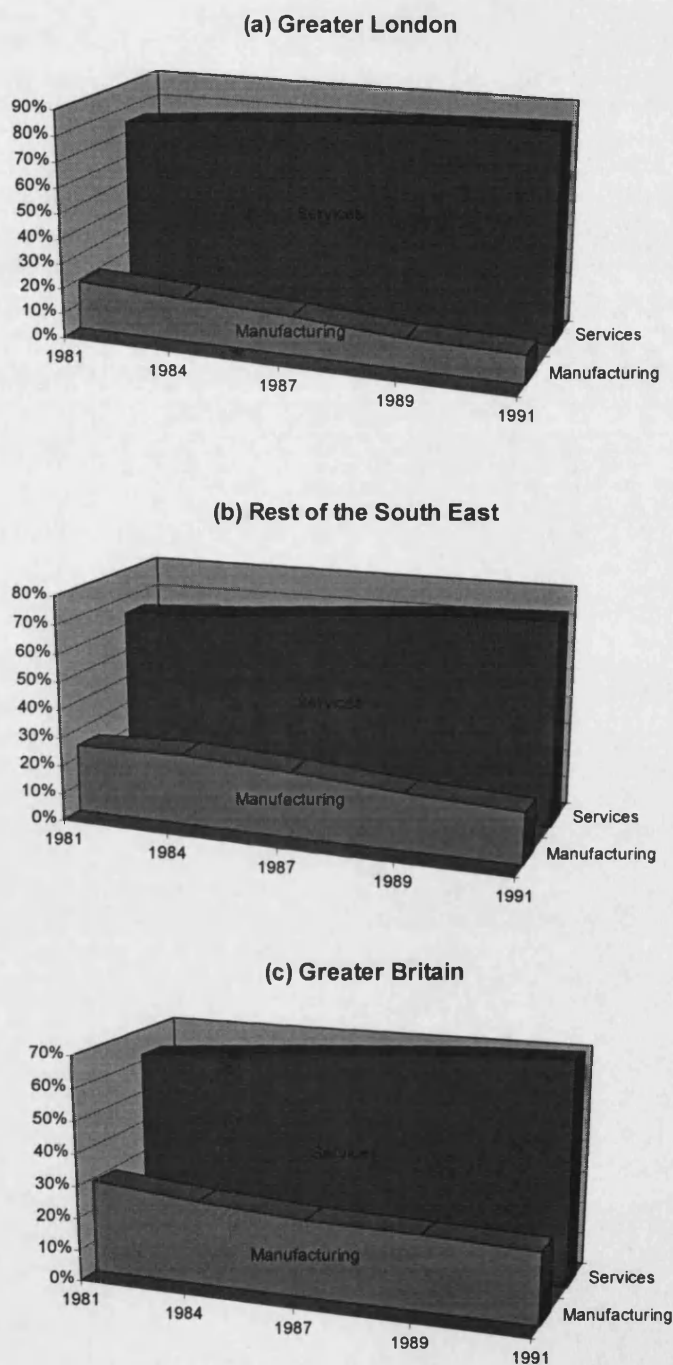


Figure 4.7 Structural Changes of Employment by Industry 1981–1991, Greater London, Rest of the South East, and Great Britain

Source: Department of Employment, *Censuses of Employment 1981–1991*

Table 4.2 Share of Greater London's Employment Compared to the Total Employment in the South East and Great Britain, 1981 – 1991

Sector ^a (SIC)	1981		1984		1987		1989		1991	
	S.E. %	G.B. %	S.E. %	G.B. %	S.E. %	G.B. %	S.E. %	G.B. %	S.E. %	G.B. %
All	49	17	48	17	47	16	46	16	45	15
0	3	1	2	-	2	-	2	-	2	-
1	44	8	46	8	45	9	43	10	41	9
2-4	38	11	39	11	35	9	34	9	33	8
5	47	15	45	14	44	14	41	12	43	12
6	48	17	46	16	45	16	42	15	41	14
7	61	26	59	26	57	25	55	23	55	23
8	67	33	64	32	63	33	60	30	58	28
9	49	18	48	17	47	17	47	16	46	16

* Industrial sectors are referred to the 1980 Standard Industrial Classification (SIC).

0 — agriculture, forestry and fishing

1 — energy and water supply

2 — extraction of ore, etc.

3 — metal goods, engineering and vehicles

4 — other manufacturing: food, textiles, etc.

5 — construction

6 — distribution, hotels, and catering

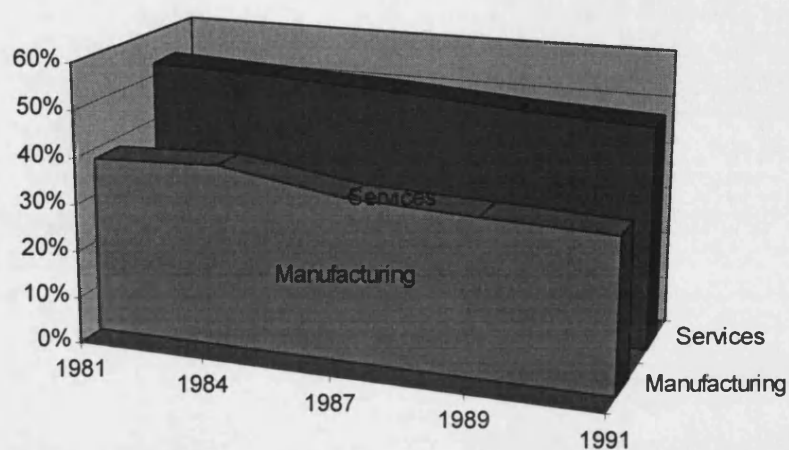
7 — transport and communication

8 — banking and finance, insurance and business services

9 — other services: public administration, education, & other health services, etc.

Source: Depart of Employment, *Censuses of Employment 1981 – 1991*

(a) Greater London's Share in the South East



(b) Greater London's Share in Greater Britain

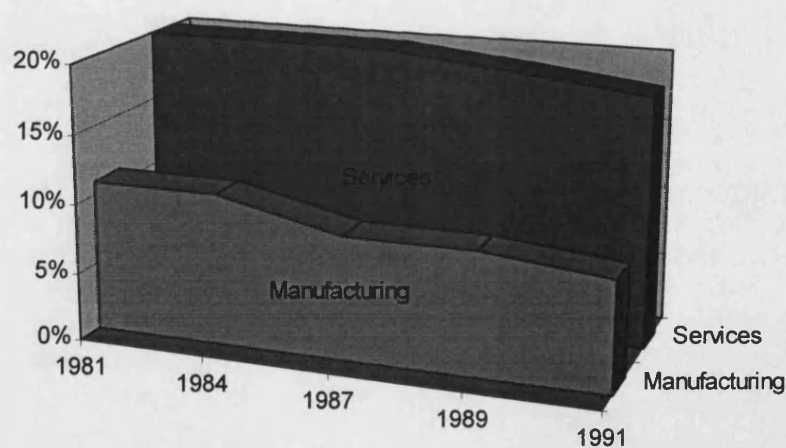


Figure 4.8 Share of Greater London's Employment Compared to the Total Employment in South East and Great Britain, 1981–1991

Source: Department of Employment, Censuses of Employment 1981 – 1991

in the distribution, hotels and catering sector (Standard Industrial Classification, SIC sector 6) and the transport and communication sector (SIC sector 5), by contrast, shrank substantially (6 per cent and 17 per cent respectively). This suggests that the changes of London's employment structure cannot be fully explained simply with reference to the factors of global economic restructuring and national unevenness between regions, but should refer to the local, regional contexts, too. Perhaps this can explain why while Britain as a whole has experienced an enormous reduction in manufacturing employment over the past thirty years, the process of de-industrialisation is particularly marked in London. This will become clearer if London's employment changes are examined from a regional point of view.

In RoSE, for example, the numbers in manufacturing employment were declining, but at a more moderate rate than in Greater London. In 1991, manufacturing still accounted for nearly one-fifth of the total employment in RoSE. By contrast, service jobs grew substantially: almost every service sector had significant employment gains. Employment in distribution, hotels and catering, together with public administration, education, research and development, medical and health services, outnumbered that in banking and finance, insurance and business services. This was a contrast to the employment structure in the inner rings of London where higher-order services accounted for a more important role in job provision. In other words, the processes of de-industrialisation in London should be understood in a regional context, where the supporting functions of London's home counties providing the bases for manufacturing industries, 'back office' functions, and homes for the great number of London's workforce, are an indispensable part of London's employment changes². In turn, to fulfill the reproduction needs of London's workforce has

² Apart from the supporting functions linking to London's leading roles in finance, business commanding, and higher-order services, some 'home counties' in the RoSE in effect have developed their own industrial geographies. For example, Berkshire, Oxfordshire, Buckinghamshire, and Hertfordshire are all important bases for high technology industries, such as defence industry and micro-electronics production. These local differences are also important perspectives for understanding the employment dynamics in the RoSE. By virtue of their uniqueness that requires further analysis, these issues are unable to be included in the discussion of London's employment changes.

created a tier of local economy on a regional scale, in particular lower-order services and infrastructure. In other words, the changes of London's employment structure should be understood as an interplay between the processes of global economic restructuring and the regional contexts of London's local economy.

Employment Dynamics: A Combination of 'Shake-out' and 'Spill-over'

The processes of London's employment changes can be characterised as a combination of the 'shake-out' of manufacturing jobs and the 'spill-over' of service jobs: i.e. the decline of manufacturing employment was more marked in Greater London than in RoSE and the growth of service employment was recorded in both areas but with quite different patterns. In Greater London, the growth of service employment was concentrated in higher-order services such as banking and finance, insurance, and business services; the number of employment in lower-order services such as distribution, hotels and catering, by contrast, was declining. In RoSE, although the fastest employment growth was in higher-order services, many jobs created in the area were 'back-office' jobs, such as administrative, clerical, and other routine and supportive functions (see Buck et al. 1986; Coffey 1992; Moulaert et al 1988; Scott 1988; Christopherson 1989). In effect, lower-order service jobs in distribution, hotels and catering accounted for the largest share of employment in RoSE (Department of Employment, *Censuses of Employment* 1981-1991).

The phenomena of the 'shake-out' and the 'spill-over' of London's employment in different sectors would become clearer if the factor of 'output'³ is taken into account (see Table 4.3 and Figure 4.9). In the manufacturing sector, for example, while the total numbers employed in manufacturing jobs has shrunk by nearly a half in Greater London, its output remained stable (CSO 1984-1994). Compared to those manufacturing jobs which have been relocated in the peripheries (including urban fringes, rural areas in Britain, and

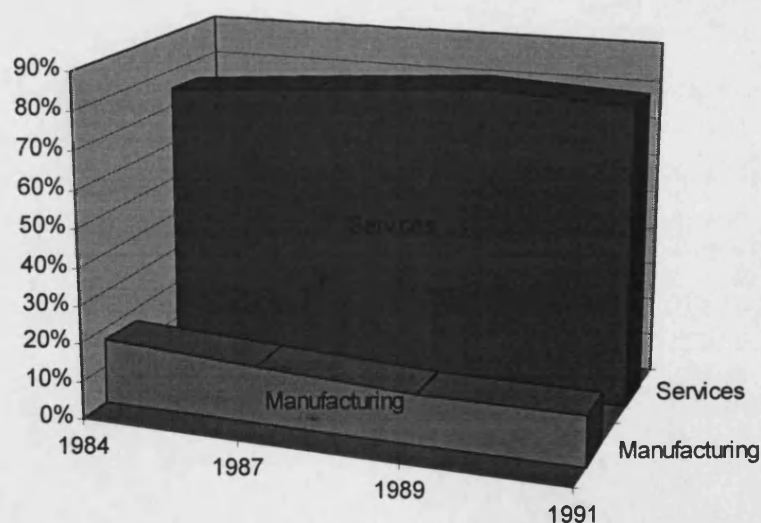
³ Here 'output' is measured by Gross Domestic Product (GDP). Central Statistical Office's GDP data are used. Due to the availability of data, only the GDPs between 1984 and 1991 are used.

**Table 4.3 Composition of Output (GDP) by Industry,
1984 – 1991, Greater London**

Sector (SIC)	1984	1987	1989	1991
	%	%	%	%
0 – Agriculture, forestry and fishing	-	-	-	-
1 – Energy and water supply	3	3	2	3
2-4 Manufacturing industries	17	15	13	13
5 – Construction	5	4	5	5
6 – Distribution, hotels, and catering	14	14	14	14
7 – Transport and communication	11	11	10	9
8 – Banking, insurance and business services*	24	28	33	30
9 – Other services	26	25	24	26

* With adjustment for financial services

Source: Central Statistical Office, *Regional Trends*, 1984 – 1991



**Figure 4.9 Composition of Output (GDP) by Industry,
1984 – 1991, Greater London**

Source: Central Statistical Office, *Regional Trends*, 1984 – 1991

Third World countries as a whole), the industries which have survived the test of global economic restructuring and remained in London seem to those industries with higher value-added ability and, perhaps, the jobs requiring higher skill levels. In the service sector, by contrast, although the number of service jobs as a whole has grown considerably, its output has maintained a similar degree of increase. In other words, under the surface of a seemingly simple process of trade-off between manufacturing and service employment in the extended London region as a whole, it was in effect a turbulent employment restructuring: a combination of the 'shake-out' of manufacturing employment and the 'spill-over' of service employment (see Graham and Spence 1995; 1997).

Different theories have been raised to explain the employment change in London. For example, the 'constrained location hypothesis' argues that a lack of land next to existing property in urban areas act as a restraint for access, expansion, and development of new technologies and cause a movement to cheaper, purpose-built sites in either the suburbs or rural areas (Fothergill and Gudgin 1982; Fothergill et al. 1987; Watts 1987; Healey and Ilbery 1990). Generally speaking, there is a lack of space for physical expansion in London, in particular Inner London. Moreover, many manufacturers are unwilling to match the rents which competing land-users are prepared to pay for locations in London, such as office and commercial developments. Accordingly, the location of industries in and around London can be seen both as reflecting the relative strength of their demands for space and access to markets, labour, and suppliers, and as the outcome of a historical sequence of development (Buck et al. 1986: 47-48).

This suggests that the process of decentralisation of employment from the densely developed core of London region to areas in the hinterland of RoSE has an irreducible perspective relating to the growing significance of local differentiation (Hudson 1992). Global capitalist economy is now constituted as a much more complex spatial mosaic of production and consumption patterns than ever before. It involves complex interactions between global economic restructuring, the creation of new intra-national spatial divisions of labour, and the historical geography of local industries (see Castells 1989; Harvey 1989b;

Dunning 1994; Massey 1984; Ernste and Meier 1992; Conti et al. 1995; Barlow and Savage 1987). In the case of London's economic change, nevertheless, recessionary factors are also crucial to understanding much of the empirical data presented (see Gomulka 1993; Cutler et al. 1994). In the space available, it is not possible to examine in detail all aspects of London's employment restructuring. The point is that this economic restructuring process, when compared to other socio-economic developments in the wider London region, has profound employment implications.

Employment Opportunities and Local Labour Markets: A Missing Link

One of the serious consequences of London's economic restructuring is a mismatch of job opportunities and local labour markets in the London region. According to a research of the London labour market, it found that in the late 1980s about half the available job vacancies, and a majority of unskilled and retail and catering vacancies were in Outer London. On the contrary, the majority of management and professional and clerical vacancies were in Inner London. And unemployment was heavily concentrated in Inner London (Meadows et al. 1988). In 1991, for example, London Boroughs of Hackney, Tower Hamlets, Newham, Southwark, Haringey, Lambeth, Islington, and Lewisham have had much higher unemployment rates than the national average (Forrest and Gordon 1993: 55). This suggests that, while the 'shake-out' and the 'spill-over' of manufacturing and service jobs has resulted in a persistent trend of decentralisation of industries and activities in the London region over the last few decades, Inner London residents, particularly those seeking retail, catering and unskilled jobs, will need to look towards Outer London for work, although some Outer London residents seeking professional or clerical jobs will need to look in Inner London. In other words, this means that although there were job vacancies suitable for most unemployed people in a wider London region, they were not necessarily available in their immediate vicinity.

In an early paper discussing the inadequacy of seeing inner areas as spatial labour markets, Cheshire (1981) argues that a complete urban or metropolitan area is the most

appropriate local labour market over which to define structural unemployment. This may be quite right for professional or managerial workers since they are more flexible in both housing and transport decisions. Nevertheless, this is not suitable to those 'trapped workers' in Inner London, in particular those who depend on cheaper housing provided by local councils. For them, longer-distance journeys to an outer, especially free-standing, location of employment is expensive and difficult. This is particularly difficult for those who are seeking jobs involving unusual hours (such as part-time jobs in retail, catering, hotel, etc.). Even if transport were not a problem for them, a poorly paid job seems unable to justify such a longer-distance journey to work (see Metcalf and Richardson 1976; Evans and Russell 1980).

In both cases, i.e. the mobile workers in the outer rings of London and the 'trapped workers' in Inner London, the social and environmental consequences are severe. On the one hand, the 'shake-out' of manufacturing jobs and the 'spill-over' of service jobs in the London region has created a growing need for longer-distance and/or orbital journeys to work. As might be expected, many of the work-related trips are made by car. This is seen to be a major threat to both global and local environments (ALA 1994; DoE/DoT 1994). On the other hand, the process of employment restructuring in London has resulted in unemployment problems, especially for those unskilled workers in the inner parts of London. This has adverse social consequences that characterise the misfortune of many inner-city communities (see, for example, Playford 1981; Loney and Allen 1979; Sullivan 1989).

Pratt (1994b: 38) argues that the need to import labour force from areas outside London and the skill gaps between London's jobs and its workforce gives proof of London's inefficient labour market. Haughton (1990) sees this has much to do with 'skills mismatch' than with 'skills shortage'. Accordingly, corrective measures like job training and job information are insufficient to resolve the problem of London's labour market. This thesis argues that the issue of a mismatch between job opportunities and local labour markets in the London region cannot be explained from the process of London's economic restructuring alone, but should refer to the disparities between London's employment,

housing, and transport structures. This will become clearer when we look at the housing structure in London.

The Housing Structure in London

As argued above, London's institutional structures are closely related to each other: not only in terms of their competition in land use but also in terms of their intrinsic links via the co-ordination of different daily moments in the course of individual workers' everyday lives. However, higher rates of unemployment in some Inner/East London boroughs, as well as the increasing scale of, in particular, longer-distance journeys to work in the wider London region (see OPCS 1994a; 1994c) suggest that there does exist some structural imbalances between London's employment and housing structures.

Having understood the overall pattern of London's economic restructuring, the structural disparities between employment and housing can be illustrated by the distribution of London's housing stock. In 1991, there was a total of 2.9 million housing stock in the Greater London area: of which only 40 per cent of the housing stock was in Inner London, and Outer London accounted for the remaining 60 per cent (LRC 1993, see Table 4.4 and Figure 4.10). As might be expected, if the housing stock in the South East region as a whole is taken into account, the skewness of London's housing provision towards the outer rings of London is more marked. Given that employment decentralisation has been a persistent trend in London over the last 30 years, there still exists a *quantitative mismatch* between London's employment and housing structures: with jobs outnumber houses in Inner and, in particular Central, London, and houses outnumber jobs in the outer rings of London.

This *quantitative disparity* between London's employment and housing structures is just the tip of the iceberg. Apart from this quantitative disparity, there exists a more fundamental *qualitative disparity* between London's employment and housing structures. This can be illustrated by the tenure of London's housing structure. Generally speaking, in

Table 4.4 Housing Stock by Sector in Greater London, 1991

Local authority	Local authority	Housing association	Other public sector*	Private sector	Total
Greater London					
Total	694,089	157,410	19,915	2,043,476	2,914,890
Percentage	24%	5%	1%	70%	100%
Inner London					
Total	409,308	105,480	6,907	666,805	1,188,500
Percentage	34%	9%	1%	56%	100%
Outer London					
Total	284,781	51,930	13,008	1,376,671	1,726,390
Percentage	16%	3%	1%	80%	100%

* Other public sector includes dwelling owned by other London local authorities.

Source: London Research Centre (1993, Table 111).

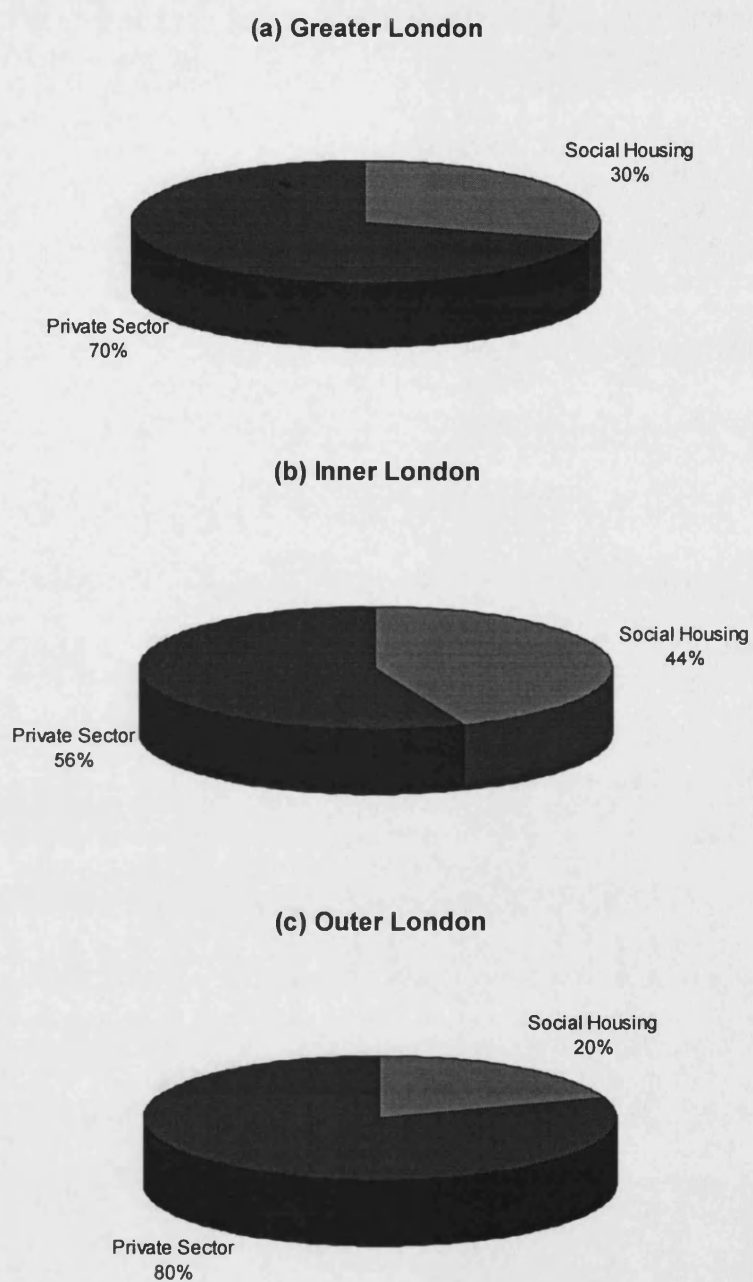


Figure 4.10 Housing Stock by Sector in London, 1991

Source: London Research Centre (1993, Table 111).

Greater London as a whole, private housing has historically played a dominant role in housing provision (see Hall 1963; 1989). In 1991, for example, private housing accounted for 70 per cent of Greater London's total housing provision, and social housing (housing provided by local authorities and housing associations) represented another 30 per cent of that total (OPCS 1993a). Among the 2.9 million of Greater London's households, 57 per cent of them lived in owner-occupied accommodation, the rest 43 per cent lived in accommodation rented from local authorities (23 per cent), housing associations (6 per cent), private sector (12 per cent), and other sources (2 per cent) (see Table 4.5 and Figure 4.11).

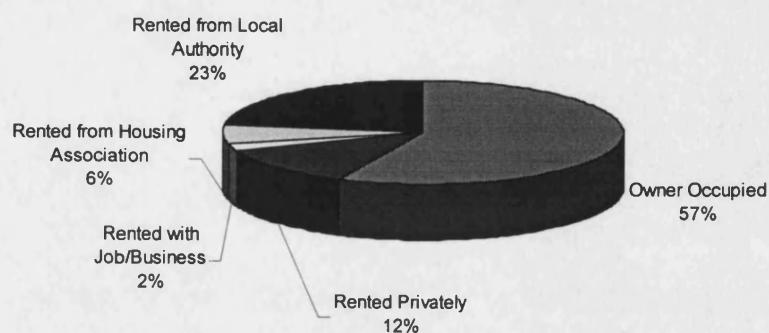
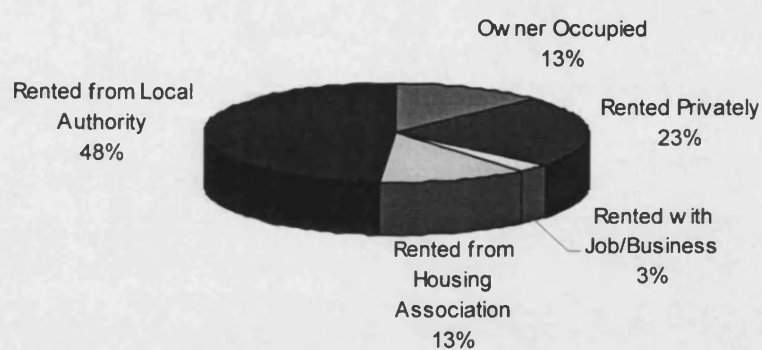
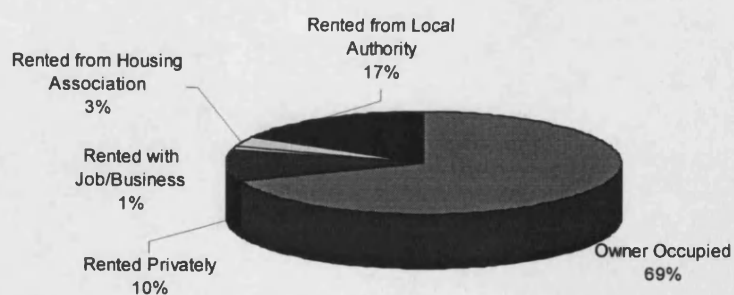
However, private and social housing was not distributed evenly across Greater London: social housing played a much more important role in Inner London than in Outer London, representing 44 per cent and 20 per cent of the housing stock in each area respectively. In some Inner London boroughs, in particular the east part of Inner London, social housing even accounted for the lion's share of local housing provision in Tower Hamlets (75 per cent), Southwark (64 per cent), Hackney (61 per cent), and Islington (61 per cent) (LRC 1993). On the contrary, owner-occupied housing accounted for 70 per cent of the housing tenure in Outer London, compared to just 40 per cent in Inner London (OPCS 1993a). In other words, it suggests a spatial divide of London's housing provision: private housing tended to concentrate in the outer and west parts of London, while social housing was more readily available in the inner and east parts of London.

For those who can afford to own their own dwellings, usually the more financially affluent, or the more skilled labour force, housing provision is more readily available in the outer rings of London, especially when factors like residential amenities, environmental quality, and housing prices are taken into account. However, for these types of households, in particular the professionals and white-collar workers, job opportunities are more likely to be concentrated in Central and Inner London. For those who cannot afford to buy or rent from the private sector — very often the less skilled, less mobile working class in both manufacturing and lower-order service jobs, including those who are currently unemployed — social housing provided by local authorities or housing associations in Inner/East London

Table 4.5 Tenure of Housing in Greater London, 1991

Area	Total households	Owner occupied	Rented privately	Rented with job or business	Rented from housing association	Rented from local authority
Greater London	2,763,166	1,580,466	338,200	44,928	154,711	644,861
Percentage	100%	57%	12%	2%	6%	23%
Inner London	1,096,141	422,857	179,077	22,092	101,584	370,531
Percentage	100%	9%	16%	2%	9%	34%
Outer London	1,667,025	1,157,609	159,123	22,836	53,127	274,330
Percentage	100%	69%	10%	1%	3%	17%

Source: OPCS (1993a, Table 3).

(a) Greater London**(b) Inner London****(c) Outer London****Figure 4.11 Tenure of Housing in Greater London, 1991**

Source: OPCS (1993a, Table 3).

seems to be the major source of housing provision that can fulfill their needs for cheaper, rented accommodation, although the job opportunities suitable to their skills and experiences may be more readily available in the outer rings of London. In other words, London's housing and employment structures did not coordinate with each other in terms of both quantity and quality. As might be expected, the double-edged character of London's transport system has always been an important factor which both contributes to, and reduces, the spatial and qualitative disparities between London's employment and housing structures. Before turning to the issue of transport, it is useful to explore a bit further the structural dynamics of London's housing structure.

The Housing Dynamics in London

The dichotomies of London's housing structure between private and social housing and their spatial bias towards Outer/West and Inner/East London can be partly explained by the history of London's employment structure in the last few decades (see GLC 1975; Wohl 1977; Slater 1980; 1981). For example, nearly 60 per cent of Greater London's social housing is concentrated in Inner London. The higher rates of social housing concentrated in inner, especially the east parts of, London, are closely related to the employment structure some 20 or 30 years ago. At that time, London had a more balanced employment structure between manufacturing and service jobs: job opportunities in textile factories, furniture workshops, breweries, ship building docks, warehouses and markets were more readily available in the capital city. In Inner and East London, cheap council housing had fulfilled the housing needs for a great number of London's workforce, including immigrants from the North and overseas. Likewise, the commercial centres in the West End and the City of London were surrounded by luxury apartments and the housing developments had gradually extended outwards and westwards to the suburbs with the extension of London's transport system: by moving people more efficiently between the workplace in central areas and their suburban home. In other words, housing structure and employment structures in London used to be more closely related to each other in space and

time. The problem is that while London's employment structure has changed dramatically as a consequence of global economic restructuring, intra-national spatial divisions of labour, and regional employment dynamics, London's housing structure has been relatively slow to change in comparison to the process of London's employment restructuring.

This can be understood in two ways. First, the adjustment mechanism of the housing structure in a region is both slow and inflexible. This is because new house-building may take several years to complete (the whole process of a particular housing development may take even longer than the actual time of construction work, including the time needed for development decision, land acquisition, applying for planning permission, construction, selling/letting, and the actual moving). Second, the space for new and large-scale housing developments in London is relatively limited, in particular in the circumstances that new house-building only accounts for a very small proportion of existing housing stock. It is not difficult to find out that in the last few years London has had the lowest rates of new house-building than other regions in the UK. Between 1983 and 1993, for example, an annual average of 2.1 dwellings were completed per 1,000 population in London, compared to 3.6 dwellings in England as a whole (LRC 1995: 3). The number of new dwellings built in London has declined from almost 34,000 in 1971 to just under 15,000 in 1994 (*ibid.*: 87). Moreover, there has been a dramatic shift in the tenure of newly built dwellings in London. In 1980, local authorities were responsible for 70 per cent of dwellings completed in London. In 1991, the proportion had fallen to just 4 per cent, and by 1994, to under 2 per cent. Consequently, the total number of newly built dwellings in the social housing sector has decreased substantially in London. Given that the number of new dwellings built in London has declined over the years and new house-building in London represents just a tiny proportion of the total housing stock, it seems unlikely that the housing structure in London will be significantly changed in the next few years.

Housing and Employment in London: A Related Issue

The decentralisation of London's employment and population from the densely

developed core of Inner London to areas in the hinterland of a wider London region has had profound implications for an overall structural integration in London. Although the relationship between these two movements, as many have suggested (see, for example, Buck et al 1986; Hall 1989; Allen and Hamnett 1991), is complex, and it is very difficult to generalise about this employment-housing relationship from any single aspect, it is useful to look at the social and environmental consequences of employment-housing disparities (as issues of 'social exclusion' and 'wasteful journeys') from the housing perspective.

Partly because land supply in London is much less elastic, and competition between different types of urban land uses is correspondingly more direct, it suggests a need to look at changes in locational patterns in an area wider than the confines of Greater London. Since the 1960s, the population of Greater London has fallen by 1.5 million mostly as a result of unplanned movement within Southern England (Buck et al 1986: 43). According to Gordon and Vickerman (1982), there were three main streams of population movements: national stream (long-distance movers who were moving to areas beyond the Outer Metropolitan Area, OMA); regional stream (people moving from Greater London out to the OMA); and local stream (short-distance movers who were moving within the borders of Greater London). Although most of Inner London's population loss was attributed to the local stream, it was the regional stream that has been responsible for most of the population loss from Greater London. Generally speaking, in the former case, people were essentially changing houses for additional space; in the latter case, people were essentially changing residential environment and houses (see Gordon et al. 1983). In other words, both the major streams of migration from Inner London and from Greater London as a whole appeared quite unrelated to the decentralisation of employment.

As might be expected, the decentralisation of employment and population in the London region as a whole has reinforced, rather than reduced, the structural mismatches between housing and employment in London. On the one hand, outward moves undertaken essentially for housing and environmental reasons have had a major effect in dispersing labour supply, at least for those groups who were able to make such moves. As Buck et al. (1986: 46) argue, there was little sign that gentrification has significantly reduced the net

outflow of professional or managerial workers from Inner London as a whole. On the other hand, because such moves were closely related to earning levels, it means that the population of Inner London included increasing proportions of those who could secure only poorly paid jobs, and who were effectively trapped in Inner London housing provided by local authorities or housing associations. The effect of inter-area movement in the London region was thus, when compared to the decentralisation of employment in manufacturing (shake-out) and services (spill-over), to increase the relative concentration of less skilled workers in Inner London. Under the overall pattern of decentralisation, accordingly, the consequences of increasing structural mismatches between housing and employment were growing acuteness of 'social exclusion' and 'wasteful journeys'.

However, the real situation might be more complex than it appears to be. For example, Hall (1989: 79) argues that, while people moved out of Inner or Greater London for housing and environmental reasons, many found jobs locally (see also Meadows et al 1988). In some cases this was because these jobs catered for the local population; in other cases, this was because they drew on the local workforce. Accordingly, it forms a complex relationship between employment and housing structures in London that requires an understanding of both structural changes and individual contexts in the London region. Nevertheless, these structural features in housing provision inevitably form a major constraint on households' housing decisions. For example, although the council population (those who depend on council or social housing) in Inner/East London may be well aware of the employment changes in the capital city, a lack of cheap, rented housing in the outer rings of London might force them to stay in council properties in Inner London and travel further afield to work (it is both expensive and inconvenient for the working class to travel a longer distance to work, especially for female and/or part-time workers) or, if not, become unemployed. Similarly, while higher-order service jobs are growing in Central and Inner London, many of the skilled and professional workers are forced to live further afield, especially the first-time buyers, because the dwellings suitable to their needs in terms of residential amenities, environmental quality, and, most importantly, housing prices, are more readily available in the outer rings of London, although they might be quite happy to

live close to work. As suggested, to bridge the structural mismatches between London's housing and employment structures is increasingly dependent on the movements of people in space and time. The problem is that the price for a mobile society is very high. On the one hand, the increased volume and scale of 'wasteful journeys' have created considerable threats to both environmental quality and resource bases. On the other hand, the increasing mobility in some social groups may pose considerable constraints to other social groups who do not have the same degree of mobility — a problem of social exclusion in getting access to job opportunities, housing provision, shopping facilities, and other services and facilities. This is why this thesis is emphasising the importance of urban social sustainability as the underlying causes of environmental sustainability. Unless this internal, social perspective of sustainability is adequately addressed, London is unlikely to achieve a state of sustainable overall development.

Transport: A Bridge or a Barrier?

As argued above, the mismatches between London's employment structure and its housing development have become increasingly enlarged in the last 10 to 20 years due to their inherent structures. These disparities suggest that the daily movements between home and work have become an increasingly important part of London's structural features. People tend to travel more and longer for employment and other purposes, such as shopping and leisure. In some senses, current trends of employment restructuring, housing development, and the enlarged disparities between them are impossible without the support of London's transport system. Nevertheless, the increasing need to travel, for employment and other purposes, has created considerable stress and problems not only for transport infrastructure, but also for those who either live or work in London. This is illustrated by the striking phenomenon of the large-scale flows of work-related journeys and other trips. For example, nearly one-fifth of those who worked in Greater London lived in areas outside London (see Table 4.6). This phenomenon was even more marked in Inner London, where more than half of the working population lived outside Inner London. By contrast, only 12

per cent of those who lived in Inner London actually travelled afield to work, and this figure dropped to just 5 per cent in Greater London (OPCS 1994c). In other words, a transport issue involves a more fundamental concern about the time-space links between daily moments and the time-space connections between different institutional structures, such as between employment and housing structures.

If we look at this issue more closely, it would become clear that gender has also played an important role in the home/work/transportation relations. For example, while only 14 per cent of Greater London's female working population were commuters from areas outside Greater London in 1991, this figure was one in four for male workers, almost twice as high as their female counterparts. This suggests that the time-space connections between different institutional structures cannot be understood only in terms of their time-space relations, but also should be referred to wider social contexts. While the increasing need for movement has been considered as one major obstacle to sustainable development in terms of the threats to environmental quality, economic prosperity, and social equity, it is important to understand the role that a transport system has played in the link between institutional structures.

The scale and structure of London's transport system can be exemplified by some figures: for example, on a typical weekday in 1991, over 20 million trips were made either wholly or partially within the Greater London area between the hours of 07:00 and 21:00 (LRC and DoT 1993). Apart from 4 million trips which were made entirely on foot, there were 16.6 million 'non-walk' trips which used some form of mechanised transport as the means of travel, and almost 10 million of these trips were made by car (see Table 4.7 and Figure 4.11). As far as the purposes of these trips are concerned, over a quarter of the 16.6 million mechanised trips were for the purpose of to and from work, and 15 per cent were for shopping purposes (see Table 4.8 and Figure 4.12). Most work-related trips were made in peak periods between 7:00 and 10:00 am and between 16:00 and 19:00 pm. As might be expected, the growth of these trips, especially those longer-distance trips created by the mismatches between housing and employment structures, is a great challenge to London's transport system. This has profound implications for the co-ordination of everyday life.

**Table 4.6 Resident and Employment Distribution 1991,
The South East and Greater London**

10 % Sample

Residents aged 16 and over economically active, employees and self-employed

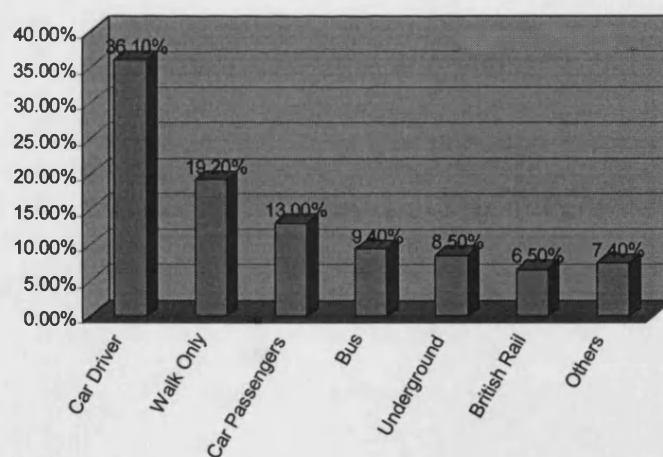
Total resident 16+ employed	Resident Base		Workplace Base	
	Resident and working in area %	Resident in area working outside %	Resident and working in area %	Working in area resident outside %
South East				
Total	99	1	98	2
Males	98.5	1.5	97	3
Females	99.3	0.7	98.5	1.5
Greater London				
Total	95	5	80	20
Males	93	7	75	25
Females	94	6	86	14
Inner London				
Total	88	12	46	54
Males	86	14	42	58
Females	91	9	53	47
Outer London				
Total	62	38	75	25
Males	59	41	70	30
Females	66	34	82	18

Source: OPCS 1994c.

Table 4.7 Forms of Transport Used for Trips in London

Form of transport	Number of trips (000s)	Percentage %
Car driver	7,430	36.1
Walking only	3,960	19.2
Car passengers	2,670	13.0
Public bus/coach	1,940	9.4
Underground	1,750	8.5
British Rail train	1,340	6.5
Other van/lorry	830	4.0
Bicycle	300	1.5
Motorcycle	150	0.7
Taxi	140	0.7
Other bus	100	0.5
All modes	20,610	100%

Source: LRC and DoT (1993, Table 3.3).

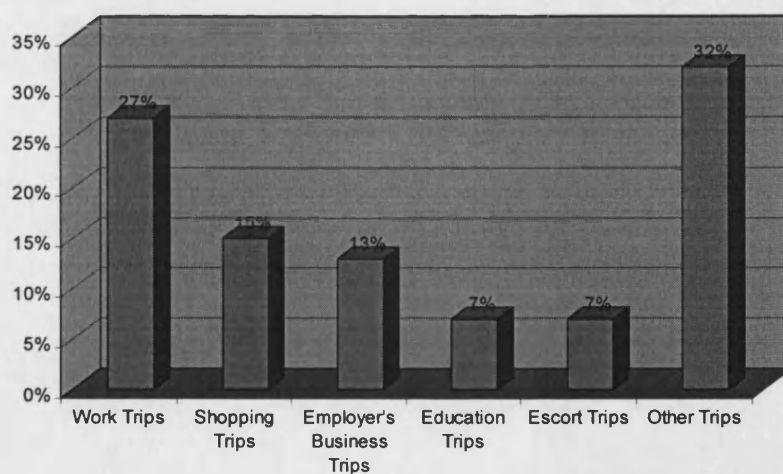
**Figure 4.12 Forms of Transport Used for Trips in London**

Source: OPCS (1993a, Table 3).

Table 4.8 Purpose of Travel in London

Purpose of Trip	Residents %	Non-residents %	All people %
Work trips	27	32	27
Shopping trips	16	6	15
Employer's business trips	11	22	13
Education trips	8	1	7
Escort trips	7	3	7
Other trips	32	36	32
Total %	100	100	100
Total (000s)	13,700	2,100	15,800

Source: LRC and DoT (1993, Table 3.1).

**Figure 4.13 Purpose of Travel in London (Residents + Non-residents)**

Source: LRC and DoT (1993, Table 3.1).

London's Transport Infrastructure: Constraining and Enabling

It may be exaggerated to say that the ways people travel between home and work, as well as the trips for other purposes, are 'determined' by the structure of the transport system; nevertheless, the choice of a particular mode of transport is often constrained by the availability and the capacity of the transport infrastructure. Generally speaking, Central London and Inner London are better served by a denser network of public transport system, including the underground, surface trains, and buses, whereas the transport system in the outer rings of London, including Outer London and RoSE, is dominated by road traffic (the few exceptions are the nodal locations along the main lines of railways and the underground). In terms of the public transport networks, there also exists a slight difference between North and South London: while the north side of the River Thames has a denser and more extended network of the underground system, London south of the River Thames has a less dense underground network, relying mainly on surface trains (see Figure 4. 14). To sum up, the inner rings of London, especially the area north of the River Thames, are more accessible by public transport; the outer rings of London, by contrast, are less accessible by public transport and, accordingly, tend to rely on road transport, especially via the use of private cars, to meet the need of one's daily routine travel.

The pending question is, whether such a transport structure in London can help reduce the disparities between London's housing and employment structures, or it has been the major factor which is responsible for such structural mismatches in the first place? The answer is 'probably both.' On the one hand, due to the convergence of both roads and trains (including Rail and the London Underground) towards the central part of London, it is easier for commuters to get into London to work, or for Londoners themselves to get around within the area. Although people may have to spend some time travelling in order to link the increasingly separated locales of home and workplace, the spatial disparities between employment and housing are largely reduced by advanced transport which has transformed the *spatial* connections between different daily moments into a wider context of *time-space* connections: i.e. via the compression of time and space

between different daily locales. In other words, the continuing growth of the higher-order service jobs in Central and Inner London by importing skilled labour force from its hinterlands is impossible without the help of the current transport structure which has largely reduced the spatial gaps between employment and housing structures. In this view, the spatial disparities between London's employment and housing structures should not be seen as a problem at all, but should be interpreted as a structural linkage of 'time-space compression' that brings together the previously remote and unrelated areas into one extended urban system. Consequently, the issues of decentralisation, suburbanisation, and counter-urbanisation, all should be understood as different manifestations of 'time-space distancing'. On the other hand, while the extension and improvement of London's transport system has eased the functional connections between areas in the extended London region as a whole, the thus created transport structure may become a serious constraint for those who are living 'local lives'. The increased separation between housing and employment structures supported by advanced transportation and communications inevitably makes essential daily movements/travelling longer and more frequent. For those who have difficulties in gaining access to, particularly private, transport, such a transport structure may make housing and employment opportunities less accessible, too. In other words, a lack of mobility creates a lack of accessibility to resources and opportunities.

Although the development of London's transport system has been used to overcome the time-space disparities created by the increasing separation between housing and employment structures, the increasing crowdedness on road and on the trains (especially the underground), as well as the higher rates of unemployment in some Inner/East London boroughs, all suggest that London's transport system is unable to accommodate the growing need to travel resulting from the increasing disparities between housing and employment structures. Some would argue that more roads and railways should be built to channel the time-space disparities between London's housing and employment structures; others would argue that a more fundamental way of channelling the time-space mismatches between London's employment and housing structures is to control the patterns of land use so that the growing pressure on the transport system can be reduced. As might be expected, in

practice both measures are required. While unchecked expansion and unthinking concentration are considered to be inadequate for sustainable development, this thesis argues that a more fundamental issue which needs to be addressed is their implications for the coordination of everyday life. No matter how the institutional structures are co-ordinated, what is important is that the ways that employment, housing, and transport structures are coordinated must facilitate, instead of constrain, the co-ordination of everyday life for the individuals. In this view, it is helpful to understand Londoners' movement patterns and their choice of transport modes.

Modes of Transport and Movement Patterns

Generally speaking, public and private transport equally share the responsibility of moving people between home and work in London. In 1991, for example, public transport served 39 per cent of the work-related journeys for those who both worked and lived in Greater London, whereas private car use accommodated the other 40 per cent of those trips (OPCS 1994c, see Table 4.9 and Figure 4.15). However, public and private transport have played very different roles in Inner and Outer London.

In Inner London, public transport accounted for as high as 48 per cent of work-related journeys for the local-employed population, whereas private car represented just 24 per cent. In Outer London, by contrast, only 17 per cent of those who both worked and lived in the area used public transport, but as high as 55 per cent of them used private cars. As might be expected, people's choice of transport methods for work trips is by and large in accordance with London's transport infrastructure: public transport for Inner London and private cars for Outer London.

The structural features of London's transport system can also be illustrated by the transport habits of London's commuters. In Greater London as a whole, public transport (mainly the Rail) and private car use represented 45 per cent and 51 per cent of the total inwards journeys respectively. But car trips dominated outward commuting, representing 80 per cent of the total work-related journeys made by those who lived in Greater London,

Table 4.9 Means of Transport (resident area and workplace)**(a) Greater London**

Persons aged 16 and over – employed and self-employed

10% sample

	British Rail train %	Underground train %	Bus %	Car Driver %	Car Passenger %	Motor cycle %	Pedal cycle %	On foot %	Other %	Not stated %	Work at home %
Resident and working in area	11	16	12	36	4	1	2	10	1	3	5
Males	11	16	8	43	3	2	3	7	1	3	5
Females	11	16	16	28	5	-	2	14	-	3	5
Working in area resident outside	38	4	3	48	3	1	1	1	-	1	
Males	37	4	2	52	2	2	1	1	-	1	
Females	42	5	5	38	6	-	-	1	-	1	
Resident in area working outside	8	2	4	76	4	1	1	2	1	2	
Males	8	2	3	78	3	1	1	1	1	2	
Females	9	2	6	70	6	-	-	3	1	2	

Table 4.9 Means of Transport (resident area and workplace) — *continued***(b) Inner London**

Persons aged 16 and over – employed and self-employed

10% sample

	British Rail train %	Underground train %	Bus %	Car Driver %	Car Passenger %	Motor cycle %	Pedal cycle %	On foot %	Other %	Not stated %	Work at home %
Resident and working in area	8	24	16	22	2	1	3	14	1	4	6
Males	8	24	12	28	2	2	4	10	1	4	6
Females	8	24	20	15	3	-	2	17	1	3	6
Working in area resident outside	44	20	4	26	2	1	1	1	-	1	
Males	43	17	3	32	1	2	1	1	-	1	
Females	46	25	6	17	4	-	-	1	-	1	
Resident in area working outside	12	12	13	51	4	1	2	3	1	2	
Males	12	12	9	56	3	1	2	2	1	2	
Females	13	12	20	43	5	-	1	4	-	2	

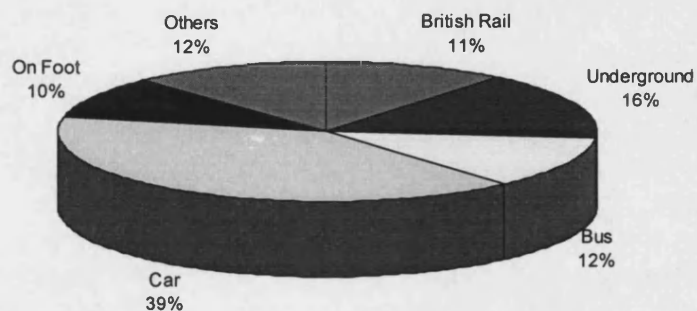
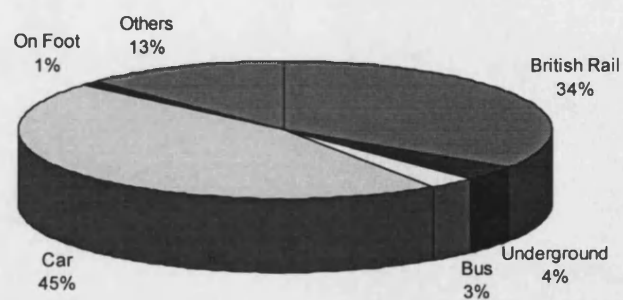
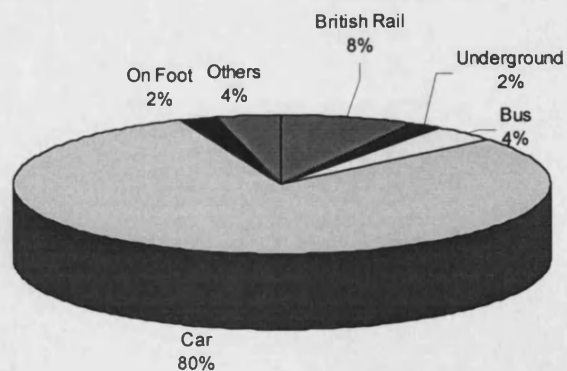
Table 4.9 Means of Transport (resident area and workplace) — *continued***(c) Outer London**

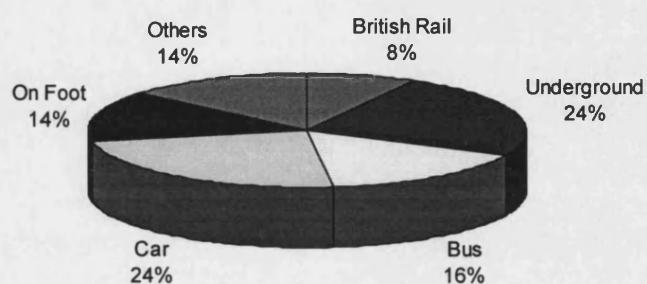
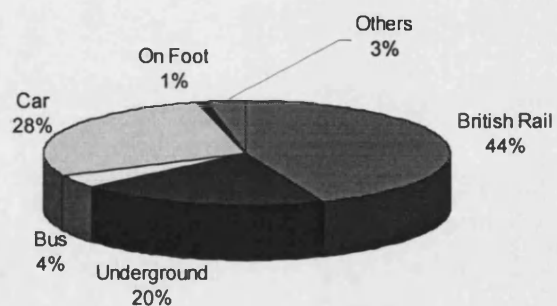
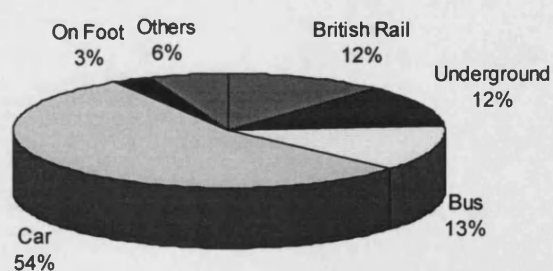
Persons aged 16 and over – employed and self-employed

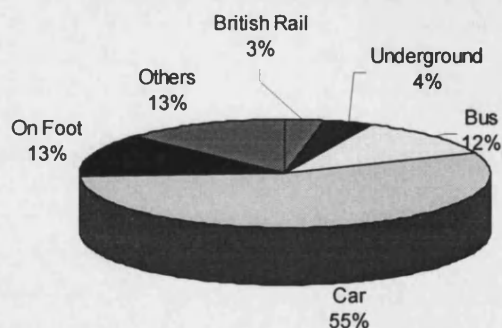
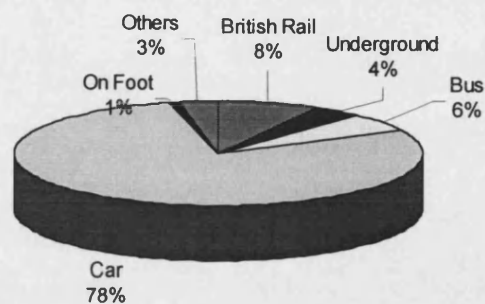
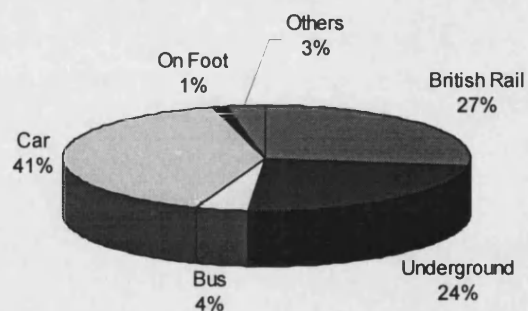
10% sample

	British Rail train %	Underground train %	Bus %	Car Driver %	Car Passenger %	Motor cycle %	Pedal cycle %	On foot %	Other %	Not stated %	Work at home %
Resident and working in areas	3	4	12	50	5	1	2	13	1	3	6
Males	4	4	8	58	4	2	3	8	1	3	6
Females	2	3	17	41	7	-	2	18	-	3	6
Working in area resident outside	8	4	6	74	5	1	1	1	-	1	
Males	8	3	3	78	3	2	1	1	-	1	
Females	8	5	10	65	8	-	1	2	-	1	
Resident in area working outside	27	24	4	37	3	1	1	1	-	1	
Males	25	21	3	44	2	2	1	1	-	1	
Females	31	29	6	27	5	-	-	1	-	1	

Source: OPCS 1994c

(1) Resident and Working in Area**(2) Working in Area, Resident Outside****(3) Resident in Area, Working Outside****Figure 4.15 Means of Transport — (a) Greater London**

(1) Resident and Working in Area**(2) Working in Area, Resident Outside****(3) Resident in Area, Working Outside****Figure 4.15 Means of Transport — (b) Inner London (continued)**

(1) Resident and Working in Area**(2) Working in Area, Resident Outside****(3) Resident in Area, Working Outside****Figure 4.15 Means of Transport — (c) Outer London (continued)***Source: OPCS 1994c*

but worked outside the area. In Inner London, public transport served as high as 68 per cent of the inward commuting needs, while car journeys accounted for just 28 per cent. By contrast, only 37 per cent of the outward commuters used public transport, but car journeys represented 55 per cent of outwards work-related journeys. This confirms that transport infrastructure has significant influence on the choice of transport modes.

