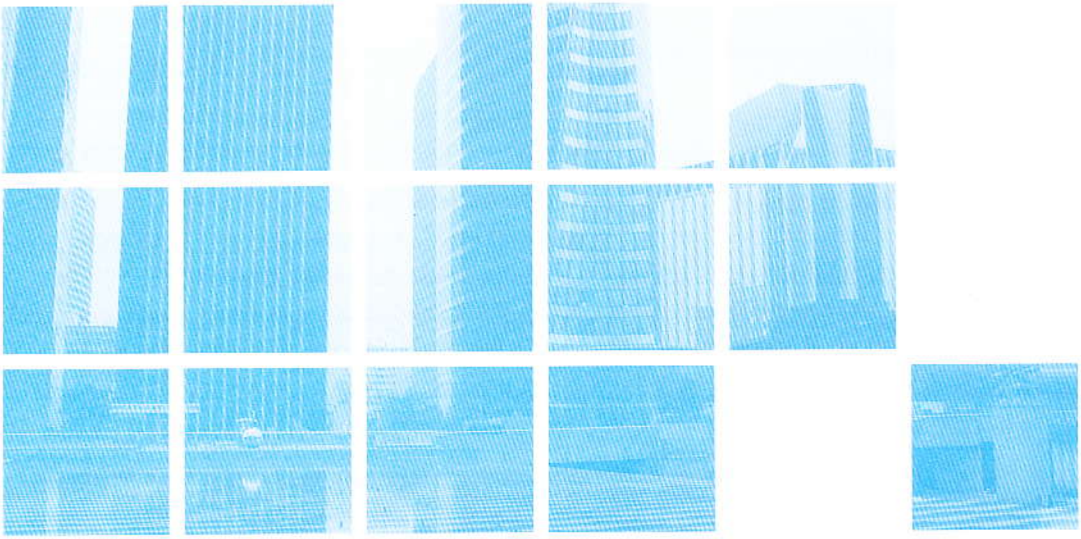

Environment and behaviour in urban settings

Key questions addressed in this chapter

- What are the geographies of crime and other deviant behaviour in cities?
- How can we best explain these patterns?
- How do people form images of urban areas, and how do these images relate to their behaviour?

Behavioural geography has its roots in the classic observed-stimulus observed-response **behaviourism** of psychologist J.B. Watson (1913). The sophistication of contemporary social geography is that behaviour is no longer described solely in terms of stimulus and reaction. Rather, stimuli are thought of in terms of information (of any kind) that are filtered through the elements of cognition, reflection and consciousness before provoking behavioural responses (**behaviouralism**) (Figure 10.1).

Central to this whole perspective is the idea of **environmental conditioning**. A classic example is provided by Newson and Newson's (1965) work on patterns of infant care. Impoverished neighbourhoods, they argued, are characterized by a poverty of sensory stimulation, by crowded environments that inhibit play, and by unenlightened attitudes towards child rearing. The net result, they concluded, is that the environmental conditioning experienced by children growing up in such settings produces 'under-socialized' individuals with a competitive nature attuned only to the immediate social group, leaving them ill-equipped to cope with the more subtle forms of competition that prevail in the world beyond. By extension, it was argued that this kind of environmental conditioning tends to curtail creativity, adaptability and flexibility. The result is doubly-disadvantaged individuals who, on the one hand, seek short-term gratification and are weakly attuned to the established norms and rules of society at large while, on the other, are unable to articulate a coherent alternative or opposition to these norms and rules.

But this kind of argument begs all sorts of questions about the mechanisms and processes involved. How, for example, are distinctive local values sustained in local settings; and to what extent do localized values and

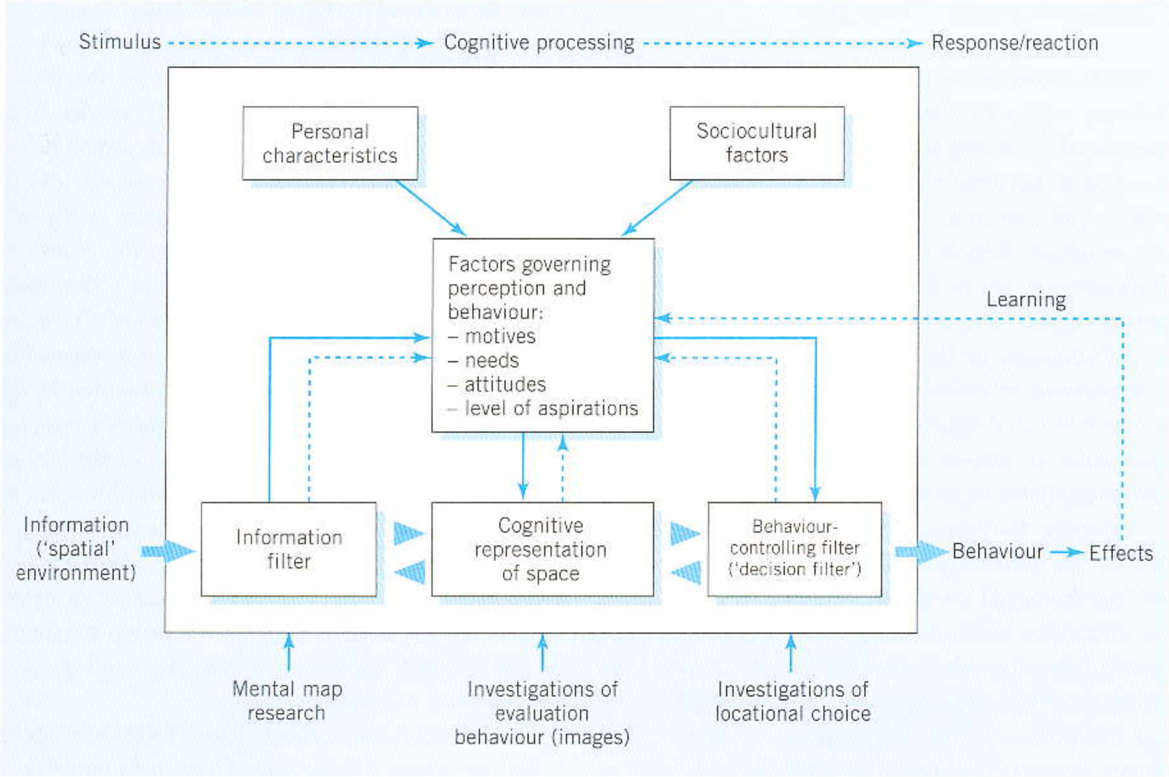
Stimulus
Cognitive processing
Response/reaction
Personal characteristics
Sociocultural factors
Factors governing perception and behaviour:
– motives
– needs
– attitudes
– level of aspirations
Learning
Information ('spatial' environment)
Information filter
Cognitive representation of space
Behaviour-controlling filter ('decision filter')
Behaviour
Effects
Mental map research
Investigations of evaluation behaviour (images)
Investigations of locational choice

Figure 10.1 A model of behaviour in human geography.
Source: After Werlen (1993).

attitudes affect the incidence of particular patterns of behaviour? How important is the built environment? And what is the role of broader class-based factors? As we shall see from an examination of ideas about deviant behaviour, there is a broad spectrum of theories.

10.1 Theories about deviant behaviour

A **deviant subgroup** may be defined as a group within society that has norms substantially different from those of the majority of the population. The notion of deviance covers a multitude of social sins, but geographers have been most interested in behaviour with a distinctive pattern of intra-urban variation, such as prostitution, suicide, truancy, delinquency and drug addiction. In fact, most aspects of deviant behaviour seem to exhibit a definite spatial pattern of some sort, rather than being randomly distributed across the city. But, whereas there is little disagreement about the nature of the patterns themselves, theory and research in geography, sociology and environmental psychology are less conclusive about explanations of the patterns. Some writers, for instance, see deviant behaviour as a pathological response to a particular social and/or physical environment. Others argue that certain physical or social attributes act as environmental cues for certain kinds of behaviour; others still that certain environments simply attract certain kinds of people. Until quite recently, almost all the theorizing about spatial variations in deviant behaviour shared a common element of environmental determinism, usually traceable to the determinists of the Chicago School. In this section the more influential aspects of this theory are outlined before going on to examine briefly the intra-urban geography of one kind of deviant behaviour – crime and delinquency – as an illustration of the complexity of the actual relationships between urban environments and human behaviour.

Determinist theory

There is no need to reiterate at length the relationships between urban environments and deviant behaviour postulated by adherents to Wirthian theory. The general position is that deviant behaviour is a product either of adaptive behaviour or maladjustment to city life, or to life in certain parts of the city. Thus the aloofness and impersonality that are developed in response to the competing stimuli and conflicting demands of different social situations are thought to lead to a breakdown of interpersonal relationships and social order and to an increase in social isolation, which in turn facilitates the emergence of ego-centred, unconventional behaviour and precipitates various kinds of deviant behaviour.

Evidence to support these tenets of **determinist theory** has been assembled on several fronts. The idea of '**psychological overload**' resulting from complex or unfamiliar environments was first investigated by environmental psychologists and popularized by Alvin Toffler (1970), who suggested that the need to 'scoop up and process' additional information in such situations can lead to 'future-shock': the human response to overstimulation. The nature of this response has been shown by psychologists to take several forms: 'Dernier's strategy', for example, involves the elimination from perception of unwelcome reality, and in an extreme form can result in the construction of a mythological world that becomes a substitute for the real world and in which deviant behaviour may be seen by the person concerned as 'normal'.

Another response is for people to 'manage' several distinct roles or identities at once. According to determinist theory, this is characteristic of urban environments because of the physical and functional separation of the 'audiences' to which different roles are addressed: family, neighbours, co-workers, club members and so on. Thus, people tend to be able to present very different 'selves' in different social contexts. Again, the extreme form of this behaviour may lead to deviancy. The city, with its wide choice of different roles and identities becomes a 'magic theatre', an 'emporium of styles', and the anonymity afforded by the ease of slipping from one role to another clearly facilitates the emergence of unconventional and deviant behaviour. It has also been suggested that *further* deviancy or pathology may result from the strain of having to sustain different and perhaps conflicting identities over a prolonged period.

Most interest, however, has centred on the *impersonality* and *aloofness* that apparently results from the *psychological overload* associated with certain urban environments. There are many manifestations of this impersonality, the most striking of which is the collective paralysis of social responsibility that seems to occur in central city areas in crisis situations. The classic and oft-quoted example is the murder of Catherine Genovese, who was stabbed to death in a respectable district of Queens in New York, the event evidently witnessed by nearly 40 people, none of whom attempted even to call the police. Other evidence of the lack of 'bystander intervention' and of an unwillingness to assist strangers comes from experiments contrived by psychologists. Such behaviour is itself deviant to some extent, of course; but its significance to determinist theory is in the way in which it fosters the spread of more serious forms of deviancy by eroding social responsibility and social control.

The overall result of these various forms of adaptive behaviour is thus a weakening of personal supports and social constraints and a confusion of behavioural norms. This, in turn, gives a further general impetus to deviant behaviour. Feelings of isolation among the 'lonely crowd' are associated with neurosis, alcoholism and suicide; and the anomic state induced by the weakening of behavioural norms and intensifying levels of incivility is associated with various forms of crime and delinquency.

It is, however, difficult to establish either proof or refutation of the connections between stress, adaptive behaviour, social isolation, social disorganization, anomie and deviancy because of the difficulty of controlling for the many intervening variables such as age, class, education and personality. Nevertheless, many investigations of intra-urban variations in deviant behaviour have found it useful to invoke determinist theory in at least partial explanation of the patterns encountered. The geography of looting during electricity blackouts in New York City (Figure 10.2), for example, was closely correlated with patterns of poverty. To the extent that determinist theory is founded on the effects of urbanism on human behaviour, the inference must be that some parts of the city are more 'urban' (in the Wirthian