However, there also exists a gender difference in the choice of transport modes. Generally speaking, men tend to use private cars more frequently and women tend to rely on public transport. For example, nearly half of the male workers who both lived and worked in Greater London drove to work, but only one third of them used public transport. Travel by bus was especially disliked by male workers. By contrast, 43 per cent of the female workers in Greater London used public transport, but only a third of them drove to work. The only exception was the outward commuters: while private car dominated the outward commuting, driving was as common for women as for men. This suggests that behind the patterns of transport modes, there are other social contexts which are as important as the constraints of transport infrastructure. In geometry, the nearest distance between any two points is the straight line connecting them. In real daily life, by contrast, those factors behind the most obvious constraints, such as the transport infrastructure and the time-space disparities between employment and housing structures, are also crucial to the choice of transport modes. While the issue of reducing the need to travel has been elected as one of the top agendas in sustainability debates, it is not just the scale, patterns, and modes of transport which are relevant to the time-space connections between institutional structures, what is also important are the social contexts and household dynamics behind transport decisions. Accordingly, what is at issue are the interconnections between the actual patterns of movements connecting employment and housing structures and the social contexts embedded in the practices of daily movements. In other words, the time-space connections between employment, housing, and transport are an integrated issue which not only involves the overall patterns of institutional structures at macro level, but is also closely related to a more fundamental concern about the coordination of different daily moments at micro level.

Transport in London: Divided and Dividing

To sum up, the overall structure of London's transport system can be characterised as 'a city of two territories': public transport for Inner and private transport for Outer London (see Department of Transport et al 1989; Organisation for Economic Cooperation and Development 1988; London Strategic Policy Unit 1987b; Barker 1990). This is exemplified by London's transport infrastructure and the actual modes of transport adopted by those who either live or work in London. In this regard, London's transport structure has bridged the increased spatial disparities between London's employment and housing structures by transforming the employment-housing-transport connections into a matter of time-space channelling, i.e. to compress the time-space frictions between institutional structures via an advanced transport system which has compensated longer distances with shorter travelling times. Having said that, however, this thesis argues that current transport systems and practices in London have reinforced the time-space disparities between employment and housing structures: increasing mobility has become a necessary part of everyday life. Nevertheless, increasing mobility has costs and takes time. For those who have difficulties in coordinating a more fragmented life, a lack of mobility means a lack of the very accessibility to resources and opportunities. As might be expected, it is the disadvantaged groups, such as the poor, the less skilled, women, part-time workers, and the like, who are more likely to be less well-off in a highly mobile society (see Focas 1985; Labour Party 1991; GLC 1985; Grieco et al. 1989). Although the transport system in London is both economically viable and structurally logical in terms of moving people between the locations of home and work, it is the environmental and social consequences that make London's transport structure problematic and unacceptable. For example, the growth of longer-distance and orbital journeys to work (the issue of mobility) to and from the outer rings of London suggests that a growing number of people are dependent on the 'wasteful journeys' to link home and work; on the other hand, the increasing rates of unemployment in some Inner/East London boroughs (the issue of a lack of mobility) suggest that some people are facing difficulties in getting access to suitable transport to link

the increasingly separated domains of employment and residence.

Moreover, although London's transport infrastructure suggests that the public transport is adequate for the trips made within or towards the inner rings of London and private transport is more convenient for trips made around or towards the outer rings of London, not all the trips made in London coincide with this transport infrastructure. In many cases, people may choose, or to put it more precisely, are forced, to use alternative modes of transport which are obviously in opposition to London's transport structure. For example, in 1991 nearly 30 per cent of male workers who both worked and lived in Inner London drove to work and one in five women, who also both worked and lived in Outer London, had to use public transport, in particular buses, to move between home and work (OPCS 1994c). As might be expected, this creates considerable pressure for both individuals and the transport system generally. Even for those work-related journeys which are in accordance with London's transport structure, the increasing need to travel in London, in terms of number and distance of trips, has made travelling between home and work an increasingly stressful moment in one's daily routine, being more bearable than enjoyable (London Regional Transport 1985; Glaister and Travers 1993). In this context, London's transport structure is increasingly unable to cope with Londoners' transport needs. Therefore, the issue of transport cannot be discussed in isolation, as the issue of mobility *per se*, but should be linked to other institutional structures as an integrated issue of accessibility to resources and opportunities (see Glaister 1991; LPAC 1996). As might be expected, the issue of accessibility involves not only the quantitative parities between institutional structures, such as the distances and times required to move between locales, but also social and household contexts which affect the time-space configurations between institutional structures. This thesis argues that to see employment, housing, and transport issues as an integrated whole is necessary, but insufficient. Rather, their interconnections should be explored via the contexts of household life on the grounds that these routinised practices of day-to-day life are the constitutional essentials of institutional structures.

Retailing and Consumption in London: A Changing Regime

As argued earlier, the employment restructuring in London can not be fully understood with reference only to the influences of global economic restructuring. Rather, there also exists an indispensable dimension of local economy relating to consumption. This is because a city-led global production system cannot be sustained without an adequate input from the labour force; and, in turn, the maintenance of an efficient local labour market must rely on the reproduction of the labour power — the issue of consumption.

The interplay between a local economy and the reproduction of local labour force can be illustrated by London's retailing structure. As Bromley and Thomas (1993: 2) argue:

The contemporary city is to a substantial degree articulated in relation to retail facilities, and this has important consequences for the nature of city growth and associated opportunities and constraints for urban planning. . . . since the vast majority of the population is involved in some direct or indirect way with shopping activities.

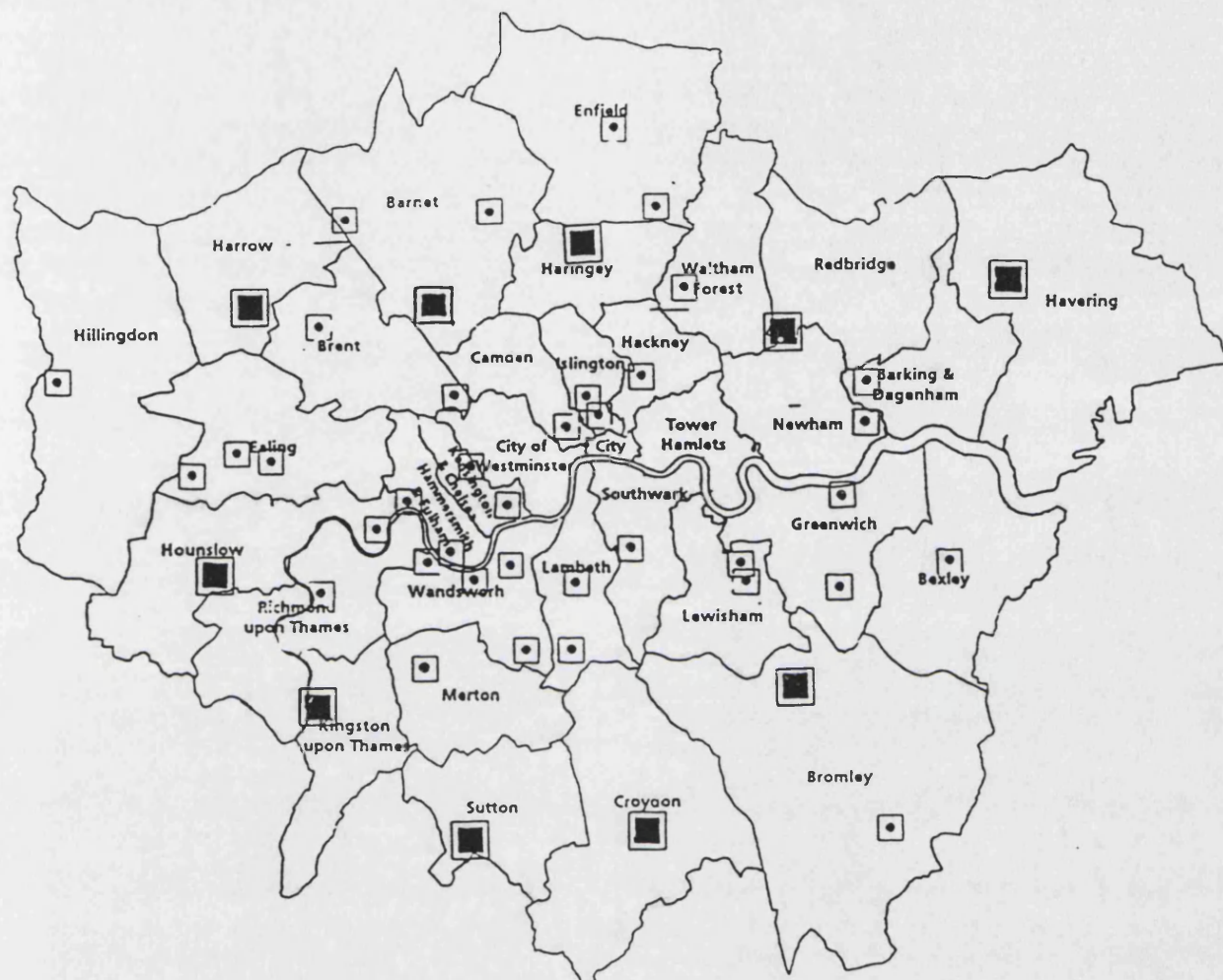
In other words, retailing structure and shopping practices are the interface between the domain of time-space distanced practices of global production system and the domain of time-space routinised practices of local consumption activities. While retailing functions provide a necessary channelling between the production system as a whole and the daily consumption needs of the individuals, retailing practices also illustrate the close linkages between employment, housing, and transport structures: they are different aspects of a same issue — a time-space interconnection between different daily moments. As long as the central theme of the empirical investigation of London's institutional structures is focussed on the time-space relations between productive and reproductive activities in the contexts of global-local connections, to explore the changing characteristics of London's retailing structure can demonstrate the time-space relations between London's employment and housing structures, as well as the role of the transport system in linking different urban institutions. As mentioned earlier, cutting the need to travel is at the top of the agenda in sustainability debates; given that shopping trips, apart from work-related journeys, have

been the second largest category of daily movements in London (LRC and DoT 1993), the growing scale of shopping trips itself represents an important dimension of London's institutional structures.

London's Retailing Centres

One of the defining characteristics of London's retailing structure is that it is comprised of a loose network of retailing centres which both compete with, and complement, each other. London is not a single place that characterises many small towns and cities; rather, London is in effect comprised of hundreds of places with different functions and varied extents of catchment, ranging from places with national and international significance, such as the West End, to smaller local communities that even many Londoners themselves are not familiar with. Accordingly, London's retailing structure is very different from those of metropolitan cities or small towns where the shopping needs in a nearby area are usually served by one or two major centres. In other words, the retailing structure in London is an interwoven network of shopping centres with varied degrees of catchment. Due to their spatial proximity, these retailing centres both compete with, and complement to, one another in providing goods and services to both Londoners and visitors.

The unique character of London's retailing structure as a web of retailing centres can be understood more easily by classifying these centres into hierarchies with different functions and varied extents of catchment, rather than treating them as an undifferentiated whole. For example, based on the amount of comparison and convenience shopping and the presence of multiple-chain stores, the London Planning Advisory Committee (LPAC) divides London's shopping centres into five categories: one *international/national centre* in Central London; 10 *metropolitan centres* in an approximate ring around Outer London; 38 *major centres* distributed more or less evenly around Greater London; at least 150 *district centres* for food and other convenience items; and 32 *out-of-town centres* (URBED et al. 1994, see Figure 4.16). As might be expected, behind the spatial distribution of these



■ Metropolitan Centres

◼ Major Centres

Figure 4.16 London's Retailing Centres

Source: URBED et al. (1994:54)

retailing centres, there have been some major changes in London's retailing structure in the last twenty years or so. First, there have been changes in ownership patterns which led to the growth of large national and international corporate retailers — the multiple chains — at the expense of smaller, independent, and more local operations. Second, this is related to the first point, there has been a trend of retailing decentralisation, with major retailing facilities moving out of in-town locations and towards out-of-town locations. Third, among the trends of retailing decentralisation and capital concentration, a trend of 'retailing gentrification', though less obvious, is also observed in the capital city. While retailing practices are seen as a unique manifestation of employment-housing-transport interconnections, to understand the major changes in London's retailing structure can help highlight different perspectives of the time-space dynamics between different institutional structures.

Multiple Chains and the Capital Concentration in Retailing

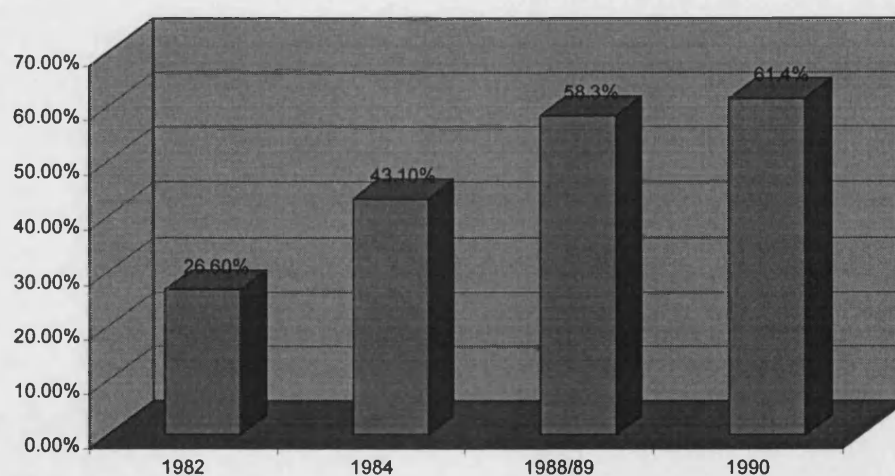
In the 1970s and 1980s there have been some dramatic changes in British retailing that is characterised by the 'retail revolution' sweeping through Britain (see Bianchini et al. 1988; Worpole 1992). One of the most notable trends in Britain's 'retail revolution' has been towards concentrating commercial power in the hands of a relatively small number of corporations and the continuing growth of large multiple chains (O'Brien and Harris 1991). Worpole (1992: 18) observes that between 1960 and 1989 the multiple chains have increased their share of the total retail sales in Britain from 33 per cent to 80 per cent, occupying not only the lion's share of the floorspace in the high streets but also accounting for a large share of the floorspace in out-of-town shopping centres. The dominance of the multiple chains is most obvious in bulky household shopping and, in particular, grocery shopping. According to Wrigley (1993: 41), between 1982 and 1990, the market share of the top five grocery retailers increased from under 30 per cent to 61 per cent of the national sales (see Table 4.10 and Figure 4.17). The net results of this trend have been a decrease in the number of shops and a growth of the average size of retail

Table 4.10 Top Five British Grocery Corporations*

	%			
	1982	1984	1988/89	1990
J Sainsbury's	9.5	11.6	14.5	16.3
Tesco	8.7	11.9	14.8	15.7
Argyll Group	3.8	5.1	9.7	11.2
Asda	4.6	7.2	7.9	10.4
Dee/Gateway	n.a.	7.3	11.4	7.8

* Estimated shares of total grocery sales

Source: Wrigley (1993: 44)

**Figure 4.17 The Market Shares of Top Five British Grocery Corporations**

Source: Wrigley (1993: 44)

floorspace. As might be expected, this has taken place at the expense of smaller and independent shops (Burke and Shackleton 1996; Wrigley 1993).

Such trends are as marked in London as in the rest of the UK. The retail landscape in London is now dominated by multiple chains that are characterised by many of the high-street brands. As a consequence of their dominance, the shopping environment has become increasingly homogeneous throughout London. In town centres, not only the high streets are becoming almost indistinguishable from each other. In enclosed shopping centres, where careful management is strictly required to assure the assembly of a balanced tenant mix, the same shop names feature prominently. In out-of-town locations, the same process is undergoing with superstores and retail parks becoming comprised of a predictable set of retailers whose premises are only too familiar in appearance.

The dominance of multiple chains in retailing has profound implications. On the one hand, while retailing is considered as an important interface (circulation and exchange) between the production and the consumption of goods and services, the dominance of multiple chains in retailing suggests that when the process of 'mass production' has gradually been replaced by the process of 'flexible accumulation' in the global production system, a process of 'mass distribution' is underway in retailing: the 'dis-embedded practices' of production and circulation in the processes of capital concentration have overcome the time-space constraints inherent in the 'embedded practices' of daily exchange and consumption. In other words, the capitalist production system as a whole has extended further in time-space in order to get closer to the consumers. In this view, shopping and consumption in London have become more localised: people no longer have to travel a longer distance to certain locations and/or at certain times in order to get certain products and services by virtue of the mushrooming of the multiple chains. People can have a greater scope of choice about the places, times, frequencies, and modes of transport for their shopping trips. However, a serious problem associated with the increased concentration of capital in retailing (i.e. the growth of multiple chains) has been the consequences of a spatial re-organisation of London's retailing structure: i.e. the decentralisation of London's retailing provision.

The Decentralisation of Retailing Provision in London

The decentralisation of London's retailing provision is characterised by a continuing, though slow, decline of traditional town centres and a fast growth of out-of-town³ shopping facilities (Westlake and Dagleish 1990: 118). The shares of the out-of-town locations in total retail spending rose sharply in the late 1980s; by contrast, traditional high street locations saw their market share decline.

The decentralisation of retailing facilities has led to different forms of development in the outer rings of London, including superstores, hypermarkets, retail warehouses, retail parks, and out-of-town regional shopping centres. Schiller (1987), for example, in reviewing the recent history of out-of-town shopping developments in the UK, detects three main 'waves' of out-of-town developments. The first wave involved food, and other groceries; the second wave involved bulky goods, such as DIY, carpets, furniture, larger electrical items and garden centres; and the third wave involved clothing and other comparison shopping. In London, however, retailing decentralisation is more apparent in convenience and household goods, large-scale out-of-town shopping centres seem not as influential in London than in other metropolitan cities. London's traditional town centres remain the major locations of retailing provision for comparison goods and, in particular, leisure and entertainment services.

This has much to do with London's housing and transport structures, as well as the changing relationship between home and work (see Bradley 1975; Mann 1977; Family Policy Studies Centre 1986; Foot 1988; Whitelegg 1995; Falk and Campbell 1997). On the

³ The term 'out-of-town' should be clarified. Some authors (for example, Thorpe and Kivell 1971) regard a suburban or fringe suburban centre as 'out-of-town'; others (for example, Davies 1978) make a clear distinction between 'out-of-town' (occupying greenfield sites) and 'edge-of-town' (usually on the edge of large housing estates) developments. For Gayler (1984) and Hillier Parker (1991), an out-of-town centre is one that does not fit either the traditional or planned retail hierarchy of town centre, district centre, neighbourhood centre and small groups of shops. In order to avoid unnecessary confusions, this thesis sees both out- and edge-of-town developments as 'out-of-town'; and the term 'edge-of-town' is used to represent the location which is immediately adjacent to town or city centre.

one hand, while the boundaries of London, as a daily urban system, have gradually stretched into its hinterlands in RoSE and merged with adjacent towns and villages, not only people's home are increasingly separated from their workplace in the nodal locations of town and city centres, the residential areas have become more widely spread, too. Moreover, the changing relations between employment and residence have also resulted in life-style change of the households, including their shopping practices (see Hewitt 1993; Lechner and Creedon 1994; Lee et al. 1994; Nippert-Eng 1996). As might be expected, the shopping needs of the suburban households can no longer be met by the retailing facilities in in-town locations; the opening of more localised shops is inevitable. In other words, the shift of population to the suburbs represents the decentralisation of the 'effective demand' for shopping facilities that has important knock-on effects on London's retailing structure. Moreover, when the mobility of suburban households has increased substantially due to the growth in car ownership, the dualistic structure of localised corner shops in the residential areas and concentrated market-places in in-town locations that is characteristic of the traditional retailing structure, is seriously challenged by the growth of one-stop, large superstore at locations which are neither truly localised nor centralised. People's shopping practices have changed considerably in order to accommodate the changing relationship between home and work, in particular when an increasing number of women have joined the labour market. Accordingly, many large multiple chains, in particular in grocery retailing, are seeking larger floorspace in order to fulfill customers' increasing needs for large, one-stop stores (the economies of scale). As might be expected, this has become more difficult in in-town locations partly because of the limited supply of land in town centres and partly because land costs are much higher in in-town locations. As a result, out-of-town retail developments have increased rapidly.

Although the majority of out-of-town retail developments lie somewhere along a size continuum ranging from individual freestanding superstore through to large retail parks, there are a few examples that are in a different category altogether. They are the so-called regional shopping centres, varying in size from 70,604 square metres (760,000 square feet) to 167,200 square metres (1.8 million square feet) (O'Brien and Harris 1991: 104).

As befitting their position at the top of the out-of-town continuum, regional shopping centres have all been strategically located on major route ways so that they can draw from the largest possible catchment. The first of these was Brent Cross Shopping Centre, opened at Hendon, North London in 1976. It benefits from the proximity to both the North Circular Road and the southern end of the M1 motorway. Similarly, the Lakeside Shopping Centre was constructed close to the M25 at Thurrock. Being the largest of the out-of-town developments, it is not surprising that regional shopping centres would contain the greatest variety of shops. Not only do the tenants consist of multiple chains that have come to be firmly associated with an out-of-town location, for example, *B&Q*, *Comet*, *MFI* and *Sainsbury's*, but also a wide selection of the major high street names such as *Marks and Spencer*, *BHS*, *C&A*, *Habitat* and *Next*. Increasingly, the incorporation of leisure facilities such as bowling alleys, multi-screen cinemas, ice rinks and restaurants in the out-of-town centres has presented a formidable threat to the established high streets in towns. They can be regarded as London's new city 'centres' which are not at the geographic centre of London but are gradually becoming the 'centre of gravity' to many Londoners' shopping trips. Although a hostile attitude towards out-of-town retailing development and a defence of the city centre as the top position in the retail hierarchy has been central to British planning since the postwar period, the relatively slow-to-develop suburban superstores and out-of-town shopping centres have reflected the demands of the decentralised suburban population in a highly mobile society.

This does not mean that the high streets and in-town shopping facilities have disappeared all together, but their role in shopping provision has changed. Partly due to the established privileged positions of London's town centres, in particular the West End and larger metropolitan centres, in the provision of comparison goods and other leisure and entertainment services, and partly due to a denser network of a (public and private) transport system in London, London's town centres continue to be of major importance in retailing provision, especially for comparison goods.

In other words, there has been a major spatial differentiation in London's retailing structure between the decentralisation of grocery retailing and the continuing concentration

of comparison shopping in in-town locations, rather than a simple trade-off between the growth of out-of-town shopping facilities and the decline of in-town shopping facilities. Such trends have illustrated how the retailers, backed by capital and consumers, are fighting against the dominance of central locations in the competition for urban space (Gayler 1989). Moreover, these trends also reflect a more fundamental issue concerning the changing contexts of people's daily lives: changing shopping practices are not an isolated issue, but involve a complex interconnection between employment, housing, and transport structures.

Retailing Gentrification

Although the retailing structure in London has shown a continuing move towards large retail outlets and off-centre locations, there is no shortage of examples of 'retail gentrification' which have brought retail developments back to smaller shops and in central locations. The best known example is Covent Garden in Central London. At Covent Garden, over three hundred years of wholesale fruit, flower and vegetable trading ended in 1974 when the Market Authority sold the site to the Greater London Council (GLC) for £6 million. The buildings were later converted into small shops, galleries and workshops and were reopened for business in 1980 (O'Brien and Harris 1991). Similar developments could be found in other locations, such as Tobacco Dock and St. Katherine's Dock, but with varied degree of success. By virtue of their specialist nature, most gentrified shops do not aim to meet the needs of daily shopping, but to offer a leisurely and recreational shopping experience in a pleasant environment.

However, a similar, though in quite different contexts, process of retailing gentrification has also been observed in grocery retailing. After nearly two decades of decentralisation and expansion, i.e. the average size of stores is inexorably growing and the opening of new shops is moving away from in-town locations, some of the largest supermarket chains have begun to open smaller stores, especially in Central London and traditional high streets. For example, *Tesco* has successfully opened their new 'Metro' stores (with smaller floorspace and, most importantly, with no parking space) in places like

Oxford Street, Covent Garden, and other high-street locations. The purpose of these shops is to serve the daily shopping needs of down-town employees, metropolitan area shoppers, inner-city residents, and tourists — the ‘transit population’. They tend to buy fewer and smaller items. In fact, large food multiples like *Marks and Spencer* have been very successful in appealing to the downtown working population by providing high-quality prepared and ready-to-eat food. This suggests that the role of city centres in serving the shopping needs for food and other basic items has changed in some perspectives: apart from serving the shopping needs of the shrinking local customers (who may shop in larger supermarkets at out-of-town or edge-of-town locations), these gentrified stores are increasingly focused on the shopping needs of the ‘transit population’. Office and commercial developments tend to include in its ‘bowels’ some combination of retailing facilities. The much vaunted Canary Wharf in Docklands is an example of this. Along with the decentralisation of shopping facilities into larger floorspace and towards out-of-town locations, the trend of retailing gentrification suggests that these institutional changes have much to do with the changing contexts of people’s daily practices. As might be expected, they are more complex than the concepts of retailing hierarchy and the trade-off between in-town and out-of-town retailing have suggested.

Consumption and Retailing in London: The Local Affair Transformed

The decentralisation of London’s retailing structure suggests that retail developments in London have by and large coincided with the trends of London’s housing structure, the changing relationship between employment and housing structures, as well as the structure of London’s transport system. Things like suburban housing developments, increasing numbers of two-earner households, the growth of car ownership, are all in favour of the development of larger, and out-of-town shopping facilities. For example, a comparison of supermarket sites in London shows that of journeys to a free-standing Outer-London site, 95 per cent were made by car and only three per cent were made on foot; while journeys to an Inner-London site, 33 per cent were by car and 50 per cent on foot (Shaw

1992, cited in Raven and Land 1995: 10). The heart of the matter lies in that not every household can have equal access to a car, and the somewhat free-standing locations may be remote to the locations of residence, especially for inner-city households. In 1991, for example, 40 per cent of the households in Greater London had no access to private car at all (OPCS 1993a). In some Inner London boroughs, more than half of the households had no car (for example, Hackney 61.7 per cent, Tower Hamlets 61.6 per cent, Islington 59.9 per cent, Southwark 58.0 per cent, Westminster 57.7 per cent, Camden 55.8 per cent, Lambeth 55.4 per cent, Newham 53.3 per cent, Hammersmith 52.0 per cent) (Forrest and Gordon 1993: 21). While the decentralisation of London's retailing structure has brought great benefits to households in terms of greater choice, lower prices and better shopping environments, it has also created some inequalities in shopping opportunities for the disadvantaged and neglected groups. These are low-income families, women, ethnic minorities, the elderly and the disabled, all of whom share the common characteristic of low mobility. It has been argued that positive steps must be taken to encourage people to travel by public transport to the town centre, rather than by private car to the out-of-town shopping centre (House of Commons, Environment Committee 1994); the problem is that households' shopping practices have changed substantially and the role of traditional town centres in retailing provision is no different by virtue of the changing relations between employment, housing, and transport practices. Although the central locations of traditional town centres are more accessible by public transport and town centres normally have wider catchment areas, if no significant changes are to happen to other institutional structures, it is unlikely that the retailing structure in London will return to the concentrated pattern of in-town development.

Nevertheless, while arguing that retail changes have much to do with the changing practices of daily consumption, the decentralisation of London's retailing structure also has significant employment implications. Given that retailing represents a significant category of employment, a considerable number of job opportunities, in particular, the less skilled service jobs, have been removed from the nodal locations and been replaced in free-standing locations. This is exemplified by the decline of employment in retail distribution

in Inner London and the continuing growth of these jobs in Outer London and RoSE (see Department of Employment, 1983-1993). As might be expected, a considerable proportion of such jobs are for female and/or part-time workers (Townsend 1986; Watson 1992). Sparks (1992) observes that women account for about 62 per cent of the workforce in British retailing. Although many Inner-London workers are willing to take the jobs created on the fringes of London, transport problems and the time-space constraints for household responsibilities (usually for women), have imposed considerable constraints on their employment choice. To understand retailing changes, one must take into account the changes in other institutional structures. As far as their time-space connections are concerned, employment, housing, transport, and retailing should be understood as an integrated issue: changes in any institutional structure unavoidably impinges on other institutional structures. While their interconnections suggest the need to co-ordinate the various institutional structures in London, the dynamic and multifaceted characteristics inherent in these institutional structures also suggest that we have to explore deeper for a connection to bridge the time-space disparities between institutional structures. As the next two chapters will demonstrate, this integration requires insights from both macro and micro perspectives.

Conclusions: An Integrated Issue of the World City Divided

Throughout its history, London has never stopped changing. However, the pace and scale of changes were most prominent in the last two centuries, in particular in the second half of the twentieth century. This is illustrated by the continuing expansion of London's boundaries: from a 'pedestrian city' at the turn of the century, to a functional region stretching out tens of miles in the late twentieth century. Although a ring of Metropolitan Green Belt has been designated around London to restrict the expansion of London's built-up areas, economic growth and social changes, via advanced transportation and communications, in reality little respect is shown to these physical buffers. In this sense, a more appropriate spatial definition of London should be the functional/regional

boundaries as a daily urban system: the extended London region. In other words, the expansion of London's boundaries is not only illustrated by the scale of the built-up environment but also by the increasing connections of different institutions between London and its hinterlands. This is exemplified by the increased number and distance of journeys to work and elsewhere.

Unlike Victorian and Edwardian London where job opportunities were mainly taken-up by the labour force from the immediate adjacent areas when the transport system was by and large a major constraint for importing labourers from areas further afield, 'post-industrial' London in the late twentieth century is increasingly dependent on importing labour force from the hinterlands further afield since a modern transport system has facilitated the links between in-town jobs and suburban labour supply. While the growing scale of transport has been viewed as a major threat to sustainable development, in terms of its adverse effects on environmental protection, resource conservation, and social cohesion, this thesis argues that the transport issue cannot be dealt with in isolation, but should be understood as an integrated issue relating to the time-space connections between institutional structures.

As mentioned earlier, industrial capitalism and urbanisation have created a time-space friction between productive and reproductive activities. This can be illustrated by the institutional changes in London's employment, housing, retailing, and transport structures. Under the capitalist mode of development, these institutional structures exhibit very different patterns of development on the grounds that they are subject to very different categories of influences and, most importantly, are directed by a very different logic of development. Accordingly, the time-space disparities between institutional structures have increased considerably in last few decades.

Firstly, the processes of London's employment restructuring suggest that there has been an overall pattern of dispersed development in London's employment structure in the last 20 years or so: i.e. a combination of the 'shake-out' of manufacturing jobs and the 'spill-over' of service jobs. This has been referred to as the process of de-industrialisation in the capital city. Secondly, compared to the changes in employment structure, the housing

structure in London has shown a very different pattern of development. On the one hand, while many manufacturing jobs have been ‘shaken out’ of London in the processes of employment restructuring, the more affordable social housing, in particular the rented accommodation provided by local authorities, tends to concentrate in Inner London, especially in East London. On the other hand, although higher-order service jobs continue to grow in Central and Inner London and gradually ‘spill over’ to the outer rings of London, owner-occupied and private housing is more readily available in the outer rings of London. Moreover, there has been a quantitative mismatch between housing stock and job opportunities in London: job opportunities outnumber housing stock in Inner London, and housing stock outnumbers job opportunities in Outer London and RoSE. In other words, there are considerable disparities between London’s employment and housing structures, both qualitatively and quantitatively. The consequences of these disparities are an increasing number of, in particular longer-distance, work-related journeys within London and between London and its hinterlands, as well as higher rates of unemployment in some Inner/East London boroughs.

To some extent, these structural disparities have been narrowed by the advance in transportation and communications in general and by the growing capacity of London’s transport system (both public and private transport) in particular. However, the structural features of London’s transport system, although quite ‘sustainable’ in their own right, seem unable to cope with the increasing need to travel for different social groups. To put it more precisely, London’s transport structure has reinforced the time-space disparities between employment and housing structures.

The overall structure of London’s transport system is characterised by a division between public and private transport in Inner and Outer London: movements within and into Inner London are better served by the public transport, whereas movements around and out to Outer London tend to rely on private car use. As might be expected, the consequences of both ‘over-mobility’ and ‘a lack of mobility’ have been on the top of environmental and social agendas. On the one hand, the growing volume and distance of work-related journeys has created substantial threats to both the environment, in terms of

the generation of pollution and the waste of energy, and the quality of life, in terms of the increased cost, and time, in the co-ordination of different daily moments. On the other hand, the inability of certain social groups, notably the disadvantaged groups such as women, ethnic minorities, the poor, and the less skilled, to gain access to suitable transport and therefore to employment and housing opportunities, has resulted in the issue of 'social exclusion' with serious social and economic consequences. In other words, transport structure both influences, and is influenced by, other institutional structures. Accordingly, the structural imbalances between London's employment, housing, and transport structures are an integrated issue that cannot be properly understood within individual sectoral boundaries.

The interwoven characteristic of structural connections between urban institutions can be further illustrated by the changing regime of London's retailing structure. While the retailing structure in London is characterised by a loose network of retailing centres which both compete with and complement each other, there have been some consistent trends of decentralisation of shopping provision and concentration of capital in multiple chains — i.e. moving away from smaller, independent shops in in-town locations towards larger multiple chains in out-of-town locations. As might be expected, these changes have much to do with London's employment restructuring, housing structure, and transport system. On the one hand, retail development has changed considerably to accommodate the changing practices in employment, housing, and the employment-housing connection (i.e. transport). On the other hand, retail developments in London also have had significant transport and employment implications.

The inter-related characteristic of London's institutional structures suggests that an integrated, holistic approach is required to co-ordinate the increasing disparities between London's employment, housing, retailing, and transport structures. As might be expected, an effective regional planning for London is seen as necessary. For example, Hall (1989: 200-204) argues that under a wider regional framework of planning, London should develop into a polycentric city for work, and into a variety of places to live in. To realise this vision, Hall adds that the entire London region must be connected by a transportation lattice which

will enable people to get from any node to any other, quickly and convenient. So people would have choice: choice to work near home, or choice to commute if the job were worth while. This planning perspective is the issue I will turn to now.

CHAPTER FIVE

PLANNING FOR SUSTAINABILITY: THE URBAN CHALLENGE

The aim of the chapter is to examine the relationship between urban social sustainability and the co-ordination of institutional structures in London via a discussion on the policy of the British government's sustainability strategy, in particular via the practices of urban planning. It emphasises the mediation of formal institutions in shaping the structural links between London's employment, housing, retailing, and transport structures. This dimension is important on the grounds that the British government's policy response to the sustainability challenge is characterised by an overriding concern about environmental sustainability (see DoE 1990), i.e. using land use planning, among other measures, to achieve environmental goals. A serious problem inherent in the 'environmental turn' in planning is that it confuses the *means* and the *ends* of sustainable development: the environment (in particular the created urban environment) is not external to our thinking and doing, but is the very medium and outcome of our daily practices. In order to tackle environmental problems policies should pursue social sustainability first; especially, it is the internal, social dimension of sustainability which should be placed at the centre of sustainability planning.

It is widely accepted that sustainability issues are both complex and dynamic: they involve a combination of issues, cutting across environmental, social, economic, and political boundaries and transcending various spatial scales, ranging from the local, through the regional, the national, and finally, to the global scale. As argued earlier, although we have a much-quoted and generally accepted definition of sustainability as shown in the Brundtland Report (WCED 1987: 43), it is still not clear how this definition should manifest itself in everyday decisions. The consensus is that we cannot go on 'business as usual' in terms of the ways that the environment has been managed and in terms of the ways that our daily lives are organised. There has been a call for a combination of policies to change the patterns of development (Hall 1995: 32). As might be expected, many authors are arguing for an integrated, holistic approach to the planning of sustainability (for example, Blowers 1993a; Buckingham-Hatfield and Evans 1996; FAO 1995; Healey and

Shaw 1994; Jacobs 1993). The question to ask is ‘how are the planning policies to be integrated?’ In Britain, one of the most vigorously debated topics regarding the role of planning for the achievement of sustainability goals is the co-ordination between land use and transport planning (see, for example, DoE 1992e; Owens 1984, 1986, 1990, 1992a, 1992b; Rickaby 1987, 1991). While the Government’s sustainability policy is characterised by an overriding concern about *spatial integration*, this thesis argues that the concept of urban social sustainability can provide a fresh scope of strategic thinking about sustainability planning by addressing the necessary time-space connections between institutional structures and individual life-chances.

The chapter is divided into three sections. The first section justifies the links between planning and sustainability. It is followed by an analysis of the UK government’s sustainability strategy, highlighting the problems of the Government’s sustainability strategy. Then these planning policies for sustainable development are reviewed with reference to a particular location — London, illustrating that the co-ordination of land use and transport should be examined in a wider regional context of time-space co-ordination between institutional structures and should include the social context of household life which is the binding mechanism of institutional links.

Planning and Sustainability: Building the Connections

Sustainability issues, which include a wide range of environmental, economic, and social concerns into a single concept, have recently been discussed in the planning framework (see, for example, Blowers 1992, 1993b; Healey and Shaw 1994; McLaren 1992a, 1996; Myerson and Rydin 1994, 1996; Owens 1992, 1994; Rydin 1995). However, many of the debates to date have been centrally concerned with the issue of how the planning practices, especially land use planning, can contribute to the goals of *environmental* sustainability. In other words, apart from economic and social objectives which have been gradually added on to the planning processes, sustainability goals have become an integrated ingredient of planning policies: there has been a call for a move

towards 'environmental planning' by including environmental and sustainability goals into planning practices (see Buckingham-Hatfield and Evans 1996).

In fact, Britain has had an impressive record in recognising and responding to environmental issues. For example, in 1773 Britain passed what may have been the world's first piece of anti-pollution legislation (a decree prohibiting the burning of sea coal); in 1863 it created the first pollution control agency (the Alkali Inspectorate); in 1947 it passed one of the most comprehensive planning acts in the world (the Town and Country Planning Act); in 1956 it was the first major industrialised nation to pass a Clean Air Act; and in 1970 it created the world's first cabinet-level 'environment' department (see Ashby and Anderson 1981; Gullingworth and Nadin 1995). The creation of the Department of the Environment (DoE) has amalgamated the Ministries of Housing and Local Government, Public Building and Works, and Transport into a new Department of the Environment¹ responsible for the whole range of functions which affect people's living environment (McCormick 1995: 160). Planning, as a function of co-ordination, is one of the central responsibilities of the DoE. As might be expected, to include sustainability ingredients into planning practices is becoming a major characteristic of the DoE's planning initiatives.

However, to build a proper connection between sustainability goals and planning practices, the first thing is to challenge the environmental approach of planning. The problem of environmental planning lies in that much attention has been focussed on environmental problems *per se*, but insufficient attention has been paid to their underlying causes. Moreover, environmental issues are often examined in isolation, instead of being examined in conjunction with other pressing issues within a holistic framework. This thesis argues that focussing on the external, physical aspect of sustainable development alone is doomed to failure on the grounds that it confuses *symptoms* with *causes* and *means* with *ends*. It is the interrelationship between the *socio-environmental* and the *socio-economic*, instead of environmental and the economic issues *per se*, which should be the major

¹ At the time of writing, the Department of Environment is now part of the Department of the Environment, Transport, and the Regions since the election of the new Labour government in 1997.

concern of sustainability debates. Accordingly, environmental planning should be internalised into the social process of development. If ‘the environment’ is as much ‘socially embedded’ as ‘naturally pre-given’, then the links between planning and sustainable development should be very different. At least it should address the social dimension of sustainable development as both the origins and the consequences of physical sustainability, not just as the means to the ends. This social perspective of planning for sustainability can be addressed by highlighting (a) the common interest shared by both planning and sustainability debates, i.e. the search for a harmonious relationship between people and their environments; and (b) the mediation of the planning system in shaping the structural features for sustainable development.

A Harmonious Relationship Between People and the Environment

In the UK, planning has been limited to the statutory land-use planning system usually known as town and country planning. The current British planning system — based on the 1947 Town And Country Planning Act — was designed in an immediately postwar context of intensive public concern about the balance between urban development and agricultural, forest and open land resources (Hall et al. 1993: 19). Part of the original intention of the postwar planning system was to reduce the wasteful transport of people and goods by reversing the trend towards big cities and enlarging the opportunity for small-town living. In effect, the concept of a harmonious relationship between people and their surroundings has been an enduring concern of the British planning system since its foundation nearly a century ago² (Blowers 1993: 2). After nearly a century of evolution, the meanings of ‘surroundings’ have been gradually extended from the immediate physical features of the built environment, such as sanitary conditions of street width and the height, structure and layout of buildings, to much wider economic, social and environmental

² The first planning act was the Housing, Town Planning, Etc. Act 1909. Its object was “to provide a domestic condition for the people in which their physical health, their morals, their character and their whole social condition can be improved...” (Gullingworth and Nadin 1995: 2).

concerns (Marshall 1994). In sustainability debates, by contrast, although the notion of ‘surroundings’ is usually understood in the widest sense as the *natural* environment, including global weather changes and the ecosystems as a whole, the close links between the natural environment and human society have always been a central concern of sustainability debates (see WCED 1987).

As made clear at the outset of the Planning Policy Guidance notes, the planning system is designed to “regulate the use of land in the public interest” (DoE 1992b, PPG 1, para. 2). There is nothing more in the interest of the whole public than the achievement of sustainable development which seeks to meet human needs while protecting the environment on which we all depend. It seems that planning thought and the sustainability debates are moving towards a common ground where natural and social environments are increasingly interwoven with each other. Both planning goals and sustainability concerns share the same view of maintaining a harmonious relationship between people and ‘the environment’. This thesis argues that planning has a legitimate interest in sustainable development; and sustainability debates cannot be comprehensive without any mention to planning practices.

Moreover, the defining characteristics of futurity and complexity shared by planning and sustainability necessarily brings them together. As defined in the Brundtland Report, sustainability issues are in principle long-term and all-embracing problems, involving inter-generational equity and transcending economic, social, and environmental boundaries (Owens 1994). Similarly, British planning has a tradition in protecting the quality of future life by managing ‘the environment’ in its widest sense. To put it another way, the vague nature of both planning and sustainability goals in the mediation of the people-environment relationship reserves a common ground for their convergence. The public health origins of nineteenth-century planning; the early Garden Cities and the postwar New Towns; the principles of urban containment embedded in the green belt policies; the designation of the National Parks; the organisation of city reconstruction and redevelopment through Comprehensive Development Areas — all have this in common. The 1947 Town and Country Planning Act introduced the world’s first *integrated* planning system and enabled

a *strategic* approach to the allocation of environmental resources. After the questionable success of 1980s experiments in allowing the market to determine the form and function of developments, plan-led planning has seen a renaissance. The 1991 Planning and Compensation Act has brought the system of planning into the mainstream of sustainability policy. The Planning Policy Guidance notes series has been rewritten, with sustainability principles advocated throughout. It may be exaggerating to say that planning in the late twentieth century on the whole is the planning for sustainability, but it is fair to say that the sustainability theme will remain one of the most important parts of planning policy well into the next century.

Planning and the Urban Environment

While emphasising that the structural properties are both the media and the outcomes of the routinised daily practices of individuals, this thesis argues that the mediation of 'formal institutions' is an indispensable part for the analysis of the duality relationship between institutional structures and individual life-chances. Alongside other policies and regulations, the planning system plays a very important role of mediation in shaping the structural features of urban forms. This can be understood in two senses. On the one hand, planning is considered to be a structural constraint which has significant impacts on the patterns of structural development. For example, both the control of development and the development plans are important factors in shaping the overall structures of urban land use. Hence, planning is a part of the structural factors which define the macro context of social interaction, although in reality its effects must be considered in conjunction with other factors and key players. On the other hand, planning is considered to be a major arena for policy debate in the rhetorical conception of environmental planning (Myerson and Rydin 1996). The plan-making functions of the system provide a mechanism for the articulation of spatial strategies which interrelate environmental, economic and social objectives on the grounds that the procedures for conflict resolution establish a useful forum in which sustainability problems can be properly addressed. As a matter of policy,

planning decisions seek to mediate between competing uses of urban land via a combination of guidance, incentive, control, and involvement. Nevertheless, planning policies will make an impact on individuals and communities by threatening their established local conditions and by creating new conflicts as groups respond to changed conditions. Therefore, planning both resolves and creates conflicts in the process of land use development.

The mediation functions of the planning system have become more marked in circumstances where the British government is advocating its view forcefully for an inclusion of sustainability ingredients into planning policies. Since the publication of the Brundtland Report in 1987, the British government has expressed its deep concern about sustainability issues, responding by publishing a series of environmental documents such as *Sustaining Our Common Future* (DoE 1989), the environment white paper *This Common Inheritance* (DoE 1990) and its successive annual reports (DoE 1992a; 1993a; 1994a), and *Sustainable Development: The UK Strategy* (DoE 1994b). An important message emerging from these documents is that the planning system is considered to be a key instrument for the delivery of land use and developmental objectives which are compatible with the aims of sustainable development (DoE 1994b: 38). In this regard, Government's sustainability strategy, when incorporated into the planning framework, is characterised by a move from land use planning towards environmental planning for sustainability. To summarise, the Government seeks to change the practices of people's daily activities, via manipulating the locations and patterns of development to achieve the goals of environmental sustainability.

Planning and Sustainability: Co-ordinating Land Use and Transport

Having elaborated the common ground between the planning policies and the sustainability concerns, it should be remembered that the institutional connections between planning practices and the sustainability debates are but one manifestation of the mediation of 'formal institutions'. A fuller understanding of the mediation of 'formal institutions' should take on board other factors.

Firstly, it should be stressed that planning is but one link, though a key one, in the

co-ordination of institutional structures. There are other objectives and considerations which co-determine the structure of the planning system. For example, other economic and social goals might have higher priorities than environmental and sustainability goals. Most importantly, planning practices often involve political considerations which tend to downplay the significance of sustainability concerns. Secondly, the planning process involves many agencies and functions. For example, although the DoE is the leading agency responsible for the co-ordination of different planning matters, it involves the processes and functions of other departments and agencies, both within, and outside the government machine, such as the Department of Transport, the Department of National Heritage, and the Ministry of Agriculture, as well as local governments at a lower level and the European Communities at a higher level, not to mention other non-government organisations (NGOs) and interest groups. In other words, planning practices involve a co-ordination in a wider context between sectoral boundaries and between different hierarchies of government.

Accordingly, it is not the intention of the thesis to place the planning system at the centre of the 'formal institutions' for the co-ordination of institutional structures. Rather, by virtue of its co-ordination characteristic, and its functional overlapping with other planning agencies, the planning for sustainability is used as the example to demonstrate both the multifaceted characteristic of sustainability issues and the broad scope for the co-ordination of institutional structures. Moreover, this reflects the historical importance of the British planning system in reconciling the different interests in the processes of development.

Given the growth in the number and distance of journeys is very much a global phenomenon, the increasing need to travel has become a major obstacle to any wider move towards sustainability in light of the generation of pollution, the wasteful use of non-renewable energy, and the associated problem of social exclusion. For the government, one key area where planners can contribute in creating a sustainable future is to encourage people to cut the need to travel in the urban areas, changing the patterns of land use and transport system. For the sake of illustration, the discussion of the mediation of the 'formal

institutions' is concentrated on the issue of coordinating land use and transport planning.

It has been estimated that passenger kilometres travelled by car in Britain increased tenfold between 1952 and 1988 (Transport and Environment Studies 1990). Part of the reasons for the huge growth in car use is that land use changes have created and enlarged the separation between the locations of employment, housing, and services and facilities. The resources that people need most in their daily lives have become more dispersed, with many new developments built at a substantially lower density, often in an edge-of-town business park or free-standing location. Another noticeable trend in the patterns of urban land use has been towards replacing local (and generally smaller) shopping, health and education facilities and services with larger and more dispersed units — partly in response to the growing mobility of London's population. A growing proportion of activities are organised for the benefits of the car-borne population for whom, for example, the weekly shopping trips to the large, one-stop supermarkets have brought real benefits in terms of price, choice, and convenience. Given these trends, as might be expected, the UK government is arguing for an integration of land use and transport planning in order to reduce the need to travel in general, and to reduce the number of car trips in particular, as an important part of the sustainability strategy (see DoE/DoT 1994: para. 1.8).

Although there has been consensus on the integration of planning policies for the necessary pursuit of sustainability goals, what seems problematic in the integration of transport and land use planning is (a) the promotion of environmental goals, apart from other social and economic considerations, as the overriding principles of sustainability planning; and (b) the ways that planning policies are integrated. This thesis argues that the 'environmental turn' in British planning can only have a limited degree of success in the pursuit of sustainability goals since it fails to recognise that environmental, economic, and social problems are in effect an interrelated challenge: not only in the sense of an environmental consequence of social practices but also in terms of the people-environment interdependency embedded in the duality between the routinised practices of individual livelihood and the institutionalised practices of social structures. Unless this deeper explanation of sustainability issues is fully addressed, policy integration based on the

environmental framework of sustainability will not work.

Urban Re-concentration: The UK Strategy for Sustainability?

Before engaging into the detailed discussion on the British government's sustainability strategy, it must be pointed out that it is not the purpose of the thesis to evaluate the effectiveness of the planning system in delivering sustainability goals. As mentioned above, successful planning for sustainability involves a wide range of issues which are far beyond the scope of sustainability policies and planning functions *per se*. Issues like the structure of the planning system, planning and urban politics, financial resources and the processes of implementation, as well as other supplementary measures, are all relevant. It would need enormous space to cover all these dimensions which are unlikely to be included in a small chapter. Even if it were possible to include all these factors for analysis, the time lag between policy-making, and the results of implementation for sustainability planning, would be too long to evaluate the net results of sustainability policies. This is reflected by the nature and the processes of sustainability issues: they are complex, dynamic, and, to some extent, mysterious in the way that they cannot be attributed to any singular causal relationship. It is impossible to evaluate the net effects of the implementation of sustainability policies at this early stage. On the contrary, the aim of the discussion here is to highlight the multifaceted characteristic of both planning policies and sustainability issues, illustrating the various aspects for the co-ordination and integration of sectoral goals in the planning for sustainability.

Urban Re-concentration: Integrating Policies of Countryside Conservation, Inner-city Regeneration and Sustainable Development

The central idea of the UK government's sustainability strategy can be summarised as a policy of 'urban re-concentration', i.e. by directing developments back into existing urban areas and making the most efficient use of urban space (see DoE, 1990; 1994b). The

underlying assumption of this re-concentration strategy is that towns and cities have a more efficient form of land use for the organisation of people's daily lives in terms of cities' densities and less need for travelling. Within existing urban boundaries, in turn, a strategy of mixed-use development centred around nodal locations which are easily accessible by environment-friendly modes of transport, such as walking, cycling, and public transport, is adopted as an integral part of the re-concentration strategy.

In a nutshell, the UK strategy for sustainable development is to argue for using the already developed urban areas in the most efficient ways by making them more attractive places to live and work without the need for long-distance travelling. In a sense, the Government's sustainability strategy of urban re-concentration and mixed-use development can be considered as an extension of the postwar British planning tradition — in line with the policies of *Green Belt* and *urban regeneration*. Green Belt policy aimed to protect the countryside and agricultural land from the invasion of urban sprawl; the policy of urban regeneration sought to revitalise the inner-city areas of Britain's major cities. Although the concept of green belt had its origin in Howard's Garden City scheme, where the green provided for agriculture and recreation and acted as a buffer against excessive urban growth and coalescence (Johnston et al. 1994: 237), the current version of Green Belt policy was promoted by the Ministerial Circular in 1955 as an extension of the principle involved in the acceptance in 1946 by the Government of the Abercrombie principles for the planning of London (Elson 1986: 11). The underlying philosophy of the Green Belt policy might have much to do with the British tradition of valuing the countryside for agricultural land use and the cottage lifestyles. In sustainability debates, however, the problem is that the 'green' countryside seems to be unquestioningly equated to the 'natural' environment, and the urban life is considered to be a necessary evil that is more bearable than enjoyable.

Within the urban boundaries, by contrast, sustainability strategy is considered to be compatible with the urban policy of the regeneration of inner city areas. As mentioned in chapter 4, the processes of de-industrialisation have changed the landscape of London's inner-city areas. With the closing down and moving out of many manufacturing industries, many sites in London have become derelict and contaminated and the redundant workers

have been trapped in the overcrowded, decayed council accommodation. As a consequence, inner-city areas have been facing the problem of a vicious circle between environmental decay and economic downturn. Based on the assumption that a good environment and a strong economy are closely related to each other, it is believed that to improve the environment and to revitalise the economy by directing developments into inner cities which are lacking activities and investment can provide the job opportunities and other services and facilities for those who cannot follow the industries to move out of the inner-city areas. It is quite right that a sustainability strategy should have an agenda for inner-city problems and these issues could be an integrated part of sustainability debates. The question is that inner-city problems, such as dilapidation, poor housing, and economic and social deprivation, are not the problems of 'inner city' *per se*, i.e. the problems of inner cities' geographical locations, the decay of the infrastructure, or the skill gaps between local job markets and labour markets, but are problems of deeper causes and wider socio-economic implications: an issue of 'uneven development' between different locations and between productive and reproductive activities (see Hall 1981; Massey 1984). Unless this 'uneven development' is properly addressed, the directing of development and investment into inner-city areas might change the built environment of local areas, but it is unable to resolve the pressing problems facing local residents.

Although the sustainability strategy of urban re-concentration has the merit of policy consistency — i.e. current policy is compatible with, and, to some extent, reinforces, previous policies, this thesis argues that a common problem shared by the Government's current sustainability policy of urban re-concentration and previous policies of countryside conservation (the Green Belt policy) and inner-city regeneration is an overriding tendency of 'nominal approach' — an approach which focuses on the symptoms of the problems in interest, but fails to address their underlying causes with reference to a wider context of the necessary connections between objects. The danger of such a nominal approach is that it tends to focus on the patterns of spatial connections between institutional structures, but the more fundamental processes which constitute the patterns are largely ignored. If concrete actions were adopted based on these principles, it is very likely that the results of

the sustainability policy of urban re-concentration are to achieve the *means* (environmental sustainability) at the expense of the *ends* (social sustainability). The British government is absolutely right to see treating sustainability issues as an interrelated challenge cutting across environmental, social, and economic boundaries when it calls for an integration of transport and land use planning to achieve environmental goals. But to bring social, economic and environmental issues into one integrated framework does not necessarily imply a sustainable urban development. If implemented without care, it is very likely that not only the sustainability strategy of urban re-concentration cannot reduce the time-space frictions between the locations and the activities of people's daily lives, but that will also result in more fragmented structures of life-patterns. Now one must ask is 'how are the planning policies integrated?' This is the issue that I will turn to now.

Mixed-use Development: Coordinating Employment, Housing, Retailing and Transport

In order to translate the strategies of urban re-concentration and mixed-use development into substantive planning policies and to incorporate sustainability principles into the processes of planning, in particular in the preparation of development plans, since 1992 the British government has revised and amended the Planning Policy Guidance notes (PPGs) (for a summary of the sustainability elements included in the revised series of PPGs, see Selman 1996: 117-18). The PPGs are the principal source of policy guidance on planning matters regarding a wide range of topics that have significant implications for the structural features of London's overall institutional structures. Local planning authorities are required to take into account these principles when preparing their development plans. The central theme of the series of the latest revised PPGs, in short, is an integrated approach which stresses the co-ordination between land use and transport planning. Among other things, planning policies regarding housing, employment, and retailing are required to be considered in conjunction with the provision of transport infrastructure, in particular the energy-efficient and environmentally-friendly modes of transport, such as walking, cycling,

and, most importantly, the public transport system.