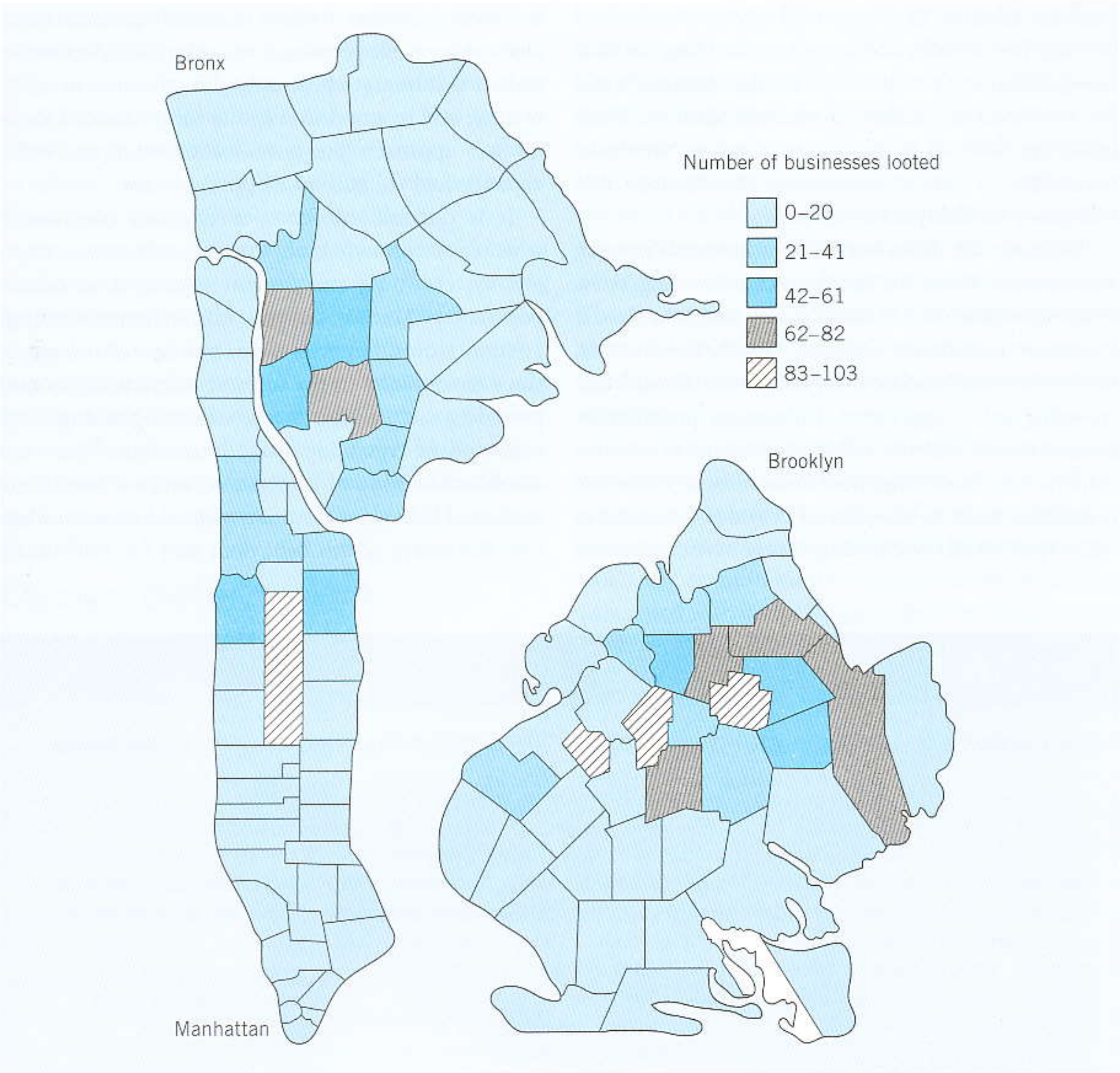

Figure 10.2 Looting in New York: businesses approved for Re-establishment Grants by the mayor's Emergency Aid Commission.
Source: After Wohlenberg (1982), Fig. 2, p. 36.

sense) than others, with more social disorganization, a greater incidence of *anomie* and, consequently, a higher incidence of deviant behaviour.

Crowding theory

There is now a considerable body of literature linking high residential densities, irrespective of other characteristics of urbanism, with a wide range of deviant behaviour. High densities and a sense of crowding, it is argued, create strains and tensions that can lead to aggression, withdrawal or, if these strategies are unsuccessful, mental or physical illness.

The initial link between crowding and stress is attributed by many to an innate sense of **territoriality**. This idea has been popularized by ethnologists who believe that humans, like many other animals, are subject to a genetic trait that is produced by the species' need for territory as a source of safety, security and privacy. Territoriality is also seen as satisfying the need for stimulation (provided by 'border disputes') and for a physical expression of personal identity. These needs are believed to add up to a strong 'territorial imperative': a natural component of behaviour that will clearly be disrupted by crowding.

This approach draws heavily on behavioural research with animals, where the links between crowding, stress and abnormal behaviour can be clearly established under laboratory conditions. Calhoun (1962), for example, in his celebrated studies of rat behaviour, showed that crowding led to aggression, listlessness, promiscuity, homosexuality and the rodent equivalent of juvenile delinquency. Projecting these ideas directly to human behaviours leads to the idea of crowded urbanites as 'killer apes'. Critics of crowding theory have emphasized the obvious dangers involved in extending animal behaviour to humans: people are not rats; it is by no means certain that humans possess any innate sense of territoriality; and in any case even the most crowded slums do not approach the levels of crowding to which experimental animals have been subjected.

It is difficult, however, to establish conclusively whether or not there is any connection between territoriality, crowding and deviant behaviour in human populations. Territoriality may exist in humans through cultural acquisition even if it is not an innate instinct, since territoriality in the form of property rights does provide society with a means of distinguishing social rank and of regulating social interaction. There is a considerable body of evidence to support the idea of territorial behaviour in urban men and women, whatever the source of this behaviour may be. Individuals'

Box 10.1

Key trends in urban social geography – The increasing use of crime mapping

In September 2008 London became the first British city to provide the public with a crime-mapping website showing numbers and rates per 1000 population of selected types of recorded crime: burglary, robbery and vehicle offences. Maps categorize boroughs and sub-wards on a sliding scale from high to low to high rates.

The initiative has the aim of fostering increased cooperation between the police and local communities as well as targeting resources into high crime areas and follows extensive experience in the United States using crime mapping. For example, the Justice Mapping Center at Columbia University gathers information on an extraordinarily wide range of data relating to the criminal justice system. In addition to maps of crime levels there is data on the numbers of adults in prison, people on probation and juveniles in detention, probation and parole caseloads and prisoner re-entry levels. There are also links with projects attempting to understand background factors that contribute towards criminal behaviour such as poor education, poor community support, substance abuse and socio-economic deprivation. Thus other related indices that are mapped include: home ownership levels, single-parent families, unemployment, welfare support levels, food stamps, Medicaid, foster care clients and reports of child abuse and neglect.

Surveys of the public show broad support for such mapping and they are politically popular. However, human rights and libertarian groups in the United Kingdom have claimed there are data privacy issues associated with very detailed crime mapping. In the United States it is certainly true that individuals are not identified, since data are aggregated to census block, tract and neighbourhood level. Nevertheless, crime mapping in the US is so far undertaken at a far more detailed level than in the UK. Some groups related to the housing market in the United Kingdom have warned that house prices could fall in areas where high crime rates are identified.

Key concepts related to crime mapping (see Glossary)

Externality, geographical information systems (GIS), quality-of-life indices, scale, surveillance, territorial social indicators.

Further reading

www.justicemapping.org

http://maps.met.police.uk

http://www.ucl.ac.uk/jdi/crime_mapping

Links with other chapters

Chapter 4: Box 4.3 How useful is the UK Census?

home territory represents a *haven*, and an expression of identity. At the group level, gang 'turfs' are rigorously and ceremonially defended by gang members. More complex and sophisticated social groups also seem to exhibit territorial behaviour, as in the 'foreign relations' of different social groups occupying 'defended neighbourhoods' in American inner-city areas.

Accepting that humans do acquire some form of territoriality, it does seem plausible that crowding could induce stress and so precipitate a certain amount of deviant behaviour. The evidence, however, is ambiguous. Some studies report a clear association between crowding and social and physical pathology, others report contradictory findings, and the whole debate continues to attract controversy in all the social and environmental disciplines.

Design determinism

In addition to the general debate on crowding theory, a growing amount of attention has been directed towards the negative effects of the built environment on people's behaviour. In broad terms the suggestion is that the design and configuration of buildings and spaces sometimes creates micro-environments that discourage 'normal' patterns of social interaction and encourage deviant behaviour of various kinds. A considerable amount of evidence has been accumulated in support of this idea. The inhibiting effects of high-rise and deck-access apartment dwellings on social interaction and child development, for example, have been documented in a number of different studies; and from these it is a short step to studies that point to the correlation between certain aspects of urban design and the incidence of particular aspects of deviancy such as mental illness and suicide.

The nature of these relationships is not entirely clear. One interesting proposition was put forward by Peter Smith (1977), who suggested that the configuration of buildings and spaces creates a 'syntax' of images and symbolism to which people respond through a synthesis of 'gut reactions' and intellectual reactions. Environments that are dominated by an unfamiliar or illogical visual language are thus likely to appear threatening or confusing: qualities that may well precipitate certain aspects of malaise or deviant behaviour.

A better-known and more thoroughly examined link between urban design and deviant behaviour is Oscar Newman's (1972) concept of **'defensible space'**. Newman suggested that much of the petty crime, vandalism, mugging and burglary in modern housing developments is related to an attenuation of community life and a withdrawal of local social controls caused by the inability of residents to identify with, or exert any control over, the space beyond their own front door. This, he argued, was a result of the 'designing out' of territorial definition and delineation in new housing developments, in accordance with popular taste among architects.

Once the space immediately outside the dwelling becomes public, Newman suggested, nobody will feel obliged to 'supervise' it or 'defend' it against intruders. Newman's ideas have been supported by some empirical work and enthusiastically received in the professions concerned with urban design, where they have created a new conventional wisdom of their own: defensible space is now an essential component in the praxis of urban design, endorsed by many law enforcement agencies as part of an international movement known as Crime Prevention Through Environmental Design (CPTED). On the other hand, Newman's work has been heavily criticized for the quality of his statistical analysis and for his neglect of the interplay of physical and social variables.

Alienation

The concept of **alienation** is a central construct of Marxian theory, where it is associated with the loss of control that workers have over their labour power under a capitalist mode of production. Alienation is also conceptualized in Marxian theory as a mechanism of social change contributing towards the antithesis of the dominant mode of production. However, the concept of alienation also has wider sociopolitical connotations with some relevance to the explanation of deviant behaviour. In its wider sense, alienation is characterized by feelings of powerlessness, dissatisfaction and distrust, and a rejection of the prevailing distribution of wealth and power. These feelings usually stem from people's experience of some aspect of social, political or economic system. Some people may be alienated because they feel that the structure of these systems prevents their effective participation; others may be alienated because they disagree with the very nature of the systems – perhaps because of their ineffectiveness in satisfying human needs.

Whatever the source, such feelings are clearly experience based and therefore spatially focused, to a certain extent, on people's area of residence. This makes alienation an attractive explanatory factor when considering spatial variations in people's behaviour, as the early deterministic theorists were quick to note. The major interest in this respect has been the relationship between alienation and political behaviour, but it has also been suggested that certain aspects of deviant behaviour may be related to feelings of alienation. Such behaviour may be manifested in apathy: mildly unconventional in itself but more significant if it is prevalent enough to erode social order. Alternatively, alienation may precipitate deviance directly through some form of activism, which can range from eccentric forms of protest to violence and terrorism.

Compositional theory

Compositional theory is the product of another school of thought that has developed out of the writings of the Chicago determinists. Compositionalists emphasize the cohesion and intimacy of distinctive social worlds based on ethnicity, kinship, neighbourhood, occupation or lifestyle, rejecting the idea that these social networks are in any way diminished by urban life. They also minimize the psychological effects of city life on people's behaviour, suggesting, instead, that behaviour is determined largely by economic status, cultural characteristics, family status and so on: the same attributes that determine which social worlds they live in.

Compositional theory is not framed explicitly to analyse deviant behaviour, but it does offer a distinctive perspective on the question. Deviancy, like other forms of behaviour, is seen as a product of the composition of local populations, with the social mores, political attitudes and cultural traits of certain groups being more productive of unconventional or deviant behaviour than others.

Graffiti as territorial markers. Photo Credit: Paul Knox.

The pattern of sexually transmitted disease in London serves to illustrate this compositionalist perspective. The incidence of this particular manifestation of deviant behaviour had for many years a very marked peak in the bedsitter land of West-Central London, especially around Earls Court. The explanation, in compositionalist terms, is the high proportion of young transients in the area – mostly young, single people living in furnished rooms – whose sexual mores are different from those of the rest of the population and whose vulnerability to venereal and other sexually transmitted diseases is increased by the presence of a significant proportion of young males who have themselves been infected before arriving in London. According to London's urban folklore, much of the blame in this respect is attached to Australians who arrive in London having visited Bangkok.

Subcultural theory

Subcultural theory is closely related to compositional theory. Like the latter, subcultural theory subscribes to

Box 10.2

Key debates in urban social geography – What are the merits of relational geography'?

One of the biggest developments in human geography in recent years has been the growth of relational approaches, leading to what some have termed a 'relational turn'. These approaches have implications for the ways in which we study cities and their social geography. Although relational approaches are many and varied in character it is possible to distinguish two main types (Sunley, 2008).

The first approach is specific in scope and emerges from economic sociology. This focuses on the ways in which economic activity is greatly affected by social factors. In particular this type of work has examined how, rather than being determined by cool rational calculations of advantage, economic activity is often bound up with socio-cultural factors such as the development of trust and loyalty forged by face-to-face interactions. This type of economic activity has most often been associated with interactions within clusters of high-technology firms (often termed industrial districts, or new industrial spaces).

The second approach is a broad philosophical stance which argues that we can only understand phenomenon by looking at their linkages and interactions. Approached in this manner, what appear to be stable homogeneous entities defined by borders and territories are, in reality, heterogeneous, unstable things that are continually being remade by interacting processes. This approach is manifest in Allen *et al.*'s (1998) views of regions and Amin and Thrift's (2002) view of cities. Consequently, 'spatial configurations and spatial boundaries are no longer necessarily or purposively territorial or scalar, since the social, economic, political and cultural inside and outside are constituted through the topologies of actor networks which are becoming increasingly dynamic and varied in spatial constitution' (Amin and Thrift, 2002, p. 1). Furthermore, 'Seen in this way, cities and regions come with no automatic promise of territorial or systemic integrity, since they are made through the spatiality of flow, juxtaposition, porosity and relational connectivity' (Amin and Thrift, 2002, p. 34). This relational approach is therefore trying to avoid the type of binary thinking that is often associated with essentialism, the idea that there are basic unvarying elements which determine the behaviour and structure of social systems. A relational approach is also sometimes called a 'non-scalar' approach since it attempts to avoid equating social processes with particular spatial scales.