Given that effective transport systems are vital for both local and national economies on the one hand, and traffic growth is considered to be a major threat to the environment on the other hand, it is not surprising that a central concern of the Government's planning policy for sustainability is focussed on transport issues. In order to effectively reduce the need to travel, as well as to reduce the growth in both the length and the number of motorised journeys, reduce the reliance on the private car, and encourage alternative means of transport which have less adverse environmental impacts, the transport policy set out in the PPG 13 rightly addresses the urgent need to integrate transport and land use planning. There are four main themes which are expected to contribute to the transport/land use integration: (a) directing the locations of development into existing urban areas; (b) adopting complementary transport measures to discourage the use of a private car by making car travel more expensive and less desirable; (c) stressing on managing demand for transport in the urban areas rather than on increasing the capacity of transport infrastructure; and (d) identifying transport priorities to ensure that adequate access to developments does not undermine the national and strategic roles of trunk roads and other through routes as corridors of movement (DoE/DoT 1994, PPG 13). In short, the transport policy set out in PPG 13 is to make the best use of current transport infrastructure and to encourage the shift of transport modes from private cars to public transport and other environmentally-friendly modes of transport, such as walking and cycling. Most importantly, these transport policies are seen as an integrated part of the policy package to direct assorted developments into the existing urban areas, in particular at or near the nodal locations.

In order to encourage the integration of land use and transport, the overall tone of the Government's land use policies can be described as a U-turn from a separation of the locations of different functions and activities to a mixed-use, plan-led approach. For example, in order to reduce the need to travel and to encourage development in areas served by energy efficient modes of transport, the revised PPG 4 emphasises that jobs and homes should be accessible to each other over large parts of urban areas (DoE 1992d). It is believed that a broader economic base with an adequate balance between manufacturing and

service industries within the urban boundaries will help to secure the long-term prosperity, thereby maintaining a sustainable relationship between homes and jobs (ibid.).

While considerable numbers and various types of jobs are expected to be retained within the urban boundaries, the housing strategy set out in PPG 3 is, in short, a policy which combines high density development, small housing unit needs, and affordable housing in the urban areas, especially through the recycling of derelict or under-used land within existing built-up areas (DoE 1992c, PPG 3: para. 15). Most importantly, housing developments are required to ensure that housing is available in the areas where jobs are being created (ibid.: para. 3) and they are required to take account of the availability of, or the need for, transport infrastructure (ibid.: para. 13). Likewise, the need to co-ordinate transport infrastructure is especially addressed in the policy for retail development. In the latest PPG 6, the Government tries to bring together retail development and at the same time safeguard traditional town centres, arguing that the objective of retail development is “to sustain or enhance the vitality and viability of town centres . . . and to ensure the availability of a wide range of shopping opportunities to which people have *easy access*” (DoE 1996, PPG 6: para. 1.1, emphasis added). A sequential approach to selecting sites for new retail development is adopted to ensure that first preference is for town centre sites, followed by edge-of-centre sites, district and local centres and only then out-of-centre sites in locations that are accessible by a choice of means of transport (ibid.: para. 1.11).

In summary, in order to reduce the need to travel and, therefore, reduce threatening the environment, the UK government tries to adopt an integrated approach of bringing together a range of developments, including employment, housing, retailing/leisure and transport, into the existing urban areas via the policy of mixed-use development.

Environmental Planning and Urban Re-concentration: A Small Move or a Big Move, a Right Move or a Wrong Move?

Having briefly articulated that the British government’s sustainability strategy is, among other measures, to place a method of urban re-concentration at the centre of

sustainability planning via the coordination of land use and transport, it is important to address the problems inherent in the 'environmental turn' of sustainability planning.

Although all would agree that cutting the number and distance of motorised journeys can reduce the threat to both the global environment, and local social cohesion, there is little agreement on the ways that transport needs can be minimised. For example, the hypothesis of a close relationship between urban density and car usage has been established in Newman and Kenworthy's analysis of fuel consumption in different cities and other studies (see Newman and Kenworthy 1989; see also Bozeat et al. 1992; Tarry 1992; Banister 1992). Likewise, the Commission of the European Communities argues that 'compact cities' are a better way of organising people's lives in accordance with the goal of cutting transport need (CEC 1990).

There has been a growing consensus that a relatively dense and mixed-pattern of development is most compatible with sustainability, primarily via the reduction of transport need (Elkin et al. 1991; Sherlock 1991; CEC 1993). Although implicitly, the UK government's sustainability strategy of urban re-concentration is in effect an echo to CEC's 'the compact city' proposal, the compact-city, high-density proposition has been questioned by Breheny (1992a) and others on the grounds that it lacks any empirical foundation. On the contrary, it has been argued that, though based on hard-ground cases from US and Australian cities, the dispersal of employment, housing, and other facilities and services actually reduce, rather than increase, the times and distances of commuting: people have stopped making long suburb-to-city trips and are making short suburb-to-suburb trips instead (Gordon and Richardson 1989a, 1989b; Gordon et al. 1991; Brotchie et al. 1995).

Given that the decentralisation of employment, housing, and retailing facilities in the UK has been most marked in large metropolitan areas since the 1960s (see Hall and Hay 1980; Cheshire and Hay 1989), the problem is that the distances of journeys may have been shortened, but a much larger proportion of trips are made by car, including both work and non-work trips. To direct activities and developments back into the cities may reduce the number of car trips, especially those made between suburbs, but to keep major city centres strong in every way — as centres for offices, for shopping, for entertainment, and for

housing — may just exacerbate the problem. At its best, the growth of central cores in urban areas may attract more people travelling from areas further afield and therefore increase the pressure for further urban expansion; at its worst, whereas a growing number of jobs have been moved to the peripheries, keeping homes crowded within the perimeter of the cities may result in worse living conditions in the cities and more and longer car trips to work, or simply contribute to higher rates of unemployment in the inner cities. The concept of ‘the compact city’ has been modified and represented as the idea of *decentralised concentration*, which stresses that developments should be concentrated in accessible centres within the urban fabric for those cities which are already too large to work efficiently with only one centre (see Owens 1986, 1992; Elkin et al. 1991). Although the concepts of compact city, decentralised concentration, urban re-concentration, and mixed-use development are plausible in some sense, what is unclear is their relationship with the number and patterns of people’s daily movements, in particular the trade-off between car trips and other energy-efficient and environment-friendly modes of transport. In other words, one inherent problem in the compact city idea as a whole seems unsolved — i.e. its implications for the co-ordination of everyday life.

The Problem of Nominal Approach

It is problematic to assume that the need to travel can be largely reduced simply by concentrating various kinds of development, such as employment, housing and other facilities, in the urban areas. It might be the case in smaller towns and cities and, in particular, in their earlier forms, because smaller scale of development and simpler relations between institutions make it easier to maintain a self-contained pattern of development. In effect, it is a lack of the ability to compress time and space which makes small towns and cities unable to expand: i.e. people must live and work close to each other in order to interact with one another at certain times and places. But modern cities in the late twentieth century are very different, especially the larger metropolitan cities. What has changed are not only the sizes of the cities and the scales of urban activities, but also the very nature and

characteristics of social interactions taking place in the cities and between cities and their hinterlands. As the extension of London's functional boundaries suggests, the functional connections between cities and their hinterlands necessarily bring the context of urban activities to a wider regional scale that involves a more complex web of relations. Accordingly, it is unlikely that modern cities are going back to their earlier, compact forms of development without changing the nature and patterns of social relations.

Spence and Frost (1995: 361) note that the distribution of employment relative to the distribution of residence is a crucial factor in the determination of travel patterns and trip characteristics. In most large cities, jobs greatly outnumber residences in the central areas, with homes generally outnumbering jobs in the suburbs. So centralised employment generates a large amount of long-distance (radial) journeys, although these trips might be more readily and easily accommodated by public transport. The policy of urban re-concentration and mixed-use development assumes that if most homes and jobs were concentrated in the urban areas, i.e. compact and high-density development, then workplaces will become more easily accessible by walking, cycling, or by local public transport networks, and the distances of work journeys will become shorter, too. But to balance the number of jobs and homes is far more complex than the physical features suggest, such as the spatial parities between activities and urban forms. For example, based on the notion of the compact city, inner cities would be the most sustainable location in an urban setting. In terms of proximity to employment opportunities in the central area, high densities of housing provision, a mixture of housing and other types of land use, lower rates of car ownership, and a denser public transport network, inner cities in their present form seem to exhibit more fully than other areas, the characteristics necessary for sustainable development. But in reality, inner cities have proven to be the least popular location for living and working over the last few decades. In other words, urban forms are but one manifestation of social relations. The co-ordination between, say, employment and housing structures have both *quantitative* and *qualitative* dimensions. Numerical parities in space are insufficient to bring them together; qualitative matches between job skills, housing features, and transport practices are the key to the co-ordination of institutional structures.

Unless the jobs created in the areas are suitable for local residents rather than attracting workers travelling from afield, it is unclear whether or not the strategies of urban re-concentration and mixed-use development can really integrate land use and transport in ways that will significantly reduce the need to travel.

The point is that sustainability is not something which can be ‘summed up’ or ‘averaged out’ — for nations, regions, and individuals. While aggregate data provide an overall view for the understanding of the patterns and trends of urban structures, a disaggregate analysis on the necessary connections between different institutional structures is fundamental to any effective planning for sustainable development. In other words, compactness, higher densities and spatial proximity between institutional structures must be re-embedded into the micro context of everyday life. For individuals, many things are more important than the distance between home and work, such as residential amenities, job security, housing prices, good local schools, to name but a few. As might be expected, the situations vary from one household to another; moreover, different members in a household may have very different considerations on the co-ordination of their different daily routines. Unless this qualitative perspective and micro context of institutional connections are fully addressed, it is unlikely that a nominal approach of numerical parity and spatial proximity can achieve the goals of sustainability in any sense.

Sectoral Coordination and the Integrated Approach

Closely related to the nominal approach to planning for sustainability are the ways through which sectoral objectives are co-ordinated. While planning policies require locations of employment, housing and retail developments to be considered in conjunction with one another, especially with the structure of the transport system, one question which must be asked is: ‘how are sectoral goals to be coordinated?’ This thesis argues that, under the framework of urban re-concentration, the co-ordination of land use and transport might end up with a great deal of ‘co-ordination’ but insufficient ‘integration’.

Inter-sectoral Integration

The first integration problem is the issue of *inter-sectoral co-ordination*. There are inter-sectoral barriers that need to be overcome at several levels of planning. Although the UK government presents its sustainability policy as an integrated approach cutting across the sectoral boundaries, a lack of any commitment to, and mechanism for, the communication between departmental sectors in the processes of policy making suggests that land use planning alone is unable to co-ordinate fragmented sectoral goals. For example, the Department of the Environment (DoE) is the governmental leading body on environmental policy, but other departmental policies have as much significant influence on the state of the environment as DoE's sustainability policies, especially when the notion of the environment is interpreted in its widest sense. Although there is a well established consensus that a purely sectoral approach to planning should be replaced by an integrated approach in order to create an enabling environment for the mediation between, and decision-making by, different sectors, in fact, in practice there are few signs of integration at any level. At present, many planning targets are set primarily according to the projection of future demand characterised as trend-planning *within* sectoral boundaries.

While the complexity and dynamism of sustainability issues are increasingly cutting across the sectoral boundaries of all governmental departments, sustainability planning in the UK, as Agyeman and Tuxworth (1996: 105) observe, has been treated as something 'added-on' to existing policy, rather than as an integrated challenge that requires a strategic response. This implies a need to create a constructive and productive dialogue and an enabling environment between the full range of stakeholders in the legislative and administrative sphere, leading to negotiation platforms for planning decision making at all relevant levels. These may include ministries, provincial and municipal government departments and their policy development entities, research and resources data base development institutes, and public-interest organisations (NGOs) at both national and local levels. Only with these attributes will they overcome bureaucracy and the historical barriers between sectoral institutions that may be blinkered by tunnel vision.

Intra-sectoral Integration

The second integration problem is the issue of *intra-sectoral co-ordination*. Since no single sectors are homogeneous entities that can be ‘summed up’ or ‘averaged out’, there is to a great extent various components within the same sectoral boundaries that could and should be co-ordinated. For example, it may need a combination of different types of housing provision in one area (and their relative distribution to other areas and sectors, such as the employment structure, in a wider region) in order to accommodate the needs of different households. How different types of transport can be co-ordinated with one another to establish an efficient network of transport is also important for the integration of sectoral structures. Currently, there are few signs of such an integration. For example, transport planning within the Department of Transport (DoT) is heavily dominated by the planning for road building in order to accommodate the growing needs of private car users. At the same time, while British Rail and the London Underground have recently stepped up their investment in new trains and rail lines, this has largely been planned independently of the road network. It could be argued that inter-sectoral co-ordination can only be effectively achieved if the intra-sectoral perspective of co-ordination is well in place.

Internal Coordination

The third integration problem, and arguably the most important one, is the issue of *internal co-ordination*, i.e. the daily practices that actually link different locales and activities in space and time. Sustainable development cannot be achieved on the margins, nor can it be something ‘added-on’ to current policies. On the contrary, it is an issue that requires a fundamental and, perhaps, revolutionary change in the ways economies and societies are directed and managed. It is an integrating concept, bringing together the local and the global, short-term and long-term, and environment and development in ways that would enable their interdependency to be fully addressed.

A fundamental problem associated with the Government’s sustainability strategy of

urban re-concentration is concerned with the ways we plan and control the locations of development, and with the use and management of physical infrastructure in order to maintain a sound and sustainable environment; however, it fails to recognise that these urban structures are not only the *media* for people's aim to live better lives but are also the *outcomes* of their actions. This thesis believes that the Government's sustainability strategy has sometimes confused the 'ends' with the 'means' of sustainable development in the urban context and it is trying to reverse the 'ends' to help the 'means'. For example, cutting the scale of motorised journeys can reduce energy usage and pollution; however, it also affects certain social groups' access to services and facilities and, therefore, may exacerbate existing social and economic problems. If these social consequences are then not properly addressed, more and severer social and economic barriers will be created. This will inevitably affect the state of 'urban environment' in the pursuit of sustainability goals. In other words, a socially unsustainable city will necessarily increase its exploitation to natural resources and environmental services. What should be stressed in the planning for sustainability, therefore, is the interrelationship between the *socio-environmental* and the *socio-economic*.

It has been pointed out that "there is little point in creating an alienated community for the sake of energy conservation from high densities" (Breheny 1993: 72). In effect, in a very dense, highly artificial context of urban environment, to sustain the daily urban system as a created environment is as important as to sustain the natural environment on the global scale. This thesis argues that only if the basic needs of individuals and local communities are fully addressed, then a sustainable interplay between human society and natural environment would be possible. Accordingly, the integration of inter- and intra-sectoral co-ordination must pay due attention to the ways that how one sector is connected to another: i.e. sectoral integration should be based on the necessary relationship of *internal co-ordination* rather than on the nominal links of spatial proximity and numerical parity between institutional structures.

For the urban population, immediate problems of unemployment, poor housing quality and inadequate services and facilities (such as public transport, health services, and

schools) tend to be central to what they think is required of planning for the urban environment. It is unacceptable that environmental sustainability at a global level is to be achieved at the expense of local urban sustainability. This does not mean that the UK government's sustainability strategy of urban re-concentration is necessarily unsustainable at a local urban level, but any sustainability strategy which fails to take account of the factor of internal co-ordination is unlikely to succeed.

Urban Containment and Scale Integration

It could be argued that the underlying logic behind the UK's sustainability strategy of urban re-concentration/ mixed-use development, or the notion of 'The compact city' in general, is the assumption of 'self-containment' in the urban areas. It is assumed that the compact form of higher densities, and mixed-use development in existing urban areas is more likely to be energy-efficient because it reduces travel distances and maximises prospects for public transport provision. But this proposition overlooks the driving forces of current urban changes. There has been a trend of decentralisation in both population and employment in Great Britain, moving away from the larger cities to small towns and villages since the postwar years (see Buck et al. 1986; Hall 1989; Champion 1991). There are few signs that this trend will slow down or even reverse (see OPCS 1992). To some extent, the imposition of the Green Belts, the creation of new towns and the expansion of old towns, and the construction and extension of motorways, have all changed the definition of cities: cities are not only restricted to being massive built-up areas; cities also involve an increasing exchange of resources at regional scale. No city can be sustained without the support from its hinterlands. This is in particular the case for modern cities: not only are they relying on the provision of material resources from a much wider region; but they are increasingly relying on its provision of a labour force. The urban economy, under the framework of the world economic system, will become unstable and vulnerable if market frustration has not been absorbed by the mobility and flexibility of the labour markets at a regional scale. To some extent, the processes of de-industrialisation in some major cities

and the resulting mass unemployment in their inner city areas have illustrated the danger of clustering jobs and homes in the limited boundaries of existing urban areas, especially when the urban economies are becoming increasingly global in their nature. Given that British cities are increasingly competing with other cities and regions in attracting investment and business, even if it were possible to concentrate both the population and various developments in the immediate boundaries of the cities, it may not be desirable to do so. It will undermine the very basis of modern cities — the open urban systems which are based on the diversity and flexibility of institutional links on a regional scale, rather than on the proximity of activities and locations on an immediate local scale. To focus on the co-ordination of sectoral structures within the immediate urban boundaries will exacerbate, rather than resolve, the problem of unsustainable development.

An issue closely related to the problem of urban containment and scale integration is *uneven development*, both between and within regions (see Massey and Allen 1988; Mainwaring 1991; Salder 1992). In the British context, under the framework of urban re-concentration, it is very likely that the already buoyant South East region and other major cities will attract a larger share of resources and leave the currently deprived areas, such as the North West of England, to fall further behind. As a consequence, the regional disparities between North and South will be enlarged rather than reduced. Within the regions, the concentration of activities and developments at or close to the nodal locations in the cities may attract more people travelling from the urban fringes into the city cores for employment, shopping and leisure purposes. Very often these people are the more skilled, richer, and highly mobile population who can afford, and perhaps purposefully seek, to live in the less dense areas, for example, in as a semi-detached house in the outer suburb of London, and travel into the city during the day for employment and other purposes. But not all the suburban population are rich and mobile. In circumstances of high local unemployment, being unable to afford a dwelling in town, and facing inadequate public transport systems in the outer suburbs, the less well-off suburban populations could find commuting means a difficult but unavoidable part of everyday life. By contrast, those who currently live in the inner parts of the urban areas, such as some inner-city areas, may have

to bear a larger share of the costs of denser development (such as higher living costs and worse environmental amenities) for being close to activities and other facilities that they may not have a real access to them due to skill gaps and a lack of purchasing power. Given that 'equity' is central to the concept of sustainable development, Pearce et al. (1989: 29) argue that "the well-being of the most disadvantaged in society must be given greater 'weight'." If the average well-being of society as a whole is raised at the expense of a worse position for the most disadvantaged, it is not sustainable in any sense. In other words, the issue of uneven development within the urban region is an indispensable part of sustainable urban development. In this view, sectoral co-ordination should not be restrained to an overriding concern about the spatial parities within immediate urban boundaries. Rather, it should be examined in a wider time-space context of scale integration at regional scale.

Undoubtedly, the planning for sustainability cannot and should not be an extension of 'trend planning' as 'business as usual'; however, any successful implementation of sustainability policy must be realistic, acknowledging and understanding the driving forces of current trends. Any attempt to prescribe some simple, single over-riding policy (such as the concept of high-density compact city) in order to reduce the impact of urban areas on natural ecosystems is usually impracticable, unrealistic and undesirable (Breheny 1993). Given the growing number of two-earner households, greater specialisation in the employment market, higher rates of job turnover and residential mobility, wider choices of retail facilities and services which diffuse the choices and options for shopping trips, and the fast growth in the scale of non-work trips, it is impractical to arrange assorted developments in a self-contained fashion within urban boundaries. It is more appropriate to examine the policy of urban re-concentration in a regional context by bringing out the necessary connections between the various institutions in the processes of people's actual movements between different daily locales.

For maximum effect the planning policies for sustainable development must be coordinated within and between different scales. In this regard, Breheny and Town and Country Planning Association's (TCPA) advocate for a 'MultipliCity' approach, i.e. to

consider a variety of approaches to suit particular settlement types within the overall 'Social City Region' (see Figure 5.1), is an adequate starting point for the integration of institutional structures (see Breheny 1993; Breheny and Rookwood 1993). The changes of environmental constraints, technological opportunities and social structures suggest that the alternatives to current forms of urban development must be explored with the greatest flexibility and the routes to sustainable development could and should be approached in diverse ways. It seems that on a regional scale, at least, there would be enough scope for the coexistence of compact city, low-density development, decentralised concentration, and other forms of urban development. But again, both *horizontal integration* between sectors and *vertical integration* between scales should be pursued on the basis of the necessary links between institutions in the processes of people's daily practices rather than on the basis of nominal links that only focus on the spatial parities between institutional structures.

Towards an Integrated Approach to Planning for Sustainability

It has become clear that sustainable urban development cannot rely on any simple, singular solution: neither the sectoral approach of 'trend planning' nor the self-containment strategy of urban re-concentration can be effectively implemented without undermining the very foundation of sustainable development — the need for variety and flexibility so that different social groups can have equal access to resources suitable to their needs, such as job opportunities, housing provision, shopping facilities, other services and facilities, and effective and efficient transport links between them. If current trends of unsustainable development were to be reversed, coordination and integration between sectors and scales is necessary. The move towards an integrated, holistic approach to sustainability planning, for example, via the coordination of land use and transport, is highly welcomed. But the integration of planning policies *per se* has no guarantee of a successful delivery of sustainability goals, especially when policy integration is under the framework of a nominal approach characterised by a singular, prescription of urban re-concentration/ mixed-use

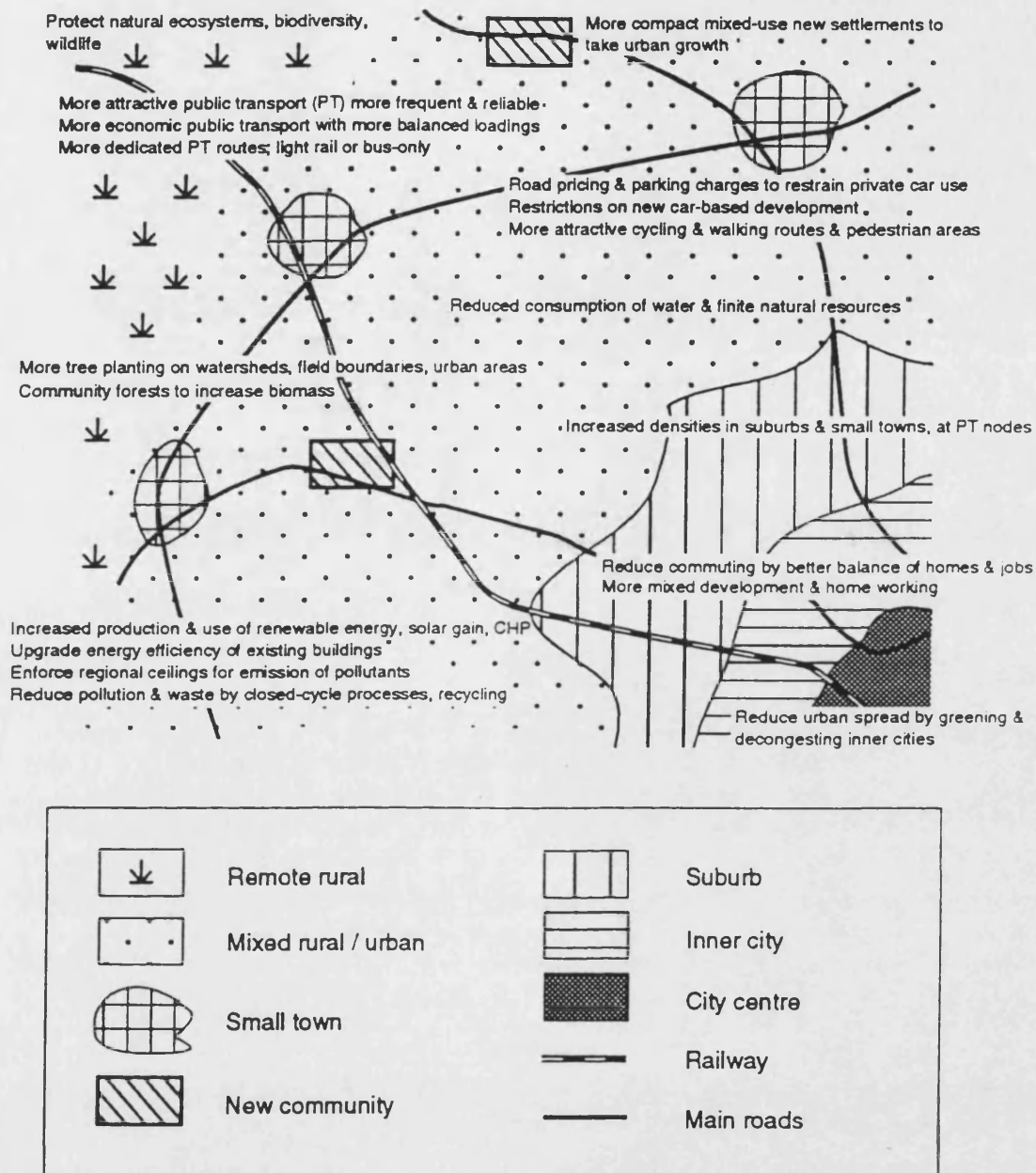


Figure 5.1 The Social City Region

Source: Breheny and Rookwood (1993: 161)

development. A lack of an internal quality of policy integration, this approach may end up with, at best, coordination without any integration or, at worst, concentration without any coordination.

It could be argued that what is fundamental to planning for sustainability is the interrelated nature of sectoral connections embedded in the routinised practices of everyday life. Policy integration should go further still, not only transcending sectoral boundaries between economic, environmental, and social objectives and between functional categories such as employment, housing, transport and other institutional structures, but also deeper to their generative essentials. There is an urgent need for a holistic, integrated approach to planning which is able to bring out the internal connections between various sectors, thereby creating an enabling environment for the mediation between, and the decision making by, all stakeholders at all levels of planning at early stages. Such a planning framework for sustainability must be technically appropriate, environmentally non-degrading, economically viable and, most importantly, *socially acceptable*. Only with these qualities will it assure a sustainable framework of policy integration that can overcome the historical barriers between sectoral institutions and planning hierarchies.

As will be illustrated later in the thesis, the spatial proximity between the locations of workplace, residence, and services and facilities in large cities has no guarantee of their necessary connections. It is pointless that any two sets of institutions, for example, employment and housing, should be clustered together in a limited urban boundary if no substantive connections are to be built between them: i.e. those who work and live in an area are in effect very different groups of people. This thesis argues that, in modern urban society, the need to coordinate different daily moments in the proximity of space is gradually replaced by a broader consideration of time-space proximity which arises due to the advance in transportation and communications and the resulting enlargement of the time-space domains of people's daily lives. Accordingly, the time-space links between different institutions in the routinised practices of everyday life are the breaking point for understanding the necessary connections between sectors and scales in policy integration. An intensive household analysis of the time-space connections between different daily

moments will illustrate the significance of the micro aspect of institutional connections (see chapters 6 and 7). In the remainder of the chapter, I am going to use the case of London to highlight the problems of urban re-concentration and mixed-use development. It will demonstrate that an integrated policy of sustainability planning should go beyond the nominal links between urban institutions in a self-contained sense; rather, it must pay due attention to their deeper, internal connections at a micro level in a wider regional context.

Co-ordinating Homes, Workplaces, Facilities and Transport: Sustainability Planning for London

Given London's roles in the UK economy and its unique position in the process of Western urbanisation, it is not surprising that London has long been the focus of urban studies and urban policies, including the debate on sustainability planning. As might be expected, due to London's scale, applying the strategy of urban re-concentration to London is far more complex than the idea of concentration itself suggests. The difficulty of evaluating the policy implications of sustainability strategy partly lies in the lack of a London-wide planning authority since the abolition of the Greater London Council (GLC) in 1986. This system problem may cast some uncertainty and co-ordination difficulty for translating sustainability policies into substantive planning objectives. But the strategic functions of municipal government have been performed, to a very limited extent, by the creation of the London Planning Advisory Committee (LPAC) immediately after the abolition of the GLC. The problem is that the nature of LPAC is advisory rather than decision-making: it provides advice on the London-wide strategic planning and development matters for both central government and London boroughs. Only recently was LPAC's strategic function strengthened, and perhaps challenged, by the creation of the Government Office of London (GOL) in 1994 which combines the functions of four key government departments (Department of Employment, Department of the Environment, Department of Trade and Industry, and Department of Transport) in the provision of regional planning guidance for London. One might argue that a strategic framework is

crucial for a successful implementation of sustainability and other planning goals in London; however, it is beyond the scope of the thesis to join the debate on the need for an elected, strategic body of regional/municipal government in London. Such an issue involves many things far beyond the considerations of planning framework and sustainability goals, for example, urban politics, taxation, and resource allocation. Nevertheless, bearing in mind the differences that regional/municipal government can make for the integration of policies, the aim of the section is to highlight the policy manifestations of Government's sustainability strategy of urban re-concentration and mixed-use development in the capital city — London.

While central government's revised PPGs have established the overall tone of the planning for sustainability in the UK, there are two sets of policy initiatives which are especially relevant to the sustainable development in London: (a) the strategic concern and response from LPAC's advice on the strategic matters for London (see LPAC 1994) and GOL's strategic guidance for London's planning authorities (see GOL 1995, RPG 3); and (b) the overall strategic framework in the wider regional context of the South East region, including the planning guidance set out by the London and South East Regional Planning Conference (SERPLAN) (see SERPLAN 1991) and DoE's Regional Planning Guidance for the South East (DoE 1994c, RPG 9). These documents are slightly different in their policy foci and spatial coverages. However, when they are put together as an overall strategic response to central government's sustainability strategy, they are considered to be the operationalisation of central government's sustainability strategy in a concrete urban context. Analysing the connections between sectoral objectives set out in the strategic advice for the London region would reveal the problems and the potentials of the UK government's sustainability strategy of urban re-concentration and mixed-use development.

Balanced Economy, Maximum Housing Provision, Lively Town Centres and the Public Transport: What are their Connections?

Although there exist different approaches between LPAC/SERPLAN and

GOL/SERO (South East Regional Office) to the sustainable future in London — the former tend to adopt a bottom-up approach (though not really grass-rooted) and the latter have a stronger orientation towards a top-down approach, a growing consensus has been established between these two sets of planning agents regarding the route to a sustainable future for London. That is, London's future cannot be sustained in a narrowly defined municipal boundary, but should be seen in a wider regional context. Based on this consensus, three common themes in relation to the future of London can be identified. They are (a) to enhance economic performance of the region, especially London's role as a world city; (b) to maintain a balance between environmental improvement and developmental need, in particular through the coordination of land use and transport in order to reduce unnecessary travel; and (c) to offer opportunities and choices to people in employment, housing, facilities, and transport (see SERPLAN 1991; LPAC 1994; GOL 1995; DoE 1994c). Under the framework of urban re-concentration, these goals are to be achieved, to some extent, by redressing the spatial imbalance between the economies of the west and the east in both London and the South East region as a whole (DoE 1994c: 6). This spatial imbalance is to be reduced by, and provides potential for, a policy of compact, mixed use development in the extended London region where "a sustainable relationship between homes, workplaces and other facilities" is considered to be the policy priority for many years to come (LPAC 1994: 52).

The 'double-edge character' of the transport issue makes it central to the planning for sustainable development in London. On the one hand, an efficient movement of goods and people is considered to be the prerequisite for a strong economy; on the other hand, growth in transport, in particular the growth of the number of motorised trips, is seen to be a major threat to the environment and, therefore, a major obstacle to sustainability. In London, the overall transport strategy is to control the increased reliance on the motor vehicles in order to link various daily locales via *the coordination of land use and*, in particular, *the public transport system*. It emphasises making the best use and management of current transport infrastructure instead of increasing the overall capacity of the transport system on the whole. Local authorities are required to facilitate the use of alternative modes

of transport, especially to encourage the use of public transport within the existing and planned network (DoE 1994c: 25). In the meantime, plans for new development and major changes in land use are required to take full account of their effects on the transport system: plans for new development and regeneration should be concentrated in locations which encourage the use of less polluting forms of travel — i.e. the areas which are at or near nodal locations, such as town centres or the edge of town.

In the light of the continuing shift of London's employment structure from manufacturing towards services, economic development is expected to move towards a *more balanced pattern between manufacturing and services* under the framework of land use/ transport coordination. While strengthening Central London's status as a financial, commercial, tourist and cultural centre, a particular objective is to broaden London's economic base by attracting manufacturing industries to move into East and/or Outer London. It is expected that both Londoners and commuters from RoSE can have better access to local jobs or employment opportunities at nodal locations by using environment-friendly modes of transport so that the increase of longer and orbital journeys to work due to the structural imbalances between job and labour markets can be cut to the minimum.

As might be expected, a balanced economy with less need to travel cannot be sustained without the support of the housing sector: where people live in relation the location of employment has significant impact on the need to, and the patterns of, travel. In the South East region, there has been an outflow of population from London to RoSE, particularly to the closest Home Counties (Buck et al. 1986). In the mean time, while London's postwar population has declined persistently over the years, the number of households has increased more sharply (Merrett 1994). In other words, the number of single and couple households has increased significantly in London. Given that housing demand has always been high in London, even at times of recession, a strategy of *maximising housing provision* in London is adopted to minimise the scale of unnecessary transport. But due to a limited supply of land for new housing development, partly because the Government is reluctant to release land from green belt sites, the priority within housing development is given to the recycling of land previously in urban use, in particular run

down, vacant or derelict sites. Moreover, housing development which is not occurring at or near the nodal locations will be required to have regard to the provision of the necessary infrastructure and to take advantage of the least congested parts of the transport network (DoE 1994c: 19-20). As might be expected, the limited capacity of London's new housing provision, when compared to the growing demand for office and commercial development and the conservation of natural and historical heritages, is unlikely to reduce the numerical disparities and the quality imbalances between London's housing and employment structures.

As far as retail development is concerned, a consensus has been established to secure close links between *town centres and retail development*. It is believed that the vitality and viability of town and district centres is compatible to the policies of reducing the need to travel, regenerating the urban areas, and protecting the countryside. Since London has a dense network of town centres, it is believed that the existing town centres should continue to be the major locations for the provision of shopping and other facilities, so that one trip can serve several purposes and shopping and other facilities can be more accessible to those who do not have a car (DoE 1994c: 11; DOL 1995: 22). In circumstances that the scope for further retail development is limited within existing centres, the sites at edge-of-town locations with good public transport accessibility are considered to be appropriate locations for retail development. Free standing shopping centres that are exclusively dependent on the use of private cars are to be encouraged only in exceptional circumstances when they would not adversely affect the vitality and viability of existing town and district centres and they should be accessible by a choice of transport, including public transport (LPAC 1994: 47-48).

In summary, the operationalisation of the UK government's sustainability strategy of urban re-concentration and mixed-use development in London is largely based on the principle of 'spatial integration': i.e. to coordinate employment structure, housing provision, retail development, and transport system within the urban boundaries centred around the nodal locations of traditional town and city centres. The question is, whether Government's policies of balanced economy, maximum housing provision, safeguarding town centres and

enhancing the public transport system can really support each other as an organic whole with necessary functional connections or are they to be held together under policy intervention and will finally break up when those policies lose their momentum?

Problems and Potentials: Sustainability Planning in London

Undoubtedly, the scale and complexity of London's built environment have cast both uncertainties and opportunities for the sustainable development of the capital city. As the largest conurbation for the UK, London's future has a key role in the pursuit of sustainable development in the UK as a whole. Although shorter journeys between homes, jobs and other services and facilities in the urban areas necessarily involve higher densities of development and spatial proximity between different sectors, it is unclear whether denser development and mixed-use development will really facilitate better co-ordination between sectors. In London, the density and scale of the existing built environment suggest that the coordination between, and the integration of, both new and existing developments within and between sectoral boundaries are far more important than the issue of density *per se*. There is little space for a large-scale development in existing urban areas; moreover, there is a need to reserve extra space for future development. Accordingly, what is needed for a better co-ordination between, and a real integration of, different sectors in London is to address the necessary links in both the macro and the micro perspectives of sectoral coordination/integration.

The Macro Aspect of Sectoral Integration

As highlighted above, the concentration strategy of coordinating land use and transport in London involves a package of sectoral goals, such as balancing development between manufacturing and services jobs, maximising housing provision, retaining retail development in the city centres, and promoting a shift in transport modes from private car to environment-friendly and energy-efficient modes of transport. It is assumed that in so

doing, a more compact form of mixed-use development can provide a better spatial linkage between different sectors. Consequently, not only the environmental goals of controlling pollution and reducing energy waste can be achieved; moreover, it also reduces the social barriers, helping the disadvantaged groups gain access to suitable job opportunities, better housing, better shopping facilities and other services by improving connections between different daily locales via a dense network of public transport. The question is, can these measures reverse the current trends of London's institutional structures or are they going to be overruled by the existing structural trends?

To answer this question, one must understand the dynamics and the underlying causes of London's current institutional structures in relation to employment, housing, retailing and transport. Given that service jobs are gradually spilling over to the London region, it might wrongly give us an impression that a more balanced relation between London's employment and housing structures can be maintained if only attempts were made to restore the manufacturing base in London, while maximising the amount of, in particular, affordable housing in London. As demonstrated in chapter 4, the disparities between employment and housing structures are due to the changing contexts of *both* employment and housing structures in London. On the one hand, the 'shake-out' of manufacturing jobs and the 'spill-over' of service jobs are the consequences of a combination of global economic restructuring and local economic dynamics. On the other hand, with the exception of the concentration of large-scale social housing in some East/Inner London boroughs that is slow to respond to the employment changes in the capital city, London's housing development as a whole has been 'squeezed out' of London by office and commercial developments. In other words, it is the socio-economic forces which have torn these two institutional structures apart, although they used to be close to each other in space. Accordingly, building the functional links between these two institutional structures might *not* be through the nominal links of spatial proximity and numerical parity *per se*, but through the underlying forces which contribute to such disparities in the first place.

Arguably, in some circumstances current state intervention has enlarged, rather than reduced, these disparities. For example, the higher rates of unemployment in some parts

of East/Inner London were closely related to central government's housing policy in general and local authorities' housing provision in particular, whereas an increasing number of manufacturing jobs have been moved to areas outside the urban boundaries, including the outer fringes of London, other rural areas in the UK, other European countries and, in particular, the newly industrialised and Third World countries. This does not mean that sustainability policies cannot work against 'market mechanisms' or have to work through 'market mechanisms'; but they should, at least, have a proper understanding of, and pay due respect to, the influences of market mechanisms if the objectives of sustainability planning are to be feasible. Given that London is striving to maintain its leading role in the world economy when it is facing increasing competition from cities in both developed and developing countries, including other British cities, any policy initiatives directly working against this trend seem to be doomed to failure. This is the very reason why manufacturing industries are trying to maintain their competitiveness by managing to move out of London to areas where costs of land, labour and other infrastructure and facilities are cheaper. Otherwise, they would be simply replaced by competitors from other European countries or the newly industrialised countries such as Korea, Singapore, Taiwan and Malaysia. Similarly, the same reasons are also applicable to London's housing markets. Due to the intensive competition from office and commercial developments, in the Inner parts of London, housing development in general has little choice but to seek opportunities on the fringes of London. In other words, it lacks a binding force which can hold both manufacturing jobs and large-scale housing development, especially affordable housing, in the inner parts of London.

But retail development in London is slightly different from employment and housing changes. Although retail development is also subject to the influence of global economic restructuring, it is the very interface between individual consumers and the production system at large, i.e. retailing is the meeting ground between productive and reproductive activities that characterises the dynamics of the *local* economy. Retail development must maintain a balance between employment adjustment and housing changes on the grounds that retailing not only has to compete with other type of developments in land use but also

has to chase the purchasing power to areas where people live. While London still maintains a dense network of town centres with relatively good public transport access, it seems quite reasonable that retail development should be planned on the grounds of safeguarding the vitality and viability of town centres. Out-of-town shopping centres have been attacked for generating car traffic and the lack of adequate public transport links (Gayler 198). However, the major challenges facing London's traditional town centres and, in particular, smaller and independent shops, are not the competition from out-of-town shopping centres *per se*, but the competition from large multiple chains (although an increasing number of this type of shops are built at free standing locations) and the competition from other town centres, especially some larger centres in Central London.

In London, there is no evidence that shops in out-of-town locations are more successful than those in in-town locations, except in some businesses where large floorspace and car accessibility are important factors in the running of these businesses, such as DIYs, large supermarkets, garden centres, furniture stores and wholesales. It could be argued that out-of-town retail development and traditional town centres should not be seen as trade-offs in London. Rather, due to their distinctive characteristics, they could be seen as supplementary to each other. For example, out-of-town supermarkets can reduce the traffic jams near or in traditional town centres if people really have to bring their car to the supermarkets for their major, bulky shopping, instead of making several smaller shopping trips on a daily basis. If out-of-town supermarkets are combined with other shops, especially the large-scale indoor shopping malls, to form a large district shopping centre, such as Brent Cross and Lakeside Shopping Centre, then public transport links could be an integrated part of that particular retail development, so that people who do not have a car can have equal access to those shopping facilities.

To a certain degree, the disparities between employment, housing, and retailing in London are caused and reinforced by London's transport system. Although nearly half of the work-related journeys in London are made by car, public transport still plays a very important role in work-related and other types of trips. Not every driver enjoys car driving. It could be argued that a certain proportion of car trips are generated simply because the

public transport services are inadequate in some respects (for example, a lack of public transport links, too crowded, unreliable, unsafe, or too expensive) hence forcing people to choose private cars, despite the travelling distance being long or short. From the public transport's point of view, it could be argued that urban expansion, including housing, employment, and retail developments, may generate an enabling environment for the provision of public transport — the economies of scale — that is economically viable and socially desirable (see Hurdle and Bell 1993). Once a dense and extensive network of the public transport system is in place, like the current situation in Central and Inner London, many people will shift to the underground or buses if they are convenient, comfortable, efficient, safe, and cost-effective. Given that London's transport infrastructure is aging and deteriorating, it is unlikely that the current transport system will be able to meet the increasing need to travel for London's residents and workers if no large-scale investment and successive improvement is made in revamping, extending, and upgrading the services of London's public transport system.

As highlighted above, the structural properties of London's employment, housing, retailing, and transport structures are subject to very different influences and, therefore, are moving towards different directions in terms of their spatial manifestations. In other words, they are becoming more fragmented both within and between sectoral boundaries. Conceptually we might be able to use some loose terms such as the general patterns of employment structure, housing provision, retail development, and transport system to represent the whole institutional structures of interest, in practice, they are constituted by a mass of highly differentiated processes and practices. To some extent, the structural links between, say, housing and employment structures, or between retailing and transport structures, are *dis-embedded* social conditions. They definitely have a certain degree of constraining power on the practices of people's daily lives. Nevertheless, to understand the actual 'working' of these institutional links, we should *re-embed* these institutionalised structures into the concrete practices in people's daily lives. Above all, they are the substantive linking chains between various urban institutions. In other words, this requires an understanding of the micro aspect of sectoral linkage.

The Micro Aspect of Sectoral Integration

As might be expected, the proximity between the locations of employment, housing, and other facilities and services with good transport links is what the urban life is about. In effect this is the case in many parts of London, especially in Inner London. The question is whether people can really benefit from such spatial proximity between different institutional structures or whether they are suffering from the increasing crowdedness of the urban environment but without truly benefiting from a reduced need to travel. Given London's scale and the complex relationships between different institutional structures, it is not a question of yes and no between compact and dispersed developments, but rather a question of degree, regarding how different institutional structures are to be co-ordinated with each other in space and time. It could be argued that one of the advantages of urban living, especially living in London, is the greater possibility of finding a suitable job and accommodation within a *reasonable* distance between each other without the need for moving home or changing job, no matter whether the journey to work is to be made by car or by other modes of transport. The rise of two-earner households, the increasing specialisation of job markets³, and the higher rates of turnover in employment, make it more difficult for a particular household to maintain a localised life-pattern in the city.

This is especially difficult when the diverse needs of different household members are taken into account simultaneously, such as both partners' access to the locations of employment, children's education considerations, residential amenities and child care, and other considerations. In other words, the concentration of assorted activities and developments in large metropolitan areas does not necessarily mean that a particular person or household's movements between different daily moments are localised (see Nippert-Eng 1996; Wachs and Crawford 1992). Accordingly, what is more important is to match the types of employment opportunities, housing features, shopping facilities and other services

³ Here labour market specialisation means the spatial and geographical consequences of post-Fordist production, for example, the outward shift of both manufacturing and service jobs from the central cores of the London region to the outer rings.

and facilities.

Arguably, the merits of large metropolitan cities, which have a more dispersed pattern of urban structure, such as the London region, are that people can maintain the flexibility of a wider range of choice for employment, housing, shopping, and other services and facilities within the extended time-space zones connected by a range of transport choices. Arguably, it is the variety and flexibility of the relationships between London's various institutional structures that have contributed to London's current status as a world city. This suggests that for the individual urban households, a sustainable relationship between homes, workplaces, and facilities and services, cannot be reduced to a single, overriding dimension of spatial proximity between different institutions at or near the nodal locations within the urban boundaries. Rather, the co-ordination of daily moments should be considered in a wider context of time-space channelling. It has become increasingly difficult for all the members of a particular household to have all these things in the nearby area. It is common that some sort of compromise must be made by some, or all, of the household members in the organisation of their daily lives if they want to live together as *one* household. Thereby, a sustainable relationship between the structural features of London's employment, housing, retailing and transport structures must have a proper respect to the micro context of time-space co-ordination in the practices of people's day-to-day lives.

This micro aspect of sectoral integration also manifests itself in the relationships between retailing and transport. While London's traditional town centres continue to provide a wide range of shopping facilities, including market stalls, small, independent stores, large supermarkets, multiple chains, and department stores, in the last few decades the life-style changes of the British households as a whole, have resulted in considerable changes in the shopping practices in terms of the frequencies, the locations, and the means of transport for shopping trips (Oumlil 1983; Bradley 1975). On the one hand, since there are an increasing number of women participating in the labour market, the meanings of 'gender divisions of labour' in the household have changed considerably: males are not the only source of family income, and domestic work and child care are not necessarily jobs for

females (see Young and Willmott 1973). Likewise, food shopping is no more the exclusive responsibility of housewives but is increasingly been shared by both partners. People also shop less frequently for food and other basic items, and tend to do a major, bulky shopping on regular intervals. Very often these shopping trips are made by car, and large, one-stop supermarkets which combine more choices, better prices, and more convenient car accessibility (including easier and free car parking). These seem to be a better place to go for such major food shopping trips, no matter whether they are at a free-standing site, at the edge of a town centre, or in a town centre. On the other hand, for non-food items, such as clothes, foot wear, home appliances, and other comparison items, given the accessibility of both public and private transport to the central shopping areas such as the West End and other metropolitan centres, many people do enjoy shopping in these centres rather than totally shift to out-of-town shopping centres, given the fact that many households have no difficulty at all in gaining access to cars. In other words, what is at issue in the choice of the mode of transport for shopping trips, is not the *location* of shops *per se*, but the *nature* of shopping trips and their relations to other daily moments.

As might be expected, the macro aspect and the micro aspect of sectoral integration are an inseparable whole of the urban system. While the institutional structures at macro level have constituted the structural constraints for individual actions, the micro contexts of people's daily practices also constitute the necessary channelling between institutional structures at large. The co-ordination of sectoral objectives in London must have due respect to both the macro, and the micro aspects of sectoral integration. Since the relationship between these two domains is neither simple nor straightforward, it would be naive, or misleading, to consider a compact urban form by concentrating various developments in a limited boundary at, or near, urban cores. This is especially unlikely for large metropolitan cities, such as London, where the scale and characteristics of urban structures have made the relationship between the patterns and the contents of urban structures more complex and dynamic. This thesis argues that only if the interrelationship between the macro and the micro aspects of sectoral integration is properly addressed and adequately channelled, it is only then that a sustainable relationship between individual life-

chances and the urban environment in London can become possible.

Local Contexts and Sectoral Integration

Although the macro and micro dimensions provide different angles to understanding the problems of, and the potentials for, sectoral integration in London, they are not separate enterprises. One way of linking the macro and micro aspects of sectoral integration is to explore the dynamics of local contexts. They are the meeting ground between the macro aspect of urban structures and the micro aspect of individual life-chances. On the one hand, these local contexts are directly related to the organisation of people's daily lives and, thereby, can highlight the time-space connections between individual life-chances and the urban environment at large. On the other hand, any successful implementation of the planning policy for sustainability must be brought down to the local level. In the case of the British planning system, it is the planning practices at the lower level of planning hierarchy that are relevant to the intersection between the micro and the macro aspects of sectoral integration.

However, the issue of local planning practices is a long process of 'bargaining' between different interest groups and planning agencies. Given the complexity and the dynamism of the sustainability issues, it is unlikely to come across all the processes of local planning issues. Nevertheless, it is possible to highlight some of the implications of the British government's planning policy for sustainability at the bottom of the planning hierarchy. Above all, it is at this level that the planning practices are most directly related to the practices of people's everyday lives. In the case of London, this can be achieved via reviewing the Unitary Development Plans (UDPs) prepared by the local planning authorities.

Since the introduction of the Planning and Compensation Act, UDPs have become the major planning documents at local level that set out the developmental prospects for metropolitan areas (Cullingworth and Nadin 1994: 58-59). In London, the UDPs are of special importance in light of a lack of strategic planning body to co-ordinate the various

sectoral goals across the region since the abolition of the GLC in 1986. Now each London borough is a unitary authority, with responsibility for most planning functions within the borough. Each borough council has to prepare its own UDP which serves the functions of both a structure plan and a local plan. By design, the sustainability principles of the UK government's concentration strategy of mixed-use development would be included in the contents of local boroughs' UDPs: all UDPs are required to have full regard to central government's PPGs and RPGs and, in the case of London, LPAC and SERPLAN's strategic guidance and advice, in which sustainability ingredients are an integral part. But in practice, local conditions and the attitudes of local planning authorities vary substantially from one borough to another. It is not surprising that the central government's sustainability policies would be interpreted very differently in local UDPs. Moreover, local authorities may have very different approaches to the same policy initiatives (Marshall 1992). As far as sectoral integration between different institutional structures is concerned, two types of co-ordination problems emerge in the UDPs. They are (a) the conflicts between local interests and the strategic views set out at higher levels and (b) the issue of policy co-ordination between individual boroughs.

Conflicts Between Local Interests and Strategic Views

Given that Greater London is comprised of 33 local authorities (32 London boroughs and the City of London), it is difficult to review the UDPs prepared by all 33 local authorities. For the sake of demonstration, and in order to link the findings of the extensive analysis to the intensive investigation of household dynamics, two London boroughs' UDPs — London Boroughs of Harrow and Tower Hamlets — are examined. These two boroughs are selected to reflect the structural contrast between East and West London, as well as the contrast between Inner and Outer London, on the grounds of geographical locations, physical fabric, and socio-economic compositions of local residents and businesses (see Figure 5.2). A more detailed description of these two boroughs will be relegated to the chapters on the intensive analysis, in which the households selected from these two



Figure 5.2 Harrow and Tower Hamlets: Two Contrasting Cases

boroughs are interviewed to highlight the dynamics of household life.

In summary, Harrow is a case of London's commuter suburb and Tower Hamlets is an example of an inner-city area. The differences between these two boroughs are so striking — for example, the types, sizes, and densities of housing stock, transport infrastructure, the fabric of built environment, industrial and commercial activities, and the socio-economic compositions of the local population — that it is not difficult to imagine that their UDPs have very different planning objectives. In appearance the UDPs presented by both boroughs are very similar, with contents and structures following the guidance and requirement of central government's PPGs and other related planning documents. It is expected that the sustainability principles set out in those strategic documents would be taken into full account in the UDPs. However, it is not unusual that in the UDPs priority has been given to the protection of local interests than to strategic objectives established at higher levels. In the planning literature, this is often understood as the syndrome of 'NIMBY' (Not In My Back Yard). The strategic views of sustainable development will be endorsed by the local authorities and the communities only if those policies are able to protect or enhance local interests (at least they should not have any significant adverse effects). In other words, the same principles and sectoral goals of sustainable development highlighted in the first part of the UDPs (equivalent to the structure plan) may be interpreted into very different objectives in the second part of the UDPs (equivalent to the local plan), due to the unique characteristics of local conditions and, most importantly, due to local authorities and communities' reluctance to sacrifice their interests for the pursuit of an overall, long-term goal of sustainable development.

For example, while the Borough Council of Harrow was expressing its support for the strategy of maximising housing provision in London at a strategic level, in substantive terms a higher priority was given to the preservation of Harrow's own character and amenity "as one of Outer London's outer suburbs with *low density* character" (London Borough of Harrow 1992: 22, emphasis added). Moreover, it was argued that "relatively increased levels of housing provision should be achieved in Inner London and East London" (ibid.: 65). In Tower Hamlets, by contrast, while the local authority shared the same view

with the London-wide vision of encouraging regeneration in the area, particular attention was paid to the interdependence between manufacturing employment, council housing provision, local shopping facilities, and good public transport links. This seems in contrast to the central government's London-wide strategy of 'regeneration'. In that framework, much emphasis has been placed on 're-use' of the 'under-used' urban land in the central locations in order to meet the increasing demand of space for producer services and the associated 'affordable' housing demand in the nearby areas so that the need to travel for those who are currently working in the central core can be reduced.

This suggests that under the current planning framework, a coherent policy initiative cannot be assured between the strategic views set out at higher levels and the substantive objectives defined in local plans. In other words, there exists a cleavage between the top-down approach of strategic planning and the bottom-up approach of grass-root local planning. Although many policies can be implemented without the endorsement from local authorities, such as major road/rail building, local planning practices still have very important influences on the structural features of the local environment. This suggests that an effective sectoral co-ordination at substantive local level should reconcile the policy disparities between local interests and strategic views established at higher levels.

Co-ordination Between Local Authorities

In many circumstances, the strategic views established at higher levels are totally in accordance with the concerns of local interests, but those strategic views cannot be realised simply by scaling down the overall policies set out at a London-wide, or national level. It is very likely that the significance of strategic thinking will be marginalised when the same ideas are applied evenly across the areas which have very different characteristics. Unlike regions and metropolitan cities that often compete with each other in attracting investment, funding, and business, London's 33 local authorities also rely on each other in the provision of services and facilities for their own residents and businesses. Given that the areas involved in a particular person's daily movements between the locations of home,

workplace and other facilities are very likely to cut across the boundaries of local authorities, and in many cases across the boundaries of Greater London, this suggests that the co-ordination of sectoral goals must transcend the jurisdictional boundaries between local authorities. But it seems unlikely that the co-ordination between local authorities can be assured under a current planning framework when conflicts between protecting local interests, and realising strategic views, remain unsolved. This is because local governments are elected bodies, they have to think about the interests of local communities all the time in order to be able to remain in power. To restore a London-wide, elected government which is able to reconcile the conflicts between local authorities and the London region as a whole, and assure that adequate co-ordination is in place between boroughs may be able to narrow the cleavage between the strategic views of sustainability goals and the protection of local interests. But again, policy conflicts between different levels of governments have long been a common concern in planning politics (see, for example, Thornley 1991; Rydin 1993). It seems that a London-wide strategic framework can only provide an enabling structure for the mediation of policy integration. It is the practices of people's everyday lives which are the key to linking the planning objectives cutting across sectoral boundaries and planning hierarchies.