If one considers the dynamic interactions of global capital, international migrants, Internet messages, tourists, goods and services that continually flow through and constitute modern cities, then this approach has great appeal. Hence, trying to control what happens in cities such as London with policies within its own administrative boundaries is often extremely difficult. However, Sunley argues that relational thinking is such a broad and open-ended approach that it lacks conceptual rigour and clarity. He suggests that the approach frequently pays insufficient attention to the character of linkages and downplays the fact that some connections may be more important than others, especially those with powerful institutions such as governments, banks and corporations.

Key concepts related to network analysis (see Glossary)

Anti-essentialism, binaries, essentialism, network society, spaces of flows.

Further reading

Allen, J., Massey, D. and Cochrane, A. (1998) *Rethinking the Region* Routledge, London

Amin, A. (2002) Spatialities of globalization, *Environment and Planning* ***A*** **34**, 385–99

Amin, A.T. and Thrift, N. (2002) *Cities: Reimagining the urban* Polity Press, Cambridge

Sunley, P. (2008) Relational economic geography: a partial understanding or new paradigm?, *Economic Geography* **84**, 1026

Links with other chapters

Chapter 2: Box 2.2 Doreen Massey

Chapter 7: Box 7.4 How useful is network analysis?

Chapter 9: Box 9.5 Nigel Thrift

the idea of social worlds with distinctive socio-demographic characteristics and distinctive lifestyles that propagate certain forms of behaviour. In addition, however, subcultural theory holds that these social worlds, or subcultures, will be *intensified* by the conflict and competition of urban life; and that new subcultures will be spawned as specialized groups generated by the arrival of migrants and immigrants and by the structural differentiation resulting from industrialization and urbanization reach the 'critical mass' required to sustain cohesive social networks. Thus:

> Among the subcultures spawned or intensified by urbanism are those that are considered to be either downright deviant by the larger society – such as delinquents, professional criminals, and homosexuals; or to be at least 'odd' – such as artists, missionaries of new religious sects, and intellectuals; or to be breakers of tradition – such as life-style experimenters, radicals and scientists.
>
> (Fischer, 1976, p. 34)

What is seen as deviancy by the larger society, however, is seen by the members of these subcultural groups as a normal form of activity and part of the group's internal social system.

Subcultural theory does not in itself carry any explicitly spatial connotations but the continued existence of subcultural groups depends to a large extent on avoiding conflict with other groups. Conflict may be avoided by implicit *behavioural* boundaries beyond which groups 'promise' not to trespass: a kind of social contract; but the most effective means of maintaining intergroup tolerance is through *spatial* segregation. This idea makes subcultural theory attractive in explaining spatial variations in deviant behaviour. It has proved useful, for example, in studies of delinquent behaviour.

Subcultural theory also fits in conveniently with the idea of **cultural transmission**, whereby deviant norms are passed from one generation to another within a local environment. This process was identified over 140 years ago by Mayhew (1862) in the 'rookeries' of London, where children were 'born and bred' to the business of crime; and it was given prominence by Shaw and McKay (1942) in their classic Chicago School study of delinquency.

Another concept relevant to the understanding of deviant behaviour within a localized subculture is the so-called **neighbourhood effect**, whereby people tend to conform to what they perceive as local norms in order to gain the respect of their local peer group. Empirical evidence for this phenomenon has been presented in a number of studies. Many aspects of people's behaviour seem to be directly susceptible to a neighbourhood effect. The paradoxical syndrome of 'suburban poverty' in new owner-occupier subdivisions, for example, can be seen as a product of neighbourhood effects that serve to impose middle-class consumption patterns on incoming families, many of whom have incomes that are really insufficient to 'keep up with the Jones's' but who nevertheless feel obliged to conform with their neighbours' habits.

Structuralist theory

This perspective views the rules of social behaviour and the definitions of deviant behaviour as part of society's **superstructure**, the framework of social and philosophical organization that stems from the economic relationships on which society is based (see Chapter 2). Definitions of deviance, it is argued, protect the interests of the dominant class, thereby helping that class to continue its domination. In modern society, deviant behaviour can be seen as a direct result of stresses associated with the contradictions that are inherent to the operation of the economic system.

One apparent contradiction in this context involves the necessary existence of a '**reserve army**' of surplus labour that is both vulnerable, in the sense of being powerless, but at the same time dangerous, because its members represent a potentially volatile group. The need to maintain this reserve army and to defuse unrest among its members explains the substantial social expenditure of modern welfare states; while the need to control the behaviour of its members explains the rules and definitions attached to many aspects of 'deviant' behaviour associated with the stress of unemployment and the repression and degradation of being supported at a marginal level by the welfare state.

Another important contradiction, it is argued, is that while capital accumulation requires fit and healthy workers, it also tends to debilitate them through the effects of the stresses that result from the various controls that are exerted on the labour force. Examples of these controls include the patterns of socialization that are part of the superstructure of society, in which individuals are rewarded for being competitive but not too individualistic, and in which they are encouraged to spend their rewards on the acquisition of material possessions:

> These sources of stress are endemic in the capitalist system, but they are unequally allocated between the classes; workers experience more than their share of the costs or stresses, and less than their share of the benefits. It is no surprise, therefore, that the working classes are disproportionately represented in the prevalence data for mental illness, drug and alcohol abuse, and crime.
>
> (N. Smith, 1984, p. 132)

Multifactor explanations: the example of crime and delinquency

The difficulty of reconciling the apparently conflicting evidence relating to these different theories has, inevitably, led to a more flexible approach in which multifactor explanations of deviant behaviour are admitted without being attached to a specific theoretical perspective. This is common to all branches of social deviance research, although it is probably best illustrated in relation to crime and delinquency. Empirical studies of spatial variations in crime and delinquency have lent support, variously, to theories of crowding, social disorganization, *anomie*, design determinism and deviant subcultures; but it is difficult to assemble evidence in support of any one theory in preference to the rest. In the absence of any alternative all-embracing theoretical perspective, an eclectic multifactor approach thus becomes an attractive framework of explanation.

Data problems

The evidence that can be drawn from studies of spatial variations in crime and delinquency is, like much social geographical research, subject to important qualifications relating to the nature of the data and methods of research that have been employed. It is, therefore, worth noting some of the difficulties and pitfalls involved in such research before going on to illustrate the complexity of interrelationships between environment and behaviour suggested by the results of empirical research.

One of the most fundamental problems concerns the *quality of data*. Most research has to rely on official data derived from law enforcement agencies, and these data are usually far from comprehensive in their coverage. Many offences do not enter official records because they are not notified to the police; and data on offenders are further diluted by the relatively low detection rate for most offences. More disconcerting is the possibility that the data that are recorded do not provide a representative sample. Many researchers have argued that official data are biased against working-class offenders, suggesting that the police are more likely to allow parental sanctions to replace legal sanctions in middle-class areas, that working-class areas are more intensively policed, and that crime reporting by adults is similarly biased.

Conversely, 'white-collar' crimes – fraud, tax evasion, expense account 'fiddles' and so on – tend to be under-reported and are more difficult to detect, even where large amounts of money are involved. Some critics have suggested that this bias has been compounded by the predilection in empirical research for data relating to blue-collar crimes. This may be attributable in part to the differential availability of data on different kinds of offence, but it also seems likely that data on white-collar crimes have been neglected because they are, simply, less amenable to deterministic hypotheses.

Because data for many important crime-related variables are available only for groups of people rather than individuals, many studies have pursued an ecological approach, examining variations in crime between territorial groups. Such an approach is inherently attractive to geographers but it does involve certain limitations and pitfalls. The chief limitation of ecological studies is that they cannot provide conclusive evidence of causal links. Thus, although certain categories of offenders may be found in crowded and/or socially disorganized areas, their criminal behaviour may actually be related to other causes – alienation or personality factors, for example – and the ecological correlation may simply result from their gravitation to a certain kind of neighbourhood.

The chief pitfall associated with ecological studies is the so-called **ecological fallacy**: the mistake of drawing inferences about *individuals* on the basis of correlations calculated for areas. One pertinent example is the frequently encountered association within British cities between crime rates and neighbourhoods containing

Box 10.3

Key debates in urban social geography – How to understand geographies of childhood and youth culture

Despite the considerable attention given to juvenile delinquency in studies of crime and disorder in cities, urban geographers have, until recently, paid relatively little to issues of childhood and youth culture. These categories are in any case 'social constructs' that have varied over time. For example, although the existence of 'childhood' might seem to be obvious, remarkably, in Western societies the concept only came to the fore in the nineteenth century. Previously, it appears that all young people, once they were beyond the stage of infantile dependency, were considered to be miniature adults with no special considerations (Skelton and Valentine, 1998). Furthermore, to begin with, it was only the upper classes who could give their children special considerations in the form of education and upbringing. Thus, it was only in the late nineteenth and early twentieth centuries that the concept of childhood really came to the fore, through factors such as the growth of universal education and developmental psychology.

The concept of 'adolescence' is even more recent than childhood, being essentially a twentieth-century notion. It has been argued that with the development of industrial capitalism in the nineteenth century the middle classes began to extend the period of children's schooling to better equip them for the needs of the new economy. This period was further extended during the twentieth century and it was during this period that there emerged a series of themes that have dominated the discourses surrounding adolescence ever since – rebellion, violence, crime, juvenile delinquency, unruly antisocial behaviour and the need for control. However, the adolescent and 'teenager' really came to the forefront of popular consciousness during the so-called long boom of Fordism in the 1950s and 1960s. The emphasis upon consumption in this period led to the development of a series of goods such as records, clothing, portable radios, record players and cars – together with services such as clubs and dance halls – that were aimed specifically at young adults in the 16–25 age bracket. It was during this period that there emerged a series of 'moral panics' about the lifestyles of various youth subcultures: 'rockers', 'mods', 'hippies', 'punks', 'skinheads', 'ravers', 'yuppies' and so on. The result, which continues into the twenty-first century, is 'the popular imagining of youth as consumption-oriented, into sub-cultural styles based on music and drugs, and free to embark on adventurous travel' (Skelton and Valentine, 1998, p. 1).

As James (1990) notes, adolescence is therefore an 'in-between' or liminal age between childhood and adulthood. As such, adolescence highlights the ways in which notions of ageing are socially constructed. Rather than being just a biological essence, being a teenager is also bound up with particular ways of acting – or performativity – as introduced in Chapter 3. This obviously includes particular styles of dress, types of music, ways of walking and modes of speech. This disjuncture between biological and social definitions of adulthood and social responsibility can lead to conflicts and tensions. Thus we find that teenagers can act in ways which are more or less adult, depending upon the context. This ambiguity is also reflected in the fact that legal definitions of adulthood reflected in stipulations concerning when young people can legally drive a car, drink alcohol, have sexual intercourse, earn money or join the armed forces vary considerably between different societies.

In keeping with these prevailing discourses, most geographical work on youths has focused upon the problems of juvenile delinquency as discussed in this chapter. A more recent focus has been upon the surveillance strategies used to govern the behaviour of potentially unruly adolescents in 'public' spaces such as shopping malls. Nevertheless, Western societies tend to place great store on youthful attributes of appearance, physical fitness and athleticism. This contrasts with the attitudes to be found in many Asian societies that tend to venerate old age to a greater extent. This privileging of youth in the West is manifest in advertising. It is therefore difficult to escape the conclusion that current attitudes towards ageing in Western societies are, at least in part, bound up with issues of consumption.

Key concepts associated with childhood and youth culture (see Glossary)

Alienation, consumption, exclusion, family status, identities, Panopticon, positional good, 'scanscape', social constructionism, spaces of resistance, surveillance.

Further reading

James, S. (1990) Is there a 'place' for children in geography?, *Area* **22**, 278–83

continued

Matthews, H. and Lamb, M. (1999) Defining an agenda for the geography of children, *Progress in Human Geography* **23**, 61–90

Skelton, T. and Valentine, G. (1998) *Cool Places: Geographies of youth cultures* Routledge, London

Valentine, G. (1996) Angels and devils: moral landscapes of childhood, *Environment and Planning* ***D*** **14**, 581–99

Links with other chapters

Chapter 3: The Cultures of Cities; Box 3.2 Hybridization: The case of popular music

Chapter 4: Box 4.1 The growth of student enclaves

Chapter 8: Box 8.4 Rap as cultural expression (and commercialization)

Chapter 10: Box 10.4 The development of 'urban nightscapes'

large numbers of immigrants. The inference drawn by many is that immigrants and their subcultures are particularly disposed towards crime and delinquency; but empirical research at the level of the individual has in fact shown that immigrants are very much less involved in the crime and disorder that surround them in the areas where they live than their white neighbours.

The geography of urban crime

Bearing these limitations in mind, what conclusions can be drawn from empirical studies about the factors that precipitate crime and delinquency? First, it is useful to distinguish between factors influencing the pattern of *occurrence* of crime and delinquency and those influencing the pattern of *residence* of offenders.

Most cities exhibit very distinctive areas where the occurrence of crime and delinquency is well above average. In many cities, the pattern conforms to the archetypal distribution identified in Chicago in the 1920s, with low rates in the suburbs increasing steadily to a peak in the inner city and CBD. The most notable exceptions are in European cities, where substantial numbers of low-income, 'problem' households have become localized in suburban public housing estates.