Conclusions: Towards a New Strategic Framework of Planning for Sustainability

British planning in the 1990s is characterised by a move towards 'environmental planning'. It incorporates many environmental objectives and sustainability ingredients in the planning policies. The consensus is that the practices of 'trend planning' within individual sectoral boundaries should be replaced by an integrated, more holistic approach of planning which is able to address the trans-sectoral character of sustainability issues. Nevertheless, the 'environmental turn' in the planning system should be proceeded with care. One major problem of the Government's environmental approach is the danger of confusing the means with the ends, and the symptoms with the causes. It could be argued

that all environmental problems are social in origin, despite 'the environment' being broadly defined as the natural environment on the global scale, or narrowly defined as the immediate surroundings of our daily lives at a local level. Planning for a sustainable future by resolving the most pressing environmental problems must fully address this 'social' dimension.

The current policy reaction to the issue of sustainability planning is characterised by an overall strategy of 'urban re-concentration' that emphasises making the best use of urban land via mixed-use development in the existing urban areas. The major problem of this concentration strategy is the tendency of 'nominal approach' which tends to prescribe a simple solution of 'spatial integration' via the co-ordination of land use and transport in the urban areas. The Government is right on the grounds of incorporating an integrated approach to the planning for sustainability. However, a nominal equilibrium of numerical parity and spatial proximity is insufficient to integrate institutional structures and sectoral goals. This is because the whole package of urban re-concentration, mixed-use development, and land use/transport co-ordination, or the notion of the 'compact city' on the whole, tends to give undue attention to the *patterns* of sectoral integration, i.e. an emphasis on spatial integration, but the necessary conditions of institutional connections embedded in the practices of people's daily lives are largely ignored.

There are at least four perspectives in relation to the issue of sectoral integration which should be addressed. The first dimension of sectoral integration is *inter-sectoral integration*. It stresses that the qualitative matches between different sectoral structures are as important as the quantitative parities. The second dimension of sectoral integration is *intra-sectoral integration*. It emphasises that individual sectors should not be treated as the sum of a homogeneous whole. Only with the quality of diversity within sectoral boundaries, will there be enough scope of flexibility for the integration between sectors. The third dimension of sectoral integration is *scale integration*. It addresses the need to examine the issue of urban sustainability in a wider regional context that allows a strategic linkage between different local interests. One of the defining characters of a modern city is an increasing exchange of resources and flow of people and goods between a city and its

hinterland, including unwanted waste and pollution. It is unlikely that modern cities are going back to their earlier forms of compact, self-contained development.

The fourth, and arguably the most important, dimension of sectoral integration is *internal integration*. The necessary connections between different daily moments in the course of people's everyday lives are the building blocks of institutional connections. This thesis argues that the internal links between daily moments are the prerequisite for, and the ultimate goal of, inter-sectoral integration, intra-sectoral integration, and scale integration. While stressing that sustainable development is centrally concerned with the issue of inter- and intra-generational equity, this thesis also argues that neither the sustainable development of a particular place, nor the life-chances of the individuals can be 'summed up' or 'averaged out'.

Traditionally, our understanding of cities and urban questions has been based on aggregate observations, on the macro and global perspectives pertaining to the issue of spatiality such as distribution and location; but it has become clear that the ways those aggregate patterns arise are but one manifestation of the underlying mechanisms and processes at work. Arguably, the problem of lacking an internal dynamics in policy formulation has been a common phenomenon in the practices of British planning, such as the early garden city movement and postwar new town schemes, green belt policy, inner city regeneration, and current sustainability planning. An overriding concern about spatiality and urban forms in the British planning system is inadequate for sustainability planning on the grounds that sustainability issues involve a broader concern about the time-space contexts embedded in the practices of both social structures and individual actions.

Time and space are not merely empty categories which provide the physical settings of interaction. Rather, they are an integral part of those social interactions. Accordingly, what should be stressed in the planning for sustainability are the notions of the socio-temporal and the socio-spatial which bring together the practices with longer and shorter time-space spans. This suggests that a fresh scope has been opened up for strategic thinking of sustainability planning — an internal channelling of sectoral goals both horizontally, between and within sectoral boundaries, and vertically, through different

spatial scales. In other words, what is badly needed for a strategic response to the sustainability challenge is to address the interconnections between the micro and the macro aspects of sectoral integration. Arguably, this is the very notion of sustainability which highlights the interdependency between people and their environments.

CHAPTER SIX

A HOUSEHOLD ANALYSIS OF THE CO-ORDINATION OF EVERYDAY LIFE IN LONDON (I): EMPLOYMENT AND HOUSING

The aim of undergoing an intensive household analysis is to establish an alternative perspective from which to consider the interconnections between urban institutions. As argued earlier, aggregate data regarding the institutional structures at macro level alone, are insufficient to address the diverse and complex contexts contributing to observed structural patterns. This is also a blind spot in many planning policies: they tend to focus on issues of either the macro or the micro alone, but failing to explore the necessary connections between these two domains.

It has been stressed in chapter 3 and elsewhere that a macro, and predominantly quantitative, analysis of London's institutional structures in relation to employment, housing, retailing and transport, is insufficient, although necessary, for an appropriate understanding of their interrelationships. Any policy initiatives based exclusively on aggregate conceptions of structural patterns are likely to be subject to the partiality of the 'nominal approach': i.e. giving undue primacy to the structural properties such as urban forms, numerical parities and spatial integration. Crucially such perspectives are silent about the processes and the dynamics of those social practices which constitute the institutional structures. However, a rejection of the structuralist approach does not mean that we have to go to the other extreme by arguing for an analytical orientation towards the micro account of institutional connections. In other words, the recognition of the role of agency and action does not necessarily lead to the rejection of structure all together. Both approaches are weakened by an inherent dualism, i.e. treating structure and agency as unrelated entities. Given that the practices of everyday life constantly draw on, generate, and reshape the structural features of urban institutions, it is the concept of 'individuals in context' (i.e. a duality) that this thesis wants to advance in order to bring out the intrinsic connections between institutional structures in the processes of everyday life.

A Reproductive Perspective

Changes in London's institutional structures have, not surprisingly, increased the concerns about London's role in the processes of globalisation (see, for example, King 1990; Sassen 1991; Fainstein 1994). Within such debates, most attention has been paid to the economic (productive) aspects of globalisation, such as the causal mechanisms of business reorganisation, property redevelopment and more general economic restructuring. Less attention has been paid to the socio-spatial (reproductive) structures that have been generated through successive economic restructuring and the networks and institutions that facilitate the transformation of cities, especially in the context of the lived experience of 'ordinary' people (Pratt 1996: 1360; Dürschmidt 1997: 57). It is an irony that while many urban researchers are focussing on the debates of globalisation and 'time-space compression' where massive flows of commodities and currencies are unleashed at the press of a button (for example, see Harvey 1989b; Thrift and Leyshon 1997), what are overlooked are the tedious, but all too apparent problems, of how people find a place to live, how they get to work, how they do their shopping, and the like (see Pratt 1996). These 'trivial' things are crucial because they have powerful influences on the structures of global cities. That is what a city is about.

Likewise (although in quite different contexts), sustainability debates tend to prioritise environmental and economic (productive) goals as the ends of development, and treat social (reproductive) sustainability as implicit goals, or simply as a means to the end of environmental and economic sustainability. The concrete objective of living everyday life, for both current and future generations, has been marginalised when the search for development is moving towards some more abstract goals such as environmental sustainability and economic development. The tendency of treating production and reproduction in isolation has been reinforced by the academic divisions of labour: in economic and industrial geography, research has tended to focus on the geography of production and employment, while in urban social geography, the focus has been on the issues of distribution and consumption as though these two domains are completely

unrelated. With the growing concerns about the sustainability of the city, there is an imperative for innovative thinking in the sustainability debates that can redress the analytical bias between productive and reproductive concerns. This thesis argues that the needs of the great majority of ordinary people, in particular the poor, are most likely to be neglected in productive analysis. Not surprisingly, this neglect is one of the major challenges facing sustainable development (WCED 1987: 48-49).

An Intensive Research Programme: Individuals in Context

In order to address this social, reproductive aspect of sustainable cities, a research project of intensive interviewing with households in different areas of London is adopted. It must be pointed out at the outset that the purpose of intensive research is *not* to summarise different households' life-patterns in the selected areas, or to use the information obtained from the interviewees to generalise the institutional links between London's employment, housing, retailing and transport structures. It is totally misleading to extrapolate the findings from a very limited number of examples and using these materials directly to construct an overall picture of London's institutional structures. On the contrary, these fragmented, and sometimes conflicting, experiences of households are used to highlight the complexity and the dynamism of the 'institutional webs' embedded in the co-ordination of different daily moments in London. These household dynamics constantly draw on, generate, and reshape the institutional structures at higher levels. This thesis argues that this aspect is crucial for a practical understanding of the underlying causality of institutional links, and this is an important issue which has been largely ignored in traditional urban studies.

As mentioned earlier, a method of intensive interviewing with households in different areas of London was adopted as the means of information collection. Two London Boroughs — Tower Hamlets and Harrow — were selected as case study areas. They were selected to highlight the structural contrast between suburban London and inner-city London. Two subareas were further identified in both Harrow and Tower Hamlets to

highlight the structural variances in the local areas. It should be reminded that the study areas, and the sample households, were neither exhaustive nor representative in the sense that the household contexts could vary substantially from one household to another and would change significantly at different stages of a household's life cycle. The structural features of different parts of London can be identified in the extensive analysis with reference to aggregate data. In effect, the selection of the study areas was based on this information. It is misleading to generalise the life-patterns of London's households from selected samples and areas. This is the task of an extensive analysis. It has been stressed elsewhere that an intensive analysis should never be used for this purpose (see Sayer 1992, chap. 9). Nevertheless, it is adequate for the purpose of illustrating the dynamism of London's institutional links in the light of the time-space co-ordination between different daily moments in the course of household life.

The fieldwork was undertaken between June and October in 1995. A three-stage fieldwork strategy was employed to assure that the households selected could include as many as possible different stages of household life cycles and different patterns of time-space configurations. A total of more than 400 households were contacted and, among them, 40 households were finally selected to proceed the interviews (for the details of the fieldwork, see appendices). A technique of less-structured, in-depth interviewing was used; all of the adults in the selected households were interviewed separately. Although the exact time spent in each interview varied substantially from one interview to another, ranging from 30 minutes to 2 hours, the average time spent for an interview was about 45 minutes. In most cases, it was the couple who were interviewed; so normally it would take an evening to complete the interviews in a particular household. Most of the interviews were undertaken in the evenings during the week between 7 pm and 10 pm, and some interviews were undertaken in the afternoons at weekends. Except three interviewees (one in Bethnal Green and two in Stanmore) who refused to be tape-recorded, all the interviews were tape-recorded. These recordings were transcribed into written materials for further analysis.

Since the purpose of the intensive research is to address the significance of 'individuals in context' in the 'institutional webs', what had been asked in the interviews

were some general questions regarding the time-space organisation of people's daily lives, such as the locations of their paid employment, the factors which affected their housing decisions, their opinions about the local areas, their shopping practices and leisure activities, the means and processes of their daily travels to work, shop and other facilities, the actual movements between different locales in a typical day, any factors which have affected their decisions and practices in the co-ordination of different daily moments, especially conflicts between household members, and their overall view about living in London (for details of the interviewing questions, see appendix 5).

Rather than focussing on the details of individual stories, these materials were grouped into different 'scenarios' of household life in London. For the sake of presentation and by virtue of the need to build the link between structural patterns and household processes, the fragmented, and sometimes conflicting, experiences of household life were reorganised under different headings which coincided with the institutional structures highlighted in earlier chapters, such as employment, housing, shopping activities, and transport. However, by virtue of the varied contexts in different households, it will illustrate that, under the seemingly stable surface of London's employment, housing, retailing, and transport structures, in effect, there are very different needs and very different household strategies which contribute to, and are forced to move against, these institutional structures. Due to the limitations of space, the details of the intensive research programme will be relegated to appendices: they are issues relating to the selection of study areas, the selection of sample households, fieldwork strategy, interviewing schedule, and other problems I was confronting in the course of fieldwork. However, there is one key question which needs to be raised here — why was it so important that the household, rather than the individual person, was chosen as the unit of analysis in this intensive project?

Household: The Unit of Analysis

In contrast to most micro analyses which automatically equate agent with individual person, this thesis uses 'household' as the unit of empirical analysis. The Household can

be considered as an institution, and perhaps the most basic exemplar of the social institution through which the intrinsic links between the different daily moments can be grasped more easily. For example, most consumption decisions are made on the basis of household units, i.e. households constitute one of the most important conditions for social interaction — the context of family (or the equivalent structure) reproduction. In most cases, household members must live together in order to be a ‘household’. Accordingly, they have to co-ordinate with each other in the organisation of their own lives.

To focus on the life of a household as a whole, rather than on that of an individual, can vividly address the ‘contextuality’ of ‘institutional webs’ on the grounds that a set of institutional relations based on the organisation of a particular person’s everyday life necessarily intersects with other sets of institutional relations by virtue of the ‘household tie’ between household members. In other words, using the household as the unit of analysis can bring together two sets of institutional links into a single context of household life — i.e. the time-space links between different daily moments for a particular person, and the need to co-ordinate between household members in a particular household. In view of this, society is neither the sum of unrelated individuals, nor an overwhelming structure which exists outside people’s thinking and doing, but the very medium and result of people’s purposeful interactions. The intra-household conflicts in the organisation of different household members’ everyday lives, and the compromising character of household life co-ordination, suggests a more appropriate way for understanding the interrelationships between different institutional structures, i.e. to explore their underlying connections through the ‘household lens’. Via examining the co-ordination of everyday life in the household as a whole, we can see how the labour markets, the housing markets, the retail development, the transport system, and other urban institutions are related to each other, not in terms of the nominal conception of their spatial links, but in terms of their intrinsic, casual connections in the co-ordination of household life. While most researchers have paid their attention to the productive aspects of development in both urban studies and sustainability debates, focusing on household dynamics of consumption and social reproduction can lead to an analytical reorientation towards the reproductive aspect of

development. This reproductive perspective is crucial for the re-conceptualisation of sustainable development, and it can facilitate a meaningful convergence between sustainability debates and conventional urban questions.

The Co-ordination of Everyday Life: Two London Stories

In the rest of the chapter, as well as in the next chapter, the intrinsic links between different institutions in London will be discussed with reference to experiences of households in different parts of London — in terms of the contexts and the processes of their co-ordination between different daily moments in space and time. But before engaging in the detailed discussion of the various aspects of the time-space connections between different daily moments in the course of household lives, it is helpful to use two examples to highlight the various contexts and tensions in the co-ordination of household life in London.

Story One: A Suburban Household

Meet household G4¹ in Greenhill, Harrow. The head of the household, Mr. G4, was originally from the West Midlands. He came to London in the 1970s to pursue higher education. After graduating from university, he found a job in the West End, Central London, working for a private company; so he stayed in London. He lived in a privately rented flat in Hampstead and travelled to work by underground, although he had bought a car shortly after he was offered the job. In 1984, Mr. G4 left this job and started working for the central government. His new office was in Euston. The new job was very different from the old one, but his life pattern had changed little until he met Mrs. G4. She then was a full-time social worker, both working and living in South Kensington. Not long after their

¹ The names of the households are disguised, replaced by a combination of the initial of the study area and a number. 'G' represents Greenhill; 'S' for Stanmore; 'B' for Bethnal Green; and 'W' for Wapping.

marriage, they managed to buy a two-bedroom flat in Hammersmith by paying the mortgage. The reason for choosing Hammersmith was because it was more convenient for Mrs. G4 to travel to South Kensington from Hammersmith than from Hampstead. She could have walked to work if she wanted, although most of the time she would take the bus. On the other hand, Mr. G4's daily travel to work had been less affected because both Hammersmith (home) and Euston (workplace) were quite accessible by the underground, so travelling into Inner London was not a problem for him.

When Mr. and Mrs. G4 were expecting their first child, they decided to move to a bigger house that they thought it would be more suitable for a family with children and, in the meantime, was more affordable. So they sold the Hammersmith flat and bought a five-bedroom house in Greenhill, Harrow. For them, the new home was not too difficult to get into Central London by the underground (the Metropolitan line) and in the meantime it was convenient to get out of London by car (because Mr. G4's parents lived in Birmingham, he would occasionally go back to Birmingham to visit his family). Mrs. G4 had quit her job since having her first baby; and in the next few years they had another three children (including twins). In 1991, Mr. G4's office was moved from Euston to Waterloo, but the process of his daily journey to work remained little changed: he continued to use the underground and left their family car at home so that during the day Mrs. G4 could take the children to schools and other places. Their eldest son was 5 years old, attending a local nursery school; the twins were 3 and the youngest was 20 months old. Although the state schools in Harrow were, generally speaking, very good, they had decided to send their children to private schools. They had not yet decided which private schools their children should go to (maybe in Harrow or in other areas), but they planned to stay in Greenhill for at least another 10 to 15 years if there were no significant changes in Mr. G4's job, no matter where the schools were to be.

Story Two: An Inner-London Household

Meet household W4 in Wapping, Tower Hamlets. Mr. and Mrs. W4 had been living

in Wapping for 5 years since 1990. They had a daughter (5) and a son (3). Before moving into Wapping, they lived in a smaller (two-bedroom), but self-owned, flat in Hampstead. After having their first child, they thought that it was necessary to have a bigger house for a growing family. At that time, they had already bought a four-bedroom house in Wapping as an investment. The stagnation of the housing prices in the early 1990s let them decide to move into Wapping and let out the smaller house in Hampstead. Both Mr. and Mrs. W4 had been working for the same organisation for many years. The location of their office was in Oxford Circus, Central London. Since they moved to Wapping, Mrs. W4 had changed her job from a full-time to a part-time basis: she went to the office three days a week (9:00 am to 3:00 pm) from Monday to Wednesday and worked from home in the afternoons on Thursday and Friday. Both Mr. and Mrs. W4 drove to work because they had quite different schedules either at the office or at home. Mr. W4 drove a company car and Mrs. W4 drove their own car.

Although their home was one of the largest among the newly built houses in Wapping², they were considering buying an even bigger house in order to have more rooms for their work, entertainment and children's play. Their daughter was now attending a local nursery school, but they did worry about the quality of local primary schools because many pupils were from local council communities. They were seriously considering moving out to the London suburbs in the next few years. They thought they could find a bigger, but still affordable, house in places like Hertfordshire or Berkshire, and they also believed that the education systems were much better in those areas.

Co-ordinating Employment, Housing, Transport and Shopping: Linking the Material Decisions and the Routinised Practices

In these two stories, it is not difficult to imagine that in order to co-ordinate everyday life, some compromises must be made by some, or all, household members,

² Most of the newly built or converted dwellings in Wapping are smaller-unit accommodations, such as studios, one bed-room flats, and small maisonnettes.

especially women³. For the households, there are two sets of factors which are especially relevant to the co-ordination of everyday life. One set of factors are those 'material decisions' which happen less frequently, perhaps just a few times in a lifetime, but nonetheless shape the time-space patterns of a household's daily life in much more profound ways, such as taking or changing jobs, moving homes, getting married, giving birth to children, and deciding which schools children should attend. Another set of factors are those 'routinised practices' of everyday life, such as daily commuting, shopping activities, and escorting children to and from school. These things might be considered by many households to be 'trivial and routine' on the grounds that they are repetitive in the course of day-to-day life. But for society as a whole, the consequences of these trivial things and routinised practices are very significant by virtue of the same reason: they are constantly repeated in almost every household. In some sense, the distinction between the 'material decisions' and the 'routinised practices' in a household's daily life echoes Giddens' contrast between the 'discursive consciousness' and the 'practical consciousness', which he believes to be the bedrock for the exploration of the social nature of day-to-day life (see Giddens 1984, chap. 2). But in this thesis, such a distinction is mainly for the convenience of discussion. As mentioned earlier, the purpose of the intensive analysis is to address the dynamism of the 'institutional webs' which are embedded in the co-ordination of different daily moments; it is important that the structural features of urban institutions remain in focus while the contexts of individual households are emphasised. Accordingly, the key to the understanding of the underlying links between London's institutional structures is the notion of 'individuals in context', which stresses the necessary links between the patterns and the processes of social relations.

In the rest of the chapter, the household account of how urban institutions are linked to one another in the co-ordination of different daily moments will be discussed with

³ Although there has been a growing trend of 'new gender divisions of labour' in the household due to the rise of gender awareness — i.e. household responsibilities are increasingly evenly shared by both partners, however, the need to play a more important role in child care and domestic work often forces women to make a compromise between paid and unpaid (domestic) work.

reference to people's experiences in employment, housing, transport, and shopping in different parts of London, showing that the dynamics of any aspect of one's daily moments will inevitably affect the practices of others in other aspects of daily life by virtue of their time-space connections, and the need to co-ordinate between household members. This suggests that the coordination of everyday life should be understood as an integrated issue: an issue of household life. The time-space connections between different daily moments are an indispensable dimension needed for the understanding of the structural connections between different urban institutions. However, due to the limitation of space, this chapter will focus on the issues of employment and housing, which are often considered by the households as more significant factors in shaping the overall time-space patterns of household life, and the more routinised practices of daily transport and shopping practices will be discussed in the next chapter.

Working in London: The Micro Contexts of Employment in the Process of World Economic Restructuring

As the largest city in the UK and one of the leading cities in the world, London provided nearly 3.5 million jobs in the early 1990s (Department of Employment 1993). As the first story illustrated, people come to London with the expectation of greater and better job opportunities. However, with an area over 1,000 square miles, London is more like a region than a city. It is comprised of hundreds of places, not just a single location. As might be expected, not all the jobs are concentrated in Central London, nor is it the case that different kinds of jobs are distributed evenly across London. The final location of a particular person's workplace has much to do with the interplay of the macro contexts of industrial structures and the micro contexts of individual conditions.

Although the overall trends of economic restructuring are quite marked in London (i.e. the shake-out of manufacturing jobs and the spill-over of service jobs), individuals may not have enough information about opportunities for specific kinds of jobs, especially as jobs which are suitable to a particular person, often involve quite different industries. For

example, the same secretarial job can be found in companies with very different sizes, in totally different industries, and at quite different locations. Most importantly, the location of a particular person's job is often affected by the location of his or her home. While the Government is seeking to co-ordinate London's institutional structures via a policy of 'spatial integration', it should be reminded that in the household life these material decisions, for example, employment and housing decisions, may not be able to be organised in accordance with one another.

People do move home, but moving home is, generally speaking, a significant decision that involves many considerations (Cockett 1978; Jackman and Savouri 1992). It is unlikely that people will move home simply to accommodate a change of job, especially when changes in jobs are intra-regional. Similarly, people are unlikely to change job for the sake of moving home, unless it is inter-regional or long-distance migration. This is especially difficult for some two-earner households because it involves more than one set of home-work relations. Nevertheless, the location of a particular person's workplace might be changeable for various reasons. Similarly, households might consider different residential environments at different stages of a family life cycle. As a consequence, the time-space relations between home and work will change accordingly. In big cities like London, it could be argued that maintaining a spatial proximity between the home and the workplace would be very difficult, if not impossible, because competition in industries and businesses, in the labour markets, and in land use in general, is much more intensive. As a result, the realm of employment for a particular person might be changeable over time, so are the time-space relations between employment and residence. Unless the various contexts of employment are fully addressed, it is unlikely to build a proper connection between employment and housing structures.

Being in the Centre of London: Being Central to the Job Markets?

It was noted in chapter 4 that the employment structures in the UK in general, and in London in particular, have continued to shift from manufacturing to services under the

influences of global economic restructuring. Because they have affected different industries in quite different ways, the restructuring processes, as might be expected, have had significant impacts on individuals in different industries and positions. Although the decentralisation of employment in London has been a noticeable trend in both manufacturing and service jobs, for those who are in the managerial positions and professional jobs, especially in higher order services, the London region as a whole, and Central London in particular, remains the largest concentration of employment opportunities in Britain. As Mr. W6, who was a computer engineer providing database services to companies on a contract basis, noted:

London is a very big job market, in particular the specialised job market. It is probably the biggest job market in the UK that we can stay and travel from one place. It makes it feasible for me to be able to get a contract somewhere within travelling distance.

He believed that, in his field, a great majority of job opportunities were concentrated in Central London where businesses with different scales and specialties might need his professional services. In order to be able to live close to the job market — either the City or the West End, he had managed to buy a two-bedroom flat in Wapping several years ago. Indeed, at the time of buying, he was working in the City. One year after he had bought the flat, the contracted job in the City was terminated. He got another contract in Elephant and Castle. Again, it was very close to Wapping. Being in that particular job for 2 years, he had become unemployed for 6 months before he got his current job in Maple Cross, North West London, some 20 miles away from Central London. At the time of interviewing, he had been in this job for 3 years, but the contract would come to an end in 6 months. He said that he had no idea where his next job would be, but he would accept any good offer “*if it were not impossible to commute.*” In other words, he considered living in Inner London would be more convenient on the grounds of easier access to different job opportunities, despite the job opportunities being in Central London or on the fringes of London.

In the light of London’s commanding position in the British economy and its unique position in the global economy (especially the global financial market), there might be a

greater chance of getting access to certain types of jobs in London, notably the City-related jobs such as banking, finance, insurance, and other specialised services, but for other jobs, notably manual and manufacturing jobs, being in the centre of London may not necessarily mean being close to employment opportunities. On the contrary, it might mean being remote to job opportunities. For those professionals like Mr. W6, it might be a coincidence to end up working on the fringes of London; but for many Inner-London residents, especially those working-class residents and the immigrants, being in the centre of London may mean being remote to job opportunities, no matter whether they are skilled or unskilled, male or female, part-time or full-time, workers. The trend of 'de-industrialisation' in London and the resulting employment changes were described by an East-London worker, Mr. GB4. He said:

Most people you met [in Bethnal Green] worked either on the docks, in the markets, in the breweries, or in small furniture workshops. But most of the jobs have gone in the last 15 years. . . . There used to be 5 breweries in East London, but they have all gone and the workers have been made redundant.

After working in a local brewery for 25 years, Mr. BG4 was among those who had been made redundant when the brewery was finally shut down in the early 1980s. Since then he had tried several different jobs, either working locally or working in other areas (such as Kent). He finally settled down in his current job in the City several years ago, working as a security guard in a bank in the City. Not surprisingly, the nature of the new job was all but irrelevant to his previous experiences in the brewery.

As might be expected, the employment opportunities as a whole might be more readily available in the London region, but it is clear that it would be more difficult to find suitable jobs for manual workers in London by restricting the locations of the workplace to a limited boundary near a person's home in Inner London. Accordingly, it seems unrealistic to talk about the spatial integration of home and work simply in a limited boundary of existing urban areas, such as Inner London. For the white-collar workers, jobs might be more readily available in Inner London, but to find a suitable and affordable house in Inner

London is not easy. For the manual workers, on the contrary, cheaper, rented housing provided by the local authorities is more accessible in Inner London, but to find a suitable job in Inner London is far more difficult (Frost and Spence 1995). While it is believed that in order to maintain a spatial proximity between employment and housing, one can cut the need to travel to the minimum (DoE 1990; DoE/DoT 1994), it is also widely recognised that the results of economic shifts in the process of global economic restructuring, which have dramatically affected the economic health of the cities and the livelihoods of their residents, are far beyond the control of the local governments and the planning system (Gilbert et al. 1996). In other words, the costs will be much higher if the government want to change either the employment structure or the housing structure in Inner London. Even if it is fiscally viable, given the density and the scale of London's (both public and private) transport system, it might raise a question as to whether the jobs created in one area will be taken by the local residents, or they will attract more people travelling longer distances from areas further afield. This is especially problematic when the jobs are created in nodal or central locations where both public and private transport accessibility is much higher, such as Inner London and Central London. Likewise, the same doubt is also applicable to the housing sector, especially in areas like London, where housing is more likely to be used for speculative purpose.

Changes of Jobs and Changes of Workplaces

While the processes of economic restructuring in London have affected the possible locations of a person's workplace, individual situations and personal considerations are also important factors in the determination of a particular person's workplace. For example, it is common for a person to change jobs several times in a lifetime, either as part of a career strategy (such as looking for a better pay, a higher position, a job challenge, and so on), as a response to career crisis (such as being made redundant), or for other reasons (such as family migration). Due to the concentration of job opportunities in the London region, people tend to change their job more frequently as an escalator in a job career ladder (see

Fielding 1992; Savage and Fielding 1989). As might be expected, the changes in a particular person's job may not necessarily be in accordance with the patterns of economic restructuring in terms of timing and locations. In large cities like London, job opportunities of various types might be more readily available, but the competition in the labour market is more intensive, too. Not only do those people in the declining sector, such as the manufacturing industry in London, have to face the problem of redundancy, people in the growing sector, such as the service sector, may also have to face the same problem. Generally speaking, the turnover rates are higher in London than in other cities or areas. Accordingly, the location of a person's workplace is also more likely to change.

For some people, the fast change in the realm of employment in the late 20th century could mean, at the extreme, *"an age without job security, no matter whether you are in whatever industry or in whatever position"*, remarked Mr. G3. In the last 9 years, he had changed his jobs several times, working in the housing department for different local authorities. He believed that:

People nowadays have no security at all about their jobs, . . . even if you are working for the local authorities. Twenty years ago, if you were working for local authorities, your pay might be not as high as working in the private sector, but at least you've got job security. But now things have totally changed . . .

In his view, *"there is no point buying a house near your job"*, because *"you don't know when you will change your job, . . . [and] it is very difficult to get a job locally."* For many households, moving home is more difficult than changing job. As Mr. G3 said, *"you've got all the mortgage, you can't move home easily, . . . so we are prepared to travel."* Indeed, when he bought the house in Greenhill one year ago, shortly after his marriage, he was working in Hounslow and owned a flat in Hackney. But Mrs. G3 also went out to work, her office was in Kilburn. Although living in Greenhill meant that Mr. G3 had to travel a longer distance to work, the distance was actually much shorter for Mrs. G3 to travel to work from Greenhill than from Hounslow or Hackney. In other words, the home-work relationship might become more complicated for two-earner households. Hence, how to

strike a balance between different sets of home-work relations is something that needs considerable negotiation and coordination between household members.

Inter-firm Movements

Perhaps the reason why a person changes jobs more frequently than others is due to personal factors, such as his or her own personality, the relations with colleagues, the nature of the jobs, and a person's adaptation to working environments, nonetheless, such a change may demand a great effort to reorganise other aspects of everyday life, including the routine practices of other members' daily lives. It might be exaggerated to say that a person's workplace will change very frequently; after all, only a few exceptional individuals do change jobs from time to time. The situations may vary quite significantly for the people in different occupations and different age groups; but still, it is not uncommon for a person to change his or her job a few times in a lifetime. As one might expect, it is not always possible for a new job to be found near the area of the previous one. This has become more difficult nowadays since the job markets have become increasingly specialised, especially when the job is more professional, or when a person is in a managerial position. In these circumstances, it seems unavoidable that one has to search in a wider area in order to find a suitable job.

As Mr. S10, who had recently been laid off after working as a senior financial analyst in a pharmaceutical group for 6 years, said, "*the professional consideration is far more important than the travel consideration . . . [because] you are not always able to find what [the job] you want within your desired location.*" It may be less of a problem for younger people either to change jobs or to move home, especially when they do not have children or their own houses, but for those who have families and their own dwellings, he suggested that "*a better way to approach the job market . . . is to be flexible.*"

Intra-firm Movements

Although it seems unavoidable to change the locations of a workplace when a person has changed his or her jobs (firms), for many others who do not change jobs at all, it is not uncommon that they might change the locations of their workplace, too. This is most likely to happen to people who work for large firms, such as national or transnational companies and the utility industries (the water companies, telephone services, electricity, gas, and so on) where their headquarters and some branches, district offices, and factories are all located in London. In such circumstances, one may have to rotate from one office/factory to another during the course of his or her stay in the company.

For example, Mr. S8 had moved into Harrow shortly after he had graduated from university and found a job in a company producing and distributing industrial gas. His workplace was in a regional (distribution) office in South Harrow. Since then, with the advance of his career in the company, he had been transferred to an office in Wembley (a production department), where he was there for 3 years. Then he was shifted to a regional office in Brentford and came back to Wembley again (but this time was in a new regional office). Although he had been working in various locations, the distances between his home (in Stanmore) and work were no further than 10 miles. His latest move took place 6 months ago, when he was transferred to the headquarters in Guildford, Surrey, some 40 miles away from his home in Stanmore, Harrow. As Mr. S8 remarked, *"I could not have afforded to travel that far to work if I don't have a company car, . . . [and] we would not move [home] unless there were quite good reasons . . . [because] now we have settled down over here."*

An interesting point was that while Mr. S8 had to travel a bit further to the headquarters in Guildford, it took him about two and a half hours per day to travel to and from work, the frequency that he had to travel to other offices and/or factories in the UK or abroad had increased substantially (about two days in a week). Although he had to put up with the longer daily journeys to the headquarters in Guildford, it was more convenient for him to travel to North England and the Midlands (by car) from Harrow than from Guildford, and it was not too difficult for him to get to Heathrow Airport when he had to travel abroad.

In other words, in reality it is more like a privilege to be able to work near home, although some people have managed to do so.

The Movement of the Firm

In some circumstances, although one does not change company or job, the location of his or her workplace might be changed: i.e. the firm itself is relocated. In effect, the process of global economic restructuring has forced many of London's industries to relocate in the peripheral areas, in particular the manufacturing industries. However, in the process of de-industrialisation, i.e. the combination of the 'shake-out' of manufacturing jobs and the 'spill-over' of service jobs, many workers found out that they had little choice except going with the company, if they did not want to lose their jobs altogether.

For example, Mr. BG5 was a goldsmith, being in this trade for 30 years and in this particular job for 17 years. The company he was currently working for used to be located in Covent Garden, Central London, some 10 to 15 minutes drive away from Bethnal Green. Five years ago the company moved out of London and relocated in an industrial park in Potters Bar, Hertfordshire, some 30 miles away from London. He went with the company. As he said:

That is difficult at my age to change job, so I go with the firm. . . . I am happy with the house now I am living in, but not the area [Bethnal Green]. . . . Personally, I always want to move out of London, . . . but I have to think about the family. My daughter works nearby; my son works not far [away] from here; and my wife works just within walking distance, only me [work outside London] . . .

Although Mr. BG5 now had to spend nearly two hours commuting every day, compared to the 30 minutes drive to and from Covent Garden, he was probably among those who were lucky enough to remain employed in the East-London communities where massive, predominantly manual jobs, had become redundant in the last few decades. In other words, the change of workplace is often beyond the control of individual workers.

No Fixed Workplaces

For some people, the locations of their jobs are not fixed at all. This has much to do with the nature of the jobs: some jobs may involve several locations at the same time and some others may need to change locations from time to time. For example, in architecture, construction, and some personal services, the locations of people's workplace are more likely to be unfixed. In these circumstances, it is very difficult to anticipate the location of one's next job, and the duration of each job may be variable, too. Therefore, it is unrealistic to talk about a fixed time-space relationship between home and work. For instance, Mrs. S9 was an architect, had been working in a Camden-based company since 1990. Her first job was a joint project in partnership with a large engineering company, which had a main office in Tottenham Court Road. Within the duration of the project, she was asked to move into the office in Tottenham Court Road because most of the design work was undertaken there and face-to-face communication was an essential part of her job. So she had worked in Tottenham Court Road for three years, occasionally she had to go back to the Camden office for things like meetings or to seek technical support. The construction site of this particular project was in Stevenage (some 30 miles north of London). At the early stage of the project, she had to go to the site office just once a month. But at a later stage of the project, she ended up travelling to Stevenage every day for nearly four months. When the Stevenage project was finished, she moved back to the main office in Camden where a new project with a construction site in Portsmouth was started. This time she had to travel to Portsmouth twice a week, some 80 miles away from London. At the time of interviewing, the Portsmouth project was at its final stage, so Mrs. S9 spent some time doing another project. The construction site for the new project was in Sandwich, Kent, but the engineering office was in New Malden, South London. So in a typical week, she now had to go to Portsmouth once a week, New Malden two days a week, and spend another two days in the main office in Camden. It was clear that the fixed spatial relation between Mrs. S9's office in Camden and the home in Stanmore did not mean much to her in her daily life

because of the nature of her job.

Household, Gender, Time-space and Employment

From the examples we have come across so far, it is clear that the realm of employment in London is not as stable as one might have thought. In other words, the location of employment for a particular person may be quite changeable. Although there has been a trend of an increasing number of single households (both young and elderly) in London (LRC 1991, cited by Merrett 1994: 43), the majority of London's households are still composed of married couples and their families, or households with similar structures. However, it should be stressed that even the single households are not entirely free in the co-ordination of everyday life. They have to face the same problems of employment dynamics and housing considerations, although they might have a wider longitude of freedom to accommodate the various contexts of employment and housing. Given the growing number of two-earner households and the increasing specialisation of the labour market in the last two decades, it is not difficult to imagine that the time-space relations between home and work are far more complicated in the two-earner households if we are convinced that a maintenance of a time-space proximity between the home and the workplace has never been easy for individual persons (single households or one-earner households).

The difficulty of striking a balance between the proximity of home and work and the expanding boundary of the job markets in London is perhaps most apparent in women's employment. In the last few decades, one of the most noticeable trends in the labour market in London has been a marked shift from male to female and from full-time to part-time employment. In Greater London, for example, 61.9 per cent of women aged 16-59 were in employment in 1991. It was lower than the male counterpart of 74.8 per cent (aged 16-64). But the composition of the total labour force in London has changed, if at all, substantially. While male employment decreased substantially (6.7 percentage points), female employment remained relatively stable (0.4 percentage points of decrease) (OPCS 1993a).

At a sub-regional level, male employment decreased substantially in both Inner and Outer London (14.4 percentage points and 10.4 percentage points respectively) between 1984 and 1991, but female employment remained relatively stable in Inner London (0.5 percentage points of decrease) but increased by 5.9 percentage points in Outer London (DoE 1996a). In 1984 females accounted for 42 per cent of the workforce in London; this had risen to over 47 per cent by 1991 (*ibid.*). In 1994, almost three quarters of London's women aged 35 to 44 participated in the labour force (Government Office for London 1995a). In short, women's role in paid employment has become increasingly important. Accordingly, to understand the time-space connections between different daily moments, we cannot ignore the changing relationships between paid employment, gender role, and household life.

On the one hand, the social factor of gender role, i.e. the gender divisions of labour in the household, still constrains the spatial boundaries and the time spans of many women's paid employment (see Tivers 1985, chap. 5). As illustrated earlier in the two 'London stories', many women either 'work' as full-time housewives or take part-time and/or local jobs. On the other hand, recent trends in female employment suggest that an increasing number of women, like most male workers, are travelling longer distances to take full-time jobs. Given the fact that women's roles in the reproduction of family life has not changed much over the years (i.e. most women still take a larger share of responsibilities in domestic work, shopping, and, in particular, child care), the increasing importance of women's role in the productive activities suggests that the need to co-ordinate home and work can no longer be met in a single dimension of spatial integration of employment and housing, but should be channelled in a wider context of time-space co-ordination. Not only is an increasing number of women from the suburbs now travelling into London to work, but there is also a consistent growth of female employment on the fringes of London. Although the time-space gap between home and work in London has been largely reduced by the improvement of the transport system and communications — such as more and wider roads, faster trains and more frequent services, and other travel-free services such as the fax machine and electronic mail, the difficulty of gaining access to different modes of transport, and the lack of time-space co-ordination between institutions, such as a lack of nursery

school at workplace and the inconsistency between school's and other organisation's timetables, have had significant impacts on the co-ordination of everyday life for female workers.

This issue is particularly acute in metropolitan areas like London where the proportion of lone parent (single-mother) households is historically higher than in the rest of the UK (OPCS 1993b, Table 18). For most single-mother households, work is an imperative; but it is very difficult to strike a balance between income consideration, child care, and the time-space connections between paid employment and domestic responsibilities (i.e. the choice between full-time and part-time jobs, as well as between local and non-local jobs). For those women who have special skills or higher qualifications, it may not be practical to restrict themselves to part-time and/or local jobs, especially in circumstances where the areas near to their homes are predominantly residential. Most importantly, even if they have to work full-time and/or work further afield, and so their responsibilities in the domestic realm and with child care do not diminish at all.

Take Mrs. S7 for example. She has had 14 years of experience in the insurance business before she separated her husband. She had already left work for 5 years because she wanted to stay at home to look after her son and daughter. At the time of interviewing, she felt that her children were old enough (12 and 14) to look after themselves and they were able to go to school on their own, although sometimes she would drive them to school or drop them at the train station. She wanted to go back to work. Ideally, as she said, she was looking for a part-time job, working between 9:30 am and 3:00 pm, either locally or in the West End with easy public transport access. Because she thought that children were still her first priority, she wanted to be at home before her children came back from school. But she realised that, if she wanted to get a job that fitted with her background and experience, *"it is very difficult to get a job locally, there is a better chance in the central area, like the City or the West End."* *"I know it is very difficult to get a part-time job in the West End"*, she continued, *"so I am prepared to work full-time if I have to work in the West End."* In other words, the increased rates of women's participation in the labour market

suggest that it has become more difficult to maintain a close proximity in space and time between paid work and domestic work. Rather, what is needed is to co-ordinate the increasingly fragmented daily life in an enlarged time-space zone. Car driving is one of the most common solutions many women have employed to link the increased disparities between home and work. However, one of the major policies of the Government's sustainability strategy has been to cut the need to travel, especially those trips made by car, and so this begs one to ask the question 'Should women should go back to their subsidiary role in paid employment, or should they have alternatives to living a less fragmented life which is both socially and environmentally sustainable?'

The Connections Between Employment and Other Aspects of Daily Life

The discussions above suggest that in reality the individuals may have little control over the locations of industrial developments and the locations of their own workplace, especially at times of recession. It sounds very plausible to concentrate the locations of both employment and housing in a spatially limited boundary — the city — in the light of the need to reduce the time-space friction between them⁴. However, the experiences of the interviewees in different parts of London suggest that to have a desirable time-space relation between home and work in everyday life is by and large a privilege more than a necessity. It is especially difficult for two-earner households and lone-parent households on the grounds that both the employment needs and the housing considerations (including other domestic responsibilities) are often pulling in different directions. It is not impossible for a particular household to maintain a close proximity between the locations of home and workplace, but the cost of such a spatial co-ordination is so high that not every household could afford it, especially when the spatial integration of employment and housing is to be achieved in Inner/Central London. For those two-earner households, it has never been easy

⁴ This is the idea behind the notion of the 'compact city'. However, it could be argued that no other British cities are more compact than London. But few would agree that London is more 'sustainable' than other British cities.

to maintain two sets of home-work relationships in an increasingly specialised labour market; and hence it may need a great deal of compromise and co-ordination between household members. Not surprisingly, such a compromise often requires a co-ordination of different daily moments in a wider time-space zone. In turn, this time-space channelling of different daily moments requires a greater effort of co-ordination and compromise between household members. For lone-parent households, to take jobs which are further afield or to work in the hours that could otherwise be used for domestic work and/or child care, has become a common phenomenon of urban life.

To live, and work, in a large city has never been easy. The point is that in order to make it possible to work in particular places and times while maintaining a reasonable quality of household life, some sorts of arrangements for other aspects of daily life would be necessary, such as choosing an appropriate means of transport, changing shopping locations and schedules, sending children to nursery school, or hiring a child minder, or combining different activities in a single trip. Usually this cannot be done without some sort of compromise from some, or all, household members. The dynamics in the paid employment will necessarily impinge into other aspects of daily life. The question is in which way and to what extent. It could be argued that the co-ordination of institutional structures in London needs to take into account the interrelated feature of the fragmented urban life and the compromising character of household life; otherwise, institutional co-ordination based exclusively on spatial proximity and numerical parity at macro level can only create a compact urban form which does not have any internal bonding quality. In the following section, the interrelated feature and the compromising character of the co-ordination of everyday life will become more illuminating when the issues of housing decisions are taken into account.

Living in London: The Reproduction of Household Life

The two 'London stories' mentioned earlier in the chapter have highlighted some of the household dynamics between home and work. Both households shared similar socio-

economic backgrounds, household compositions, and they were both at similar stages of their family life cycles; they used to live in the same area (Hampstead) and the heads of both households were working in Central London. But the time-space configurations of their everyday lives were very different, mainly because of one thing — different housing decisions. Household G4 chose to move to the outer suburb of London: Mr. G4 travelled into London to work by the underground and Mrs. G4 stayed at home as a full-time housewife but used a car for her daily transport. In contrast, household W4 decided to move into the central part of Inner London: both Mr. and Mrs. W4 drove to work, but Mrs. W4 only worked part-time because she had to take a larger share of domestic responsibility, in particular, child care. As these two examples have demonstrated, the close proximity between home and work does not necessarily result in a more sustainable pattern of transport, even in the central core of Inner London. The distance between home and work may be reduced, but the number of car trips has increased. On the contrary, the longer distance between the suburban home and the workplace in Central London is connected by public transport.

Of course, these two examples cannot represent the life patterns of all the households in London. There is no shortage of examples to contrast these two cases. The point is that people choose residential location for different reasons, commuting distance and transport infrastructure are but one dimension of the whole housing considerations. Arguably, given that the networks of both public and private transport are more readily available and denser in London than in other areas, transport considerations are a less important factor in many households' housing decisions. Moreover, moving home is a very significant decision for many households, especially when they are moving via buying their own dwelling. The costs of moving are very high, including the cost of the property, the waste of time and energy, the break-up of social connections, and the changes in daily practices and other disturbances (such as changing address, telephone number, and so on). Factors such as the right type and size of housing suitable to the needs of the whole family, the price of the property, the quality of the residential environment, the availability of local facilities, the connections to public and private transport systems, the reputation of local

schools, and perhaps the potential market value for re-selling the property, are all important considerations when people make their housing decisions⁵. Plus, once households own their own dwellings, they are less likely to move (Rossi 1980; Fredland 1974). In other words, housing decisions are a very important constraining factor which have, by and large, set the overall configurations of particular household's plans of their everyday lives; this is crucial to a range of issues concerning the reproduction of family life.

However, this does not mean that households do not move home at all. On the contrary, for many households the housing decisions are not a one-off affair, but represent a process of household life which evolves over time. In fact, the view that housing decisions and household life cycles are closely related, has been a consensus in housing literature (see, for example, Rossi 1980; Clark and Onaka 1983; Kendig 1984; Forrest 1987). The overall argument of the life cycle hypothesis is that housing demands change systematically with the life cycle of the family, and that moving is primarily a means of bringing demand and supply into agreement (Rossi 1980). Things like marriage, giving birth to a baby, the growing up of children, divorce and death, will all affect housing demands. Generally speaking, younger households are more able to tolerate a less satisfactory housing condition. This is partly because they cannot afford a better or a bigger dwelling, especially via purchasing, and partly because they do not have the need. For many younger people, public spaces and the activities outside home are a more important part of everyday life. Very often younger households are living in rented accommodations. But once they have children, especially when the children are growing up, their needs for bigger space and more rooms will increase accordingly. Very often this is also the time that people's careers, as well as their incomes, are reaching a stable stage. Consequently, households are more likely to consider moving home, especially by purchasing a more permanent property.

⁵ The point is, as demonstrated in chapter 4, that the supply of appropriate properties is not evenly distributed in London. The combination of certain sizes, types, and prices of dwellings tend to be available only in certain locations. This would inevitably create co-ordination problem for households between housing and employment decisions.

In housing decisions, the choice of location has much to do with the supply of suitable dwellings. While widespread car ownership and the advances in telecommunications have loosened the spatial bond between residential locations and other activities, people are able to choose the location of their home in a wider area. As might be expected, an ideal residential location for a particular household does not necessarily coincide with the locations of different household members' workplaces. Moreover, due to the competition between different uses of urban land, the locations of employment and residence tend to be contradictory. It is not uncommon that housing developments are 'squeezed out' from central areas to urban fringes. While an increasing number of the housing-employment disparities are reduced, or reinforced, by the advance of transport technology and the improvement in the transport system, this thesis argues that, given the significance of residential decisions for the co-ordination of household life as a whole, what is needed in the intensive investigation of households' daily dynamics, is to understand the interplay between households' housing needs and the constraints of London's housing structure. The remainder of the chapter will highlight the housing dynamics of people's residential decisions, illustrating that a choice of a suitable residential location in London is subject to a range of considerations. Arguably, spatial proximity is but one way of connecting the fragmented moments of housing and employment in household life, instead of an essential part of housing decisions.

Living in Inner London: A Privilege or a Necessity?

As mentioned above and elsewhere, a considerable share of the UK's employment opportunities are concentrated in the London region, in particular in Central and Inner London, such as higher-order service jobs. For those who are working in Central or Inner London, an ideal location of home, as might be expected, is somewhere in Inner London which is close to both the workplace and other facilities and services. This is especially appealing to younger households or those households whose centre of life gravity is outside home, be it at work or with other leisure activities. In fact, a growing number of

purposefully built and converted apartments have recently been built in Inner London to fulfil such a demand. So they can go home as quickly as possible after a long day of work or they can have easier access to the locations of leisure facilities in Central London. As Mr. W5 noted, *“it is no fun in commuting.”* In either case, living in Inner London could mean a more efficient way of life because the time spent commuting and other travels can be cut to the minimum. By contrast, living on the fringes of London and working and entertaining in Inner London, or having ‘two lives’, might be considered by some as *“inconvenient and boring”*, said Mr. W6. For such households, time is the most valuable resource: long hours of journeys for daily commuting and other trips is a waste of time, and therefore a waste of life. As Mrs. W3 argued, *“it is not worth wasting time on travelling.”* For example, Mr. W2 used to live in Surrey and travel into London to work (in the City) by train. It took him nearly 4 hours a day to travel between Surrey and the City. Because he worked very long hours during the day (more than 10 hours per day and sometimes he had to work on Saturdays) and after work he liked to socialise with colleagues and friends in town, after 6 months of long-hour commuting, he finally decided to move into London (Wapping). As he said:

To live in London is mainly for work. . . . Being 10 to 15 minutes walk away from work, it gives you a better quality of life during the week: you don’t have that stressful daily commuting. . . . Before moving into London, I had to spend up to 4 hours a day commuting, . . . but now I can either work longer or have more free time.

Not surprisingly, many people move to Wapping or other areas of Inner London for similar reasons. It might be more convenient and exciting to live in Inner London; however, there are some disadvantages which often discourage people from living in Inner London. Much higher housing costs, and a generally poorer quality of environment are two main disadvantages that many interviewees have mentioned. As Mr. W2 noted, *“the price of the property is too high [in Wapping], we could not afford it if it is not my girlfriend’s father who owns this house.”*

Some might argue that the somewhat higher housing costs in Inner London are the

premiums to be paid for the saving of money and, most importantly, for the saving of time spent on commuting. However, it seems unlikely that people can avoid travels all together by living in Inner London. Generally speaking, transport costs are more expensive in London for both public and private transport than in other areas; and the differences of transport costs are not so significant between Inner and Outer London. Many households simply choose to live further afield and travel into London to work. Moreover, it has never been easy to find a suitable dwelling in a desirable location in Inner London, at times when people need, or want to, move home.

On the other hand, most households considered residential amenities were an important factor in their housing decisions. In this regard, the generally poorer environmental quality in Inner London, such as traffic congestion (both on the road and on public transport), noise and air pollution, the lack of open and green spaces, and higher rates of crime and delinquency, seem to be vital factors which have discouraged many households from living in Inner London. Even for those who are currently living in Inner London, this factor has forced some households to consider moving out. In fact, some interviewees in Wapping and, in particular, Bethnal Green, admitted that they were, or had been, seriously considering moving out of Inner London (such as households W3, W4, BG1, BG3, BG4, BG5). Although a persistent trend of 'counter-urbanisation' has been observed in the 1980s (see Champion 1991), many people simply can not afford losing the job opportunities (many of them are better paid, professional jobs) in London, and move to smaller towns or villages. For many people, a compromising solution for striking a balance between the 'pull and push' of London's employment opportunities and residential environment (i.e. higher housing costs and poorer environmental quality) is to live on the fringes of London and commute to London to work.

Rented Social Housing and the Poor

While some, in particular younger households, are paying the premiums for being able to live close to work and other leisure activities in Inner London, many Inner London

households, in effect, have had very little control over the location of their home. Although there are calls for increasing housing capacity in the cities, and in particular in areas at, or near, the nodal locations (DoE 1992c), a largely ignored issue is that many council households (those households who rely on the cheaper, rental accommodation provided by local authorities or housing associations as the only source of affordable housing provision) have been trapped into the rented social accommodation in Inner London, in particular in the East part of Inner London (see Myers 1983; Smith and Williams 1986). The central location of these council properties might appear to be attractive to those suburban residents who have to travel a longer distance into London to work, shop, and entertain, but, generally speaking, the conditions of council properties and the residential environments in Inner London, especially in the east part of London, are not satisfactory on the grounds of a range of problems which characterise London's East End or the inner cities in general (see Butler and Rustin 1996; Bannet 1989; Robson 1988). Things like overcrowding, poor construction quality, lack of maintenance, deteriorating infrastructure, and coincidentally the higher rates of delinquency, crime and drugs problems, as well as the tendency of racial tension within the community, have been considered to be closely associated with council properties. As Mr. BG3 complained, *"it is very noisy, . . . kids play outside, . . . cars and traffic."* Mr. BG4 said, *"it [Bethnal Green] is very convenient, but the shadow of the racial issue has become a serious problem in this area."* Mrs. BG1 added, *"the community is divided. . . . Neighbours make noise, but you can do nothing about it. If I could go now, I would definitely go."* The same view was shared by Mrs. BG5, she said, *"I want my children to move out of this area; it is better for them."*

Nevertheless, a more serious problem facing many council households in the East/Inner London communities has been a lack of suitable jobs in the nearby areas. The advantage of being close to East London's traditional labour market, such as those jobs in docks, warehouses, markets, breweries, and the manufacturing industry, has gradually become a disadvantage since the closing down or the moving out of those industries from London in the last 20 to 30 years or so. Unlike their richer, more mobile and flexible, white-collar counterparts in the outer suburbs, or the gentrified households in the inner parts

of London, many of the predominantly working-class, council households, are unable to move to areas where job opportunities suitable to their skills and experiences are more readily available because of a lack of affordable rented housing in the outer parts of London. The difficulty of moving out of council accommodation in Inner London can be illustrated by household BG3's unsuccessful moving attempt. As Mrs. BG3 said, they had thought of moving out of Bethnal Green and to the suburb when they saw some of their neighbours had gradually moved out and bought their own dwellings in other areas. But they could not afford to buy a suitable house in the private sector, so they tried to exchange for other council properties on the fringes of London several years ago. After trying many years in vain, they finally gave up and bought (by lease hold) the maisonette they lived in from the borough council under the scheme of 'Right to Buy'. As Mrs. BG3 said, *"it seemed to be the only chance that we could own our own property."* As might be expected, many households I have interviewed in Bethnal Green shared a similar view (such as households BG1, BG4, BG5, BG6, BG8). For them, staying in council properties in Inner/East London was simply because they were unable to move to other areas, although they wanted to.

However, staying in the council properties in Inner/East London, may mean having difficulties gaining access to job opportunities in Central or Inner London due to the skill gaps between their experiences and the job requirements. Moreover, they may also have difficulties in gaining access to the job opportunities on the outer fringes of London due to the inadequacy of the public transport system's outward travel and their inability to own a car. This is especially difficult for some female workers in the council communities. On the one hand, in many households women must go out to work in order to earn a living for the family; on the other hand, they also have to take a larger share, perhaps all, of the responsibilities for domestic work and, in particular, child care. This makes a longer journey to work either impractical or difficult.