In detail, however, patterns of occurrence vary considerably by the *type of offence*. In his pioneering study of crime in Seattle, Schmid demonstrated the concentration of shoplifting and cheque fraud offences in the CBD, of larceny and burglary in suburban areas, and of robbery and female drunkenness in the 'skid row' area of the city (Schmid, 1960). In a later study of the same city, the dominant pattern of crime occurrence was found to be associated with inner-city areas of low social cohesion, where there was a concentration of burglary, car theft and handbag snatching (Schmid and Schmid, 1972). Studies of other cities have demonstrated a similar general association between the occurrence of crime and poverty, and detailed ecological analyses have revealed a distinct association between low-income neighbourhoods and crimes of violence, including murder, rape and assault. There is also evidence to suggest that transitional areas – with a high proportion of land devoted to manufacturing and wholesaling, a decaying physical environment and an ageing population – are associated with a separate and equally distinctive concentration of offences that include larceny, robbery and car theft as well as assault and murder.

Other important relationships to emerge from empirical studies are the correlation between property crimes – burglary, larceny and car theft – and stable, mid- and upper-income suburban neighbourhoods, and between violent crimes and black neighbourhoods. A *compositional* perspective is useful in interpreting these various findings: the idea here being that communities move through 'life cycles' or 'careers' in their experience of criminality as the demographic composition of their population changes in response to neighbourhood deterioration and family life cycle changes. Because the peak years for offence rates are the teens and early 20s, neighbourhoods with high proportions of youths of this age can be expected to exhibit high levels of criminality, especially if the neighbourhood is caught in a spiral of economic decline and physical decay that heightens

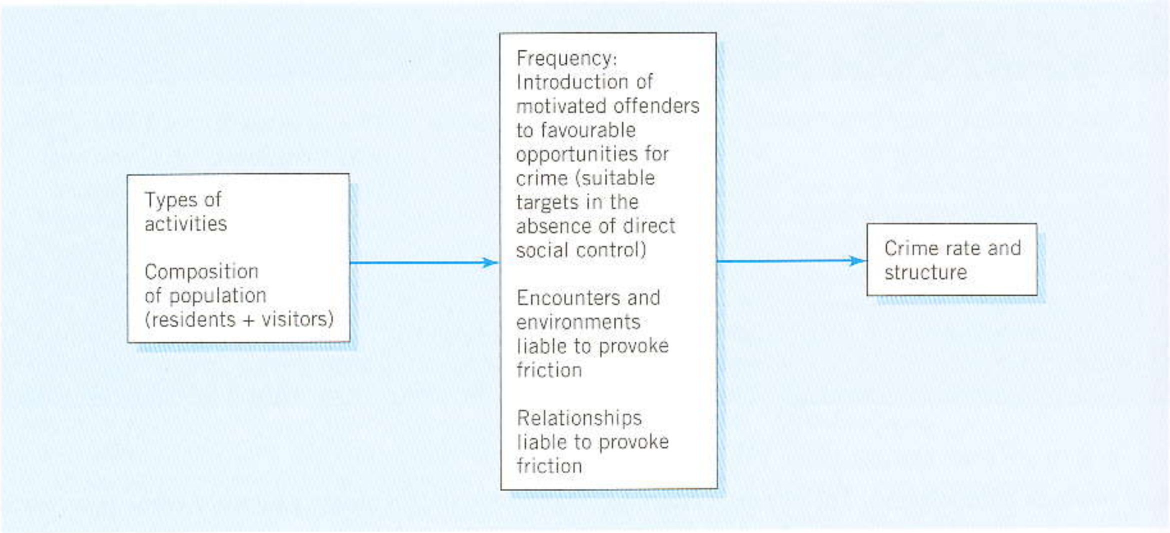
Types of activities
Composition of population (residents + visitors)
Frequency: Introduction of motivated offenders to favourable opportunities for crime (suitable targets in the absence of direct social control)
Encounters and environments liable to provoke friction
Relationships liable to provoke friction
Crime rate and structure

Figure 10.3 Variation in crime (offence rate) and structure in the urban environment.
Source: Bottoms and Wiles (1992), Fig. 1.1.

youths' feelings of relative deprivation. The compositional perspective has been developed into what has become known as the *routine activities* theory of crime, in which demographic or social class characteristics lead to certain activity routines that bring together the three prerequisites for crime: the presence of a motivated offender, a suitable target and the absence of a capable guardian.

Spatial variations in *opportunities* for crime have been shown to be critical in studies of occurrence patterns of several different kinds of offences, with a marked relationship between property values and house-breaking offences. Accessibility, visibility, control of property, residential density and state of physical repair are the most significant aspects of the micro-environment of violent crime. Newman's concept of defensible space is clearly relevant here.

In summary, there are qualities attached to the offence location that relate to the *built* environment – its design, detailed land use – and to the social environment – status, local activity patterns, local control systems. Figure 10.3 represents an attempt to capture this, emphasizing sociodemographic composition, routine activities and opportunities.

Patterns of *residence* of offenders are subject to a much wider range of explanatory factors although, like patterns of occurrence, they display a consistent social order and clustering that make them suitable for ecological analysis. Although there are variations by type of offence and age of offender, the classic pattern is the one described by Shaw and McKay (1942) for Chicago and other American cities: a regular gradient, with low rates in the suburbs and a peak in the inner city. Such gradients have typified not only North American cities, but virtually all Western cities for which evidence is available. Recently, however, departures from this pattern have become more apparent as the spatial structure of the Western city has changed.

Many cities have experienced an outward shift of offenders' residences with changes in residential mobility and housing policies. British studies, in particular, have identified localized clusters of offenders in peripheral local authority housing estates, which suggests that the social environment is at least as important as the physical environment in explaining offenders' patterns.

Most geographical research has set aside the possible influence of personal factors (such as physical and mental make-up) and factors associated with the family, school and workplace in order to concentrate on the social and physical context provided by the neighbourhood. From these studies there is an overwhelming weight of evidence connecting known offenders with inner-city neighbourhoods characterized by crowded and substandard housing, poverty, unemployment and demographic imbalance. In cities where peripheral clusters of offenders are found, there appears to be an additional syndrome linking offenders with public housing developments containing high proportions of families of particularly low social and economic status, many of whom have been dumped in problem estates through the housing allocation mechanisms of public authorities.

A few studies have followed up this general ecological approach with an examination of the less tangible local factors that may be related to crime and delinquency: the dominant values and attitudes associated with different areas. Susan Smith (1986), for example, argued that the distribution of crime reflects the lifestyle and activity patterns of a community and that the effects of crime, in turn, help to shape these *routine urban behaviours*.