A lack of cheaper social housing or privately rented accommodation on the outer fringes of London makes it very difficult for today's Inner London council households to move to the areas from where they can have easier access to the job opportunities suitable to their experiences and skills. In 1991, for example, less than 20 per cent of Outer

London's households lived in rented social housing; but nearly 70 per cent of Outer London's households lived in owner-occupied housing. By contrast, more than 43 per cent of Inner London's households lived in rented social housing; but less than 40 per cent of them lived in owner-occupied housing (OPCS 1993a, Table 3). In some Inner London boroughs, such as Tower Hamlets and Southwark, rented social housing represented more than 60 per cent of the total local housing provision. The inadequacy of the housing structure in London, when taken into account in association with London's employment structure and transport system, suggests that co-ordinating everyday life in London is especially difficult for the council households in Inner London because they tend to live against the grains of London's structural features. The question is that their 'needs', say, for housing and transport services are more likely to be ignored in the 'market mechanisms' simply because they are a weaker, and a less effective 'demand' on the market. Accordingly, how to strike a balance between housing and employment for council households seems to be a pressing issue that requires a strategic response in a sustainable urban policy.

Suburban Living, Household Life Cycle and the First-time Buyers

As might be expected, many suburban households have had the experiences of living in Inner London (for example, households G3, G4, G8, S3, S6, S7) when they were younger and/or had no children, in particular by renting from local authorities, housing associations, or the private sector (see, for example, Clever 1971; Rossi 1980; Clark and Onaka 1983; Kendig 1984; Forrest 1987). However, while some households are tolerating a higher housing cost and a poorer residential environment in Inner London, the need for a bigger house and a better residential environment may increase with the advance of the household life cycle, especially when the 'size' of a household is growing, i.e. the arrival and the growing-up of the children. Usually, this is also a stage where households are more capable of affording their own, and perhaps more expensive, property. People might tolerate a less satisfactory housing condition and a poorer residential environment when

they are younger, and especially when they have no children. This is probably because they are at a stage where they cannot really afford owning a property and because the 'residential environment' is less important to them when they spend more time in other places outside the home. However, when people are getting older, in particular after the arrival of children, they tend to spend more time at home. They are more concerned about the safety and the quality of the residential area, partly because of the responsibility of child care. As might be expected, many households simply move to the suburbs. As Mr. G4 noted, "*I think this area [the suburb] is quite good for children.*"

For those households with children, home is, in some sense, not only a place to rest after work but also the very base for the 'reproduction' of the next generation. The boundaries of the home as the locale of family reproduction will be extended from the physical limits of the house itself to the wider area of nearby streets and the neighbourhood areas. Accordingly, things like a bigger house, more rooms in the house, a larger back garden, safer and quieter streets without through-traffic, adequate local facilities for both adults and children, and good local schools are of growing importance. For many households, houses are more desirable than flats or maisonettes, and 'pure' residential areas without through-traffic are better than the flats above shops and the dwellings off the main roads. So when people are seriously considering to settle down in London with their families by purchasing a more permanent accommodation, it is common that they would choose, or to put it more precisely, they are forced to choose, the outer parts of London for a better quality environment and more affordable housing prices. As Mr. S10, who had two children aged 10 and 13, said:

We had a growing family. . . . When the children grew up, their space needs increased. They had more things, for example, they've got their own computer, they had their own music [equipments] . . . , it all took up space. I also had my own study, so we needed a larger house. This was the main reason that we moved from Wealdstone to this place [Stanmore].

This house has 4 bedrooms, plus one study room [and a big garden], the old one had just 3 bedrooms, and no garden. The differences between this house and the old one are that this house is a bit more private than the old one and this [house] has more garden space where children can play in safely.

While the needs for bigger houses and better environments are pulling the households out of the inner parts of London and to the fringes, the higher housing prices in Greater London often push them to live further afield. It must be noted that housing has never been cheap in London, including the peripheral areas of the 'garden suburbs' in Outer London. Although the housing prices in London vary considerably from one area to another and fluctuate substantially over the years, there has been a persistent trend in the housing market: i.e. the average housing prices in London are much higher than the regional average in the South East, and the average housing prices in the South East as a whole are higher than the UK average. In 1983, for example, house prices in London were 30 per cent higher than the UK average; by 1987, this figure increased to 50 per cent; and there remained a 35 per cent difference in 1994 (Government Office for London 1995a). It would be difficult for some first-time buyers to afford a property in Outer London, not to mention a much more expensive property in Inner London. Household S4's migration history well illustrates the difficulty of living in London by purchasing a property of their own: they (both Mr. and Mrs. S4 are teachers) have moved 4 times in the last 15 years. Firstly, they have moved out of London (to Luton) and then managed to move back to the outer rings of London (Wealdstone), and finally moved to a bigger house at their current address (Stanmore). Mr. S4 told the story of their moves:

My wife and I met 15 years ago when we were at university in Nottingham. We've both got jobs in London so we moved to London and got married. At the beginning we rented a small accommodation in Golders Green. . . . We wanted to buy, but that was too expensive. So we moved out to Luton because property there was much cheaper. We bought a small house there, . . . a two-bedroom, terraced house. Then we moved to another house, also in Luton, but a slightly bigger one.

During that time I was working in London, and she was doing a one-year teacher's training [in Luton]. It was very difficult to get teaching jobs [in London] at that time, so we waited patiently until she got a job in Harrow, and I got my job transferred to Harrow, too. Then we managed to afford moving down to Wealdstone, . . . which was a three-bedroom, terraced house. Being there for 6 years, then we thought we needed a bigger house . . . because my youngest daughter was mentally handicapped, she needed her own room. So we moved to this house [in Stanmore] 2 years ago. This is a four-bedroomed, semi-detached house with a quite large garden.

In other words, for many traditional households, to live in the outer suburbs is a more feasible way of living in London: they can have better housing and residential environments at more affordable costs while having reasonable access to the job opportunities in the London region as a whole. However, one consequence of such a suburban housing decision, and the associated life-style changes, is that transport needs, including work-related trips and the trips for other purposes, have increased substantially. As Mrs. W4 said, *“if you live in the outer suburb, you can get an old house and a bigger garden, but . . . then you have to face the problem of commuting.”* These factors, in turn, have reinforced the patterns of suburban living via the structural changes in the transport system and other facilities. To some extent, this has been reinforced by London’s transport system and the ‘regressive effects’ of the transport costs. On the one hand, the radial distribution of London’s transport networks (including road, train and the underground) towards Central London has facilitated the inward commuting for the suburban workers. On the other hand, the *relatively* cheaper fares for the longer-distance journeys on trains and the underground seem to suggest that those who live further afield are subsidised by those who travel shorter distances (see Banister 1994). Likewise, for those who can afford a car, the relatively cheaper ‘running costs’ for using the car, such as the costs of fuel and wear and tear, when compared to the much higher ‘fixed costs’ of owning the car, such as the costs of the car itself, insurance (car insurance is more expensive in Inner London than in the outer rings of London), M.O.T. and road tax, seem to encourage people to make the best use of the car. In 1991, for example, less than half of Inner London’s workers actually lived inside the area, and as high as 20 per cent of Greater London’s workers lived outside London (OPCS 1994). This suggests that a considerable proportion of the working population in London live on the fringes of London and rely on a longer distance of travelling to link the locations of home and work.

It could be argued that the trends of suburban living also have much to do with the inadequate housing supply in London. In Inner London, the number of jobs greatly exceeds the capacity of the housing stock: while nearly nine tenths of Inner London’s residents worked in the area, more than half of the working population in Inner London lived outside

the area (OPCS 1994c). The disparities between the number of job opportunities and housing stock in Inner London also reflect the limited capacity of land supply in London and the intensive competition between different sectors in the use of urban land. As might be expected, housing developments on the fringes of London have provided the buffer for the mismatches between Inner London's employment and housing capacities. Can the households who want to own a more permanent property really have the chance to find the dwellings with right housing features, good residential and environmental amenities, and, most importantly, affordable housing prices in Inner London if their jobs are mainly located in the inner parts of London? Again, the limited supply of land suitable for, in particular large-scale, housing developments in Inner London has been a serious constraint for such housing demands. This suggests that the structural patterns of housing and employment, as well as the resulting practices of daily movements and other routinised activities are closely related. We cannot change one aspect of these daily moments without the support of the changes from the others. I shall leave the discussion of the routinised practices of daily commuting and shopping activities to the next chapter. But the key point that these housing dynamics have made is that the co-ordination of institutional structures should be realised in a wider time-space context at a regional scale because the co-ordination of housing and employment in the households involves different considerations and practices, and are well beyond the issues of housing and employment *per se*. Accordingly, spatial integration between the locations of housing and employment is insufficient to address the dynamic relationships in the co-ordination of household life. Children's education considerations and households' investment in the property market are two examples in focus.

Children's Education and the Housing Decisions

Having said that children's needs may have significant influences on housing decisions, it is children's education which is among the top priorities of many households' moving decisions: the need to be close to children's schools is perhaps more important than the need to be close to adults' workplaces. There is no shortage of schools in London; by

contrast, school density is much higher in London than in the rest of the UK. The problem is that many parents want to send their children to 'good' schools, normally that means those schools with better GCSE results on the league tables. Although private schools are not necessarily better than state schools, private schools as a whole, generally speaking, have better GCSE results than state schools. But not every household can afford sending their children to private schools; in addition, many parents have an ideological commitment to state schooling. In these circumstances, good local state schools are one of the key criteria which define a good residential environment.

In order to be able to send their children into a particular state school, the households must live within the catchment area of that school. Although there are many exceptions, generally speaking, the division between 'good' and 'bad' schools in London more or less coincides with the division between Outer/West and Inner/East London. For example, schools in 4 Outer London boroughs were listed on the top of the national GCSE league tables in 1995/6 (Department of Education and Employment 1997). They were Kingston-upon-Thames, Sutton, Barnet, and Harrow. In the same year, however, schools in 7 Inner London boroughs (Islington, Southwark, Haringey, Tower Hamlets, Lambeth, Hackney, and Lewisham) and 1 Outer London borough (Barking and Dagenham) were listed on the bottom of the league tables. As might be expected, some households in Harrow do move into the area for this reason. As Mr. G4 said, *"One thing I learned about Harrow was that Harrow's education system has for many years come out quite high in national league tables."* For example, both Mr. and Mrs. S4 were school teachers. They thought that *"it is important that we've got a house near the school so that our children can get into that school"*, said Mrs. S4, since *"children's education is the thing we think about all the time."* In their view, the state school in Stanmore was very good, so they chose this particular area to move in when they were making the moving decision. Such educational considerations were also mentioned by other interviewees in Harrow, such as households S5, S10, G4, G5 and G8. They believed that the reputations of local schools were one of the key factors for their moving decisions.

In Inner London, however, many local schools' GCSE results on the league tables

are unable to match the premium quality of local properties and the associated much higher housing prices. In some cases, it might be the schools and the teachers' problems, but it is also relevant to the backgrounds of the pupils themselves. In Wapping, for example, a considerable proportion of the local schools' students are from local council families. That means that they are from working-class households and, in particular, from immigrant and ethnic-minority households. From an education point of view, it may not be a bad thing because children can learn a lot more about different cultures and make friends with people from quite different socio-economic backgrounds. But since English is a second language for many pupils and thus it is an added burden in their education, it would inevitably affect the schools' GCSE results on the league tables. Many interviewees in Wapping, notably the 'in-comer' households, were quite concerned about this issue. Some parents felt forced to send their children to private schools and some others were planning to move to other areas where they believed the educational opportunities/conditions were better. For example, household W3 did send their daughter (11) to a boarding school in Scotland for this reason. One year after they had sent their daughter to a local state school in Wapping they found that "*the local school was so terrible . . . [that pupils had] no home work, no discipline. Teachers spent time on immigrant students . . . because they fell behind*", said Mr. W3. He added that "*Basically, we don't believe in private education, . . . but we've got no choice, we sent her to a private school.*"

Although it might be very troublesome and costly to move home, rather than sending their children to private schools in other areas, some parents were prepared to move out of Inner London for the sake of their children's education. Household W4 (with 2 children aged 2 and 5), for example, were seriously considering moving home in the near future for similar reasons. As Mr. W4 explained:

Our house is one of the biggest in this area, and the location is fine; . . . we've got the facilities here and we've got a fairly good quality environment; . . . children can play on the back; we can park our cars very easily and travel to work is fine; so we are quite happy with the area. But one thing we are worrying about is education. The secondary schools here, on a whole, seem not terribly brilliant. The published league tables indicate that they are not very good. We don't know whether we can afford the private schools, and private schools do not necessarily mean better. We have to consider very seriously, when our

children are growing older, whether to move away from here, primarily for educational reasons. The trouble is that to get the house with the size we want in Inner London, is just too expensive. Therefore, we certainly have to move outside London, such as Hertfordshire or Buckinghamshire, because the education systems are good there.

But, again, how to strike a balance between educational and other considerations, such as work, and housing and transport, seems to be a great challenge for many households. As Mr. W4 said, “*we also have to consider other problems, such as where to go, commuting, all those sorts of problems.*” There are no rules about such decisions, and the situations may vary from one household to another. The point is that these factors are definitely relevant to the locations of housing decisions. Housing is not just about a shelter; rather, it is also about a range of issues which are closely related to the reproduction of household life. Any housing policies that fail to take into account these factors can at best have a limited degree of success, no matter what goals are to be achieved, environmentally, socially, or economically.

Housing as an Investment

It could be argued that to restrict households’ housing decisions to the realm of reproduction might ignore what housing can contribute to the creation of wealth for the households in the realm of production, i.e. housing can be used as a tool of investment. In the early 1990s, it might seem less attractive for the households to invest in their properties since London’s housing market was at a stage of stagnation. However, in the 1980s it was not uncommon that many households would consider their housing decisions as some sort of investment, at least partly, when the property market was buoyant in the London region. In Wapping, for example, this phenomenon was especially marked because it was within the regeneration area for the redevelopment of London’s Docklands, which has been described as “the largest redevelopment area in Western Europe . . . and the greatest opportunity since the Fire of London” (Brownill 1990: 1).

The productive aspect of the housing decisions can be illustrated by some of the

households' moving decisions. For example, household W5 admitted that their move into Wapping was mainly because "*it was a good opportunity to buy as an investment.*" They bought a two-bedroom flat in Wapping 6 years ago as an investment and continued to live in a self-owned house in Kent. But later the housing prices in Wapping became overheated and finally began to drop, so they sold their house in Kent and moved into Wapping. After living in that flat for 3 years, they found that the prices for the flats were soaring in Wapping but the prices for the houses were sluggish, so they sold the flat and reinvested in the house in which they were now living. Although it is highly unlikely that the households would move home from time to time simply because they want to invest in the property market, the potential of the capital gain from buying and selling properties seems to be an important, although not the only, factor in many households' housing decisions.

However, for those households who relied heavily on borrowing money from banks or building societies to finance their housing investment (either for resale or for their own use), many were first-time buyers, and the stagnation of the housing market in London in the late 1980s had created a problem of 'negative equity' that had seriously affected the mobility and flexibility of households' residential decisions (see Forrest et al. 1994). In other words, although these households 'owned' their own properties, like many council households, they were trapped by the housing sector — they could not sell or move home. It was estimated that a total of 876,000 households in the UK were in 'negative equity' and the shortfall was heavily concentrated in the South East of England (Bank of England 1992), especially in Greater London and among cheaper dwellings (Dorling et al. 1992). As might be expected, people have to change other aspects of their daily moments in order to accommodate the housing predicament. This suggests that institutional co-ordination and household life are the two sides of the production-reproduction coin.

Conclusions: Co-ordinating Housing and Employment in London — A Necessary Condition or A Mission Impossible?

As illustrated above, the conditions of both housing and employment dynamics vary

considerably from one household to another, and from one stage of family life cycle to another. It would be far more difficult to coordinate these two realms in the course of everyday life if they were to be coordinated in a small, confined area as the notion of 'compact city' suggests. The number of two-earner households has increased steadily in the last few decades; the job markets have become increasingly specialised and the turnover rates of employment have also increased. Accordingly, it is becoming unrealistic, and undesirable, to coordinate housing and employment structures via a policy of 'spatial integration'. Given that a lion's share of Britain's households are comprised of two or more persons, it is common that the final locations of both home and work for a particular household are the results of a great compromise made by some, or all, household members so that they can live together as *one* household.

On the one hand, this is because the structural features of London's employment and housing structures are subject to the influences of very different mechanisms and processes. Although individual households have a certain degree of autonomy to choose where to work and live, there are few signs that people can always find both suitable jobs and dwellings in the same area. On the other hand, this is because neither employment dynamics nor housing decisions are one-off affairs. It is simply unrealistic to restrict the boundaries of household life in a spatially limited area. This is especially difficult for the large metropolitan areas where the advance of transport and communications has resulted in what Webber (1964) calls 'the communities without propinquity'.

The difficulty of maintaining a close time-space relation between employment and housing decisions can be illustrated by household S2's moving story. Household S2 (a household which was comprised of three generations: a recently retired husband and his working wife, their only son and daughter-in-law, and 2 grandchildren aged 1 and 3) moved from Hounslow to Stanmore 3 years ago when they had decided to buy a house of their own after the arrival of a new born baby. They had considered several possible locations, such as Richmond, Hounslow, Wembley, and Harrow, and finally decided to move to Stanmore because it had the residential environment they wanted and the housing prices were relatively affordable for them. At the time of moving, Mr. S2 had just retired from India

and came to London to join the family; Mrs. S2 had already been working in an electronic factory in Hounslow for over 20 years; their only son worked in the City and their daughter-in-law stayed at home as a full-time housewife. The daily commuting was less of a problem for their son because he had his own car, so he could park his car near the station and take the underground to his office in Central London. However, for Mrs. S2, the daily commuting from Stanmore to Hounslow was rather difficult because she had to rely mainly on public transport. She had thought of getting another job near the new home in Stanmore, but she found that it was better to remain in the same job because the benefits she already had for working for the same company for over 20 years (such as longer paid holidays, a bonus and pension scheme, and the friendship she had established at her workplace) made her unwilling to change job. “*In order to have a bit of both*”, said Mrs. S2, i.e. a better residential environment and stable employment, she had to change 3 buses and spent at least 75 minutes in commuting (one way) since she moved to Stanmore but continued to work in Hounslow.

As might be expected, it would need a great deal of effort to coordinate the daily practices between household members because people are not only the members of a particular household, they are also the members of other institutions — as employees, clients, customers, club members, students, and so on — which requires interaction with other people in different locations and times. The concept of the ‘institutional webs’ suggests that the coordination between housing and employment structures in the city can only be achieved in a wider time-space context at regional scale so that the households can have the *flexibility* to accommodate the needs of different household members in both housing and employment. In other words, the concept of *diversity* is as important in the constructed urban environment as in the natural ecosystem. Otherwise, we might have a very dense and compact pattern of development in the urban area but it also meanwhile generates unsustainable patterns of movement, such as growing numbers of longer- and shorter-distance car journeys.

Moreover, because any aspect of daily moments necessarily involve other people and institutions, the coordination of everyday life in the household requires an adequate

institutional channelling between different institutional structures in society as a whole. In other words, the integration of institutional structures must facilitate an enabling environment for the coordination of household life and social interaction. The irony is that what is integrated at the macro, institutional level may not necessarily be co-ordinated at the micro, household level on the grounds that what is 'significant' for individual households may be very different for society as a whole. Accordingly, what is badly needed is a comprehensive framework which can adequately relate co-ordinated everyday household life at micro level and integrated institutional structures at macro level, so that the time-space connections between housing, employment, other services and transport can be firmly sustained, well into the future.

CHAPTER SEVEN

A HOUSEHOLD ANALYSIS OF THE CO-ORDINATION OF EVERYDAY LIFE IN LONDON (II): TRANSPORT AND SHOPPING ACTIVITIES

In the last chapter, the discussion of the household dynamics in relation to the coordination of everyday life was focussed on the issues of employment and housing. For most households, employment and housing decisions are two of the most important considerations in their daily lives: the two major locales of daily production and reproduction. Given that London's employment and housing structures have been subject to a range of different influences and, accordingly, are taking different directions, it has never been easy to coordinate everyday life in the increasingly fragmented world of the metropolitan city: London. In addition, the number of two-earner households has increased considerably in the last few decades and the labour market has become more specialised; to co-ordinate two or more sets of housing-employment relations in a household has become more difficult, too. Most importantly, very often the locations of both employment and residence for a particular household are not fixed: they are changeable with the advance of the household life cycle. Hence, some sort of compromise must be made so that the members of a particular household can live together as *one* household. For individual households, to co-ordinate the fragmented everyday life in London, both between different daily moments and between household members, is unlikely to be achieved through the method of spatial integration. Rather, in order to sustain the day-to-day household life, households often have to co-ordinate the locations of home and workplace in a wider time-space context at regional level. In so doing, their needs for certain types of job opportunities and residential considerations are more likely to be fulfilled without the trouble of changing job or moving home.

However, to coordinate an increasingly fragmented household life in a wider time-space zone necessarily involves other aspects of daily moments by virtue of the mutual impinging character of everyday life. For example, in order to move between home and workplace, people must travel. But in many circumstances the distances between the locations of home and work in the urban areas have increased to the extent that they can no longer be linked by short distance walking or cycling, in particular when the travelling

must be done within a very tight time budget. This implies that home and work are increasingly connected by motorised vehicles. In other words, longer and more frequent journeys have become an essential part of daily urban life. This suggests that to coordinate the 'material decisions' of household life, such as housing and employment decisions, increasingly requires an adequate channelling made by other less significant, but more routinised, practices, such as daily commuting and shopping practices.

Ironically, for policy makers and environmentalists, the all too tedious daily journeys to work or to shop have serious socio-economic and environmental consequences, such as the generations of pollution and environmental degradation, road accidents and causality, and social exclusion and inequities, by virtue of their repetitive character. In other words, a small time-space friction between the locations of employment and residence for the individual households may result in a great amount of movements which are seriously threatening to a sustainable urban development collectively. Not surprisingly, in sustainability debates and urban studies, reducing the need to travel in general, and to encourage a modal shift from private car to environment-friendly modes of transport in particular, has been a central issue in the debate on sustainable cities.

Current sustainability policies and environmental theories are right on the grounds that the trend of transport growth cannot go on like this; and they are right on the grounds that cutting travel need requires an integrated approach to coordinate transport development and other institutional structures. However, both Government's sustainability strategy of spatial integration (through the policies of urban re-concentration and mixed-use development) and neo-classical environmental economists' stress on the market mechanisms (such as the lobbies for road pricing and taxation on pollution) are problematic on the grounds that they seem to ignore the intrinsic links of 'institutional webs' embedded in household life. On the one hand, the Government's call for a spatial integration of institutional structures in the urban areas is lacking proper consideration of the micro contexts for the coordination of individual everyday life. This micro perspective is important because those routinised practices of everyday life are the constitutional essentials of London's institutional structures. On the other hand, neo-classical environmental

economists' market-based approaches tend to focus on the individuals, as if they were homogeneous entities. This atomistic tendency ignores the fact that people are living in a web of social relations: their decisions and their actions necessarily involve other individuals at different time-space zones by virtue of the links of the 'institutional webs'. In other words, neither a structuralist view nor a voluntarist view alone are sufficient to address the complex issue of co-ordinating transport and other institutional structures. This thesis argues that to focus on the dynamics of how household life is coordinated can eliminate the blind spots inherent in both structuralist and voluntarist approaches. Accordingly, such an insight will provide a practical understanding of the concept of urban social sustainability and, therefore, can facilitate a more effective strategic response to the challenge of sustainable cities.

In the remainder of the chapter, I shall use the examples of daily commuting and shopping practices to demonstrate the dynamism of coordinating an increasingly fragmented household life in London. It suggests that *diversity* and *flexibility* are two essential criteria for the time-space channelling between individual life-chances and institutional structures in London.

Commuting: An Issue of Accessibility

It should be noted at the outset that the intensive analysis of household dynamics in relation to the issue of commuting is *not* focussed on the patterns of movements *per se*, i.e. issues regarding the distances, the times, the directions, and the modes of work-related journeys. Rather, what is important is the diverse household contexts behind the surface of people's commuting patterns. For example, studies show that there have been some persistent trends in the processes of people's commuting trips, such as an increase in the use of car as the principal mode of commuting and a corresponding decline in the use of public transport, an increase in average length of commuting, and an increase in outward-commuting (Das 1978; OPCS 1994c; DoT 1994; LRC/DoT 1993). Furthermore, it has been argued that the choice of modes of transport is affected not only by the distance of

commuting, but also by the socio-economic backgrounds of the households (see, for example, Fryer 1978; Rees and Shultz 1970; Kain 1975; Simpson 1977). However, Langdon and Mitchell (1978: 19-20) argue that the choice of modes available to a particular person is probably not as wide as is usually assumed on the grounds that there are many complex interactions between individuals and their activities that can affect the availability of travel modes. As illustrated in chapter 6 and elsewhere, over time individual circumstances and the structure of the urban economy will change over time. Commuting patterns of the individuals, consequently, change frequently because of residential and workplace relocation decisions. Accordingly, what should be stressed in the intensive analysis of household life in relation to the issue of commuting is the dynamics of people's transport strategies embedded in the contexts of both household life and other institutional structures at higher levels.

While the Government is arguing for a spatial reorganisation of urban land use — i.e. to direct housing, employment, and other developments into existing urban boundaries via the policy of mixed-use development — for the sake of reducing the scale and volume of transport needs, especially the trips made by private car, it is necessary to explore the considerations underlying, and the possible consequences of, different transport needs. It could be argued that daily commuting and other transport needs are basically an issue of *accessibility* — the need to get access to the locations of economic, social, cultural, and other resources which are required for the continuity of day-to-day life, although in many circumstances *accessibility* is closely related to the issue of *mobility*. Technical change enhances the quality of transport and the extensive mobility within the metropolis is taken for granted by its inhabitants. Nevertheless, in the case of London, due to its scale and history, the relationship between commuting and accessibility is far more complicated than what is implied by the trade-offs between the increase in the capacity of the transport system and the spatial integration of various institutional structures. While there has been a widespread desire to improve availability and in the meantime to minimise environmental impact (see DoT 1996), this thesis argues that a multi-modal, comprehensive urban transport system ranging from cars through underground and surface trains to buses and

bicycles is crucial for meeting the diverse transport needs of the households in different parts of London and under different households and employment contexts.

Transport Infrastructure: The Constraints

Apart from the relative locations of people's homes and workplaces, transport infrastructure plays a very important role in the determination of the modes and the patterns of commuting. The transport structure in the London region as a whole is characterised by a 'dual system' between road traffic and public transport: the transport needs in and toward the inner rings of London are better served by the public transport system, including surface trains, the underground, and bus services; by contrast, the transport needs around and toward the outer rings of London tend to rely on the services of road traffic, especially relying on the use of a private car (LRC & DoT 1993). However, such a distinction is also subject to a north-south division: the north of the Thames in London has a denser network of the underground and the area south of the Thames tends to rely on surface trains (Hall 1990). Given that the transport needs of linking the locations of employment, residence, and services in the inner parts of London are more likely to be met by the existing transport system, it is understandable why the Government wants to direct various developments back to the existing urban boundaries, especially to the areas at, or near, the nodal locations.

However, the purpose here is not to evaluate the Government's transport policies and associated issues of implementation and financing. Rather, the purpose of the intensive household analysis is to illustrate that the transport needs for a particular household must be considered in conjunction to other household dynamics which are beyond the issue of movements *per se*, such as safety considerations (especially for women and children), time constraints, the need to combine work-related trips and other trips, and the difficulty of gaining access to a particular type of transport at certain times and places for different household members. As might be expected, it is unlikely that the diverse transport needs of millions of households in London can be met via a single mode of transport, by either the public transport system or the private car. In many circumstances, people have to travel

against the structural features of London's transport system. While arguing that endless road building and rail expansion alone are unable to bridge the increased disparities of London's institutional structures, this thesis also believes that changing the patterns of land use is insufficient to resolve London's transport problems. On the contrary, what is needed is to treat them as an integrated issue, an issue of time-space co-ordination between everyday life and institutional structures.

Arguably, the issue of urban transport should be understood in a wider *social* context of *household accessibility* instead of a narrowly defined *physical* context of *personal mobility*. This household perspective is especially important in circumstances where an increasing number of trips, both for work and for other purposes, are apparently against the grains of London's current transport structure. Unless the diverse contexts of households' transport needs are fully addressed, it seems unlikely that the 'spatial integration' of London's institutional structures can bring any real benefit to households' co-ordination of their daily lives. This household perspective is the key to the formulation of effective urban policies for sustainable development.

Walking and Cycling in London: Returning to a Pedestrian City?

Bearing in mind that the actual modes of transport are often constrained by the structure of the current transport system in general and by the availability of appropriate properties and suitable job opportunities in particular, it should be pointed out that only a small proportion of London's population actually walk to work (less than 10 per cent in 1991, OPCS 1994), mainly those who both lived and worked in Inner London. For example, both Mr. and Miss W2 (a couple) walked to work from Wapping to their office in the City (they worked in the same company), a journey about 15 to 20 minutes on foot. In Bethnal Green, similarly, both Mr. and Mrs. BG1 walked to work in the local area (Mr. BG1 worked in a local take-away which was 5 minutes walk away from home, and Mrs. BG1 worked in a small textile factory which was just around the corner of their home).

However, the contexts behind the seemingly similar pattern of short walk journeys

were very different. In Bethnal Green, for example, many of these short journeys simply reflected the difficulty of taking jobs further afield: the distance might be too far to travel on a daily basis and the transport links between the home in Inner London and the workplace on the outer fringes of London were so inadequate that the journeys to work tended to be both inconvenient and frustrating. Moreover, a lack of suitable and affordable housing on the fringes of London has forced many manual or unskilled workers to stay in rented social accommodation in Inner London. This local orientation of work-related trips was especially apparent among the female workers in the East End communities where women tended to purposefully look for local and/or part-time jobs that could be easily reached on foot, or by a short-distance ride on a bus, at times which were convenient to go out to work while being able to rush back home without the trouble of long-distance travelling. As Mrs. BG1, who has been working part-time in a local textile factory for 15 years, noted, "*I do this job because it is convenient, not because I like it. . . . Home is much more important than work. . . . It [the factory] is just around the corner, if there is anything . . . I can go home immediately.*" In other words, it is the constraints of domestic responsibilities and a lack of suitable transport, i.e. a *lack of mobility*, that force them to look for local and/or part-time jobs (see Tivers 1985; Grieco et al. 1989; Camstra 1996). Moreover, the lack of mobility in transport often involves a more fundamental issue of lacking *accessibility* to suitable employment and housing opportunities.

In Wapping, by contrast, the reason why many people were able to enjoy the convenience of a short (walk) journey to work, was mainly because they had managed to move into the areas which were close to their workplaces. In other words, it is the *mobility* of the households in their employment and housing decisions which enables them to be able to walk to work. It is not uncommon that people choose to walk to work is because of the inconvenience of travelling by public transport and/or because of the difficulty of driving and parking in Inner/Central London. For example, although both Mr. and Miss W2 had their own cars and did not particularly enjoy walking, they chose to walk to work simply because parking was impossible for them in their workplace (the City of London). If they took a bus, the bus route did not go straight to their workplace; it was too much time-

consuming compared to driving and walking, not to mention the awkwardness of using the underground in Wapping (the East London line). Because the underground network can only cover a limited number of points in an area, rather than stopping at every location, it would be much quicker to walk to the office directly, than use the underground, especially when the locations of both home and workplace are not close to the underground stations.

The distance between home and workplace, for some of London's households, is short enough to walk or cycle to work; however, in most circumstances it is simply not feasible to do so when taking into consideration the weather, the physical constraints (health conditions, disabled people, or the need to carry things), safety considerations (especially women's fear of being the target of crime), inadequate infrastructure (such as safe and extensive cycle routes), time constraints, noise and air pollution that make walking and cycling unpleasant, and other factors (for example, the need to escort children to school which is too time-consuming by walking, or the inconvenience of changing clothes and taking a shower when one is cycling to work). For example, Mrs. W7 had to go to college in Elephant & Castle three or four days a week. The distance was not very far; it was about one and a half miles. In effect, she could have walked. As she said, "*If I could walk, it takes about 35 minutes to get there.*" But she added, "*It is a long way, . . . [and because] I am lazy, so I use the public transport.*" First, Mrs. W7 had to take the bus to Tower Hill. From there she took the Circle Line to Monument (just one stop) and then changed to the Northern Line to Elephant & Castle (three stops). The whole journey took her 40 to 45 minutes, door to door. In other words, there exist some (or many) 'blind spots' in the network of Inner London's public transport system, not to mention in the outer fringes of London.

The reality is that, given London's scale and its current structures of housing and employment development, it seems inevitable to use some sort of motorised vehicles to coordinate the locations of employment, residence, and other services and facilities. In other words, the idea of 'localised' lifestyle might mean quite different things for the households in the late twentieth-century London than in earlier days or in smaller towns and villages. It is unlikely that London is going back to the 'pedestrian city' of Victorian or

Edwardian London by keeping the locations of both employment and residence in a close proximity. Given the disparities of London's housing and employment structures, as well as the constraints of London's transport structure, in this situation what is more important is to co-ordinate the increasingly fragmented daily urban life under different household contexts. As might be expected, this requires a combination of different modes of transport in a wider regional context, so that the locales of different daily moments are more likely to be co-ordinated for the households.

Driving in London: A Luxury or a Requirement?

One might be of the opinion that travelling in Inner London by public transport, especially on the underground, is more *efficient* and, in some circumstances, more *effective*, than driving on the road, especially when the issue of parking is taken into account. But for many people, the public transport in Greater London in general, and in Outer London in particular, may not be convenient enough, when compared to car driving, as a practical means of transport in terms of accessibility and quality of service. In fact, in the early 1990s as great as 40 per cent of work-related trips made in Greater London (not including inwards and outwards commuting) were made by private car (OPCS 1994b). Even within Inner London, where the network of public transport was much denser, one in five of those who both lived and worked in Inner London, used a car for their daily commuting (*ibid.*).

One might wonder that, given the short distance between home and work, and the availability of a dense public transport network, why many people who both live and work in Inner London bother driving into such an area where driving conditions (including parking) are, generally speaking, among the worst in the UK. One might also suspect that the mobility created by the increasing rates of car ownership has been abused. For example, Mr. W4, who lived in Wapping and worked in the West End (near Oxford Circus), had been driving to work all the time although it was only a few miles between these two places and he could have taken a bus or the underground to work. In fact, there are few places in London which have better public transport accessibility than in Central London, such as

Oxford Circus. But Mr. W4 explained why he preferred to drive:

I never use public transport in London . . . [because] it is so slow . . . [and] because we are in a difficult area. East London Line . . . is complicated to change; . . . to use Circle Line, I have to walk to Tower Hill. It takes me 15 minutes to get there. . . . The bus services are essentially no use . . . [because] there is only one bus [route] going to Liverpool Street, and you have to go around, . . . [and] there is the traffic jam; . . . then you have to change from Liverpool Street. . . . If I go [to work] by tube, it probably takes me 40 to 45 minutes, door to door. If I drive, it takes me just 20 minutes. The traffic is not brilliant . . . but the distance is short.

In other words, one must consider the accessibility of the locations of both employment and residence as well, not just the distance. If there is no adequate public transport link between the locations of home and work, even when the distance between the home and the workplace is short and both locations are quite accessible by public transport, it can become more convenient and time-efficient to drive to work than use public transport, considering that one can afford a car, and have no difficulty in finding a parking space near the workplace.

Time Considerations

As illustrated above, it was the short distance that made the unpleasant car journeys more bearable when it was compared to the time spent on public transport with all the inconvenience of waiting and changing. This suggests that not every place in Inner London, especially in some residential areas, is easily accessible by public transport (notably the underground), although it might be well 'covered' by some kind of public transport 'network'. In other words, to use the public transport may mean that one has to go indirectly, i.e. the actual distance of travel may become longer, although the actual distance between the home and the workplace may be very short, so the time spent on travelling may become longer, too. In some circumstances, the time spent on board by using, say, the underground, might be shorter than that of the car journey, but the time spent walking to and from underground stations, as well as the time spent waiting and changing, must be

taken into account, too. According to the transport statistics for London, “access, waiting and changing time accounted for *more than half* the total door-to-door travel time for rail for short radial journeys, and nearly *three quarters* for central area journeys” (DoT 1994: 20, emphasis added). This is in contrast to that “*over 80 per cent* of total journey time was spent ‘in-vehicle’ for short radial car and central taxi journeys” (ibid.). In other words, it is the *door-to-door* journey time, instead of the time spent *on board*, which counts. Given that the need to co-ordinate the fragmented daily moments has increased substantially in the last few decades, it seems that a convenient and quick, though not necessarily fast in speed, movement in space and time between different locales is a prerequisite of modern urban life — a lifestyle which is based largely on the differentiation of daily activities in space and time. In other words, for many households transport is only a time-space bridge between different daily moments. Shorter distances between different locales do not imply that the time of travelling can be largely reduced. Nor will it guarantee that the public transport, or other environment-friendly modes of transport, will be used.

Poor Service Quality and the Public Transport: A Push Factor

Even in circumstances where driving is not much faster than using public transport, especially in Inner/Central London, the deteriorating quality of services in public transport, seems to push people away from the ‘public space’ of trains and buses, and to the ‘private space’ of a car cabinet, where they can avoid the sweat and distress of sitting or standing in a crowded (or overcrowded) train/bus, the uncertainty caused by the delays, interruptions, cancellations, and breakdowns of transport services, and the fear of becoming the target of crime, including pick-pockets, assault (especially for women), and bomb attacks from terrorists. Many measures have been, or will be, adopted to improve the service quality and the safety feature of London’s public transport — such as the introduction of zonal fares and travelcards in 1981, the publication of the Passenger Charter by British Rail in 1992, the launch of the Red Route scheme in some bus lanes and the new London Bus Passenger’s Charter, the installation of the CCTVs in major underground stations, the extension of the

Jubilee Line, the construction of the Paddington-Heathrow Express Railway, the opening of the ThamesLink cross-London line, and the proposed East-West CrossRail link from Paddington to Liverpool Street. However, the somewhat aging infrastructure, the deteriorating quality, and, most importantly, the insufficient capacity of London's underground and bus services have cast an uncertain future for London's transport structure when it is compared to the growing need for a faster, safer, and more comfortable transport system in London, especially for trips made at peak hours. For example, Mr. BG7, who used the underground (the Central Line and the Victoria Line) to travel between his home in Bethnal Green and his office in Victoria, commented, "*the [underground] train is reasonably reliable: there are quite a few trains in the morning, but still not enough. Trains are always packed, it is very common that I cannot get in [the train] at all.*"

While the Government is calling for a modal shift from the private car to public transport, it seems that the problem is not that people do not want to use public transport but that they are unable to get access to a quality service from the public transport system. As might be expected, it may need a massive investment in the maintenance, modernisation, expansion, and innovation of the public transport services in London, if the vision of 'a city of public transport' is to be viable in the long term. Moreover, the special needs for women, children and the elderly, including safety considerations, must be the top priorities of investment for improving services in public transport, since they have been, and will continue to be, the main users of London's public transport. But it is unlikely that all the transport needs in London will be met by public transport. What is also needed is the recognition of the contribution that car trips can make in the co-ordination of people's daily lives, especially those transport needs which cannot be adequately met by the public transport system. If it is agreed that a better transport connection is an important part of daily life for an adequate time-space channelling between different daily moments in the late twentieth-century cities, then it would be necessary to create an enabling transport structure which could make best use of the existing transport infrastructure to help London's households in the co-ordination of an increasingly fragmented everyday life. This thesis argues that a comprehensive transport system in London should place the public

transport system, and the transport needs for the majority of people who either live or work in London, at the centre of London's transport structure. The private transport should be a supplement to public transport in meeting those transport needs which cannot be properly served by the public transport system, including the transport needs for the elderly, the disabled, and women with younger children.

It could be argued that to distinguish the general transport needs for the majority of ordinary people from the special transport needs for specific groups or areas, will be more viable in terms of economic considerations and more effective in terms of social considerations. On the one hand, an extensive and well co-ordinated public transport network is economically viable and socially acceptable because the 'economies of scale' in transport investment can make best the use of the limited resources by making them accessible to a great majority of people in the urban areas, especially to those people who are less well-off. On the other hand, the allowance for a certain degree of flexibility in transport can tailor the special needs for a small group of people who have difficulty in getting access to public transport anyway. This thesis argues that the money saved can be invested in some special schemes which target the unique needs of disadvantaged groups. Likewise, for those for whom *car mobility* is the only way of gaining access to employment locations, and other services and facilities, a flexibility of movement must be reserved for them. The problem is that quite often transport needs for a particular person are not considered in isolation, such as the most time-efficient and the most cost-effective ways of travelling to work. On the contrary, they are often considered in conjunction with transport needs for other household members. In other words, the transport needs for work-related journeys are closely related to the transport needs for other purposes, such as escorting children to school, shopping, and the like. I shall return to this issue later. The point is that, for individuals, transport issues are not an end in themselves. Although it has become increasingly clear that an endless growth in the volume and scale of transport is environmentally degrading, economically wasteful, and socially unacceptable, what is of equal importance in a civilised and sustainable society is that people in different circumstances must have a reasonable degree of accessibility to the major locales of their

daily activities, especially when the locations of their, say, employment and residence are often beyond their own control. Accordingly, the issue behind daily commuting is a complex relationship and a dynamic process of co-ordinating fragmented household life.

Outward Commuting and Orbital Movements Between Suburbs: The Neglected Transport Needs

The inability of London's public transport system to serve the transport needs of co-ordinating fragmented lives is most marked in the outward commuting to, and the orbital movements between, London's outer suburbs. Given the decentralisation of London's employment structure (a combination of a 'shake-out' of manufacturing jobs and a 'spill-over' of service jobs to the outer rings of London) and housing structure (the 'squeezing out' of large-scale housing development), a growing number of worked-related trips are made from the inner rings of London to the outer fringes, as well as between and within the outer suburbs. Since many jobs on the outer fringes of London are located in free standing locations which are not easily accessible by public transport, such as some industrial parks and out-of-town shopping centres, it seems that private car use is a more feasible means of transport linking the locations of home and workplace, for all those who work in the outer suburbs. For example, Mr. W6, who lived in Wapping and worked in Maple Cross, Northwest London, some 30 miles away from home, had to drive longer than an hour to work every morning. As he said:

The place I work at the moment is not really accessible by public transport. They [the company] run a mini-bus from the tube station, it is not convenient to take. When my car goes to service, I do use public transport. . . . But it is not a pleasant journey . . . and you have to take a taxi from tube station to the office.

In other words, with the help of a car, one is more likely to take a job in the outskirts of London, although he or she may need to travel tens of miles and spend hours commuting daily. This suggests that there exists a dilemma between making difficult decisions of

moving home or changing job, and spending longer time and more money on daily commuting.

The irony is that, in some circumstances, the longer journeys to work for a particular person is a necessary compromise if the transport needs of other household members are to be taken into account. For example, Mr. BG5, who was a goldsmith, had to drive nearly an hour and travel some 30 miles from Bethnal Green to Potters Bar, Hertfordshire on a daily basis since he went with the company when it moved out of Central London (Covent Garden) and relocated in an industrial park in Potters Bar several years ago. At the time of his company's moving, he had thought of changing job or moving to areas which were closer to his workplace, but he realised that it was very difficult to change job at his age (early fifties) and it would be more inconvenient and a waste of time and money for the rest of his family to travel into London to work if they did move out of London: his wife worked in Bethnal Green; his son worked in Poplar; and his daughter worked in Shoreditch — all in Inner London and were very close to Bethnal Green. So it was more practical that he drove a longer distance to work from Inner London (because there was no direct public transport link to his workplace) rather than move out of London and let other household members travel back into Inner London to work, either by public transport or by private car. Accordingly, when the transport needs of a particular household are considered as a whole, it would necessarily involve a more complicated set of relationships between employment, housing, and transport for different household members.

As might be expected, it may not be a problem for an individual person to arrange the locations of both employment and residence in a close proximity so that the need to travel can be minimised; but it would be quite difficult for a multi-earner household to maintain such spatial proximity between their home and the locations of different workplaces. One might suspect that the relatively small percentages of the outward commuting in London (less than one in twenty in Greater London and less than one in eight in Inner London, OPCS 1994c) are not a serious problem at all when compared to the sheer amount of radial, inward movements. However, it could be argued that the higher rates of unemployment in Inner London in general, and in East London in particular (such as Tower

Hamlets, Hackney, and Southwark) are partly due to an inadequacy of public transport links between the labour markets in the inner rings of London and the job markets in the outer rings of London. Accordingly, to consider the time-space channelling between London's institutional structures from the perspective of a household as a whole, rather than from the perspective of the individual person or from the perspective of aggregated structural patterning, is more likely to address the internal links between institutional structures.

The problem of inadequate public transport links is most marked for the transport needs in the outer rings of London. For those who both live and work in the outer suburbs, because of the lack of an extensive network and intensive services in public transport between, and within, different locations in the outer rings of London, it seems that a private car is a more feasible means of transport for both work-related trips, and trips for other purposes, irrespective of whether matter these trips are made orbitally between suburbs or locally within the suburbs. For example, Mrs. G6 was a secretary at a local school (in South Harrow). She drove to work. As she said:

Working locally is quite good. But working locally [in Outer London] without [private] transport is very difficult. I could not go to work by bus, it would take me an hour, . . . it is not practical. ... If I drive, it is only 15 minutes.

In other words, while the decentralisation of both employment opportunities and housing development has made suburban living an important life-pattern in London, suburban households' transport needs should be an integral part of the Government's transport policy. It should be noted that in some areas of Outer London, where local traffic may not be much better than the traffic in Inner London, notably the areas near town centres or local centres. Given the fact that underground and rail networks only connect a few nodal locations in the outer suburbs, shorter journeys made by car may be more attractive. The slow traffic in town centres is partly caused by the stop-and-go's of the buses because they have to use the same road surface (bus lanes and the Red Routes are not applicable to most roads in Outer London since the roads are not wide enough to separate buses and private cars). As Mr. S6, who was an engineer working in a factory near his home in Stanmore, noted, "*the local*

traffic may not be good, but the distance is short, so it is not a problem to drive.”

If it is inconvenient to use public transport, mainly the bus, in the local areas of Outer London, given the lack of appropriate rail links around the outer rings of London, it would be more difficult to travel between the outer suburbs by public transport. Car journeys may not necessarily be cheaper and more pleasant for orbital movements around Outer London, but at least, they are *more feasible*. In Mr. S8's case, he had to travel some 40 miles and spend longer than an hour from Stanmore to his office in Guildford, Surrey. As he said:

Because I have a company car, otherwise I could not have afforded to drive such a long distance to work. . . . Normally I leave [home] at six o'clock in the morning, but recently there is a bit more road work, so I leave at about quarter to six. . . . In order to avoid the rush on the road, I tend to go to the office earlier (7:45-7:50 am) and leave the office earlier (5:00 pm).

In other words, people are forced to use private transport when lacking appropriate public transport services. For households, things like employment and housing decisions are more significant because they have to take into account a wider range of considerations, including the needs of different household members. Transport needs, on the contrary, are something which should be overcome in order to bridge the time-space gaps between different daily moments. While the decentralisation of both employment and population has become a well established trend in the London region, the question is whether the Government can afford to extend the existing network of public transport to the outer rings of London, or some sort of institutional integration, say, between housing and employment, must be assured in the outer rings of London if a second tier of transport network is to be viable in the long term.

Mobility and Suburban Living: An Abuse of Car Usage?

Although it is true that car journeys are more practical than the trips made by public

transport in Outer London, the tendency of driving to work also reflects the very nature of suburban life: i.e. a lifestyle dependant on the mobility created by car driving. In 1991, for example, nearly 70 per cent of the households in Outer London had at least one car and one third of them had two or more cars (OPCS 1993a). One of the consequences of such a mobile lifestyle of suburban living is an over-dependency on car driving for trips that can be made by public transport, including those trips made towards or within Inner London. The relationship between car-dependency and the inadequacy of the public transport system seems to be a vicious circle that on the one hand reinforces the use of a private car, and on the other hand, discourages investment in public transport.

In the outer suburbs, very often the distance between the home and train (or underground) station is too far to walk (because the public transport network only covers a few points along the main lines of railways in the outer suburbs) and the bus services are inconvenient to use (because the scattering of housing developments in the outer suburbs makes it economically difficult to maintain both extensive and intensive bus services). But the longer distances of car journeys and the congested roads leading to Inner London, as well as the problem of parking in Central and Inner London, are all stressful experiences for the commuters who drive all the way to work. In these circumstances, a combination of 'park and ride' seems to be more practical for those suburban households so that they can have both the mobility in the outer suburbs and the accessibility in Inner London. For example, Mr. S2, who lived in Stanmore and worked in the City, had to drive to Preston Road station and take the underground (the Metropolitan Line) to work. It should be noted that the nearest underground station in the area was Harrow & Wealdstone (the Bakerloo Line), not Preston Road. But because of the use of a car, it allowed Mr. S2 to gain access to the station for a fast train that was slightly farther away. This would save him considerable time commuting.

However, not all the suburban households can afford to use both car and public transport. In some circumstances people have to use the car during the day for other reasons, such as job needs, escorting children to school, and other needs. Moreover, it may not be easy, or cheap, to park near the station and take the train to work. In this respect,

'park and ride' may not be practical or economical. For example, Mr. S3, who lived in Stanmore and used to work in South Kensington before he retired, had been driving to work all the time. As he said:

There is a fast train [the Metropolitan Line] to Euston, just 20 minutes. The problem is that the local bus is inconvenient, . . . [So] most of the time I travel by car . . . because I have a parking space at college [the place he worked]; . . . and also because of job needs: sometimes I have to send or pick up things on the way to or from work; . . . another reason for using a car is [that a car is] more economical. . . . I try to combine all of them and I find that the car is more convenient.

While criticising the public transport system for being inadequate and inconvenient in the outer rings of London, given that suburban development has created a considerable degree of wasteful journeys (especially car trips) and reinforced the decentralisation of other institutional structures, such as retailing and other services and facilities, perhaps we also have to question the adequacy of suburban living *per se*: i.e. is it really necessary? In this respect, we must recognise that, for many households, living in the outer suburbs of London is a considerable compromise they have to make in order to be able to gain access to the employment opportunities and other facilities and services in London, while at the same time trying to have a reasonable quality of residential amenities at affordable costs. For those suburban households, the inconvenience in, and the higher costs of transport, seem to be a necessary evil of urban life. Accordingly, while accusing car driving as a serious threat to both environmental and social sustainability, perhaps we also have to question the nature of urban life itself, considering the issue of accessibility and transport needs facing London's suburban households. A fundamental problem facing policy makers and urban researchers is 'Can these problems be resolved via technological breakthroughs in the long term, such as the use of environment-friendly, renewable energy, or should suburban living be changed by expanding the public transport system into the urban fringes or by directing urban development back to existing urban cores?' Most importantly, these issues should be considered as an integrated issue of co-ordinating fragmented urban life. Suburban life itself may be less sustainable in terms of environmental and social considerations; however,

its role for the co-ordination of an increasingly fragmented life in an expanded urban region is crucial. Accordingly, to facilitate a time-space coordination between the decentralised daily moments will be a major challenge to sustainable cities.

Radial Commuting and Public Transport in the Suburbs

Having said that the public transport system is, generally speaking, inadequate in the outer suburbs of London, it is not unusual for many in Outer London to still have to, or even prefer to, use public transport for their daily commuting. This is especially apparent in those households which have no car, or have only one car which must be left at home for family use during the day. This would be less of a problem for those households who live close to a train or underground station, such as the households in Greenhill where the station (Harrow-on-the-hill) is only a few minutes walk away. In fact, a longer-distance journey made by public transport (train and underground), such as the radial movements between Central London and its hinterlands, is still the most efficient way of commuting in terms of the average time spent on travelling and the average cost per mile of travelling. For example, Mr. G1 had to travel from Greenhill to his office in Paddington by underground. The whole journey took him about 45 minutes, door to door. The journey time might be slightly longer than that of the shorter trips made within Inner London, but it was more efficient in terms of the distance travelled. Moreover, as distance increases, the average cost per mile of travel decreases (see Roberts 1992: 253; Banister 1994: 65). Mr. G1 thought that a good public transport link was essential if a person wanted to live in the outer parts of London in order to have more space and better environment but did not want to lose the accessibility to the employment opportunities in the Inner parts of London.

In addition, some people consider that the slightly longer journey on a train is a good buffer between the peaceful family life and the busy working environment. As Mr. G7, who lived in Greenhill and worked at the Old Bailey, Central London, explained:

I think it is quite good to have such a gap between home and work. Although it takes a while to get in [the train] and I normally don't get a seat in the morning, one of the reasons

I think the tube is O.K. is that . . . you've got the time to think about what you are going to do before you get into the office . . . and you can 'switch off' when you leave office and don't have to worry about the traffic ... [because] driving in London is very stressful, ... although I personally quite enjoy driving.

In other words, if there were good public transport links between the residential areas in the outer suburbs and the locations of employment in the inner rings of London, it would be quite an efficient service in terms of the money and the time spent on daily commuting. Clearly, not all the suburban households can really benefit from, and contribute to, the public transport system equally. However, if the inadequacy of public transport links to London's outer suburbs has been proved threatening to the coordination of suburban life as a whole, before discouraging the use of cars, perhaps we should make sure that the nodal locations in the outer suburbs are well served by the public transport network, so that people can have easier public transport access to Inner/Central London and other suburban centres. Therefore, a *decentralised concentration* of developments and adequate public transport services around the nodal locations on the outer fringes of London might be technically feasible and economically viable for both the localised lifestyles of shorter-distance commuting in the outer rings of London, and the extended lifestyles of longer-distance commuting into Inner/Central London or to other suburban centres.

Orbital Commuting and Public Transport in the Suburbs

The inadequacy of London's public transport system is in particular marked by the orbital movements around the outer fringes of London. As might be expected, the process of orbital commuting in Outer London is both difficult and frustrating. It can be illustrated by Mr. S10's daily commuting from Stanmore to his office in Park Royal. Partly because he had to leave the car at home for family use, and partly because his eye sight was not good enough to drive, he had to rely on public transport for daily commuting. The distance was not very far, it would not take longer than 20 minutes to drive there, but the process of traveling to and from work was far more complicated than the distance suggested. A

lengthy quotation is useful to illustrate the difficulty of his journeys to and from work by using a combination of bus and underground. As he said:

It is a difficult journey for me from here [Stanmore]. London is very good for commuting if you want to go directly into the centre. If you want to go around the area, the orbital route is not so brilliant. I would be 25 minutes car ride [to Park Royal], but it [the public transport] takes me, on an extremely good day, at least 50 minutes, on a bad day, it could be an hour and a quarter to an hour and a half.

I would walk from here [Stanmore] to Harrow & Wealdstone station. It takes me 15 minutes or so. Then I would go four stops to Wembley Central [on the underground]. From there I take a bus to Sudbury Town, and then I would travel on the underground two stops to Park Royal. Then the office is 3 minutes walk away from the station.

Coming home, that is slightly faster. I go from Park Royal to South Harrow on the tube, and then I would go from South Harrow to Harrow Weald by bus. From there it is about 7 to 8 minutes walk back home. . . . Why I do that in the evening is because Harrow is less congested at that time. If I try to do it in the morning, it just takes far too long because Harrow gets so congested in the morning. It is a combination of people going to work, and children going to school. That's why I have to choose a complicated route to work, that route is the quickest route, the optimal route, to the office by public transport.

Clearly, it was not a pleasant journey. But for many who share a similar context of household life, the unpleasant process of daily commuting by public transport seems to be a necessary evil if they want to co-ordinate the fragmented moments of daily life in an enlarged boundary around London's outer suburbs.

If we could understand the inconvenience and the frustration of such difficult journeys, it would not be too difficult to imagine why many people would choose to drive when their financial and other situations permit. The disparities between London's employment and housing structures suggest that in order to reduce the gaps between these two realms in London, improving the transport links between them is as important, at least in the short and medium term, as changing the overall structural patterns of employment and housing in the long term. This transport perspective is especially important for some disadvantaged groups, such as the poor, the unskilled, and ethnic minorities, because they are less flexible in their housing and employment decisions and because they are less likely

to afford a car. To some extent, recognising the significance that public transport can have to the transport needs of the orbital movements in the outer rings of London enables one to take into account the scale of the existing suburban development in London. In this respect, a decentralised concentration of developments in the outer rings of London with appropriate public transport links both radially to the inner parts of London and orbitally around the outer rings of London, might be more feasible than an overriding prescription of concentrated development in Inner/Central London.

Commuting and Other Transport Needs

The discussions above illustrated how the interplay between London's transport system and the locations of both home and workplace has affected the modes and the processes of people's daily commuting. However, information collected from the intensive interviews with the households in different parts of London suggests that daily commuting is more than the movement of people between the locations of home and workplace, but also involves, and is conditioned by, other transport needs. This neglected perspective of transport needs highlights that the structural links between different urban institutions are far more complex than their time-space configurations, and far more dynamic than the processes of movements *per se*, have suggested. Accordingly, from a household's point of view, the co-ordination of everyday life, both between different daily moments and between household members, should be understood as an integrated issue of co-ordinating household life, rather than as separate and unrelated problems. Here are some examples.

Need to Use the Car for Work

Although the locations of many people's workplaces in London might be quite accessible by public transport, it is common that people tend to drive to work simply because they need the car for their work. Given that more than one tenth of the trips made in London were employer's business trips (LRC & DoT 1993, Table 3.1), it is not surprising

that this would inevitably encourage people to bring their car to work. For example, Mrs. G3, who was a manager in a housing association based in Kilburn, tended to drive to work most of the time, although occasionally she might take the underground. As she said, *“either I go [to work] by car or by tube, I always need the car for my job, because it is London-wide . . . also places outside London.”*

The need to use the car for work is especially obvious for those who are in managerial positions and/or professional jobs because face-to-face communication is an essential part of the work, or because people have to carry equipment, products, or samples that it would be impossible, or very inconvenient, when using public transport. Most importantly, some sorts of subsidies might be provided by employers, such as mileage allowance, insurance and maintenance, and, in many circumstances, a company car, as compensation for using the car for business purposes, or simply as part of the salary packages. For many companies, it seems to be fashionable to provide their employees, especially those who are in higher ranks, with company cars for both business and personal use. For those who use company cars, notably those who are in managerial positions, it is sometimes very difficult to make a clear-cut distinction between trips for business and trips for personal purposes: for example, it is common that they have to visit clients or attend business events after work, or that they may need to do their own personal things during office hours. As might be expected, driving to work seems to be a more practical way of commuting in order to maintain the mobility and flexibility that is required for some jobs. Although both conceptually and practically we tend to draw a division between work and leisure, or between work time and leisure time (see Parker 1983), in many circumstances it is simply impossible, and for many unnecessary, to make such a distinction. What is at issue here is that people have to reach certain places at certain times in order to be able to interact with other people.

It could be argued that while the need to travel might be reduced to some extent via a spatial reorganisation of urban institutions and other ‘transport-free’ measures, such as telecommunication, direct debit, telephone banking, mail order, and the like, the number of business travels, delivery and freight services might increase substantially. This is

because the physical constraints of space and time are not only applicable to the movements of people themselves, but also applicable to the movements of other goods and services. The simplest example is food: people cannot 'eat' without physical access to food. If people do not travel to the places where the things they want are provided, then those things must be delivered to them. In other words, a certain proportion of transport needs will be diverted from work-related trips in the morning and evening rush hours, to business trips which are made more evenly across the day, or to times which are more convenient for the households, such as in the evenings or at weekends. The nature of transport will be quite different between the movements of people and the movements of goods and services, such as the types of vehicles used, the patterns of movements, the times and frequencies of movements, and the transport infrastructure required. As might be expected, current transport systems may not be able to accommodate these changing transport needs. Moreover, this also implies a time-space change in the realm of production: the locations of employment might be more decentralised; more people are going to work at unsociable times; and the transport needs of work-related journeys will change considerably. This suggests that different moments of daily life are closely related to each other. We cannot deal with any single aspect of daily life without a proper regard to the changes in other aspects of daily life.

Need to Use the Car for Other Daily Needs

In contrast to those who drive to work for job reasons, some people might bring their car to work because they have to use the car on their way to and/or from work, or during the day, for family or personal needs. For example, Mr. and Mrs. W4 worked in the same place, but both of them drove to work. Mr. W4 drove the car mainly for job needs, because it was very common for him to travel around London and to the RoSE to visit clients. He was provided with a company car for his own use. Because both Mr. and Mrs. W4 worked in the same place, it would be very convenient and could save them some money if they only drove one car to work. However, Mrs. W4 had a very different schedule (she worked

from 9:00 am to 3:00 pm, Monday to Wednesday, and working from home on Thursday and Friday), mainly because of the needs of the family, especially child care; so she brought her own car to work. In the morning, she had to drop children to school and to a child-minder's home before she went to work. In the afternoon, she would leave the office earlier (at 3:00 pm) in order to pick up her daughter from school (at 3:30) and do some food shopping on the way home. She might prepare the dinner or play with her daughter for a while, occasionally she might walk to the supermarket to get some small items (the nearest supermarket was just a few minutes walk away), then she would drive to the child-minder's place to pick up their son (at 5:30). Both the school and the child-minder's home were not very far away from home, but they were in different directions and the times to pick up her daughter and son did not match very well with each other. It would be very difficult, if not impossible, for her to do these things in a very tight budget of time if she did not have a car.

As might be expected, such problems might be even more common in the outer suburbs. In these circumstances, the car is a more useful form of transport which can bring both the flexibility and the convenience for those who need to travel between different locations in a rather tight time-budget either within or outside working hours, especially when the locations of their daily activities are scattered in different areas which are not properly linked by the public transport system. This suggests that although many people do not have the need to use the car for their daily commuting, it is the considerations of other daily needs which force them to bring the car to work so that they can do the things they have to do on the way to and/or from work, or during the day. Accordingly, a temporal co-ordination between institutions, for example, between a school's timetables and the office's working hours and between different services and facilities, is as important as the spatial integration between institutional structures.

Children's Travel to School

The need to escort children to school, especially younger children, has been an important factor reinforcing the tendency to drive to work. In fact, the proportion of

children (under 16) travelling to school by car has shown a large increase, from 17 per cent in 1981 to 28 per cent in 1991, and more than one in three children under 11 were escorted to school by car (DoT 1994: 12). Although a great majority of London's primary and secondary schools are within walking distance, for many households, especially two-earner households, the problem is that the time is so pressing in the morning that it would be more convenient to drop children to school by car and go to work directly than to walk them to school and then take public transport to work. This is especially the case in the outer suburbs where the average distance between home and school is greater than their counterparts in Inner London. Moreover, it is not uncommon for children in a particular household to go to different schools (nursery, primary and secondary schools) and these schools may or may not be in the same location, or even the same direction. Most importantly, the 'school run' has to be repeated again in the afternoon. It is not uncommon that in some areas evening rush hours have begun from the mid-afternoon simply because of the 'school run' in the afternoon. Given that children's safety considerations in the school trips have always been the top priority for most parents and that school buses are not widely available in London, the growth in the number of full-time working mothers would inevitably create co-ordination difficulties between parents' work trips and children's educational trips. To some extent, this also reflects the temporal mismatches between schools' schedules and most organisations' working hours, as well as a lack of comprehensive policies for children's school trips (including children who attend a non-local school). As one might expect, such mismatches also exist between other institutions, such as banks, libraries, post offices, and shopping facilities and other services.

The purpose here is not to justify the use of the car for work and other purposes. On the contrary, it is to illustrate the difficulties of co-ordinating an increasingly fragmented life-pattern. Although many measures have been adopted to cut the need to travel, such as direct debit, fax machine, mail order, and so on, the need to move between different locales at certain times remains a very important part of daily life, because many social interactions are taking place on the basis of face-to-face contact at certain times and locations. Accordingly, what is needed for the integration of London's institutional structures is not

only their spatial and temporal configurations, but also the whole range of institutional contexts relevant to their time-space connections. This thesis argues that the key to facilitating the integration of institutional structures is to build the links between the micro contexts of household life and the macro contexts of institutional properties via the concepts of 'institutional webs' and 'individuals in context'. These two aspects are the two sides of a same coin. On the one hand, individuals constantly draw on the resources of the institutions, but not in the form of atomistic optimum. Rather, people are related to each other via a web of institutional links. In the realm of reproduction, the household is a more useful concept linking individuals with other institutions of extended time-space. On the other hand, the process of living everyday life collectively reproduces the institutional properties which form the structural constraints of individual actions. Therefore, productive and reproductive activities, individual life-chances and institutional structures, are all closely related to each other.

Home, Work and Transport: An Integrated Issue of Everyday Life

Due to the increased mismatches between institutions and the increasing mobility of households in London, people are living an increasingly fragmented life in terms of the locations, time budgets, and frequencies of movements involved in their daily activities. This does not necessarily mean that the boundaries of a particular household's life have been enlarged, although it seems to be the case for many Londoners; however, it is clear that the time-space configurations of people's daily activities have become more differentiated and more fragmented. The issue of daily commuting cannot be simply constrained to the movements between the locations of employment and residence, but should be considered in association with other aspects of daily life in which the locations and timetables of different daily activities, as well as the movements between them, are closely related to each other. For the sake of demonstration, a lengthy quotation of a particular household's average daily life will be helpful to highlight the impinging and compromising character of the co-ordination of everyday life in an increasingly fragmented urban structure.

Meet Mr. and Mrs. S5 and their only daughter (6 years old). Mr. S5 was a chef, working in Ealing; Mrs. S5 was a health visitor, working from a clinic based in Kingsbury. They moved from Harrow Weald to their current address in Stanmore two years ago, mainly because they wanted a bigger house and a better environment, in their own words, “*a better quality of life*.” Both Mr. and Mrs. S5 drove to work partly because they needed to travel back and forth between home, workplace, and school during the day, and partly because Mrs. S5 had to use the car to visit her patients. She explained why they had to run two cars in a family, which to some extent was expensive for them. As she said:

In this part of Stanmore, the [public] transport is not particularly good. There is only one bus. . . . I use the car for my work, because my job involves visiting people. That is why I need the car, . . . and also because I have to take my daughter to school, which is about half a mile away; I need the car for that. My husband works in Ealing, in order for him to come home early enough without taking [public] transport, it is easier that he has a car, too.

One might wonder whether it is really necessary for them to use two cars if they cannot afford it. But once we realise how it looks like in an average day in their daily lives, we might agree that it is not easy to coordinate the fragmented everyday life when they have two cars. Mrs. S5 went on to describe a typical day in their lives:

I leave the house at about 8:40 in the morning, taking my daughter to school and leaving the school at 9:00. I then drive from Stanmore down to Kingsbury, it takes me about 20 minutes in the car to the clinic. So I arrive at the clinic at about 9:20. . . . I probably leave the clinic [to visit the patients] at 10:00, coming back at 12:00.

I pay someone to pick up my daughter from school for me 3 days a week. But the other 2 days I normally do is: at 3:00, I rush from work, running and picking her up from school and bringing her back home, then waiting for my husband to come back. He will be back by car at about 3:45, I then go back to work for another one hour's job and then leave work at about 5:30, coming home at 5:45.

But in the past 5 years, I was also working on a degree at college [Westminster University in Harrow]. Some mornings I have to go to college, so I drop my daughter to school and rush to college, staying at college in the morning, and then going straightly back to work at about 12:45. Because I also have to go to college in the evening, when I come home at about 5:45, I will see my daughter and my husband, cooking and eating something, and then go out to college again, . . . and come home at about 10:00. I do this twice a week and

sometimes three times a week.

From the example above, we find that things as simple as living everyday life would need tremendous efforts, and, of course, a considerable degree of compromise, to achieve. This household dynamics is crucial to the challenge of urban sustainability. It is agreeable that the scale and the volume of motorised trips should be controlled. But to cut the distance and the number of movements, we must understand why the movements are necessary in the first place and how the different modes of transport are used to channel the increasingly fragmented household life. Institutional structures are not related to each other via their spatial relations; on the contrary, they are linked to each other via the interactions of individuals. While we are arguing that an integrated approach is required to redress the institutional disparities in London, attention should be paid to the household aspect of institutional links. The point is that the co-ordination of everyday life in the household is a premise for an institutional integration at wider time-space spans. It is pointless to create an 'integrated' institutional structure which is unable to facilitate the time-space co-ordination of everyday life for individual households. It should be noted that it is *people's life-chances* which are the ultimate goal of sustainable development and urban policies. Any improvement in the *environment* is but a means to an improvement in the quality of life.

However, an enabling condition for one household could mean quite a constraining factor for another. For example, a concentration of assorted developments in nodal and central locations might largely reduce the time-space disparities between different daily moments as well as the need to travel for households who are able to afford a house/flat in town; but for many others, the increased housing prices in central locations and the exclusion of some industries and businesses from central locations may force them to live or work further afield. In other words, some households will benefit and some others will suffer. The point is that no one policy should sacrifice the welfare of those who are on the lower tiers of a society, nor should it enlarge the difference between the haves and the have-nots. Clearly, there is no single solution to the institutional co-ordination in London. But

what is needed is to assure a necessary connection between the types of suitable employment opportunities and appropriate housing provision in areas of concentration development. Otherwise, adequate transport links must be provided to connect the locations of employment, residence and other services and facilities. Most importantly, they must be co-ordinated in wider social and regional contexts so that the households under different circumstances, and with different needs, can coordinate their daily lives more easily. In other words, a sustainable co-ordination of institutional structures must have the quality of *diversity* and *flexibility* which can facilitate the co-ordination of everyday life for individual households. This quality dimension is important not only for the disadvantaged groups such as the poor, the unskilled, women, and the like, but is also important for the majority of 'ordinary' people in our society. Things like daily commuting might be trivial for some households when compared to their housing and employment decisions, but any tiny improvement in these minor and tedious practices of individual households can make a great difference for the society as a whole by virtue of their repetitive nature. Accordingly, housing, employment, and transport decisions, should be understood as an integrated issue of the co-ordination of household life. This household perspective is crucial for the coordination of institutional structures and, in turn, is crucial for the pursuit of sustainable urban development which aims to reconnect the practices of people's daily lives with their environments.

Shopping Activities: The Changing Contexts of Urban Life

In the last section, the complex contexts and dynamic processes of the co-ordination of household life was illustrated by the issue of daily commuting and its close links to other aspects of household life. In this section, the interrelated nature and the compromising character of household life will be further illustrated by the shopping practices of London's households. Before proceeding, there are some practical justifications for focussing the intensive analysis of household dynamics on the issue of shopping activities.

Firstly, shopping trips, apart from work trips, have been the second largest category

of the motorised trips made in London and the single largest category of trips made in off-peak hours (LRC & DoT 1993: 28). Given its role in the generation of traffic, there has been a growing concern about the future of retail development in London. For example, it has been argued that the move of London's retailing structure towards out-of-town retailing is closely related to the increase of car trips (and consequently, the issues of pollution, waste of energy, and social exclusion) (see Raven and Lang 1995; OXIRM and BDP Planning 1992); it leads to the decline and increasingly run-down of city centres (see House of Commons, Environment Committee 1994); and the purchasing power of large superstores penalises small shops (see Wrigley 1993). While one of the key themes of the Government's sustainability strategy is that steps should be taken to reduce car usage and to encourage more people to use public transport or other environment-friendly modes of transport, free-standing superstores and out-of-town shopping centres, not surprisingly, have been considered as part of the less-sustainable development.

Secondly, the term 'sustainability', when used loosely, has been applied to the durability of past urban environments and the historical legacies, particularly, of town and city centres (CEC 1990). Sustainability strategy in relation to urban retailing tends to emphasise the need to safeguard the vitality and viability of town and city centres (DoE 1996b). Most importantly, for most practical purposes in a household life, shopping in general, and shopping for food and other basic items in particular, is an essential part of a household's reproduction — for example, the acquisition and the consumption of food and other materials and services. In other words, the household is the most basic institution of consumption and reproduction. For many people, shopping activities are also a very important part of leisure activities (Bromley and Thomas 1993: 2). While most sustainability debates and urban studies tend to focus either on the productive side of analysis (such as the debates of global cities) or on the reproductive side of analysis (such as the issues of urban housing, community development, and the like), the discussion on the household perspective of shopping practices can bring out the diverse contexts which are key to understanding the necessary links between the productive side and the reproductive side of retail development in London. While the policy makers are increasingly concerned

about the relationship between the locations of retail facilities and the structures of transport links, it is important to take into account the changing contexts of household's shopping practices and their close links to other aspects of daily life in the discussion of a sustainable retail development in London. This thesis argues that a sustainable structure of retail development cannot be sustained in isolation. Rather, it must be considered in conjunction with other institutional structures. Accordingly, the changing practices in shopping activities should be examined in the wider context of the changing patterns of London's household life.

Shopping in London: A Multiple Choice

In order to facilitate the discussion and to have a better understanding of the relationship between shopping activities and other aspects of daily life, it is helpful at the outset to divide shopping activities into two main categories: the daily/weekly *food shopping* and the occasional *non-food (leisure) shopping*: the former is mainly for food and other basic items, an *obligatory shopping* which is essential to the household's daily consumption; and the latter is mainly for comparison items and durable goods, such as shoes and clothes, furniture, and home appliances, a *discretionary shopping* which is more or less for leisure purposes and conspicuous consumption (see Tivers 1985: 135).

There are some justifications for such a division. On the one hand, it is to reflect the transition of London's retailing structure from a spatially concentrated structure of traditional marketplaces and town centres to a dispersed pattern of retail development in diverse locations. On the other hand, it is to reflect the associated time-space changes of different types of shopping trips: presumably most people will travel shorter distances but shop more frequently for food and other groceries; and they tend to travel longer distances but shop less frequently for non-food items. While leisure time has increased and people are more conscious of their use of time (see Blacksell 1991), it is argued that the experiences for shopping activities tend towards either the leisurely and pleasurable, or the quick and time-efficient (Bromley and Thomas 1993). Nevertheless, these two categories

of shopping activities should not in any sense be seen as mutually exclusive. For many households food shopping could be as interesting as leisure shopping; for some others non-food shopping could be as boring as a chore. Most importantly, in many cases, one shopping trip is aimed to meet the needs of both food and non-food shopping, or one trip is aimed to meet both shopping and other purposes.

The point is that, by virtue of the existence of a network of competing locations of shopping facilities in London, both food and non-food shopping are a *multiple choice*: households usually have a range of choice between different types of shops and locations. While London's town centres continue to play an important role in shopping provision for both Londoners and visitors, retail decentralisation, in particular in grocery retailing, has become a well established trend in London. But what seems unclear is the household contexts behind different shopping patterns, as well as their close links to other aspects of daily life. The purpose of this section, therefore, is to illustrate some of the changing scenarios of people's shopping activities in London.

The Local Orientation of Food Shopping: Space Matters

To a considerable extent, the practices of food shopping are affected by the location of a person's home (and sometimes the location of his/her workplace), the location of the shopping facilities, the transport links between them, and the modes of transport available to that particular person. While it is common that people in London might travel tens of miles away to work and spend several hours commuting, it seems unlikely that they would travel that far and spend so much time for things like milk and bread and other groceries. Due to the decentralisation of food and grocery retailing in London, especially the opening of large, one-stop superstores in the residential areas, at the edge of towns, and in free-standing locations, most households in London, both in Inner London and in the outer suburbs, now have more choices for food shopping in terms of different types and locations of shopping facilities. In Wapping, for example, the households may have a choice between small local shops near Wapping Lane, a large local supermarket (*Safeway*) in Vaughan

Way, non-local market stalls in Whitechapel, and non-local large supermarkets in Surrey Quay (*Tesco*, in a large shopping complex), Isle of Dogs (*ASDA* and *Tesco*), Whitechapel (*Sainsbury's*), and so on. Likewise, households in Stanmore have a wider range of choice between different directions and different distances of travelling on the grounds of the use of car for shopping trips. Places like Wealdstone, Hatch End, Edgware, Harrow town centre, Colindale, and Brent Cross are all possible locations for food shopping.

Although the search for convenience, comfort, cheapness, quality and variety of shopping facilities has increasingly got to do with individual household's preferences, especially when grocery retailing in the UK has gradually been dominated by large multiple chains (see Wrigley 1993), and food shopping today tends to be the bulky-type made by car at regular intervals (this will be discussed later), spatial factors like distance and direction of shopping trips, remain to be decisive in the practices of food shopping. As household W2, a young couple without children, noted:

We tend to use *Safeway* [a large local supermarket] . . . because it is near. We go after work or on Saturday morning, sometimes Sunday. . . . We might go to Surrey Quay [an out-of-town shopping complex South of the Thames], because it is not just a supermarket, but also other shops. If we don't want to go to the West End, there are too many people, we just drive out there, and get the [food] shopping done at the same time.

While it is believed that the central location of town centres and their easy access by public transport can provide a better shopping environment to households who have no access to private cars, information obtained from the interviewees in different study areas suggests that people tend to use the nearest shops if there is no significant difference in the choice, quality, price and service of goods, no matter whether they live in Inner London or live in the outer suburbs, with or without a car. In Wapping, for example, many interviewees (households W2, W4, W6, W7, W9) tended to use a large local supermarket *Safeway* in Vaughan Way, or they alternatively got small items from shops in Wapping Lane. Likewise, in Bethnal Green, people (households BG2, BG3, BG4, BG6, BG7, BG8, BG10) tended to do their food shopping in Bethnal Green Road where a medium-size supermarket *Tesco/Metro* (no car park) was opened side by side with other small shops and street stalls;

and in Greenhill households (households G1, G3, G4, G5, G6, G7, G9) liked to shop in a large supermarket *Tesco* (with a large car park) at the edge of Harrow town centre. In these areas, these shopping facilities are within walking distance for the local residents¹.

However, the shorter distance between the locations of home and shop might mean quite different things for different households. For some people, for example, to shop in the local shops (or supermarkets), i.e. those shops which are within walking distance, is due to the proximity between different moments of reproduction — the acquisition (in shop) and the actual consumption (at home) of food and other materials. While the time available for shopping has decreased substantially for many households due to the increasing rates of female participation in the labour market, it would be easier to use local shops, especially the one-stop, large supermarkets, instead of travelling to nodal locations and shopping in traditional markets or small shops. In other words, the decentralisation of grocery retailing into residential areas in London has substantially reduced the distance between locations of residence and shopping facilities for many households. As a result, people are encouraged to shop locally. It is quite common, especially in Inner London, for a considerable amount of these shopping trips to be made by foot, although many people have no difficulty in getting access to a car at all.

Partly due to the convenience created by the short distance between home and local shops and partly due to the difficulty of carrying heavy shopping bags (even for a short distance), people tend to use local shops and/or supermarkets more frequently by buying smaller and fewer items. But shopping locally and more frequently does not mean that all short shopping trips are made by foot. In effect, according to the interviews, nearly half of the local shopping trips in Wapping and Greenhill were made by car, i.e. while people used local shops (supermarkets) more frequently for buying smaller and fewer items, they also tended to maintain a major shopping trip to the local shops at regular intervals. As might be expected, this has much to do with the changing contexts of people's lifestyles,

¹ The only exception in these four study areas was Stanmore, where the nearest food stores were quite far away from the residential area, such as Harrow and Weald, Stanmore High Street, Hatch End, and Edgware.

especially the changing time-space relationships between the realms of employment and residence, as well as the resulting changes in transport practices. I shall come back to this point later.

For those people who have to rely on public transport as their only means of transport, the tendency to use local shops or supermarkets, or shops at transit locations, reflects the problem of lacking suitable transport and/or appropriate time for food shopping. In these circumstances, people are forced to shop locally because they are unable to make longer shopping trips to shops further afield they may prefer. It might be less of a problem in Inner London and at some nodal locations in Outer London, since there is no lack of small shops and/or supermarkets in areas within walking distance, and usually these shops have longer opening hours. However, it could be a serious problem for households in outer suburbs where low-density development and deficiencies in the public transport system may make shopping facilities less accessible, except by car, despite the distance between home and 'local' shops being shorter than the trip to town centres. As for shopping facilities in town centres or at other nodal locations, on the contrary, they might be quite accessible by public transport and the choice between shops may be more due to the concentration of shops, but shopping from one shop to another in a town centre, carrying heavy shopping bags (or by pushing a shopping trolley) and carrying bulky things all the way home by public transport would be quite difficult, especially for women with younger children or when the shopping trips are made during rush hours on the way home from work. As Mrs. W6, who did not have a car and had to rely on public transport, noted:

It is inconvenient to shop in other areas, . . . because the [shopping] bags are so heavy and the bus is so small and crowded. Otherwise, you have to get a minicab, . . . it is expensive. . . . But the things are not so much different [between the local supermarket and the supermarkets in other areas], so I tend to use the [local] *Safeway* two or three times a week, . . . usually on the way home.

In other words, the importance of public transport accessibility to town centres is diminishing in many households' food shopping trips: it cannot justify the time and costs

of travelling to town, if it only entails buying a small quantity of things; or, otherwise, it is very inconvenient to avoid the bulky shopping in town being carried out by public transport. The only point that justifies the central location of town centres in retail provision, is that a single trip to the town centre can serve several purposes, including leisure shopping, going to the bank, post office and so on. However, for things like major, bulky food shopping, a car trip to town could be as problematic as a car trip to out-of-town locations. The thesis argues that a sustainable retail development cannot be achieved by policies which have no respect to the changed needs of households' shopping trips. In this respect, we may need to examine the changing contexts of households' life-styles which have contributed to the changes of households' shopping practices.

Employment, Gender Role and Food Shopping: A Changing Perspective

The need to use car for food shopping has much to do with the life-style changes resulting from the changing relationships between shopping practices, gender roles, employment dynamics, housing decisions, and many other things. Although it is common that shopping responsibilities are increasingly shared by both male and female partners, among many households, women are still the chief shoppers. In the last few decades, women's rates of participation in the labour market have increased steadily. This suggests that the availability of time for shopping has decreased. According to a report, the average time spent shopping for working women is one-third less than that of non-working women: while non-working women spend an average of 4.56 hours per week shopping for groceries, working women spend only 2.93 hours (*The Independent*, March 24, 1995). In other words, changes in shopping practices have much to do with the changing relationships between the realms of production and reproduction.

A lack of time due to the participation in paid, or unpaid, employment (especially in the case of two-earner households), the popularity of time- and labour-saving home appliances (such as the microwave oven) and large storing space at home (such as large freezers and fridges) for fresh food and readily prepared meals, the isolated residential

locations (for suburban households), the lack of access to cars during the day, the rise of one-stop, large shopping facilities in decentralised locations, and the economical considerations of shopping's economies of scale (the more you buy at a time, the more you save), have much to do with the changing practices in food shopping: i.e. moving away from small-quantity, daily food shopping in traditional markets and small shops in central locations and towards one-stop, bulky shopping in the evenings or at weekends at regular intervals to, probably, off-centre locations.

As one might expect, it is very difficult to do bulky shopping without a car (or a minicab), even the distances of shopping trips are very short. For example, although Mrs. W4 preferred to shop on a daily basis to get a meal's food in the afternoon by walking to *Safeway* (a large supermarket in the neighbourhood) which was just a few minutes walk away, she also tended to maintain a main shopping trip to the same supermarket (*Safeway*) every week to buy bulky goods, such as mineral water, canned food, toilet paper, and the like. In the latter case, she would definitely drive to shop, especially when the bulky shopping was made directly on her way home from work. For many full-time housewives, the responsibilities of domestic work and, in particular, child care, the isolation of residential locations (in outer suburbs), and the lack of access to the family car during the day, are all in favour of making fewer, but larger shopping trips, at regular intervals.

In fact, a great majority of households who had been interviewed in the study admitted that they tended to maintain a bulky shopping for food and other basic items, despite living in Inner London or in the outer suburbs, with or without a car. In Bethnal Green, a relatively traditional working-class community in East London, bulky shopping seemed to be a well established practice, too, although some of the bulky shopping trips were actually made *on foot*. For example, household BG4 tended to do their weekly major food shopping in *Tesco* (by walking to the Bethnal Green Road) and occasionally in *Sainsbury's* in Whitechapel (by car). If they shopped in *Tesco*, they would use the supermarket's trolley to bring things home and return it to the supermarket in order to get the deposit refunded. In other words, we cannot understand the changes in retail development and people's shopping practices without addressing the changing relationships

between the realms of production (employment) and reproduction (consumption) in the organisation of everyday life in space and time in the households, including the changes in people's daily diet towards readily prepared, ready-to-eat, and frozen food. This suggests that one-stop, large supermarkets, especially those at locations which are easily accessible by car, preferably with a large and free car park, is one of the shopping environments which is more likely to accommodate the changing needs of households' shopping practices. The problem is that such needs are also applicable to those who do not have a car, or have difficulty in gaining access to a car at certain times, including some full-time housewives who cannot go shopping until the evenings or weekends when the only family car is available or when their husband can help either to carry heavy shopping bags, or to stay at home and look after the children. For example, household G4 tended to do their food shopping in a large supermarket, *Tesco*, a few minutes walk away on Saturday mornings *by car*. Most of the time it was Mr. G4 who was responsible for the major food shopping trips. As Mr. G4 said, "*I drive [to Tesco] because the amount. . . . We also occasionally use Marks and Spencer [in Harrow town centre] . . . but I've never driven there.*" However, this had much to do with Mrs. G4's responsibility of child care during weekdays. As Mrs. G4 said, "*I don't mind going to the supermarket at all. But he [Mr. G4] prefers to go to the supermarket rather than stay [at home] with the children.*"

For those households that do not have a car, the decentralisation of food and grocery retailing into the residential areas with a good public transport link between residential locations and one-stop, large shopping facilities (a large supermarket on the edge of the town centre or a public transport service to an out-of-town shopping centre) might be able to alleviate the difficulties of bulky shopping trips. But what seems clear is that food shopping in London in general has become more convenient than 20 or 30 years ago because the shopping facilities in London nowadays are more accessible in terms of their locations and their longer opening hours, although an increasing number of these trips are now made by car.

Household Mobility, Preference and Food Shopping: Time-space Matters

While many households in London tend to shop less frequently and do bulky shopping at regular intervals, local supermarkets, as might be expected, are not the only choice for households, especially when such shopping trips are made by car. Given the increasing rates of car ownership and the associated increase in household mobility, people nowadays are able, and are willing, to travel a bit further for their food shopping trips while a car is increasingly being regarded as a 'shopping basket on wheels'. Rather than shop in the nearest or local supermarkets, some households *prefer* to shop in areas which are slightly further afield. The reason is simple: when a car is used for bulky food shopping, spatial factors like distance and direction are less relevant because the time spent in shopping trips for different distances and directions are not so much different, especially when such trips are made less frequently but only at regular intervals (once a week or every fortnight). This is especially marked in London's outer suburbs, although there is no exception in many parts of Inner London. For example, Mr. S9, a full-time househusband, preferred to do his major shopping in different supermarkets slightly further away mainly for price reasons. As he said:

I always shop around, checking the prices. The place I use most often is a big supermarket called *ASDA* in Colindale. Because *ASDA* is a bit further, I try to do a bulky shopping when I go there.... I may go to other places like *Safeway* in Hatch End . . . for some special items or when I run out of things . . . because it is not very far away.

Likewise, some people do not mind shopping a bit further because they think quality, services, and shopping environments are more important than the distances between home and shops, although the sizes of the shops are not necessarily larger and the prices are not necessarily cheaper. For example, Mrs. G8, a part-time worker working at the Harrow town centre, liked to shop in a slightly smaller supermarket (*Waitrose*) in Wealdstone rather than shop in a large local supermarket (*Tesco*) which was just a few minutes walk away or shop in town where she worked. As she said, "*it [Waitrose] is better [in quality] and less*

crowded, although [it is] smaller and slightly more expensive." Likewise, in Bethnal Green Mrs. BG1 tended to shop in *Safeway* in Wapping rather than in the local *Tesco/Metro*. In Wapping, by contrast, Mrs. W3 tended to shop in Surrey Quay (*Tesco*) more frequently than in the local *Safeway*. Given the increasing mobility of many of London's households, it seems that the locations, the distances, and the directions of shops are not a problem at all — they are all *local* shops in terms of the proximity of 'time-space'. In this circumstance, what matters is other considerations, such as car accessibility, easy to park, the features of the shops, the quality and the prices of products and services, and the relationship between shopping trips and other travel considerations. As Mrs. W5, a full-time worker, noted, they had "*no fixed pattern or routine*" for food shopping, "*as long as it was convenient*", they might shop in *ASDA* in the Isle of Dogs, *Safeway* in Barbican, or at other places, "*depending on which ways we are going*". While the households in London are becoming more sophisticated in shopping, it is their *preference* which is decisive for the choice of shopping locations, such as the concern about prices, choice, quality, services, comfort, extended opening hours, and the availability of (free) parking facilities. Accordingly, it is the 'time-space' which is crucial to the shopping practices for those households who are making bulky shopping trips at regular intervals by car. It has become increasingly common that people would shop in different places for different reasons. As Mrs. G2 remarked, "*I sometimes go to Tesco, sometimes Sainsbury's, and sometimes Waitrose, . . . I go to different Tesco's, . . . [because] I like variation. It seems the nearest [supermarket] I like the least.*"

It might be thought that with increasing mobility, the life-style changes of London's households, as well as the increasing significance of the role of consumer preference, might require a diverse pattern of retail development in both space (locations) and time (opening hours) in order to meet the changed needs of households' shopping practices. In other words, conventional retail analysis (such as central place theory; see, for example, Christaller 1966; Berry and Parr 1988) seems less relevant here. Rather, it is the household dynamics which is more closely related to the changing practices of households' shopping trips. However, although nowadays people have a wider choice between different types and

locations of shopping facilities due to the opening of large, one-stop supermarkets and their decentralisation from in-town locations, what seems unclear is whether this trend will continue, become stable, or even reverse (under the government's intervention). It could be argued that the changes in both shopping practices and retail development, as a whole, might have very different implications for the households in different contexts. Accordingly, it is the changing relations between one-stop, large chain stores, and smaller, independent shops/supermarkets, rather than the locations of shopping facilities *per se*, which should be examined in relation to the practices of people's shopping trips.

The Changing Relations Between Large Supermarkets and Small Shops: A Time-space Reorganisation of Food Shopping Provision in London

As mentioned in chapter 4, a noticeable trend in London's retailing structure has been a continued shift from smaller, independent shops towards large, one-stop chain stores. This trend is marked in both Inner London and Outer London. Given that many of the newly opened superstores are located in free-standing locations, such as greenfield or industrial parks, they have been criticised for the generation of unnecessary car trips and associated environmental and social problems. It could be argued that such a change cannot be sustained without the support of the customers — the households; or, to put it in another way, the 'supply' for such shopping facilities would not have existed in the first place if there was no such 'demand'.

In short, the significance of the roles of traditional smaller, independent shops in food and grocery retailing in London is diminishing. This can be explained taking two perspectives. On the one hand, the role of small corner shops for convenience shopping has been, to some extent, replaced by the opening of large local supermarkets in, or 'near' (in the case of car usage), the residential area. This phenomenon is especially apparent in Inner London where shops can be reached by a short walking distance, in particular when the opening hours of most large supermarkets have been extended to late hours in the evenings

and on Sundays². On the other hand, the one-stop design of large supermarkets provides the convenience of getting almost everything under one roof, especially with some large supermarkets that have now included an in-store butcher, fishmonger, bakery, news agent, and cafe. This is currently impossible in town centres or traditional markets where people have to shop from one store/stall to another. In other words, the opening of large, one-stop supermarkets has combined the shopping provision for both convenience shopping and major food/grocery shopping in one location.

Accordingly, households' shopping behaviour seems to shift away from either a concentrated shopping trip to the central locations in town (for major daily food shopping), or a more frequent visit to the local shops (in the case of convenience shopping at corner shops) at times more evenly distributed in the week towards a more diverse, and perhaps more dispersed, pattern of shopping trips to large supermarkets in off-central locations at times concentrated in the evenings or at weekends. The changing shopping contexts in favour of shopping trips to large, one-stop supermarkets is illustrated by Mr. G8's remarks. He said:

The disappearance of small shops [in the neighbourhood] . . . is quite sad in a way . . . but also inevitable. If you can go somewhere like *Tesco* [a recently opened supermarket in Greenhill] and buy your greens, your fruits, and at the same time buy your bread and your meat, it is almost inevitable that you are going to end up going to *Tesco* and doing that, rather than walk from the green grocer, to the baker, and to the butcher.

I don't feel great about it. There is a shop just over the road, where we used to go before *Tesco* was opened. I am quite friendly with the shop keepers, and I've actually tried to make a conscious effort to use it. But even so, I find that it is very difficult, . . . because you've got all you need in *Tesco*.

While the Government is arguing for a restriction on out-of-town retail development for the sake of safeguarding the vitality and viability of traditional town centres, this thesis argues

² Now most large supermarkets open till 10:00 pm in the evening. Some supermarkets even open all day in selected dates at central/transit locations. For example, the *Sainsbury's* at Camden Town has been opening 24 hours every Friday since 1996.

that unless the changing needs of households' shopping practices are taken on board, including the need to use a car for major food shopping made at regular intervals and the need for a longer opening hours outside normal office hours, it is pointless to insist on a concentrated pattern of retail development in traditional town centres. These 'central' locations have become remoter to the time-space zones of many Londoners' everyday lives. While the purpose of the advocate for in-town retail developments is to reduce the number of car trips and the need to travel on the whole, it could be argued that in-town retail developments actually add pressure to the existing transport system in London, instead of reducing it.

However, a factor which is in favour of the existence of smaller, independent shops at nodal locations in London is the provision of staple food for ethnic households. Although only 5.5 per cent of the total population in the UK belonged to an ethnic group other than white, nearly half (45 per cent) of the population in the non-white ethnic groups lived in Greater London. Given that London accounted for 12 per cent of the total population in the UK (OPCS 1994b), one in five of London's population belonged to a none-white ethnic households. As might be expected, these staple shops remain to be a very important source of shopping provision for staple food. On top of this, the close relationship between staple shopping provision, and the distribution of an ethnic population has also created some unique shopping environments in the London region, such as Wembley (Indian), North London (Turkish), North West London (Jewish), Finchley (Japanese), East London (Bangladeshi), China Town (Chinese), and the like. This has created a richer cultural variety in London. Although an increasing number of London's large supermarkets have begun to supply a limited selection of ethnic food on the shelves, shopping in these staple shops (or areas) is also an important part of the social and leisure activities for many ethnic households, especially at weekends. This cultural perspective suggests that shopping trips should be considered in conjunction with other transport needs.

Food Shopping and Other Daily Activities: The Need to Combine Different Activities in One Trip

As illustrated above, both the shopping practices and the retailing structure in London have changed substantially as a result of the changing relationships between London's employment structure and household dynamics. Nowadays people, especially working women, tend to do their food shopping in different locations and at times concentrated in the evenings, at weekends, or at lunchtime breaks. Given that the time available for food shopping has decreased considerably due to the increasing fragmentation of everyday life, it is not uncommon for food shopping trips to be combined with trips for other purposes. While the Government is trying to facilitate the coordination of shopping trips and other transport needs by retaining retail and other developments, including employment and housing, in the existing urban boundaries, especially in places at or near the nodal locations, it is important for shopping practices to be examined in association with other daily activities in the co-ordination of everyday life.

For example, Mrs. W4 (a part-time worker with two children) tended to do quick shopping in the afternoon on her way home after picking up her daughter from school. Mr. and Ms. W2 (a young couple without children) might get the main shopping done when they went to Surrey Quay to buy clothes or other things. Mr. and Mrs. G3 (a young couple without children) would buy some fresh fruits and vegetables from the stalls when they were popping around in Harrow town centre or they might buy some fish from a fishmonger in Pinner when they went browsing in the antique shops. Mr. and Mrs. S5 (a working couple with one child) liked to do their main food shopping in Colindale on Saturday morning because their daughter had a play group in Colindale on Saturday morning — while their daughter was playing with other children, they got their main weekly shopping done.

As many interviewees noted, they did not have a fixed pattern of shopping trips but depended on the possibility of combining food shopping with other trips. For example, Mr. and Mrs. W5 (a working couple with a child aged 5) tended to share the responsibility of food shopping and did it together. As Mr. W5 said, "*It [where to shop] really depends. If*

we go to the West End, then we will shop in Safeway [in Barbican]; if we go to Kent [to visit relatives], then we will shop in ASDA [in Isle of Dogs]. Otherwise, we will do it in Safeway here in Wapping." In other words, partly due to a lack of free time doing an increasing number of things after work, and partly due to their locations at different daily moments becoming increasingly separated, it seems that nowadays the need to co-ordinate a fragmented life has increased substantially in London. As a consequence, people tend to be more flexible in their shopping practices in order to coordinate different daily moments more efficiently in time and space. For example, it is becoming increasingly common that food shopping is done either at a lunchtime break in the shops near the workplace, on the way home after work in the shops at transit locations or near home, or on the weekend when it is combined with other activities, especially non-food shopping and other leisure activities.

In terms of the need to combine several purposes in one single trip, traditional town centres may have the advantage in this regard due to the concentration of shops and facilities, as well as an easy access by public transport. However, the increasing difficulty in the co-ordination of fragmented life at different times and locations has made in-town shopping facilities less attractive. Out-of-town shopping centres, by contrast, although having been criticised as environmentally unsustainable for the sake of generating car trips, have created a formidable threat to the high streets in town by including large supermarkets and a range of leisure facilities, such as bowling alleys, multi-screen cinemas, ice rinks and restaurants, in a comfortable shopping environment which allows the combination of different purposes in a single trip.

We have tended to believe that a city centre could serve all purposes to all people, but it is not so clear that this is possible or wise. Given that most households' daily activities are taking place at different times and locations in the urban areas, what is crucial to the co-ordination of everyday life is to bridge the time-space gaps between different daily moments. While recognising the contribution that traditional town centres could make in shopping provision, how to strike a balance between traditional town centres and out-of-town shopping centres in order to meet the diverse needs in shopping and other activities

for households in London will be an important issue for many years to come.

Non-food Shopping and the Weekend Economy in London: Another Aspect of Time-space Co-ordination in Everyday Life

It was noted in chapter 4 that the retailing structure in London has differentiated into three discrete developments: the decentralisation of shopping facilities for grocery and household goods into green belts and residential areas, the concentration of shopping facilities for comparison goods in towns and at nodal locations, and the opening of large out-of-town shopping centres which combine these two shopping facilities in off-centre locations easily accessible by car. Although the average working hours has reduced substantially in the second half of the 20th century, most people's leisure time has not increased by the same degree because the greater fragmentation of everyday life requires more amount of time to be spent on transit. It is not surprising that the practices of non-food shopping, like those of food shopping, have been affected by the time-space constraints of other daily moments. Partly because most people have to work on weekdays and partly because most non-food shops are closed in the evenings (except late night shopping on Thursdays) and on Sundays, the concentration of non-food shopping trips on weekends, especially on Saturdays, is apparent. Besides, a noticeable trend in London's non-food shopping activities has been an increasing number of choices between different types and locations of shopping facilities within reasonable distances of travel. While the households in London are more flexible in their non-food shopping trips between the choice of Central London, local shopping centres and out-of-town regional shopping centres, what seems unclear is the factors which affect the choice of their shopping locations.

In Wapping, for example, Mrs. W4 might drive to Surrey Quay on Saturday morning to buy her daughter's clothes or shop around in Oxford Street, which was close to her office, at lunchtime break for her own clothes; Mr. and Mrs. W5 liked to shop in different areas both in Inner London, such as Oxford Street, Covent Garden, Knightsbridge, Kensington High Street, and on the fringe of London, such as Lakeside Shopping Centre

at Thurrock. In Bethnal Green, Mrs. BG3 might travel into Central London (the West End) with her daughter by bus or go outwards to Ilford or Romford if Mr. BG3 drove. In Harrow, likewise, people could have a range of choice between local shopping centres (such as Harrow town centre and Edgware), major shopping centres outside London (such as Watford in Hertfordshire), out-of-town shopping centres (such as Brent Cross near the junction of the North Circular Road and the M1 Motorway), and the central shopping areas in Central London. While an attitude of safeguarding the vitality and viability of traditional town centres and opposing the expansion of out-of-town shopping centres has increasingly become a consensus between central and local governments, what seems important is to understand the flip side of households' organisation of time and space in relation to the practices of non-food shopping.

Central London and Specialised Shopping: Quality, Choice and Public Transport Accessibility

Central London's privileged position in the hierarchy of the British retailing structure suggests that London is one of the most important locations of consumption for both visitors/tourists and Londoners themselves. For example, there were some 86.4 million visitors (19 million from domestic and 67.4 million from overseas) who came to London and spent a total of £4,520 million (£720 million from the domestic visitors and £3,800 million from the overseas visitors) in 1991 (London Tourism Board and Convention Bureau 1993). For Londoners themselves, the unique shopping environment in Central London combines the quality and the choice of comparison goods and retail services, as well as good public transport links, providing a superb shopping experience that few other places, both in London and in the rest of the UK, can provide. As might be expected, for those who are looking for something special, either stylish, high quality, or good value for money (especially during the summer and winter sales), the concentration of a large variety of shops in Central London has always been the major choice for non-food shopping in its own right. For example, Mr. and Mrs. G3, a young, professional couple without children,

enjoyed shopping around in Central London for their clothes, shoes, furniture and many other things. As Mr. G3 said, “*There are better choices in [Central] London. . . . The prices are probably a little expensive, but I don’t want to wear what everyone else wears in Harrow.*” Although the slightly longer distance to travel and the difficulty of bringing a car to town has created some inconvenience for suburban households, it seems that extra efforts to arrange a shopping trip into town is needed, and worthwhile, in order to be able to enjoy the unique shopping facilities in Central London. As Mr. G3 said:

The disadvantage of shopping in [Central] London is it takes time to travel, . . . and very often we have to use the tube because it is very difficult to find a parking space in [Central] London; but we don’t think it is a disadvantage: we can plan it, take a day out, have lunch or dinner in town . . .

However, for some Inner London households, to shop more frequently in Central London does not necessarily mean they like it more, but it is nearer and more accessible, especially by public transport. As Mrs. BG7 (she always shopped in Central London by using public transport) said that one of the great advantages of living in the central part of London is “*being so close to major shopping areas*”. But the concentration of shops and the easy access by public transport in Central London also creates a range of problems and inconveniences: notably the congestion both on the road and on board (buses and trains), the difficulty of finding a parking space at the shopping areas, and the inconvenience of moving around both in the shops and on the streets due to the crowdedness (both Londoners and visitors and tourists) in the shopping areas. This is especially difficult on Saturdays and in on-sale and tourist seasons. Given that non-food shopping is increasingly to be considered as, or combined with, major leisure activities for the family as a whole, it would be quite difficult for those households with younger children to shop in such a crowded environment. This is partly because of the difficulty of travelling with younger children on an (over-) crowded train or bus or the difficulty of finding a parking space in shopping areas if people travel by car (it is much easier to travel with younger children by car than by public transport) and also partly because of the difficulty of shopping with younger children

in a crowded environment itself. As Mrs. G6 said, “*I rarely shop in town . . . because it is very difficult to shop with my daughter [aged 5].*” As might be expected, for many households, especially the households with younger children, the inconvenience of shopping in Central London would force them to shop in other areas which are either closer to the residential areas or are more accessible by private car so that the shopping environment (including the shopping trips) as a whole would become more child-friendly. It could be argued that while Central London remains to be the largest concentration of quality shops and services in the UK, ‘how to improve the shopping environment and the related infrastructure in Central London’ is a very important issue, if Central London wants to maintain its leading role in the non-food shopping provision.

Local Shopping Centres and Functional Shopping: A Combination of Food Shopping and Non-food Shopping

While non-food shopping has been considered by many households as some kind of leisure activity, or the activity which is closely associated with other leisure activities, such as going to the cinema, meeting friends, and eating out, for many others, it could mean something less interesting but necessary, more like a chore than a pleasure — just like food shopping. In such a circumstance, households may try to minimise the number of such trips, to do it as quickly as possible, or to combine it with other daily routines, in particular with food shopping trips. This suggests that the nearest, or local shopping areas, such as local high streets and nearby town centres, that can meet the basic needs for non-food items while providing the shopping facilities for food and other groceries would be used more frequently than the larger shopping centres which are located in areas further afield. For example, many households in Harrow tended to use Harrow town centre for things like shoes and clothes rather than for travelling into Central London. It was less than 10 to 15 minutes walk away from Greenhill or the same amount of time for a car (or bus) journey from Stanmore. As Mrs. G1, a full-time mother of three children (aged 7, 9 and 12), remarked:

It is so convenient [to go to Harrow town centre] . . . [that] most of our shopping is done in Harrow [town centre] . . . because it is more like a chore than a pleasure. If there is anything I need or the children need, I will go there and get it, and come home as soon as possible.

Likewise, people in Wapping (such as households W2, W3, and W4) might go to Surrey Quay to buy things like shoes and clothes and get the food shopping done at the same time instead of travelling into Central London (the West End), although the travelling time was not so much different.

As might be expected, most of the shops in such locations are multiple chains which are characterised by many high street brands. As Mr. S5 described, "*Harrow [town centre] is a 'mini West End' . . . because in Harrow you've got Marks [& Spencer], C&A, Next, those chain stores.*" For those who need no more than the 'standard items', local shopping centres like Harrow town centre are very convenient because most of the things they need are available. So "*there is no reason for going to other places*", said Mrs. G7. The role of such type of shopping centres is, as Mr. G3 put it, "*functional*", and those who shop in these centres tend to combine it with other chores, such as food shopping, going to the bank, post office, and the like, so that they can do several things in a single short trip. For example, Mrs. S7 might go to Edgware to do both food and non-food shopping if she did not have time to go to separate places for different things, such as Brent Cross or Watford for clothes and Wealdstone or Hatch End for food and other basic items.

Local shopping centres have the advantage of being close to residential areas so that the households will have little problem in getting access to the shopping facilities in the local areas. In addition, the concentration of both food stores and non-food shops, as well as other services and facilities such as a post office, banks, building societies, cinemas, restaurants and cafes, in the local centres makes it possible for the households to do both food and non-food shopping, as well as other chores in a single trip. However, the limited choices regarding the type and number of shops as well as the range of products in the shops, have been criticised as the major disadvantage of shopping in the local centres that were described as "monotonous and boring", said Mr. G3. For example, as Mrs. G6 (a

woman who worked in a local school and had a daughter aged 7) commented, “*The trouble in Harrow [town centre] is [that] things are all the same, . . . it is adequate from day to day, . . . but if I want something special, I would go to the West End or Watford*”, because, noted Mrs. S1 (a full-time housewife), “*there are a larger selection of shops.*”

Another problem relating to shopping in the local shopping centres is traffic, including the parking problems. This seems to be a common phenomenon in Harrow town centre and other town centres in London. Because most local shopping centres are traditional town centres, the roads near the centre of shopping areas are both narrow and crooked. In recent years, there has been a trend of introducing one-way systems, parking restrictions, and pedestrian zones in many town centres. As might be expected, to shop in local centres by car, especially when food shopping is to be done in the same trip, has become increasingly difficult. While the government is trying to encourage a modal shift in transport from private car to public transport by making car journeys to town more difficult and by restricting the parking space (both on-street and in car parks) in town (DoE and DoT 1994), given the increasing need to combine both food and non-food shopping in a single car trip, especially for those households with younger children or the elderly, it might end up forcing people to do food and non-food shopping separately in different locations or pushing them away from the local shopping centres and shifting to other shopping centres, such as out-of-town shopping centres, which are more car- and child-friendly.

Out-of-town Shopping Centres and Alternative Shopping: The Shopping Environment for the Car-borne Households?

Entering into the 1990s, out-of-town regional/district shopping centres have represented a new trend of retail development as an alternative to the smaller local shopping centres and the larger shopping centres in the city centres across Britain. MetroCentre near Gateshead (Tyne-side), Meadowhall near Sheffield, Lakeside near Thurrock (Essex) and Merry Hill in Dudley (West Midlands), are all good examples (McGoldrick and Thompson

1992). Although the success of the so-called 'High Streets out of town' has been considered as an increasing threat to the vitality and viability of existing town centres (Bowlby 1987) and the source of a series of negative social impacts on the disadvantaged groups (Davies 1984), the situation seems to be less serious in London than in other British towns and cities. The reason is simple. On the one hand, the dominant position of Central London's retail facilities in the provision of high quality comparison goods and leisure services, backed up by a network of public transport links, has created a unique shopping environment which aims to fulfil the shopping needs for a greater number of customers, including tourists and visitors. On the other hand, the convenience of local shopping centres in terms of its proximity to residential areas, its easy access by both car and public transport, and its dominant position in lower order retailing (food and grocery) and other basic facilities (post office, banks, libraries, and the like) has maintained a basic shopping environment which aims to meet the shopping needs for most households on a day-to-day basis. Accordingly, out-of-town shopping centres seem to supplement, rather than substitute, the existing shopping facilities in both Central London and local town centres.

For those households who neither like the limited choice of products and shops in the local shopping centres nor are willing to tolerate the trouble and inconvenience of travelling into and shopping in Central London, out-of-town shopping centres which are neither local nor central but are more accessible by car, might be an attractive alternative. Places like Brent Cross Shopping Centre and Lakeside Shopping Centre are used by many interviewees in Harrow and Tower Hamlets due to their easy access by car, large and free car park, a variety of shops, and the unique shopping environment (the high standard, weather-proof indoor shopping design), although they may not be necessarily nearer. As Mr. W6, who tended to go to the Lakeside Shopping Centre as often as he went to the West End, said, "*Lakeside [Shopping Centre] has more variety of shops . . . and a big car park*". "*When the weather is bad*", added Mr. BG5, "*we tend to go to Lakeside . . . because all the shops are under one roof, you can park your car and do the shopping.*" Not surprisingly, car accessibility and the 'child-friendly' shopping environment are two major features which are especially appealing to families with children. For them, to shop in out-of-town

shopping centres, unlike shopping in the West End or local centres, could be a pleasant and enjoyable family trip.

As might be expected, out-of-town shopping centres are designed and marketed to tailor the shopping needs of the car-borne population, although a minimum standard of public transport might have been provided as well. As Mr. S6, who tended to drive to Brent Cross, remarked, *"I have no preference for the places [of shopping] except two criteria: the shops I want and a place to park"*. *"I don't realise we are dependent on car"*, added Mr. G8, *"but we are; it is convenient, really."* The Government and scholars may be right about the relationship between car usage and out-of-town shopping in terms of the generation of traffic and pollution (for example, DoE and DoT 1994; Kamali and Crow 1988; Parker 1987; Stokes 1992); however, if people who wish to shop outside town are forced instead to shop in the local high streets or in the West End, the increased congestion and pollution from traffic in towns may be at least as problematic as that created by out-of-town retailing.

Nonetheless, it could be argued that perhaps our concerns should be extended to the shopping needs of the households who are excluded from, or neglected by, the shopping facilities both in town and out of town. While out-of-town shopping centres have brought advantages for the car-borne population, it means that some people may not have equal access to these shopping facilities. They are the disadvantaged consumers, such as low-income earners, residents in areas with poor public transport, those without cars, people with caring responsibilities (usually women), the elderly, the disabled and those with mobility problems, and the young and ethnic minorities, who are not satisfactorily catered for by the retail hierarchy as it currently operates (Royal Town Planning Institute 1988). Rather than making all kinds of shopping facilities accessible to every individual, the importance for the need to provide adequate public transport links to out-of-town shopping centres lies in the fact that retailing has been an important source of employment in London. It might be less serious if the disadvantaged groups are unable to get access to the out-of-town shopping facilities designed for the mobile households, but it could be a very serious problem if they cannot have access to the job opportunities which are created in those locations. This suggests that while we are considering the need to co-ordinate shopping

activities with other daily activities, we also have to take into account, say, employment and transport implications created by the changing contexts of shopping practices.

Co-ordinating Shopping Activities and Other Daily Moments: Time-space Integration and Sustainable Development

As illustrated above, any changes in shopping practices are not isolated issues, but have much to do with their changing relationships with other aspects of daily life, such as employment changes, housing decisions, and transport processes. For example, the shift of households' shopping trips from in-town locations to decentralised locations and from weekdays to evenings and weekends must be explained with reference to the decentralisation of London's housing provision and the changing structure of London's labour market. While the notion of urban social sustainability centrally is concerned with the time-space channelling between productive and reproductive activities embedded in the duality between individual life-chances and institutional structures, the discussion of a sustainable retail development should not ignore the changing contexts in the co-ordination of household life.

Given London's huge scale and the close relationships between different institutional structures, it could be argued that what is important for a sustainable retail development in London is not to encourage any single type of shopping provision and discourage the others in terms of the locations of shopping facilities, their sizes and features, opening hours, transport links and the like. On the contrary, efforts should be made to maintain the *diversity* and the *flexibility* of London's shopping environment via a co-ordination of different shopping facilities which can adequately supplement each other in ways that are able to fulfil the diverse shopping needs of households in different social groups and under different household circumstances. It seems that neither an unlimited growth of out-of-town retail development nor an unthinking return to in-town retail development can meet the diverse shopping needs of the households. Given the complex relationships between different daily moments, it is unrealistic to believe that one type of

shopping environment can serve the needs for all.

Most importantly, the spatial patterns of retail development might be changeable via a temporal rearrangement of shopping provision. For example, late night opening and Sunday trading in town might significantly change the time-space organisation of a particular household's daily life on the grounds that it may attract the working population to use the shopping facilities in town after work or during the weekend. It may substantially reduce the need to shop in free-standing superstores and therefore cut the number of wasteful car journeys. Furthermore, the influences of the changed shopping practices on the co-ordination of household life are many-sided: they not only have reproductive implications but also have employment implications. This is especially important for women. Not only do women take a larger share of shopping responsibilities in the households, they also comprise a very high percentage of the workforce in retailing. For example, the opening of large superstores in out-of-town locations and the extension of the opening hours to late evenings and on Sundays have created an increasing need for, and are facilitated by the use of, female and/or part-time workers. The proportion of female employment in retailing in the UK has increased from 61 per cent in 1961 to 63 per cent in 1992 and the proportion of part-time jobs has increased from 28 per cent to 47 per cent (*Employment Gazette* 1992, cited in Kirby 1993: 196). Accordingly, the tendency towards longer business operating hours and shorter personal working time in retailing may reduce the time available for workers to be with their families and therefore create other co-ordination problems in everyday life. As might be expected, current transport structures, in particular the public transport, and other institutional structures, including trading regulations and associated arrangements, are unable to cope with a wide range of issues regarding the coordination of increasingly fragmented patterns of household life and institutional structures. Therefore, it is important to consider the whole issue of shopping activities in a wider household context of time-space co-ordination between different daily moments while maintaining the sensitivity to their impacts on the co-ordination of institutional structures at higher levels.

Conclusions: The Missing Links Between Household Life and Institutional Structures

As illustrated above and in the last chapter, households in different areas of London exhibited very different patterns of time-space configurations in the co-ordination of different daily moments. This was mainly because the overall structural features varied considerably from one area to another, in particular between Inner and Outer London. However, different household contexts from the same study area demonstrated that, under similar institutional structures, there existed quite different patterns of lifestyles regarding the organisation of everyday life. In addition, even if the households had similar backgrounds or household compositions, their organisation of everyday lives in space and time might be very different. Nevertheless, these diverse, and sometimes contrasting, stories did share some common characteristics. First, these stories suggest that the various daily moments for a household, such as housing decisions, employment, shopping activities, and transport, are *not* discrete and unrelated events. Rather, they are an integrated issue of everyday life co-ordination by virtue of the impinging and interrelated character of time-space connections between different daily moments. Second, these daily moments are becoming increasingly fragmented due to the changes of both micro and macro contexts in London. Accordingly, the co-ordination of everyday life requires a great deal of compromise, not only between different daily moments but also between household members. The household dynamics is *not* a one-off affair, but is a changing domain which might evolve with the advance of household life cycle. Most importantly, by virtue of the repetitive nature of the routinised practices of everyday life, they have significant consequences for the society as a whole.

While the Government is arguing for an integrated approach to the structural connections between urban institutions, this micro, household dynamics rightly addresses the significance of the 'human scale' of sustainability issues: i.e. the need to include everyday life into environmental concerns. Nevertheless, the time-space coordination of everyday life, both between different daily moments and between household members, is

not something that can be ‘summed up’ or ‘averaged out’; the integration of institutional structures at macro level should reserve the *diversity* and *flexibility* for the households at micro level in order to channel different daily moments in both space and time. This is especially important for the disadvantaged groups, such as the poor, women, unskilled workers, ethnic minorities, and so on, because it is common that they have to live against the grains of urban structures. For them, those structural features are more like a constraint, rather than an enablement, for the co-ordination of their everyday lives. In other words, the sectoral integration between institutional structures at macro level cannot be achieved via a wholesale, nominal approach that gives primacy to aggregate patterns and urban forms, such as the numerical parities and the spatial integration between different institutional structures, but ignores the diverse contexts and the dynamic processes of household life at micro level which are in effect the constitutional essentials of all institutional structures.

This does not mean that the Government’s sustainability strategy of urban re-concentration and mixed-use development, or the idea of ‘compact city’ in general, is necessarily unsustainable. On the contrary, the case of London vividly illustrates that dense and compact development *per se* is not enough. Given that the London region is one of the largest conurbations in the world and the dense development within existing urban boundaries actually is creating pressure for further expansion, it could be argued that sustainable *urban* development cannot be pursued via the prescription of a simple, singular solution of spatial integration at macro level. Rather, we need to examine the time-space channelling between everyday life and institutional structures in wider *social* and *regional* contexts so that the diverse needs of different types of households, or the needs of the households at different stages of their family life cycles, can be taken into account. In so doing, the impinging and compromising nature of household life and the interrelated character of institutional connections can be properly addressed. In other words, the inclusion of the time-space dimension, the stress of the micro context of household life, and the expansion of the urban definition to a regional scale, all point in the same direction: i.e. the need to address the *human scale* in the sustainability debates by virtue of the interconnections between people’s life-chances and their environments. Accordingly, an

adequate channelling between everyday life and institutional structures is the necessary condition for a sustainable relationship between people and the created urban environment, i.e. the defining character of social sustainability, and, in turn, the prerequisite for an overall sustainable development which requires a harmonious channelling between social and physical sustainability .

CHAPTER EIGHT

SUSTAINABLE DEVELOPMENT, TIME-SPACE AND CITIES: RE-CONNECTING PEOPLE AND ENVIRONMENT

The aim of the concluding chapter is to draw together the emerging themes of the thesis and to set them in a wider context of sustainability debates. The main argument of this thesis is that to pursue sustainable development as one of the top policy priorities at both a global and a local scale requires a proper conception of sustainable development. While conventional sustainability debates tend to focus on the issue of reconciling the competing goals between environmental protection and economic development, this thesis argues that the key to a proper re-conceptualisation of sustainable development is to address the *human scale* of sustainability issues by digging into their underlying causes. Neither environmental protection nor economic development are an end in themselves; rather, they are the means to the end — the search for a better life, for both current and future generations. In other words, sustainable development is not concerned with the issues of environmental protection and economic development *per se*, but is concerned with the interrelationship between the *socio-economic* and the *socio-environmental*. Conventional conceptions of sustainable development are right on the grounds of seeing environmental protection and economic development as a joint challenge, but they share the same blind spot: seeing the environment and development as a dualism, rather than a duality. What is required to bridge the concerns for environmental protection and economic development is a human/social dimension in the discussion of sustainable development. To put it more precisely, sustainability is primarily concerned with the interdependency between *people* and their *environments*. Accordingly, it is people's life-chances, both current and future generations, which should be placed at the centre of the whole sustainability debates.

The interdependency between people's life-chances and the environment can be understood from two angles: *physical* sustainability and *social* sustainability. These two perspectives constitute the *external* (physical) and the *internal* (social) dimension of an *overall* sustainability. The former is concerned with the interrelationship between *human society* and the *natural environment* as a whole, or the interconnection between the *re-production* of the production system in human society and its fundamental material basis — an issue which has been much discussed in conventional sustainability debates. The latter is concerned with the interrelationship between individual actions and the created

environment, or the interconnection between the *reproduction* of individual life-chances and the reproduced institutional structures — an issue which has been largely ignored in conventional sustainability debates. By virtue of the origins and through the consequences of sustainability problems, this thesis argues that social sustainability is the prerequisite of physical sustainability and, hence, brings about a deeper explanation of sustainability issues. In view of this, the discussion in this thesis has been limited to just one aspect of the wider sustainability debates — one that has previously been largely ignored and misunderstood in conventional sustainability debates — concerning the concept of urban social sustainability.

Having argued that a proper conception of sustainability is both crucial to the understanding of the meanings of sustainable development and crucial to the adoption of concrete actions in response to the sustainability challenge in practice, this thesis also believes that sustainable development cannot be discussed in abstract alone: to link the concept of social sustainability to both the concrete world and the empirical data is as important as developing a proper conception of sustainability. The way that this thesis attempts to bridge the theoretical account and the practical understanding of social sustainability is to situate the debate in a concrete *urban* environment — a context which can illustrate more easily the close connection between the life-chances of the individuals and the institutional structures of the created urban environment. While the environmental issues are increasingly threatening to the survival of both human beings and other species, in particular those issues with global significance such as global warming, ozone layer depletion, and large-scale deforestation, many of the discussions on sustainability issues are focussed on the issue of ‘green economy’, i.e. the search for further economic development while taking into account the need for environmental sustainability.

Among other things, the issue of a growing scale of motorised transport, in particular the growth in the number of car trips, as well as associated problems of resource depletion, environmental pollution, and social exclusion, have been a central concern in sustainability debates at both local and global levels. This transport issue has much to do with the separation between the locations of residence, employment, education, and other facilities and services. This thesis argues that these issues have a deeper explanation concerning the expanding tendency and the utilitarian logic of *industrial capitalism* in the

Western society and the resulting time-space disparities between productive and reproductive activities. While the productive activities in capitalist industrial society are increasingly undertaken at global scale by overcoming the constraints of time and space, the realm of reproduction is by and large a local affair by virtue of the constraint of our bodies. Thus, a sustainable urban development requires an integrated approach to bridge the time-space gaps between productive and reproductive activities.

In this regard, the British government's response to the sustainability challenge is characterised by an 'environmental turn' in the planning policy. The Government is prescribing an overriding strategy of 'spatial integration' via the policy of urban re-concentration which aims to promote a mixed-use pattern of development by co-ordinating transport and land use in ways that discourage the use of private car and reduce the need to travel altogether. Undoubtedly, the growth in motorised transport should be controlled; and an integrated, holistic approach is required to bridge the time-space disparities between different urban institutions. However, what has not been properly addressed in both sustainability debates and the Government's urban policies, is the totality of everyday life. By virtue of its repetitive character and its collective effects, this thesis argues that this micro aspect of the co-ordination of everyday life represents the constitutional essentials of institutional connections at macro level. Accordingly, they are the key to understanding the duality relationship between individual life-chances and the overall structures of the created environment. Nevertheless, society is not the sum of unrelated individuals. Rather, it is constituted by a complex web of social relations. While stressing that sustainable development is not something which can be 'summed up' or 'averaged out', this thesis argues that the key to a practical understanding of the concept of urban social sustainability is to explore the time-space relations embedded in the household dynamics of co-ordinating everyday life both between different daily moments and between different household members in the created urban environment.

The remainder of the chapter is divided into three sections. The first section summarises the main themes of the thesis. It emphasises that a proper conceptualisation of sustainable development requires a fundamental rethinking about the relationship between people and their environments as an issue of 'uneven development' between productive and reproductive activities in space and time. The second section extends the

argument of sustainable development to a practical explanation of the concept of urban social sustainability by linking the theoretical account of sustainability to concrete urban questions. It focuses on the issue of co-ordinating everyday life and institutional structures in London. Finally, the implications for further research are discussed to conclude the thesis. The findings of the thesis suggest that the concept of urban social sustainability can be extended to wider contexts of different scales, and in different societies. Among other things, sustainable development in Third World cities, and an overall sustainability between social and physical sustainability at both regional and global scales, are two pressing issues which require further research.

Sustainable Development in Urban Society: Reconsidering the Relationship Between People and the Environment

The thesis began with questioning the adequacy of conventional conceptions of sustainability, arguing that sustainable development cannot be achieved on the margins under inappropriate conceptual frameworks. In conventional sustainability debates, sustainability problems are conceptualised as trade-offs between the goal of environmental protection and the goal of economic development. This view is inadequate on the grounds that it ignores the internal, underlying essentials of sustainability problems: the problems of people themselves. By virtue of the very origins and through the consequences of people's thinking and doing, sustainability issues are in essence *social* problems, rather than the problems of the economy or the environment *per se*. Therefore, resolving both economic and environmental problems under the common framework of sustainable development requires a fundamental rethinking about the practical meanings of sustainability from the social perspective, as issues of the *socio-economic* and the *socio-environmental*.

In order to explore the deeper causalities of sustainability issues, this thesis argues that the meaning of sustainable development can be, and should be, explained as an interdependency between *people* and the *environment*. The key to understanding the people-environment relationship is the concept of 'duality': i.e. people and the environment are not two given sets of unrelated entities, a dualism, but represent a duality — the structural properties of the environment are both the media and the outcomes of the

practices people recursively organise. Based on the concept of duality, the meanings of *environment*, *development*, and *people* can be clarified. First of all, we have to distinguish the socially constructed *man-made* environment (or the *created* environment) from the pre-existing *natural* environment. Secondly, we should not restrict the meanings of development to a narrowly defined *economic* development (or *productive* development), which is the means to an end rather than an end in itself. Rather, we must address the importance of *socio-economic* development (or *reproductive* development), which is the ultimate goal of economic development. Most importantly, we should not conflate *society* with *individuals*. Society is constituted by individuals; nevertheless, one cannot be reduced to the other. Although conceptually we can make a clear distinction between the natural and the created environment, between economic and socio-economic development, and between society and individuals, in practice they do impinge into each other as dualities. This is what sustainability is about.

By making these distinctions, it allows us to separate the *internal, social* aspect of sustainability (as dualities between individuals, socio-economic development, and the created environment) from the *external, physical* aspect of sustainability (as dualities between human society as a whole, economic development, and the natural environment). The distinction between the internal, social dimension and the external, physical dimension of sustainability is important on the grounds that it allows us to identify the causal relations between environmental and economic issues by addressing the necessary connections between the origins and the consequences of sustainability problems. Otherwise, it would be counterproductive, or even misleading, to conflate the symptoms with the underlying causes, and the means with the ends by searching for any direct connections between economic and environmental issues. Unfortunately, conventional sustainability debates are subscribed to this type of problem because they tend to focus on the external, physical aspect of sustainability, or they tend to conflate the external and the internal aspects of sustainability, when they are trying to reconcile the conflicts between environmental goals and economic objectives directly.

The underlying essentials of the internal, social aspect of sustainable development, or in short social sustainability, is almost unexplored. Even worse, it has been treated as the means to an end (environmental and economic sustainability). Accordingly,

conventional debates on sustainability are superficial and the corrective actions based on these conceptions could only have a limited degree of success because they tend to focus on the 'symptoms' and the 'means', rather than on the 'causes' and the 'ends' of sustainability issues. In order to redress this conceptual flaw in conventional sustainability debates, this thesis has focussed on the concept of social sustainability and its practical implications.

Nevertheless, this social orientation should never be interpreted as *anthropocentrism* which treats the environment as nothing more than the material base of our surroundings (including the existence of other species) that is in our command and for our use. It has to be agreed that the natural environment, other species and the whole ecosystems should be preserved in their own right. But, arguably, this is only possible when a sustainable condition is maintained within the created environment of human society. A socially unsustainable society would inevitably require a higher degree of economic growth and, therefore, would increase its exploitation of the natural environment. It is totally unacceptable that physical sustainability, i.e. the search for better environmental quality and further economic development, is to be achieved at the expense of social sustainability, i.e. the ultimate improvement in the harmonious interdependency between individual life-chances and the overall living conditions. It is very likely that it is the poor, including the disadvantaged groups in a particular society and the societies in the less developed regions/countries as a whole, who will suffer more if the external, physical aspect of sustainability is made the primary, or the only, goal of sustainable development. While the issue of equity (both inter- and intra-generational equity) is understood as the defining character of sustainability thinking, it is the welfare of the disadvantaged groups which should be given priority. While arguing that a proper conception of sustainable development should recover the *human scale* of both economic and environmental issues, this thesis has been focussing only on one aspect of the wider sustainability debates: the issue of social sustainability.

Approaching Social Sustainability: Uneven Development Between Production and Reproduction in Time and Space

While emphasising the importance of the internal, social perspective of

sustainability, this thesis argues that the root of current unsustainable trends can be traced back to the rise of *industrial capitalism* in the Western World, first in Britain and later in North America and other European countries, some two hundred years ago. With *industrialism* as the machine and *capitalism* as the power, the *utilitarian logic* of Western industrialisation and the *expanding tendency* of capitalist mode of production, not separately, but hand-in-hand, have transformed the world in ways that natural processes and previous civilisations would have taken millennia to achieve. When combined externally with *imperialism* and internally with *urbanisation*, industrial capitalism has exploited both natural and human resources to an unprecedented scale that some, in particular the Marxists, have predicted its collapse. However, while the collapse of Marxist-Leninist socialism as a basic form of economic and political organisation in Eastern Europe, former Soviet Union and elsewhere has nullified the theory of class conflict, this thesis tries to explore the unsustainable tendency of industrial capitalism from the time-space implications of the capitalist industrial society: as an issue of *uneven development* between productive and reproductive activities in time and space.

The defining character of the capitalist mode of production is the pursuit of *surplus value* and the resulting separation between productive and reproductive activities in time and space, i.e. an increasing disconnection between the production system as a whole and the consumption of the individuals by virtue of the creation of productive institutions. In a nutshell, the growth of industrial capitalism is exemplified by the expansion of the whole production system, an entity which is increasingly beyond the control of the ‘invisible hand’ — the motivation of self-interest — at an individual level. In the late twentieth century, the capitalist production system is increasingly operating on a global scale by overcoming the constraints of space and time, i.e. spatially by expanding both the markets and the production bases to overseas and temporally by increasing the speed of circulation, when ‘flexible accumulation’ is realised in the process of ‘time-space distancing’ that has turned the whole world into a ‘global factory’. By contrast, by virtue of the constraint of our bodies in both space and time, consumption and reproduction remain a matter of ‘here and now’ that presupposes the condition of ‘time-space co-presence’. Accordingly, a time-space tension has been created between the realms of (global) production and (local) reproduction in the capitalist industrial society. In a sense, sustainable development can be

understood as an issue of *reproduction* — both the *re-production* of the production system as a whole and the *reproduction* of individual life-chances — that requires to overcome the ‘uneven development’ in time and space between productive activities and reproductive activities. This thesis argues that to address the time-space tension between productive and reproductive activities is a key to approaching the internal, social aspect of sustainable development.

The Marriage of Critical Realism and Structuration Theory: Towards a New Conception of Sustainable Development

While the stress of social sustainability as an issue of uneven development between productive and reproductive activities in both space and time has opened up a distinctive terrain of debate on sustainability, it begs the question about the adequacy of the conceptual framework in normal science. Given that this thesis is centrally concerned with the internal, social perspective of sustainable development, orthodox approaches to social science, characterised by positivist science, are rejected on the grounds that they are basically involved with making empirical generalisations in assumed closed systems. While sustainability issues are considered to be both complex and dynamic, and cannot be reduced to the ‘symptoms’ of pure economic and environmental problems, a new conceptual framework which aims to dig into the deeper causalities of sustainability issues in open systems is required. Accordingly, this thesis adopts an alternative conceptual framework that is characterised by a marriage of *critical realism* and *structuration theory* to explore the internal, social dimension of sustainable development.

On the one hand, critical realism is important on the grounds that it provides an adequate philosophical foundation for the analysis of social sustainability. Through a distinction between the domains of *the real* (mechanisms and structures), *the actual* (events), and *the empirical* (experiences) in social inquiries, critical realism stresses that the task of social science is to tease out causal chains which situate particular events within these deeper generative mechanisms and causal structures. Accordingly, it is the necessary relations of structures and mechanisms in the internal, social aspect of sustainability, rather than the contingent relations of factual events or fragmented experiences in the external, physical aspect of sustainability, which are the deeper explanation of sustainability issues.

In other words, any sensible discussion in the sustainability debates cannot ignore the internal, social perspective of sustainability. On the other hand, the theory of structuration is important on the grounds that it provides a solid theoretical framework for a practical explanation of the underlying essentials of sustainability issues. In structuration theory, the concept of the duality of structure, the inclusion of time-space in social analysis, and the discussion of the modes of regionalisation in social relations, construct a useful framework for the analysis of the 'uneven development' between productive and reproductive activities in capitalist industrial society.

Most importantly, the marriage of critical realist philosophy and the theory of structuration has opened up a new perspective for an empirical investigation into the issue of social sustainability. The stress of the 'practically adequate explanation' in realist methodology and the stress of the duality relationship between social structures and individual actions in structuration theory suggest that a combination of *extensive* and *intensive* analysis is required to explore the necessary connections between the structural patterns of the created environment, and the dynamic processes of people's daily practices.

Social Sustainability and Urban Questions: Building the Connections Between Theory and Practice

Since conventional sustainability debates are paying undue attention to the *temporal* dimension of sustainability issues, as issues of *inter-generational equity*, the empirical investigation of the internal, social perspective of sustainability has to address the *spatial* dimension of sustainability issues, stressing the importance of *intra-generational equity* by situating the debate of social sustainability in a concrete urban context in capitalist industrial society: the case of London. This urban focus can be justified on several grounds. Firstly, cities are considered by many as the very antithesis of sustainable development in terms of the consumption of resources, the generation of pollution, and the creation of social injustice. Secondly, the significance of the city's role as the major forum of modern civilisation is increasing due to the fast growth of urban population in the world as a whole, the city's leading role in both productive and reproductive activities. Thirdly, cities represent the very manifestation of the created spaces. It is easier to understand the duality relationship between people's daily practices and the structural properties of

institutionalised social conditions in the cities. Most importantly, the overall sustainability strategy adopted by the British government is characterised as a policy of spatial integration concentrated in the urban areas. By highlighting the time-space relations between the co-ordination of everyday life at a micro level, and the structural connections of different urban institutions at a macro level, the discussion of urban social sustainability can provide a deeper explanation for the issue of sustainable development in general.

In order to explore the meanings of social sustainability in a concrete urban context, it is necessary to translate the abstract theories of social sustainability into substantive urban questions, and fit the existing urban questions into the framework of sustainability debates. In structuration theory, on the one hand the routinised practices of everyday life are considered to be the prime expression of the skilful accomplishment of human activity in the continuity of social life; on the other hand the institutionalised properties of social systems, which are both constraining and enabling, are considered to be both the media and the outcomes of the practices that people recursively organise. For the individuals, the continuity of day-to-day life relies on the integration of different daily moments in 'time-space routinisation': an issue of *social integration*. For society as a whole, by contrast, the maintenance of the social system relies on the integration of different institutional structures in 'time-space distanciation': an issue of *system integration*. In primary and agrarian societies, these two domains were very close in both space and time. Except for an overriding problem of 'underproduction' or 'underdevelopment', it would not be a problem for the co-ordination between production and reproduction. In capitalist industrial society, although technological breakthroughs and knowledge diffusion have largely improved the production system as a whole, while the reproduction (consumption) of individual life-chances remains a localised affair, the utilitarian character of industrialism and the expanding logic of capitalism have created a time-space tension between social and system integration: an issue of 'uneven development' between productive and reproductive activities. Therefore, social sustainability can be understood as an issue of *societal integration* that requires a time-space co-ordination of everyday life and institutional structures between productive and reproductive activities.

In the urban areas, the consequences of lacking a co-ordination between productive and reproductive activities and between individual daily practices and the overall urban

institutions, are the increased mismatches in space and time between different daily moments, and between different institutional structures. In substantive terms, it involves a wide range of problems: for example, the increased separation of the locations of employment, residence, and facilities and services; prolonged processes of daily commuting; the fast growth of car ownership; a growing number of wasteful car journeys for work, shopping, leisure and other purposes; and the associated problems of pollution, waste of energy, and social exclusion due to inadequate connections between basic daily locales. In order to highlight the time-space connections between the routinised practices of everyday life and associated institutional structures in a concrete urban environment, the foci of analysis have been concentrated on four of the most basic moments of daily life — home, work, shopping and movement between them — and associated institutional structures of housing, employment, retailing and transport.

The key to understanding the necessary connections between the routinised practices of everyday life and the institutionalised urban structures is the concept of *institutional webs*. Understood in their widest sense as lasting, though changeable, social relations, institutions are the meeting grounds between social structure and individual action. But the meanings of institutions are many-sided. 'Institutions' not only refer to the formally constituted and legally regulated organisations and systems, such as central and local governments, private companies, and laws and regulations, but also to other informal forms of social structures, ranging from small groups of people with direct contacts, such as family and similar structures, to large-scale institutional structures extending over a much wider time-space zone, for example, industries, labour markets, and housing markets. By addressing the institutional links between productive and reproductive activities of different time-space extents, it allows us to keep one eye on the processes of individual action while keeping another on the patterns of the overall structures. Accordingly, the empirical discussion of the concept of urban social sustainability is focussing on three institutional dimensions: (a) the household (as the most basic social institution) dynamics of day-to-day life; (b) the institutional structures of London's employment, housing, retailing, and transport structures (as *informal* institutions); and (c) the intervention of the planning system (as *formal* institutions).

As might be expected, these issues have been the major concerns of both urban

researchers and policy-makers. However, these issues have been traditionally dealt with in separate sectoral boundaries as if they were unrelated issues, and within polarised frameworks as *either* micro issues *or* macro ones. While the concept of urban social sustainability rightly points out the need for an insight into the internal, deeper perspective of sustainability issues, it also provides an appropriate framework for an integrated, holistic approach to a range of urban questions cutting across sectoral boundaries and linking both micro and macro concerns.

Co-ordinating the Fragmented Everyday Life and the Mismatched Institutional Structures in London: A Time-space Approach

Apart from opening up a distinctive terrain of sustainability debates by counterposing the internal, social aspect of sustainability and the external, physical aspect of sustainability, another major contribution of this thesis is its practical explanation of the necessary links between different urban institutions by virtue of the concept of urban social sustainability. Based on the concept of *institutional webs*, the links between sustainability concerns and urban questions are established on three particular perspectives: the overall patterns of London's institutional structures in relation to employment, housing, retailing and transport; the planning policies for sustainable development; and the household dynamics in the coordination of everyday life. The findings from both the extensive analysis of London's institutional structures and the intensive analysis of households' daily practices suggest that there have been increasingly enlarged time-space mismatches between different institutional structures in the London region and the everyday lives of London's households have become increasingly fragmented, too.

While recognising that an integrated, holistic approach is necessary for the pursuit of sustainable urban development in London, this thesis argues that Government's sustainability strategy of 'spatial integration' which is characterised by the policies of 'urban re-concentration' and 'mixed-use development', or the notion of 'compact cities' in general, is problematic on the grounds that it ignores both the structural trends of London's institutional properties and the dynamic contexts of household life in the coordination of everyday life. Greater regional prosperity does not guarantee greater prosperity for all. Therefore, a socially sustainable city must coordinate the overall

institutional structures with the tedious practices of everyday life for those who are living in different parts of London, with different socio-economic backgrounds, at different stages of family life cycle, and, most importantly, with different needs. This suggests that both sustainability strategy and urban policy should transcend the overriding concern for the *place per se*, and should focus on the ‘underlying essentials’ of the needs of the *people* who create and change places. In so doing, we must consider the issue of the sustainable city from a wider *regional* perspective so that the *diversity* and the *flexibility* of structural connections at macro level can assure an enabling environment of time-space channelling between institutional structures, which are required for the co-ordination of fragmented daily moments at a micro level. In other words, a sustainable city must provide opportunities of *accessibility* to resources and facilities for those who live or work in the cities, especially for the disadvantaged groups whose basic needs are more likely to be ignored in the market mechanisms. This thesis argues that the starting point for a socially sustainable city is to focus on the time-space channelling between the coordination of everyday life and the integration of institutional structures. In this view, planning should be understood as the activity of problem-setting instead of the activity of problem-solving (see Crosta 1990). It is unlikely that all the diverse needs of the households in different situations can be met in a sustainable city. It is technically infeasible, economically unviable, and socially unjust. However, as far as the created environment is concerned, what is needed is to assure an enabling condition of institutional integration, so that the individuals can coordinate their everyday lives more easily with fewer structural barriers. Accordingly, co-ordinating everyday life and institutional structures in space and time is the key to a sustainable urban development.

The Case of London: A Divided City for a Fragmented Life

In chapter 4, aggregated data derived from censuses, official statistics, and other studies and reports suggested that the overall description of London’s institutional structures could be ‘divided city’ with employment, housing, retailing and transport structures mismatched with each other in space and time. This is illustrated by an overall pattern of dispersed development which is reflected in the expansion of London’s

functional boundaries from a pedestrian city of Victorian and Edwardian London to an extended metropolitan region stretching out tens of miles into the South East region of England. However, the seemingly similar pattern of decentralisation in effect has very different meanings for individual sectors in terms of (a) the different patterns and paces of decentralisation, (b) the underlying factors behind the changes of structural properties, and (c) the time-space implications for the co-ordination of everyday life in the households.

For example, the influences of global economic restructuring have contributed to the process of 'de-industrialisation' in London that is characterised by a combination of the 'shake out' of manufacturing jobs from the inner rings of London to the urban peripheries (as well as to the rural areas in the rest of Britain and other European countries and, in particular, to Third World countries as a whole) and the 'spill over' of service jobs from Central and Inner London to the outer suburbs (in particular the fast growth of some lower-order service jobs, such as retailing and other clerical or back-office jobs, in the outer rings of London). In terms of housing structure, by contrast, although large-scale private housing development has been 'squeezed out' to the urban peripheries of the London region, including the home counties in the RoSE, a considerable proportion of the cheaper, rented social housing provided by local authorities and housing associations is concentrated in Inner, in particular East, London. In retail development, while London still retains a loose network of shopping centres at nodal locations in traditional town centres, there has been a trend of retail development moving away from small, independent shops in in-town locations towards large, multiple chain-stores in out-of-town locations. This trend is especially marked in grocery retailing and household goods. Accordingly, the need to travel for both work and shopping purposes has increased substantially in terms of the frequency and distance of movements because of the increased separation of the locations of employment, residence, and shopping facilities.

In short, there have been increasing mismatches between different institutional structures in London. However, the structural feature of London's transport system — i.e. a transport system with the public transport network concentrated in Inner London, especially in the area north of the River Thames, leaving the outer rings of London to be dominated by road transport, in particular private car — seems to reinforce, rather than reduce, the structural mismatches between London's employment, housing, and retailing

structures. In other words, the movements made within, and into, the inner parts of London are more likely to be served by public transport and the transport needs around, and towards, the outer rings of London tend to rely on private car.

Given the growing number, as well as the longer distances, of different types of trips, especially those made by car, the increasing mismatches between London's institutional structures become environmentally unsustainable, economically unviable, and, most importantly, socially unacceptable. While the goals of reducing the need to travel in general, and reducing the number of car trips in particular, are among the top priorities of sustainable development, undoubtedly, these institutional disparities should be understood as an *integrated* issue of time-space connections between institutional structures. The question is 'what are their substantive implications for policy making?'

The 'Environmental Turn' in Planning: Space Matters?

In response to the sustainability challenge highlighted in the Brundtland Report and the Earth Summit, the British government is adopting a sustainability strategy which is characterised by an 'environmental turn' in the planning system: i.e. a call for land use planning to achieve environmental goals, in particular by cutting the scale of car trips. In a nutshell, the UK strategy for sustainability can be described as a policy of urban re-concentration in existing urban areas. It prescribes a solution of spatial integration by co-ordinating transport and land use at, or near, the nodal locations in the urban areas through mixed-use development. This policy is adequate on the grounds that it aims to eliminate the blind spots of 'trend planning' which tends to define the sectoral goals within individual sectoral boundaries based on the projection of individual trends. For example, conventional transport planning has been focussed on meeting the needs of future transport growth by building more, and wider, roads and railways; but it has not questioned the adequacy of the links between transport systems and other institutional structures. By contrast, sustainability planning stresses that this is an integrated issue that requires a proper co-ordination between institutional structures. However, it is problematic on the grounds that it tends to focus on urban forms and the spatial aspect of institutional connections; but it ignores the necessary connections between institutional structures embedded in the

dynamics of household life, that requires a wider scope of time-space co-ordination.

In other words, Government's sustainability strategy of urban re-concentration is subscribed to the fallacy of wholesale, nominal approach to sectoral integration that tends to prescribe an overriding policy of spatial integration via the numerical parity and spatial proximity of institutional structures; but it is lacking any sensitivity to the internal connections between institutional structures. This thesis argues that very few cities in the Western World are denser, or more compact, than London. But London itself cannot be sustained without the import of labour and other resources from its hinterlands and other areas. This suggests that the underlying assumption of urban containment in the sustainability strategy of urban re-concentration is both unrealistic and misleading. Therefore, what is required is a qualitative perspective of sectoral integration, including *inter-sectoral* integration, *intra-sectoral* integration, *scale* integration, and, most importantly, *internal* integration, which can bind the assorted institutional structures together in both space and time through the process of everyday life. Otherwise, dense development and urban concentration alone might lead in the opposite direction towards increasing mismatches between institutional structures and more fragmented life-patterns by creating extra pressure for urban expansion and dispersed development, as has been happening in London in the last two centuries.

Household Life and Institutional Connections: Time-space Matters

This thesis argues that, under the wholesale, nominal approach of urban re-concentration and mixed-use development, there will be a certain degree of improvement in the state of environmental quality; however, it is very likely that such goals are achieved at the cost of increasing fragmentation in the co-ordination of everyday life for the disadvantaged groups in our society. By virtue of their disadvantaged position in competition with more well-off groups to gain access to the central locations of urban resources, the needs of the disadvantaged groups are more likely to be marginalised due to increased competition resulting from denser and more compact development, in particular when the changes of urban structures take place through the 'market'. This thesis argues that the dynamic contexts of the co-ordination of household life are the key to understanding the institutional connections at higher levels, and, accordingly, they are the

underlying essentials for a strategic response to the challenge of integrating institutional structures.

For example, the contexts of coordinating different daily moments in time and space for a particular household could be very different from the overall patterns of institutional structures. While the increasing number and scale of motorised movements have been considered by many to be a serious threat to the environment and to social cohesion, for most individuals transport issues are but the means to co-ordinate the increased fragmentation of everyday life, that should be considered in conjunction with other household needs. In other words, the 'dis-embedded' structures of institutional connections should be explained from the perspective of the 'embedded' practices of everyday life. Hence, the diverse contexts of household life, rather than the atomistic conception of homogeneous individuals characterised by neo-classical economic thought, are a deeper explanation for the institutional connections at higher levels. It is the 'institutional webs', situated in the process of household life, which build the necessary connections between individual actions and the overall institutional structures.

It is very likely that both housing decisions and employment conditions, as well as other aspects of household life, will change at different stages of household life cycle. But it seems unlikely that the changes in any aspect of daily moments will correspond to the changes in other aspects of daily moments. Most importantly, given that a lion's share of London's households comprise traditional families or similar structures with two or more members, it will inevitably make the co-ordination of everyday household life more complicated in the light of several sets of institutional connections in a single household. By virtue of the mutually impinging character of household life both between different daily moments and between household members, it is not difficult to imagine that to coordinate everyday life is a great compromise for some, or all, household members. This is especially difficult for disadvantaged groups in the sense that their lives are more likely to be organised in ways that go against the grains of urban structures, particularly in capitalist society in which their 'needs' are weaker market signals because of a lack of purchasing power. Most importantly, this micro, household perspective is not something which can be 'summed up' or 'averaged out'. It would be pointless to have an 'integrated' institutional structure in a limited boundary of the urban area at a macro level while leaving

the households on the urban fringes to live more fragmented lives in terms of the increasing difficulty in the co-ordination of different daily moments. Therefore, what is required for a socially sustainable urban development is an adequate time-space channelling between everyday household life and the institutional structures at large in a wider regional context.

However, given the huge scale of London's institutional structures and the diverse contexts of individual households' daily lives, it must be pointed out that it is the time-space dynamics embedded in social practices — rather than the physical characters of space and time *per se*, such as the 'time-space' defined by distance and clock time — that is the key to the co-ordination of everyday life and institutional structures. In other words, what matters is the issue of the *socio-spatial* and the *socio-temporal* embedded in social practices. Accordingly, an effective sectoral integration between institutional structures at a macro level, such as the co-ordination of transport system and land use, must take full account of the household dynamics in the co-ordination of everyday life in time and space; in turn, a better co-ordination of the fragmented daily moments in the households also relies on an adequate structural integration between different institutions in space and time. As might be expected, there is no single solution to the issue of co-ordinating everyday life and institutional structures on the grounds that the interdependency between individual life-chances and the overall created environment is not something which can be 'aggregated' or 'disaggregated'. Any prescription of a simple, singular policy, such as the previous policies of a Green Belt and inner-city regeneration, and the existing sustainability strategy of urban re-concentration, can only have marginal effects because they are superficial and, to some extent, misleading. By contrast, what is needed for a sustainable city is a fresh strategic framework which can re-embed the dis-embedded institutional structures to the concrete practices of everyday household life.

Diversity, Flexibility and Accessibility: A Socially Sustainable City

Given the increasing disparities between London's institutional structures and the growing difficulties in co-ordinating the increasing fragmentation of everyday life for those who either live or work in London, it is undoubted that an integrated, holistic approach is

required to re-connect everyday life and institutional structures in both space and time. However, Government's sustainability strategy of spatial integration does not address the necessary connections between these two realms. The decline of the inner cities and the unsuccessful attempts to regenerate these areas can illustrate the weakness of the wholesale, nominal approach of urban re-concentration for ignoring the internal, necessary connections between institutional structures. Given that job markets are becoming more specialised and the number of two-earner households is growing steadily, this thesis argues that the time-space co-ordination between everyday life and institutional structures is an integrated issue which holds the members of a particular household as *one* household and links the various institutional structures of a particular city as *one* daily urban system. In other words, to focus on urban forms *per se* is insufficient to build such connections. On the contrary, a time-space channelling between co-ordinated everyday life and integrated institutional structures is the premise for a socially sustainable urban development.

To achieve this goal, first and foremost, the view that planning is understood as a problem-solving activity should be changed. By virtue of the duality relationship between institutional structures and individual agents, it is more appropriate to see planning as a problem setting activity. In other words, planning is not a machine (i.e. a machinery, a well established set of techniques and processes) whose effective working (whose problem solving capacity) depends on its being correctly supplied with the right input (i.e. on its being correctly adapted to manage well-specified problems), and on its being efficiently operated. By contrast, planning should be understood as an interactive process through which the problems to be dealt with, as well as the ways to cope with them are to be defined, together with the conditions which possibly make the interacting partners engage in a joint action (see Crosta 1990; Myerson and Rydin 1994). Accordingly, the concept of urban social sustainability can be considered to be a guiding principle for the planning of a sustainable city.

The stress of the necessary interconnections between individual life-chances and institutional structures in the concept of social sustainability rightly addresses the common ground of both planning and sustainability concerns: the need to maintain a harmonious relationship between people and their environments. While there has been a renaissance of strategic planning towards plan-led development in the 1990s, what is of equal

importance is to find out the ways through which different sectoral objectives are integrated. Cities are not islands. It is counterproductive to plan a sustainable city by focussing only on existing urban boundaries under the assumption of urban containment. By contrast, a sustainable channelling between the micro contexts of everyday life and the macro structures of institutional integration in London must be examined in a wider *regional* context. Both economic activities and environmental impacts have little respect to the borders of the cities. It could be argued that one of the defining characters of modern cities is the close linkage between cities and their hinterlands by virtue of the increasing exchange of resources, including the flows of both people and goods/services, and the unwanted side-effects of waste and pollution, across the borders. With this broader regional scale, then there would be enough scope for a *diverse* pattern of development which can assure the *flexibility* necessary for the co-ordination of the increasingly fragmented daily life of the households with distinctive needs, especially for those disadvantaged households whose needs are more likely to be ignored by the market mechanisms.

In this regard, Breheny's discussion on the 'social city region' is a good starting point for a regional scale of sectoral integration that reserves the *diversity* and the *flexibility* of co-ordination between the micro context of household life and the macro context of institutional structures (see Breheny 1993; Breheny and Rookwood 1993). In other words, a suitable urban development may involve different patterns of development, including compact development, low-density development, decentralised concentration, and other urban forms. But simply extending the scale of analysis to the regional is not enough. As this thesis has illustrated, labour markets, housing markets, retail developments, leisure patterns, and transport systems are not separated issues. They have a spatial element; but they cannot be reduced to space. They are linked to each other via the institutional connections of household life. Accordingly, what is more fundamental to the integration both between and within sectoral boundaries is the internal, necessary conditions of sectoral integration: the issue of *internal integration*.

At the centre of this strategic framework of sectoral integration is the issue of *accessibility* in the coordination of everyday life. This thesis argues that what lie behind the time-space disparities between different institutional structures are the *social* barriers which create the time-space tension between different daily moments. Unless these social

barriers are removed, people are unable to gain access to the opportunities and facilities required for their daily lives, even if the locations of, say, employment opportunities and shopping facilities are very close to the locations of their residence. For example, *appropriate* housing must be provided in areas where jobs are created; *suitable* job opportunities must be created in areas where people live; facilities and services must be provided at *times and places* which are convenient; and, most importantly, an *effective and efficient* transport system based on a *comprehensive network* of public transport must be established to assure easy access to the locations of employment, housing, and facilities and services. As might be expected, it is not an easy task for the policy-makers in both central and local governments. It requires a great deal of integration and co-ordination between, and within, sectoral boundaries, as well as between hierarchies. The findings of the thesis, i.e. the complex structures and dynamic processes behind the co-ordination of everyday household life and institutional structures, are a useful framework towards a more holistic approach to policy making for different levels of governments. However, this does not mean that individuals do not have to make any effort to coordinate their everyday lives. What the government can do is to provide the *opportunities* and an *enabling environment* for the co-ordination of individual lives, in particular for those disadvantaged groups with special needs. The actual working out must depend on the efforts of the individuals. In other words, *diversity*, *flexibility*, and *accessibility* are the most fundamental criteria for the time-space channelling between the co-ordination of everyday life and the integration of institutional structures in London if future urban development is to be environmentally non-deteriorating, economically viable, and, most importantly, socially acceptable.

Implications and Limitations of the Practical Understanding of Urban Social Sustainability

One significant feature that distinguishes this thesis from other sustainability debates is the engagement in critical realist methodology. It emphasises the consecutive confrontation of theory and methodology throughout the thesis, spiralling between the abstract and the concrete. Neither theorisation nor practical analysis is an end in itself; both of them are only a mode of explanation, focusing on different levels of abstraction. A fuller explanation of sustainability issues, as might be expected, requires inputs from both

categories. This is why critical realists stress *theoretically informed empirical research*. In other words, the process of this research is permanently reiterative: the theory of social sustainability has substantive practical implications and the empirical analysis of social sustainability is ingrained in theoretical framework.

However, the structure of writing and presenting the findings is linear. It is very difficult to present the findings of the thesis in ways that reflect the research process. For example, although the overall idea of social sustainability (chapter 1) was developed before the appropriation of critical realist philosophy and structuration theory (chapter 2), it was not clearly defined until the completion of the empirical analysis (chapters 4-7). The first part of the extensive analysis (chapter 4) helped to define the structure of the intensive research (chapters 6 and 7) and the findings of the intensive research were used to modify the overall structure of the extensive analysis (chapters 4 and 5). Again, the results of the empirical studies were used to redefine the research questions (chapter 3) and, in turn, the redefined research questions provided the guidance for the intensive analysis (chapters 6 and 7). And this process has been repeated several times in writing the final drafts of the thesis.

The point I want to make here is that the ways that the theoretical and practical analysis of urban social sustainability is presented are for the convenience of reading and writing. In a very real sense, it highlights the difficulty of reporting the findings of critical realist research: both the theoretical explanations and the practical explanations are developed with the inputs from each other and this process takes place in a consecutive manner. It is more appropriate to view these two categories as different ingredients of a single research programme, that one ingredient interacts with another, like a chemical reaction, instead of as different moments of a research programme, that one category of analysis necessarily follows another (but not simultaneously). In other words, in this thesis the theoretical and the practical explanations of social sustainability are an integrated whole. This is the core of critical realist research: the use of causal mechanisms to explain concrete events — the idea of *retroduction*.

Nevertheless, the integration of theory and methodology, as well as the re-conceptualisation of sustainable development as a fundamental interdependency between people's life-chances and their environments, does not mean that this thesis is able to deal

with every aspect of sustainability issues. There are, at least, two major constraints in the thesis. First, although the concept of urban social sustainability rightly addresses the internal, underlying causalities of sustainability issues in general, there is a lack of direct application of the concept of urban social sustainability to conventional debates of sustainable development, in particular concerning the interconnections between the natural environment and the production system of human society as a whole, or the concern about *physical* sustainability. Practical issues like pollution control, resource conservation, environmental monitoring, and the contradictories between different economies (in particular between Western and Third World countries), are not included in the discussion of urban social sustainability. Rather, this thesis chooses to focus on the overall conception of sustainability in general (the theoretical debate), and on the practical meanings of social sustainability in particular (the empirical analysis). Arguably, this is the strength, rather than the weakness, of this thesis. On the one hand, it is the clarification of the internal, social dimension of sustainable development — as a deeper explanation of sustainability issues — which allows us to build the necessary connections linking the broader concerns of environmental protection and economic development. On the other hand, it is the practical meanings of social sustainability — as time-space channelling of everyday life and institutional structures, and productive and reproductive activities — which provides a breaking point of linking global environmental and developmental concerns with our daily lives. It is not only a good example of operationalising sustainable development, but it also provides some useful guidance for effective policy making, in particular through linking everyday life and institutional structures, and productive and reproductive activities in time and space.

Second, because the empirical analysis of the concept of urban social sustainability is focused on the households and the London region, the issues of ‘transit population’ (such as visitors, immigrants, and tourists) and London’s functional links with other cities and regions are not included in the analysis. These aspects are important for the metropolitan cities, such as London. Without them, it is questionable that London can maintain its roles, as a world city, in both production and reproduction. Nevertheless, because these issues involve very different social groups, and very different time-space arrangements, it may require a separate research programme to deal with these questions. The exclusion of these

issues from analysis is partly because this thesis is focused on the reproductive aspect of people-environment connections: an aspect which has been largely ignored in conventional sustainability debates.

In a sense, the limitations of the concept of urban social sustainability also reflect the complexity and dynamism of sustainability issues: it is neither possible, nor desirable, to reduce sustainability issues to either *social* or *physical* sustainability. The aim of the thesis is to stress the importance of a proper conception of sustainable development, by focusing on the internal, social aspect of sustainability issues; and the time-space analysis on the necessary connections between everyday household life and the overall institutional structures is but one attempt to highlight the practical meanings of the deeper explanation of sustainable development. A fuller understanding of different aspects of sustainability issues requires more inputs from, and collaboration between, different disciplines, in both social and natural sciences.

Social Sustainability in Third World Cities and the Rural Areas: Implications for Further Research

As discussed above the concept of urban social sustainability not only opens up a distinctive terrain of debate for sustainable development, but it also provides a fresh strategic framework for the integration of sectoral objectives in urban planning. Given that countries and regions are increasingly closely related to each other under world economy and global environmental systems, this thesis believes that the realisation of an overall sustainable development relies on a successful translation and application of the concept of urban social sustainability in industrialised countries to other cities and regions, in particular Third World cities and the rural areas, which are the fundamental basis for the growth and proper functioning of Western cities. However, there is not enough space in this thesis to tackle these issues. So the last section will highlight the implications of urban social sustainability for further research.

Urban Social Sustainability in Third World Cities: A Pressing Need

Although there has been a great controversy between developed countries and

developing countries regarding the trade-offs between the goals of environmental protection and economic development in sustainability debates, there does exist a common interest for both camps: the pursuit of socially sustainable urban development. As stressed throughout the thesis, in the light of the origins and the consequences of sustainability issues, it is this internal, social aspect of sustainable development which should be placed at the centre of sustainability debates. As a consequence, the empirical analysis of the concept of urban social sustainability in the thesis was focussed on a Western city: London. However, in terms of the pressing need to assure a sustainable future of urban development, it is the sustainable development in Third World cities which needs more policy concerns and research efforts.

There are several justifications for the urgent need of applying the concept of urban social sustainability to Third World cities. First, the roles of Third World cities in both world production and local reproduction are becoming increasingly important in terms of the growing role of city-led, capitalist systems of world economy and in terms of the increase of urban populations in Third World countries. While Third World cities are following the patterns of development of Western cities in the process of industrialisation and modernisation (or in short, in the process of 'westernisation'), their roles in international divisions of labour are becoming increasingly important as the links between the commanding functions of large Western cities and the bases of production (including the provision of raw materials) in Third World countries (see Wallerstein 1974; 1979; Taylor 1991; 1992). In other words, Third World cities are playing a pivotal role in linking the various markets and the different bases of production between Western countries and Third World countries. As a consequence, fast and large-scale urbanisation has been a distinctive feature of Third World cities (see Cherunilam 1984; Potter 1992). While more than half of the world's population will be urban at the turn of next century, it is estimated that most of the newly increased urban population will be in Third World countries (Hardoy, Mitlin and Satterthwaite 1992). By the year 2000, two thirds of the world's urban population will be living in the developing countries of Africa, Asia, Latin America, the Caribbean and Oceania. Given that the total urban population in Third World countries is already larger than the total population of Europe, North America and Japan combined (Hardoy and Satterthwaite 1991), there is a pressing need to apply the concept of urban

social sustainability to Third World cities such as Mexico City, Calcutta, Sao Paulo, Jakarta, and Shanghai on account of their fast growth and the much more acute environmental, economic, and social problems.

While 'becoming developed', i.e. becoming industrialised and rich, has been the top priority of most Third World countries, it is important to make sure that Third World cities are not making the same mistakes of Western cities. Most Western cities are facing the problems of aging infrastructure and slow changes that make corrective actions difficult and less effective. On the contrary, many Third World cities are at the early stages of fast growth and large-scale modernisation through borrowing practices and importing technologies from Western countries. As might be expected, it would be easier to coordinate assorted institutional structures at their earlier stages than to make incremental changes at later stages if we are convinced that only prevention is possible for sustainable development. As long as urban social sustainability is considered to be a common interest for both Western and Third World cities, there is an urgent need to apply the concept of urban social sustainability to the areas with pressing needs.

However, it is becoming obvious that the patterns and the processes of Third World urbanisation are not conforming to the models of urbanisation borrowed from the Western experience (Smith 1996: 7). Accordingly, there is no automatic route which Third World cities are bound to follow. Given that the patterns and the processes of urbanisation in Third World cities are very different from those of Western cities, there are very different priorities, therefore requiring very different approaches, in the pursuit of a socially sustainable urban development. On the one hand, the urban growth in Third World countries is often integrally linked to the changes in the rural areas; on the other hand, the development, or 'underdevelopment', of the Third World as a whole is externally linked to the process of development in the Western World. Accordingly, pursuing a sustainable path of development in Third World cities must take into account the issue of urban-rural migration and the intrusion of industrial capitalism and imperialism from Western countries (see Gilbert and Gugler 1992; Gugler 1988).

In Third World countries, while cities are making significant contributions to the national output, they are facing the apparently contradictory situation of a rapid deterioration in physical and living environment. This urban deterioration manifests itself

in a number of ways: for example, the growth of slums and squatter settlements, lack of piped water systems for both homes and businesses, inadequate provision for sanitation and the disposal of solid and liquid wastes, increasing traffic congestion, air and water pollution, deteriorating infrastructure and shortfalls in service delivery (United Nations Centre for Human Settlements 1989). Accordingly, this suggests that applying the concept of urban social sustainability to Third World cities faces very different conditions, and requires very different approaches.

Sustainable Overall Development: Re-connecting Social and Physical Sustainability

As argued throughout the thesis, the underlying causes of unsustainable trends can be traced to the inner logic of industrial capitalism — the single-purpose aim of endless expansion of the capital base by unlimitedly exploiting the environmental resources. Since the time of Adam Smith, Western capitalism has been steadily globalising. At the end of the twentieth century, industrial capitalism is reaching an unprecedented scale of globalisation: with the internationalisation of production, consumption, and trade patterns by creating global assembly lines and global supermarkets, and by integrating the world economy into larger and newer forms. While Western capitalist growth has been recognised as the mainspring of unsustainable development (see Saunders 1995), it is also the turning point of capitalist industrial society.

However, conventional sustainability debates concerning the trade-offs between environmental protection and economic growth are flawed due to a lack of sensitivity to the internal dimension of sustainability. This thesis argues that sustainable development based on the external connections between development and environment, i.e. based on the concepts of productive relations, such as the neo-classical economic view of ‘valuing the environment’, is more likely to facilitate the capitalisation of natural resources on a global scale that would widen, rather than narrow, global inequality and unsustainability, in particular the already acute problem of uneven development between Western countries and Third World countries. In so doing, the earth might end up with a ‘global factory’ in the process of globalisation, instead of a ‘global village’. As might be expected, there have been polarised views between environmentalists and developers, a contest between self-

reliant development (localisation) and pro free-trade globalisation. Both approaches are problematic because they ignore the reproduction needs of both human society (the fault of the environmentalist view) and the natural environment (the fault of the developer's view).

Rather, the internal dimension and the reproductive aspect of sustainability are crucial. As stressed throughout the thesis, the life-chances of individuals can not be detached from the mediation of the created environment. Nor is it possible to separate human society from its natural, material basis. In other words, social sustainability and physical sustainability are inseparable. A properly functioning human society relies on a sensible use of environmental goods and services; in turn, a sound environmental base can only be preserved under a sustainable social system. After elaborating the significance of the internal, social aspect of sustainable development by highlighting the interdependency between individual life-chances and the created environment of institutional structures in the urban context, what is desperately needed in the discussion of the interdependency of environmental concerns and economic development, or the debate on physical sustainability, is to take on board the internal, social perspective of sustainable development.

Although social sustainability is the prerequisite of physical sustainability, nevertheless, social sustainability alone does not guarantee that the overall development is sustainable. Without a sound environmental base and a robust economic structure, social sustainability can only be achieved in a small-scale, localised manner. Accordingly, an overall sustainable development cannot be achieved partially, or on the margins, by focussing either on the internal, social dimension of sustainability or on the external, physical dimension of sustainability alone, but should be achieved by addressing the interdependent relationship between the created environment of human society and the natural environment of the ultimate material foundation with the recognition of the internal, human dimension. By addressing these fundamental perspectives, it would not conflate the means with the ends of sustainable development. Therefore, it would become an integrated issue that necessarily bridges the concerns about the social, the environmental, and the economic, linking the interests of the global and the local, and reconciling the conflicts between Western countries and Third World countries. Issues like uneven development

within regions (i.e. the disparities between urban and rural areas), uneven development between regions (i.e. the disparities between Western countries and Third World countries), and uneven development between human society and the ecosystem as a whole (i.e. the disparities between the created environment and the natural environment) can be recast into a more sensible framework of analysis, concerning the fundamental interdependency between people and the environment. Arguably, only if we have an overall view of sustainable development based on the necessary, internal connections of people's life-chances and their environments, are we then able to manage the economy and the environment in ways 'that meet the needs of the present without compromising the ability of future generations to meet their own needs'.

APPENDICES

APPENDIX ONE

THE INTENSIVE HOUSEHOLD ANALYSIS

The aim of the intensive household analysis is to bring out the household dynamics of everyday life in London. In contrast to the extensive analysis of London's institutional structures, which stresses the overall patterns of the time-space connections between different institutional structures, the intensive household analysis is focussed on the micro perspective of institutional connections. It aims to illustrate how the dynamics of individual households' daily lives are contributing to, and are constrained by, the structural properties of urban institutions. In other words, the intensive analysis of the household dynamics is to problematise the nominal approach of 'spatial integration' inherent in the British government's sustainability strategy or 'urban re-concentration' and the notion of 'compact cities' in general. It suggests that the integration of institutional structures at macro level must have proper regard to the internal, micro dimension of institutional connections. What is at issue for the internal links between institutional structures is the necessary time-space connections between different daily moments for a particular individual and the need to coordinate the time-space arrangements of daily life with other household members so that they can live together as *one* household. In order to avoid the pitfalls of both voluntarism and neo-classical economic thought, i.e. to give an undue primacy to the fragmented experiences of the individuals at the expense of the overall contexts of structural constraints and to assume that individual persons are the most basic units of decision-making for all the daily practices, the intensive analysis is focussed on the 'institutional webs' and the households. This thesis believes that by stressing the institutional links through the 'household lens' it can recover the complex and dynamic interplay between social structures and human actions. Accordingly, what the intensive household analysis is trying to get is the contextual dynamics of household life which links the time-space relations with narrower and wider extents.

This appendix covers a few issues relevant to the intensive household analysis. Firstly, the overall research design is highlighted. Secondly, the criteria for the selection of study areas and the characteristics of the selected study areas are briefly discussed.

Thirdly, the procedures of selecting the sample households are explained. Fourthly, the interviewing schedule is summarised. Finally, some of the problems encountered in the course of fieldwork are discussed.

Research Design: An Intensive Project

In order to address the role of household dynamics in the co-ordination of institutional structures, a research project of intensive interviewing with households in different areas of London was adopted as the means of information collection. However, it must be pointed out that it is *not* the intention of the intensive household analysis to characterise the time-space configurations of the households in different parts of London. It is misleading to construct an overall, generalised model of life patterns from a very limited number of samples. Nor is it right to emphasise the differences of household contexts without any mention of the overall structural influences. Rather, the purpose here is to recover the processes of, and the reasons behind, different patterns of time-space organisation of everyday life.

In order to highlight the significance of 'individuals in context', i.e. the necessary correspondence between structural properties and household dynamics (in this respect institutional structures are considered to be the outcomes of household actions), and the potential conflicts between them (in this respect institutional structures are considered to be the constraints for household actions), this study chose two London Boroughs — Harrow and Tower Hamlets — as the cases. They were selected to highlight the structural contrasts between suburban London and inner-city London. Two sub-areas were further identified in each borough to feature the structural variations in the local areas. In each sub-area, a large number of households were contacted in order to find out suitable households to participate in the intensive interviews. In each sub-area, a total of ten households were finally selected. All the adults in the selected households were interviewed *individually*. Finally, the data collected from the intensive interviews were transcribed into written material to be analysed.

The Selection of Study Areas

In order to address the interplay between household dynamics and institutional structures, the study areas were carefully selected to highlight the structural contrasts between suburban London and inner-city London. As mentioned in chapter 4, the seemingly simple and straightforward divisions of London into East and West London, as well as into Inner and Outer London, are useful, though not precise, benchmarks for the understanding of London's overall institutional structures. In the intensive household analysis, the London Boroughs of Harrow and Tower Hamlets were chosen to represent the Outer/West and Inner/East contrast between suburban London and inner-city London. The structural differences between these two boroughs are so striking — in terms of their location in Greater London, their physical fabric, the features of housing and built environment, the transport structures, the nature of industrial and commercial activities, the quality of local facilities, and the socio-economic compositions of local residents — that they can highlight the structural constraints and opportunities of different parts of London.

In a nutshell, Harrow is an outer suburban borough in the North West of Greater London that represents a more affluent area of commuter suburb in the London metropolitan region. With an area of 5,081 hectares, the built environment in Harrow is less dense, with more open spaces and green fields than most London boroughs (about one-fifth of the area in Harrow is designated Green Belt or Metropolitan Open Land). The sizes of the dwellings in the borough are larger than the London average: almost two-thirds of the dwellings were constructed during the inter-war period. It means that they are mainly comprised of three-bedroom, two-storey, semi-detached houses. There are some older pre-1919 dwellings, especially cottages and large houses, concentrated in Harrow's historic village centres such as Harrow-on-the-Hill, Pinner and Stanmore. There is also a belt of older housing between Harrow town centre and Wealdstone stretching down to South Harrow, where the housing conditions are, generally speaking, less satisfactory (London Borough of Harrow 1992).

Nearly four-fifths of the households in the Borough live in owner-occupied accommodation (OPCS 1993a). Unemployment rates are among the lowest in the region.

In 1991, for example, the male unemployment rate was 7.4 per cent in Harrow, compared to the national average of 12.0 per cent (*ibid.*). A lack of extensive networks of public transport to adjacent areas and Central London suggests that a lion's share of the households in Harrow are car-dependent. More than three-fourths of the households in Harrow had at least one car; and nearly 30 per cent of the households have two or more cars (*ibid.*). Harrow town centre is the largest shopping area in the Borough, but there are several smaller shopping areas scattering over the Borough, such as Wealdstone, South Harrow, Pinner, Stanmore, and Edgware (London Borough of Harrow 1992: 90).

Tower Hamlets, by contrast, is an example of inner-city borough in Inner/East London. The Borough is historically more closely associated with the less privileged groups, such as manual workers, immigrants, and the unemployed, as well as the declining sectors of London's traditional manufacturing industries, such as ship building, warehouses, markets, textile, furniture, breweries, and other manufacturing jobs. Throughout the 1980s Tower Hamlets has had one of the highest rates of unemployment in the UK. For example, in 1991 Tower Hamlets had a male unemployment rate of 21.8 per cent, which was nearly twice that of the national average of 12.0 per cent (OPCS 1993a). Six out of ten households in Tower Hamlets lived in the accommodation provided by the Borough; and more than 60 per cent of the households in Tower Hamlets had no car at all (*ibid.*).

However, what is more peculiar is that Tower Hamlets borders the City of London, one of the three largest financial centres in the world, to the west. Generally speaking, the quality of the built environment and the housing conditions in the Borough is less satisfactory: the density of the built area is higher than the London average and many old council properties are in a deteriorating state. The only exceptions are the City fringe, the Isle of Dogs, and river fronts like Wapping. Since the 1980s these areas have been experiencing a fast change as the results of the extension of the City of London and the redevelopment of London's Docklands. This was especially marked in the cases of Isle of Dogs and Wapping because they were within the areas of the designated Urban Development Areas (UDAs) under London Docklands Development Corporation's (LDDC) project of regenerating London's Docklands. Due to the intervention of the government,

as well as due to a huge investment by both public and private sectors, these areas represent the renaissance of in-town development that seriously challenges the trends of decentralisation, suburbanisation, and counter-urbanisation by attracting businesses and population into the area.

Dominated by council towers and small maisonettes, Tower Hamlets is one of the few London boroughs which are deficient in open space. Moreover, since Tower Hamlets lies across the main transport access between East and Northeast London and the City of London and the West End, it has very congested road traffic and more serious problems of environmental degradation. As far as shopping facilities are concerned, Tower Hamlets does not have a major, large shopping centre. Most shopping facilities in the borough are traditional shops and street market pitches concentrated in Whitechapel and other local centres (London Borough of Tower Hamlets 1992).

Nonetheless, the contrast between Harrow and Tower Hamlets is just the beginning of the story. In fact, the urban structures in London are far more complex than the spatial divisions between East and West London and between Inner and Outer London. As mentioned above, considerable variations do exist within the local areas: not all the areas in Tower Hamlets are traditional East End communities; nor is it the case that all the areas in Harrow are dispersed, low-density developments. Rather than randomly select the households from different areas in the boroughs, two sub-areas in each borough were further identified as the fieldwork areas in order to address the structural variations within the borough. However, the criteria for the selection of fieldwork areas were slightly different in these two boroughs. In Harrow, these two fieldwork areas were selected to reflect their structural differences in terms of transport infrastructure, shopping provision and housing features; but the socio-economic backgrounds of the households in these two areas might not be so different. In Tower Hamlets, by contrast, apart from the contrast in the built environment, the disparity of local households' socio-economic backgrounds in the fieldwork areas was distinctive.

In Harrow, the two fieldwork areas were Greenhill and Stanmore¹. The fieldwork area in Greenhill was mainly between Hindes Road and Greenhill Way, a residential area 10 to 15 minutes walk away from Harrow town centre (see Figure A1.1). There is a train (underground) station (Harrow-on-the-Hill) in the town centre, linking to Central London by British Rail and the Metropolitan line (about 40 minutes journey on board). Next to the train station is a bus station, serving the public transport needs of the borough and adjacent areas. Most of the dwellings in Greenhill are terraced, two-storey houses. There are also a small number of converted flats and semi-detached properties in the area. A large supermarket with huge customer car park — Tesco — is located near the junction of Station Road and Hindes Road (near the edge of town centre). Households in the fieldwork area can actually walk to the supermarket or town centre in 10 to 15 minutes.

Another fieldwork area in Harrow was the area between Harrow Weald and Stanmore Golf Course, near Kenton Lane. Housing stock in the area is a good mixture of semi-detached (dominant), terraced, and a small proportion of detached houses. Although there are a few corner shops (convenience shops and news agents) concentrated at the junctions of main roads, the nearest shopping area is Wealdstone, some 20 to 30 minutes walk away. There is a parade of shops along A409 (the High Street) in Wealdstone, including one large supermarket, Waitrose. There is only one bus route serving the neighbourhood area (running every 30 minutes). The nearest train (underground) station is Harrow & Wealdstone (British Rail and the Bakerloo line). It is about 20 to 30 minutes walk away.

In Tower Hamlets, the two fieldwork areas were Bethnal Green and Wapping (see Figure A1.2). Generally speaking, Bethnal Green is a working class community where most people in the area used to work either in the breweries, in the markets, at docks, or in the factories. But with the closing down and the relocation of many manufacturing industries in the nearby areas in the last few decades, the community is in a declining situation due to

¹ For the sake of convenience, 'Stanmore' is used as a shorthand to represent the fieldwork area which is located on the border between Wealdstone and Stanmore but is slightly closer to Stanmore. Generally speaking, Stanmore is a more different area, dominated by detached, handsome houses and wealthy households.



Figure A1.1 The Fieldwork Areas in Harrow

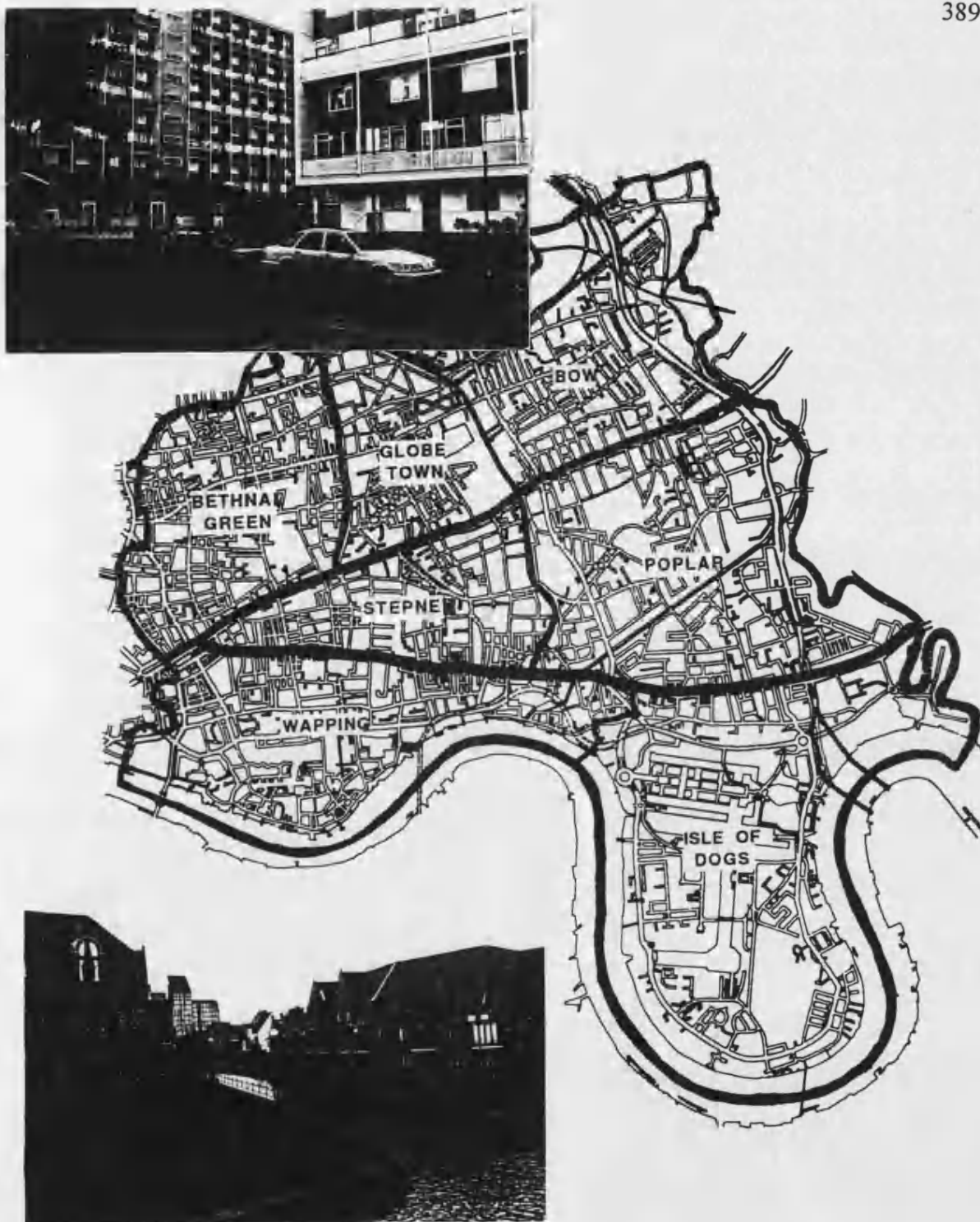


Figure A1.2 The Fieldwork Areas in Tower Hamlets

the higher rates of unemployment, the moving out of the more successful households (both white and ethnic minorities), and the flowing in of new immigrants from overseas (in particular from Third World countries like Pakistan, India, and Bangladesh). Council housing dominates the area, including both small maisonettes and high-rise tower buildings. Small shops (including one supermarket with no car park, Tesco/Metro) and street stalls cluster along the main road (Bethnal Green Road), although more shops and market stalls, as well as a much larger supermarket, Sainsbury's (with customer car park) can be found in Whitechapel — the major shopping area in Tower Hamlets some one-and-a-half miles away from Bethnal Green. There is one line of the underground (Central Line) and one line of surface train (Southeast Rail) passing through the area; and there are several bus routes going in different directions. The fieldwork area in Bethnal Green was concentrated in a residential area between Bethnal Green Road and Old Bethnal Green Road, an area dominated by council properties. People in this area can walk to shops, bus stops, and underground and rail stations in 10 minutes. Some might be able to walk to work in the same area.

The situation in another fieldwork area, Wapping, is very different. It is within the boundary of the Urban Development Area (UDA) where the London Docklands Development Corporation (LDDC) is the local planning authority for development control purposes and also a major land owner. Since the 1980s large-scale, purpose-built new properties have been put into this area, and many vacant wharfs have been converted into small-unit apartments. These changes have attracted many people to move into the area, especially the richer, white-collar households. This made Tower Hamlets the only London Borough which has had substantial population growth in the last 10 to 15 years while most London Boroughs have faced a continued trend of population loss² (OPCS 1993a). However, there are considerable numbers of old council properties existing in the area,

² Although natural growth (by births and deaths) is considered to be the major factor of population growth in Tower Hamlets, the very low rate of net out-migration (0.5 per cent between 1981 and 1991) in Tower Hamlets, compared to the much higher rate of out-migration in Inner London as a whole (11.1 per cent), suggests that in-migration has played a very important role in population change.

making the contrast between old and new properties even more noticeable. The fieldwork area in Wapping was concentrated in the area between A1203 (the Highway) and the River Thames, in particular in the area of newly built properties. There is one big supermarket (with car park in the basement of the building) — Safeway — sitting at the fringe of the area (near the junction of Vaughan Way and the Highway). A few small shops are concentrated in Wapping Lane, near the underground station. There are two large shopping complexes in Wapping — St. Catherine's Dock and Tobacco Dock³. They were built mainly as tourist attractions for being close to one of London's most famous tourist sites — Tower Hill, rather than for the purpose of meeting the daily shopping needs of the local population. There is one underground station at the end of Wapping Lane (East London Line). But at the time of the fieldwork, it was closed for construction work. A bus substitute was provided to maintain the services. In this circumstance, the nearest underground station available to the households in Wapping was Tower Hill (Circle Line and District Line), some 15 to 20 minutes walk away from Wapping. There is only one bus route coming into the area, going to Liverpool Street. Although there are no statistics showing the overall socio-economic composition of the households in the fieldwork area, the experience of personal contact with local residents suggests that a very high proportion of the households in the fieldwork area are the more well-off in-comers. A small proportion of the households who live in the newly built properties (especially flats and smaller houses) are local council households who either purchase (by lease hold) or rent the properties from the Borough.

The Selection of Sample Households

After the fieldwork areas had been carefully selected to highlight the structural contrast between Outer/West and Inner/East London, the next step was to choose suitable households to carry out the interviews. Because the purpose of the intensive household

³ At the time of fieldwork, most floorspaces in Tobacco Dock were vacant for a lack of tourists. But the situations in St. Catherine's Dock were better, probably because it was closer to major tourist sites such as London Tower, Tower Bridge, and the River front.

analysis is to bring out the dynamism and complexity of household life, the procedure of less-structured interviews is very time-consuming and, therefore, it is unlikely to interview a large number of households. As might be expected, the selection of the sample households has a decisive influence on the results of the intensive analysis.

Because the number of sample households was small (40 in total), it should be stressed that neither the types of sample households were exhaustive nor were they 'typical' or 'representative' in character. In order to address the general contexts of 'ordinary' household life, this study tried to include as many different types of households as possible, in terms of different stages of household life cycle (including single, especially younger, households, young couples, with or without children, traditional single-income households, and double-income households), different time-space configurations of everyday life (such as long distance commuting, local employment, working from home, full-time and part-time employment, and different modes of transport to work and to shop). But two groups of households were purposefully excluded: they were the wealthiest households at the top of the socio-economic hierarchy and the long-term unemployed down at the bottom. The latter are often, though not necessarily, associated with other disadvantaged groups, such as the poor, ethnic minorities, the disabled, the elderly, and lone parents.

These two groups of households were excluded on the grounds that their time-space organisation of everyday life might be very different from that of the vast majority of *ordinary* households. For the very rich households, the relationships between the activities and the associated time-space configurations of everyday life might have more to do with their 'preference' and 'wants' than with their 'needs' in the light of their abilities and high mobility. For the long-term unemployed, by contrast, the relationships between the activities and the associated time/space configurations of everyday life are largely biased due to lack of paid employment, especially when the unemployment is caused by other factors like disability. In these circumstances, the organisation of their daily lives might be very different from that of ordinary households by virtue of their special needs, say, in transportation. In other words, unemployment itself might obscure the very needs for a time-space coordination between different daily moments.

This does not mean that these unique 'needs' and 'wants' are unimportant. On the contrary, by virtue of their uniqueness, it may need separate research programmes to address their special problems, in particular those problems facing the households at the bottom of our society. It could be argued that unemployment is partly caused by a lack of co-ordination between employment and housing structures. However, it might be counterproductive, and, to some extent, might marginalise the significance of their problems by mixing assorted issues with very different characteristics into a single research project. This thesis argues that the general needs and the unique needs should be dealt with separately so that the common interests of the vast majority will not be misled by the unique needs of a small group of people; and, most importantly, the pressing needs of the the most disadvantaged groups will not be 'averaged out' by the general needs of the majority in our society. By contrast, to deal with these problems separately might enable us to address the underlying causes of different issues more precisely and, accordingly, offer better and more effective solutions to those with distinctive needs. It may need to stress again here that, in order to address the necessary connections between individual life-chances and the overall institutional structures in London, the intensive analysis of the household dynamics is focussed on the 'ordinary' households rather than on those households in special situations.

Sampling Procedure: A Multi-stage Approach

Given that the intensive household analysis is based on a small number of sample households, the selection of the sample households is critical. In order to gain access to the target households highlighted above, a three-step sampling procedure involving direct and indirect contact with the households was adopted. At first stage, a large number of letters were delivered to the households *in person*. Basically, these households were randomly selected from the study areas, but the criteria of selection were mainly based on the housing characteristics of the study areas. For example, in Greenhill most of the households contacted were living in terraced properties. In Bethnal Green, by contrast, most of the

households contacted were living in council properties. In the letter, the research project and the interviewing schedule were briefly explained, and the households were asked to spare some time to take part in the interviews (see appendix 2).

At the second stage, I came back and knocked on the door of the pre-selected households, explaining again the importance of my study and the interviews and asking whether they were willing to help with the interviews. This usually happened a few days after the delivery of the letters so that the households could have sufficient time to discuss this matter between household members. If they were interested, I would ask them a few preliminary questions in order to make sure that they were the suitable households to proceed the interviews. Questions asked at this stage included the composition of the household, employment status, location(s) of current workplace, car ownership, and their modes of transport (see appendix 3). If they were the households that I wanted, then an appointment would be arranged to proceed with the formal interviews; if they were not the households that I wanted, being unemployed, pensioners, or those households who had similar backgrounds and/or life-styles with the households that I had already covered earlier, then I would tell them that I must stop at this stage for some reasons and apologised for the disturbance.

The final stage was the formal interviews. It normally happened a few days after the preliminary interviews. It involved all the adults in the household, but the interviewees were interviewed separately. Most of the formal interviews were taking place in the evenings, some were in the afternoons at weekends. On average, it took 45 minutes to complete the interview with a particular individual. Given that most interviews in a particular household involved two persons (in some cases three persons), it would take a whole evening to complete the interviews in a particular household. Except for three persons who refused to be tape-recorded, all the interviews were tape-recorded.

The fieldwork was undertaken in the summer of 1995 (from mid-June to early October). A total of over 400 households had been contacted (about 100 households in each fieldwork area), and 40 households were finally selected to proceed to the formal interviews (10 households in each fieldwork area). The details of the sample households were

summarised in appendix 4. In each study area, the fieldwork was broken down into smaller projects (trials). Each time about 20 to 25 letters were delivered to the households. A few days later, the preliminary interviews were conducted. And finally, the formal interviews were conducted. On average, nearly half the households who answered the door were willing to help with the interviews. But not every household who was interested was suitable to proceed the formal interviews. Generally speaking, about 2 or 3 households would be picked up to proceed to the formal interviews in each trial. This procedure was repeated in each study area until the 10 sample households were finally selected. Normally, it took about 4 weeks to complete all the trials in one study area. Then the whole procedure would be started again in another study area until all the interviews were completed in these 4 study areas. It took 18 weeks to complete the whole fieldwork.

Interviewing Schedule: A Less-structured Approach

The information I wanted to collect in the intensive interviews was mainly about (a) the household's time-space configurations in relation to different daily moments, (b) the contexts and reasons behind such time-space configurations, and (c) the interplays between household members in shaping the time-space prisms of their daily activities. Although these questions are very simple and straightforward, however, due to the tedious nature of the daily routines and the complex contexts behind these daily practices, a more flexible interviewing schedule was required to get at the dynamism of the co-ordination of everyday household life. As might be expected, ordinary close-ended questionnaires are unable to bring out the whole spectrum of household dynamics. Nevertheless, a totally unstructured approach is not appropriate, either. This is because there are several common themes of daily life that can be picked up, such as housing decisions, employment, the daily routines of travel-to-work, and shopping practices that characterise the different moments of daily life; and these common clues are useful structures for analysis. Although the actual situations and the contexts behind them might vary substantially from one household to another, it is useful to divide the questions into groups. Accordingly, a 'less-structured'

interviewing schedule was developed as the means of information collection (see appendix 5).

To put it more precisely, it was a changing process of interviewing schedule shifting between *structured* and *unstructured* interviews. This changing process manifested itself in two senses: both in the course of fieldwork in a particular study area and in the course of interviewing in a particular household. To say that it was changing in the course of fieldwork means that, with the accumulation of local knowledge when an increasing number of households had been interviewed in a particular study area, more specific questions regarding local areas could be added into the interviews. As a consequence, it was easier to lead the topics of interviewing and to get proper responses from the interviewees who were interviewed at later stages in each study area. To say that it was changing in the course of interviewing means that, once one person in a particular household had been interviewed, more specific questions regarding the daily routines of the household could be added into the interviews so that the interactions between household members could be taken on board as well. In other words, the interviewing schedule was a changing procedure with the advance of both individual interviews and with the advance of the fieldwork as a whole. Moreover, the 'less-structured' feature of the interviewing schedule also reflected the predicament facing an unsophisticated research student, who had to accumulate the skills and the experiences of interviewing, as well as the knowledge about the study areas, in the course of fieldwork, although a pilot study had been tried out in all study areas shortly before undertaking the formal fieldwork.

However, it was not the case that the interviews would always proceed like this, i.e. to move from structured to unstructured interviews. This was because interviewing was very much a two-way communication. Given that all the interviews were conducted by the same person, the ways that questions were asked had much to do with the responses of the interviewees. In some circumstances, the interviewees were very sensitive to the questions asked, partly because they were interested in the topics of the conversation, so that once a few questions had been asked, they tended to lead the topics of conversation by telling you more related stories. Very often, what they were saying were the things I was interested in,

although these stories might be told in quite different ways or sequences. In these circumstances, all I needed to do was lead the topics of our conversation and ask some following-up questions. That means a *less-structured* interviewing schedule. But in some circumstances, the interviewees might not have a clear idea of what I was interested in, then I had to use a *more-structured* interviewing schedule, i.e. by asking more factual and more specific questions. Because the formats of interviewing could be highly variable in the course of fieldwork and in the course of interviewing, tape-recording was necessary. Although a great majority of the interviewees did not mind at all being recorded, three interviewees did insist that their voices were not tape-recorded (one West Indian lady in Bethnal Green, one Asian gentleman in Stanmore and one British lady in Stanmore). In these circumstances, note-taking was the only way of keeping the valuable information. In order to have a clearer memory, I tended to use a *more-structured* interviewing schedule in these interviews so that it was easier for me to take notes.

Problems and Discussions

As stressed above, the purpose of the intensive household interviews was not to construct an overall picture of the time-space configurations of certain types of households, but to illustrate the dynamism and the complexity of household life in the co-ordination of different daily moments, and for household members. Since the sample households did not need to be 'typical' or 'representative', it would not have the problem of 'over-generalisation' or 'extrapolation'. However, in order to have a more sensible understanding of the information collected from the intensive interviews, it is worth sparing some space in this appendix to come across some problems that I was confronting in the fieldwork.

Due to the pressure of time and other constraints, in particular the financial consideration and a lack of well-developed methodologies in the literature that could be used for the intensive, qualitative analysis, the research design, the fieldwork strategy, and the interviewing schedule were in effect gradually developed and modified during the course of fieldwork. Although a small-scale pilot scheme had been tried out in all of the

study areas before proceeding to the formal fieldwork, some unexpected problems did turn up at different stages of the fieldwork. Among other things, the most serious issues were the problems of access difficulties, incomplete interviews, and the quality of interviews.

Access Difficulties

In the fieldwork, there were two kinds of access difficulties which needed to be pointed out. The first one was the problem of *physical* accessibility, i.e. the physical constraints of the dwellings themselves (such as the flats in high-rise buildings and apartments) which had restricted the physical access to the households inside the buildings. This constraint made it difficult to deliver the letters and talk to the people living inside. Physical accessibility was important on the grounds that face-to-face contact was a more effective way of convincing people to take part in the interviews. This physical accessibility was important because I had to ask the households some preliminary questions in order to decide whether or not they were the right households to proceed to the formal interviews.

The problem of physical accessibility was especially marked in Bethnal Green, where high-rise tower buildings were the dominant form of housing provision, and, to a less serious extent, in Wapping, where newly built or converted apartments had advanced security systems that made it very difficult to contact the people living inside. My solution was to turn to other types of properties in the same area that were more accessible, such as small maisonettes, low-rise flats, or the flats on the ground floor. It was assumed that the backgrounds and the life-styles of the households were not so contrasting between different types of properties in the same area. Nevertheless, I could decide whether or not they were the households I wanted when I actually talked to them and asked them some preliminary questions. So it might not be a serious problem being unable to gain access to the households in certain types of properties.

Another access problem was the issue of *personal* accessibility, i.e. the difficulty of contacting the people of pre-selected households. Generally speaking, this problem was more marked in Harrow than in Tower Hamlets, in particular in Greenhill. About one in

four households in Greenhill that I contacted never answered the door; and I had tried at least three times to contact them before I gave up and tried other households. This was compared to the no-response rates of 20 per cent in Stanmore, 15 per cent in Bethnal Green, and less than 10 per cent in Wapping.

There were several explanations for the higher rates of no-response in Harrow. The most likely reason was that there was nobody home at the time when I was knocking on the door. Normally I would try to contact the households between 7:00 pm and 9:00 pm during the week, or in the afternoons during the weekend. I assumed that before 7:00 pm people might be still on their way home and after 9:00 pm it was too late for some people to feel comfortable to talk to a stranger at the door, especially when it was getting dark. Although there was no evidence to support my suspicion, however, the higher rates of no-response households in Harrow might reflect the unique life-patterns of some suburban households by virtue of the difficulty of longer-distance commuting: some people might choose to come home later in order to avoid the traffic congestion (for both public transport and road traffic) during the evening peak hours. Another possible explanation was that people might be away on holidays. Since suburban households are, generally speaking, more well-off, they are more likely to go on holidays during the summer. Although it was possible to try some more times before I actually gave up, it was the climatic factor which forced me to move on and turn to other households. Because the trials in Harrow were conducted at later stages of the fieldwork (between late August and early October), the weather did become a disadvantage for doing the fieldwork. It was assumed that people were more likely to answer the door and accept my (both preliminary and formal) interviews when it was still early and warm than when it was dark and cold. This was why the fieldwork was undertaken in the summer rather than in other seasons of the year. Because the actual selection of the sample households was decided at the time of preliminary interviewing, it was not a serious problem being unable to contact some pre-selected households.

Incomplete Interviews

During the course of the fieldwork, I was confronting two types of incomplete interviews. The first one was a complete cancellation. A few households did change their minds after they had promised to help me with the formal interviews. Normally I would try to persuade them to accept my formal interviews. If it did not work, I just gave up and shifted to other households who had similar backgrounds and/or life-patterns. This was not a serious problem at the earlier stages of each 'trial' because I had more time and chances of finding substitute households. But it was becoming more difficult to find substitute households at the later stages because of a lack of time (usually this meant that I had to restart another 'trial' and it was very time-consuming). This is why there were only 38 sample households rather than 40 as planned (one cancellation was in Wapping and another in Greenhill). Although it would be better to have the same number of sample households in each study area, it may not be necessary to have a numerical parity between study areas. This is because the intensive household analysis was not a comparison study. Rather, these examples were used to highlight the role of household dynamics in the co-ordination of different daily moments. Accordingly, the slight imbalance in the number of sample households might be tolerable.

Another problem in relation to incomplete interviews was that not every person in the selected household was able, or willing to, participate in the interviews. Although I did make it very clear in the letter that this study needed to interview all adults in the household, and although it was restated in the preliminary interviews, this problem did happen to some households. On the one hand, this issue suggests that the communication between household members was not sufficient in some households because some household members did not know at all that they were going to do the interviews until I turned up. On the other hand, it reflected the great difficulty of the everyday life co-ordination between household members, i.e. they might be well aware of the meetings for the interviews, but they were unable to make it. In the former case, the problem could be resolved by persuading them to accept my interview right away; in the latter case, the

problem could be resolved by arranging another suitable time to complete the interview. Unfortunately, there were three interviews which were never completed (two in Bethnal Green, households BG2 and BG8, and one in Greenhill, household G6).

An immediately arising question is 'Whether or not the information obtained from incomplete interviews should be included in the analysis?' Or to put it in another way, 'Is it sufficient to address the dynamism and the complexity of the time-space co-ordination between household members in a particular household?' There are no straight answers to this question. Since the co-ordination of everyday life involves the time-space arrangements of all household members, it is unlikely to bring out the whole spectrum of the household dynamics by interviewing just one person in a particular household. Moreover, different household members might have very different views about the same things. This is particularly apparent between men and women. Generally speaking, the 'partial views' obtained from incomplete interviews were useful information for understanding the dynamism of the co-ordination of different daily moments in time and space, although they were weaker explanations for understanding the dynamism of the co-ordination of everyday life between household members. This is why the intensive analysis of the co-ordination of everyday life is focused on households rather than on individuals. Since the purpose of the intensive interviews was to bring out the contexts of the time-space co-ordination of everyday life in a household, as long as the stories were able to illustrate the time-space tension between different daily moments and between household members, it was not a problem to include the incomplete interviews into analysis. In other words, what is at issue is the quality of the interviews.

The Quality of the Interviews

Since less-structured interviewing is a two-way communication, the quality of the information derived from the interviews depends very much on the interaction between the interviewer and the interviewee. On the one hand, for the interviewer, the techniques and the skills of interviewing, as well as the knowledge about the study areas, are crucial to the

quality of the interviews. Unfortunately, for an inexperienced interviewer like a research student, this could mean a process of learning with the advancement of fieldwork. Although a three-day intensive course on unstructured interviewing provided by the School was very helpful in developing the necessary skills and techniques of unstructured interviewing⁴, and a pilot study had been tried out in all the fieldwork areas before the actual fieldwork was undergone, these experiences were in effect very difficult to develop beforehand.

On the other hand, the quality of the interview also depends on the interviewees. In the formal interviews, some interviewees tended to concentrate on certain topics which were less relevant to my study, such as their family histories and the things regarding their jobs, their children, or their hobbies. Other interviewees tended to avoid certain types of questions, such as what they were actually doing in their jobs and the times and locations of their daily activities. This was especially apparent for some less well-off households who might have received some sort of income support and at the same time were doing some kind of part-time jobs. And some others tended to answer the questions very ambiguously. For example, one gentleman, when asked to make comments on the time-space patterns of his daily life, simply answered that "it is O.K.". When I followed up by asking what he actually meant by 'O.K.' and why he felt that it was 'O.K.', he just said that "it's not a problem for me" and made no further comments. In these circumstances, I would go back to the more-structured ways of interviewing in order to get some factual information and then, by following up these questions, to get more in-depth information regarding the contexts and the reasons behind their action. Fortunately, only a very small proportion of the interviewees had this problem (less than 10 per cent of the total interviewees). The rest of the interviewees were very cooperative and did provide many useful insights which were crucial to the intensive household analysis.

⁴ I had taken a three-day intensive course on unstructured interviewing shortly before I undertook the fieldwork. The course was run by the School's Institute of Methodology. Expert training in all aspects of interviewing skills and techniques were taught in the course, including the practice of 'role-play' interviews supervised by the experts from a consultancy company.

APPENDIX TWO

INTERVIEWING LETTERS

(a) Letter from Research Student

Dear Sir/ Madam,

I am a PhD research student from the Department of Geography at the London School of Economics (LSE). I am carrying out research into the relationships between the activities and the locations of work, housing, shopping and leisure, as well as the travel between them.

A key part of this research involves carrying out interviews with all members of a number of households. It would be very much appreciated if you and members of your family could spend an hour or so in one evening to help me with an interview.

The interview is very straightforward, it involves questions about where and when you carried out certain activities on an average day.

In order to give you time to discuss this with your household, I will contact you again in a couple of days to arrange a convenient time for the interview.

Please note that all of the information will be dealt with in the strictest confidence. It will not be passed on to other people, and it will not be attributed to you; identities will be disguised.

Finally, I would like to thank you in advance for your help.

Yours faithfully,

Peter Cheng-chong Wu

Tel: 0171-4057688 ext.2613 (LSE); or 0181-3723364 (home)

(b) Letter from Supervisor

Dear Sir/ madam,

This letter is to confirm that **Mr. Peter Cheng-chong Wu** is a PhD research student in this Department. If you wish to confirm his identity, please ask to see his student identity card. Mr. Wu is carrying out very important interviews as part of his research degree. I do hope that you will be able to spare some time to help him.

Can I emphasise that the information that he collects will be kept in the strictest confidence: it will not be passed on to anybody else, and, where it appears in his research thesis, it will not be attributable to any one individual (names will be changed).

If you have any further questions please ask Mr. Wu, or please contact me (his supervisor) directly.

Yours sincerely,

Dr. Andy C Pratt

(Acting Director of Graduate Studies, Department of Geography)
Tel: 0171-9557588

APPENDIX THREE

PRELIMINARY QUESTIONS

1. Names, address and telephone No.:

2. Could you tell me how many persons live in this house/flat as members of your household?

Husband Wife

_____ children aged _____

others _____

3.1 Do you do any paid job at all?

Yes

No

Do you work at home or you go out to work?

At home

Go out

Is it a full-time job or a part-time job?

Full-time

Part-time

Where is the place you work:

3.2 Does your partner do any paid job at all?

Yes

No

Does he/she work at home or go out to work?

At home

Go out

Is it a full-time job or a part-time job?

Full-time

Part-time

Where is the place he/she work:

4. Do you own any car or motor vehicle?

Yes

No

5. Do you or your families use the public transport services?

Yes

No

APPENDIX FOUR

A SUMMARY OF SAMPLE HOUSEHOLDS

(a) Greenhill, Harrow

Features Household	Household Composition ¹	Car Ownership	Employment Status ²	Locations of Employment	Mode of Transport
G1	H,W, 3C(7,11,14)	1	H(FT) W(X)	Paddington X	Underground
G2	H,W, 1C(12)	1	H(FT) W(X)	Harrow X	Walk
G3	H,W	2	H(FT) W(FT)	Hounslow Kilburn	Drive Drive
G4	H,W, 4C(2,4,4,6)	1	H(FT) W(FT)	Waterloo X	Underground
G5	SM, 2C(11,13)	1	SW(FT)	South Harrow	Drive
G6*	H,W,E, 1C(7)	1	H(FT) W(FT)	North London Harrow	Underground Drive
G7	H,W, 3C(3,4,6)	1	H(FT) W(X)	Old Bailey X	Underground
G8	H,W, 2C(13,16)	2	H(FT) W(PT)	Harrow Harrow	Walk Walk
G9	H,W, 2C(7,11)	1	H(FT) W(FT)	Wembley Oxford Street	Drive Underground

¹ Household Composition: H – Husband; W – Wife; SM – Single Mother; E – the Elderly

² Employment Status: FT – Full-time; PT – Part-time; X – Not Working

* Incomplete interviews

(b) Stanmore, Harrow

Features Household	Household Composition	Car Ownership	Employment Status	Locations of Employment	Mode of Transport
S1	H,W	1	H(VJ ¹) W(VJ)	Harrow Harrow	Drive Drive
S2	H1,W1;H2,W2 1C(1)	2	H1(X),W1(FT) H2(FT),W2(X)	Hounslow City	Bus Drive/U-ground
S3	H,W	1	H(FT) W(X)	S. Kensington X	Drive
S4	H,W, 3C(7,12,13)	2	H(FT) W(FT)	Harrow Kenton	Drive Drive
S5	H,W, 1C(6)	2	H(FT) W(FT)	Ealing Kingsbury	Drive Drive
S6	H,W, 1C(8)	2	H(FT) W(X)	Harrow X	Drive
S7	SM 2C(12,14)	1	SM(X)	X	Drive
S8	H,W, 2C(10,12)	2	H(FT) W(PT)	Guildford Wembley	Drive Drive
S9	H,W, 2C(10,14)	1	H(X) W(FT)	X Camden	U-ground/Drive
S10	H,W, 2C(10,13)	1	H(FT) W(PT)	Park Royal Harrow	Bus/U-ground Drive

¹ VJ – Voluntary Job

(c) Wapping, Tower Hamlets

Features Household	Household Composition	Car Ownership	Employment Status	Locations of Employment	Mode of Transport
W1	SM, 1C(16)	1	SM(FT)	Isle of Dogs	Drive
W2	MP,FP ¹	2	MP(FT) FP(FT)	City City	Walk Walk
W3	H,W, 2C(2,11)	1	H(X) W(FT)	X Home	Drive
W4	H,W, 2C(2,5)	3 ²	H(FT) W(FT)	Oxford Circus Oxford Circus	Drive Drive
W5	H,W, 1C(3)	2	H(FT) W(FT)	Tottenham C.Rd Battersea	Drive Drive
W6	MS ³	1	MS(FT)	Maple Cross	Drive
W7	SM,MS 1C(8)	X	SM(FTS ⁴) MS(FTS)	South Bank Hammersmith	Bus/U-ground Bus/U-ground
W8	H,W, 1C(6)	1	H(FT) W(X)	Kent	Drive
W9	H,W,	1	H(FT) W(FT)	City Knightsbridge	Drive Bus/U-ground

¹ MP – Male Partner; FP – Female Partner² One company, one household car, and one antique car (as a collection).³ MS – Male Single⁴ FTS – Full-time Student

(d) Bethnal Green, Tower Hamlets

Features Household	Household Composition	Car Ownership	Employment Status	Locations of Employment	Mode of Transport
BG1	H,W, 2C(7,11)	1	H(FT) W(PT)	Bethnal Green Bethnal Green	Walk Walk
BG2*	H,W, 2C(16,19)	1	H(FT) W(X)	City X	Walk/Bus
BG3	H,W, 1C(24)	1	H(FT) W(FT) C(X)	Islington City	Drive Bus
BG4	H,W, 2C(17,19)	X	H(FT) W(FT)	City Shoreditch	Bus Walk
BG5	H,W, 2C(21,24)	3	H(FT) W(PT) C1(FT) C2(FT)	Potters Bar Shoreditch Poplar Shoreditch	Drive Walk Drive Walk/Drive
BG6	H,W, 1C(23)	1M ¹	H(FT) W(PT) C(FT)	City Bethnal Green Hackney	Ride M-bike Walk Bus
BG7	H,W	X	H(FT) W(FT)	Victoria Chancery Lane	Underground Underground
BG8*	H,W	1	H(FT) W(FT)	Bethnal Green Islington	Drive ² Bus
BG9	MS,E	X	MS(FT)	Piccadilly	Underground
BG10	SM, 1C(7)	X	SM(FT)	Croydon	Train

¹ The head of household rides motorbike.² The husband is a mini-cab driver.

* Incomplete interviews

APPENDIX FIVE

CHECKLIST FOR INTERVIEWING QUESTIONS

Opening Remarks

First of all, I want to thank you for helping me with the interview. Can I explain very briefly the purpose of this interview? At the moment I am carrying out a research about the relationships between the built environment and an overall development. I call it social sustainability. This is different from conventional concept of sustainability, or sustainable development, which focuses mainly on the relationships between natural or physical environment and economic development. At the core of my study is a stress of concerning about people in context. In other words, I try to look at the relationships between people's daily activities and the related locations by bringing out the dynamics of daily lives that many households have faced in the course of their day-to-day lives, especially about the relationships between work, housing, shopping and leisure, as travel between them.

The questions I am going to ask in the interview are basically about your experiences in the course of everyday life in particular relating to work, housing, shopping and leisure, and travel between them, as well as your points of view about these things.

I am going to take some notes during the interview, but in the meantime, if you don't mind, I may have to tape-record our conversation. Will it be alright? Of course, if you like, we can stop the tape-recorder at any time in the interview.

AND CAN I ASSURE YOU THE MATERIALS OF THIS INTERVIEW WILL BE TREATED WITH THE STRICTEST CONFIDENTIALITY: NEITHER THE TAPE-RECORDING NOR THE NOTES OF THIS INTERVIEW WILL BE HEARD OR SEEN BY ANY SINGLE PERSON EXCEPT MYSELF, AND NONE OF YOUR NAME AND ADDRESS, NOR THE NAMES OF YOUR FAMILIES, WILL BE REFERRED IN MY FINAL REPORT.

So far, do you have any questions or anything unclear about this interview?

PAUSE A LITTLE WHILE . . .

If no, can we start the interview?

TEST TAPE-RECORDER.

Housing

1.1 First of all, could you tell me how long have you been living here?

(a) less than 10 years

(b) longer than 10 years

Before moving into the current address, where did you live?

Did you grow up in this area?

Did you grow up in London?

Could you tell me what reasons let you and your family decide to live here? Did you consider any other places when you were making the moving decision?

Are there any major changes in this area in the last 10 to 15 years?

1.2 Do you own this house/flat, or you rent it from someone else?

Own the flat

Rent

from whom?

1.3 Could you tell me something about the house/flat, such as the layout and the facilities? Are you happy with this house/flat? What are the good/bad aspects of this particular house/flat, for example, is it too small, the neighbours, facilities, etc.?

Good aspects

Bad aspects

Local Area

Let's look at the surrounding area.

2.1 Can you tell me something about the neighbourhood area? For example, are there any park, leisure facilities, and public transport, etc.? Generally speaking, are you happy with the neighbourhood area now you are living in? What are the good aspects for being living here, what are the down side? Do you know your neighbours?

Good aspects

Bad aspects

2.2 Do you have any plan of moving to other area, either in the near future or after your retirement? Or you want to live here for a longer term?

Yes

No

Do you have any idea where you may like to live? Could you tell me where?

2.3 Do you use the public transport services in the area, such as bus, train, or the underground?

Yes

No.

How often do you use them? Do you use them for work, shopping, or leisure?

Are there any particular reasons?

Are there any difficulties or inconvenience when you are using these public transport services?

2.4 So generally speaking, how good is the public transport services for people living here?

Very good

Good

Not very good

Poor

Is there any particular place you think the public transport could, or should, be improved?

2.5 Does the household own any car or motor vehicle?

Yes

No

_____ cars/motorbikes

Could you tell me is there any particular reason that this household decide not to have a car?

Normally, who use the car? For what purpose?

Can you use the car?

Do you bring your car to work, leisure, or shopping?

In your workplace, is there any parking facility provided by your company or employer?

Is there any subsidy or benefit provided by your company or employer for using the car in your daily trips? Is it a company car?

2.6 Do you use any facility in the local area, such as leisure centre, library, park, etc.?

Employment

All right, now I would like to ask you some questions about your job.

3.1 For those who are working

What kind of job are you doing? Could you describe what you are actually doing in your job?

How do you get this job?

For those who are not working

Do you do any voluntary job? Could you describe it?

Have you had any (full-time) job before you were married or having first child (for women)? Could you tell me more about this?

Is there any special reason that you are not working (or working full-time) at the moment, for example, have to look after children, no suitable jobs, don't need the money, not worth it, prefer not to, etc.?

3.2 Do you work from Monday to Friday, or you only work on certain days of the week?

3.3 How many hours do you work in a week?

3.4 How long have you been in this particular job?

(a) less than 3 years

(b) longer than 3 years

What did you do before doing this job?
Can you tell me more about it?

Could you tell me more about your job?

Is there any major change in your daily routine when you changed to current job?

- 3.5 Where is the place you work?
- 3.6 Do you think the distance between home and work is too far, O.K., or very short? Or you think that there are some other things more important than the distance, such as the time spent on travelling, traffic conditions, and the like?
- 3.7 Does it affect your housing decision? Or on the contrary, the location of your workplace has actually been affected by where you live? In your opinion, which one (home or work) is more important?
- 3.8 How significant do you think that your daily life is affected by your work, and in which ways? For example, your relations with other household members, the arrangements of your times and activities, or simply imagine that you are working from home or you are not working at all?

Travel-to-work

- 4.1 Could you tell me what is the major means of transport you normally use to get to work, do you walk, drive, take bus/train/underground, ride bicycle, etc.?
- 4.2 Could you describe the processes of your daily journey to and from work and the approximate times you have to spend in each steps? (for example, you have to spend 5 minutes walking to train station, spending 30 minutes on train, then spending another 10 minutes walking to your office)
- 4.3 In your ways to and from work, is there anything you have to do in the same trips? for example, to pick up children from school, to do some shopping, etc.
- 4.4 During the processes of your journey to and from work, is there any thing particularly difficult or inconvenient to you or is there anything very unusual that you think I may want to know? for example, have to pick up children from school, and they are far from your workplace
- 4.5 Have you considered any alternatives to the current mode of transport to your workplace, for example, riding bicycle, taking bus? Is there any thing prevent you from adopting the alternative means of transport? Will you try other types of transport when the situation permits (for example, you can get access to the car, you can work in the local area, etc.)? And why not?

Partner's Work

- 5.1 Does your husband/wife/partner have a job?
- 5.2 What does he/she do?
- 5.3 Where does he/she work?
- 5.4 Now I want you think very carefully, and tell me do you think is there any relationship between your partner's job and yours, as well as the everyday life of the family? for example, does it affect your decision of going out to work or not, where to work, what kind of job, etc., or you and your families have to change or rearrange your timetables, to negotiate with each other for the use of car, or to give up some plans that you would have do it in certain times and places otherwise?

Food Shopping

We've been talking quite a bit about work and paid jobs, now I want to know something about your daily shopping activities.

- 6.1 Could you tell me that most of the time who are responsible for food shopping and buying general items in this household?

Is there any one in the household will help you/your partner, or accompanying you/your partner, to do the shopping?
- 6.2 Could you tell me how often do you go out to buy food or general items? For example, do you go out everyday, about 2-3 times a week, about once a week, or less than once a week? and could you tell me why do you prefer or have to do your shopping like this?
- 6.3 Where do you go most of the time for your daily food shopping? Do you use corner shops for certain items?
- 6.4 Are there any other shopping areas in the nearby area you may use but you do not use them as often as the area you just mentioned?
- 6.5 Could you tell me is there any particular reason you like to do your food shopping in this area rather than in other areas? Could you tell me what kinds of shops you use most often and why? (note: it is very possible that people use the superstores as the major sources of food shopping but may go to the corner shops as well to get

some convenience items)

- 6.6 At what times do you usually go out for this kind (food and general items) of shopping, for example, in the morning, afternoon, evening, or weekend? Could you tell me why?
- 6.7 When you are doing the shopping, normally you just go out for shopping or there are some other things you have to do in one trip, for example, to pick up children from school, on the way to or from work, or go to the bank, office, etc.?
- 6.8 Could you tell me what kind of transport you use for the daily food shopping, do you walk, take bus, or drive (or your husband drive)? and why?

Non-food Shopping

- 7.1 Apart from food shopping and shopping for general items, where do you (or your family) normally or regularly go for non-food shopping, such as clothing, fashion items, or just a day out, etc.?
- 7.2 Could you tell me why do you like to shop in this area (or these areas) rather than in some other areas? (for example, the West End, or local town centre)
- 7.3 How often do you go there (non-food shopping area)?
- 7.4 Do you normally go alone or the family will go together?
- 7.5 What kind of transport do you use for this kind of shopping? Why?
- 7.6 Could you think of anything difficult or inconvenient in the shopping areas that you use most often, for example, is it too far from your home, no public transport connection, no sufficient parking space, too much traffic, etc.?

Leisure Activities

Now I want to ask you something about your leisure activities.

- 8.1 In your spare time, except going out for shopping, are there any particular things which you are doing on a more or less regular basis, such as sports, self-improvement (adult education), visiting park or playground with children, or just going for a walk in the neighbourhood, having a drink in the pub, dining out with family or friends, etc.?

Or you spend most of your spare time at home, either because you have some particular hobbies which are taking place at home, such as gardening, DIY, playing or listening to music, watching TV, etc., or because there is something prevent you from going out, for example, you have to look after children, having no access to appropriate transport facilities, lack of information, etc., or you just don't want to?

Leisure activities outside home

- 8.2 Where are they located? Are they in the neighbourhood area (ask the names, such as leisure centre, park, etc.) or in other areas?
- 8.3 Do you go by yourself most of the time or your families will go with you?
- 8.4 What time do you usually go out for these activities? and why?
- 8.5 Could you tell me what kind of transport do you use to get there?
- 8.6 How much time does it take to get there?
- 8.7 Could you tell me is there any thing you have to coordinate with other members of the household or reorganize the daily routine so that you can go out to do these things, for example, ask you partner to come home earlier so that you can use the car, or you can only do it in the evening because your partner can help looking after the children, etc.?

Social Activities

And now, can I ask some questions about visiting other people?

- 9.1 First of all, do you have any relatives or close friends living in the local area? I mean within walking distance?

Yes

No

How often do you see them, either at your home or theirs?

Do you visit relatives or close friends who live in other places?

How often do you normally see them, either at your home or theirs?

Could you give me some ideas where

they live?

What kind of transport do you normally use when you are going to visit your relatives/friends? And why?

Other Routine Activities

- 10.1 Except those activities we've mentioned earlier, are there any activities or events you have been taking part on a more or less regular basis, for example, attending evening school, going to church, voluntary work, informal gathering, etc.? Could you tell me something about this?
- 10.2 According your experiences, could you tell me what part of your daily life would have changed if you were single or when your children grow up and leave home?
- 10.3 Could you give me some ideas about the best things of living in London, and what are the worst things for living in London?

Children and Other Household Members

(For those households with children)

- 11.1 You've told me you have ____ children, do they have to go to schools (primary school or nursery school)?
- 11.2 Could you tell me where are the schools?
- 11.3 When do your children have to arrive/leave school?
- 11.4 How do they travel to and from school? Do you or your partner have to take your children to and from school, or there are school buses? Is it convenient or inconvenient for you and the children to do so?
- 11.5 Apart from going to school, are there any special events your children have to take part on a regular basis, for example, going to music lesson, sports, etc., or they want to go to the playground during the weekend? Is there anything that your children need your help or care? Could you tell me something about this?

- 11.6 Could you tell me is there any major change in the daily life before and after having children, in particular regarding your work, choice of transport means, participating in sports or leisure activities, etc.?
- 11.7 By the way, in the household is there anyone else, except your children, who depends on your cares, I mean such as the elderly? If yes, could you tell me something about this?

Recalling the Activities in a Typical Day

- 12.1 We've been talking quite a lot about job, shopping, leisure, and meeting friends. Now, I want you to recall what you have done in the last few days, and tell me what you and your families were doing in a typical day? For example, what did you do anything in the morning, did you go out in the evening, and the like.

THANK YOU VERY MUCH FOR HELPING ME WITH THE INTERVIEW!

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