While evidence can be cited in support of particular theories and concepts, empirical research has also demonstrated that it is possible to find support for quite different theories within the same pool of evidence. In this situation it seems sensible to accept a multifactor explanation. David Herbert provided a useful framework within which to subsume the various factors that appear to be involved (Figure 10.4). Areas of crime and delinquency are linked to several local environmental contexts and generally related to a nexus of social problems. Poverty is the central focus of the model, and is seen as the product of structural factors which, through differential access to educational facilities and employment opportunities, produce an 'impersonal social environment' (i.e. local population) consisting of 'losers' – the aged, the unemployed, misfits and members of minority groups.

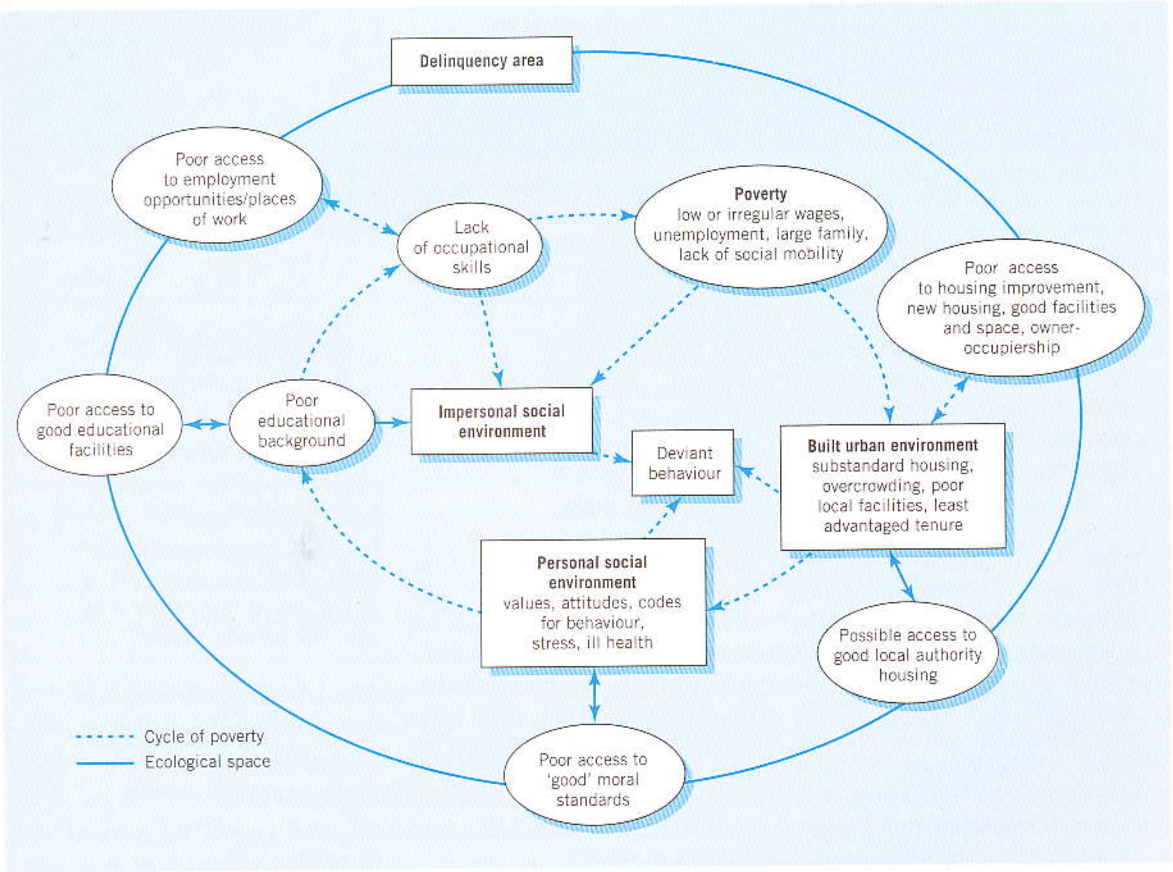
Delinquency area
Poor access to employment opportunities/places of work
Lack of occupational skills
Poverty
low or irregular wages, unemployment, large family, lack of social mobility
Poor access to housing improvement, new housing, good facilities and space, owner-occupiership
Poor access to good educational facilities
Poor educational background
Impersonal social environment
Deviant behaviour
Built urban environment
substandard housing, overcrowding, poor local facilities, least advantaged tenure
Personal social environment
values, attitudes, codes for behaviour, stress, ill health
Possible access to good local authority housing
Poor access to 'good' moral standards
Cycle of poverty
Ecological space

Figure 10.4 Delinquency residence: the cycle of disadvantage and its spatial connotations.
Source: Herbert (1977), p. 277.

One aspect of crime-related research in which geographers have made significant contributions in recent years is women's fear of violent crime. Such studies have mapped the areas with high rates of reported crime and correlated these with areas in which women claim they are most worried about being victimized, the objective being to evaluate the relationships between fear and risk. We should note that there is a serious methodological problem with such studies in that violent crime, and especially that of a sexual nature, is thought to be seriously underreported, both to the police and to social scientists.

Nevertheless, these studies present something of a paradox. On the one hand women mostly fear strangers in public places. However, studies have shown that women are much more likely to be raped or experience

Box 10.4

Key trends in urban social geography – The development of 'urban nightscapes'

The redevelopment of city centres has been associated with what Paul Chatterton and Robert Hollands (2003) describe as 'urban nightscapes' – districts full of activities centred around nocturnal leisure-based consumption and hedonism among young adults (i.e. clubs, pubs and bars). Many have attributed such developments to the changing character of young adulthood. Delayed marriage and child rearing, prolonged participation in higher education and increasing dependency upon parental accommodation have all led many young adult groups to have increased disposable incomes for drinking and clubbing. In addition, it is argued that these young adults have a desire for new experiences through experiments with new forms of identity in a carnivalesque atmosphere.

However, Chatterton and Hollands locate such developments firmly within a political economy perspective, noting the collusion between local governments, property developers and major corporations. Thus, major brewers and leisure-based corporations have used various branding strategies to entice cash-rich young people into 'cool' venues. As with many aspects of consumption in contemporary Western societies, what was once seen as 'alternative' and transgressive (e.g. self-organized parties and raves) has been incorporated into mainstream culture (see also Chapter 11 on 'gay spaces').

However, 'urban nightscapes' reflect a complex mixture of both deregulation and reregulation. For example, in the United Kingdom recent policies aimed at relaxing licensing laws and prohibitions on planning permissions for casinos have led to a 'moral panic'. Many have objected to the violence, petty crime and ill-health that are seen to be associated with excessive alcohol consumption (so-called 'binge drinking') in city centres. Although many lament the difficulty of instigating a European-style 'café culture' on the streets of Britain, the general trend in the United States, Australia and indeed Europe, is for increased surveillance, policing and control of urban nightscapes. It is also important to recall that many young people are excluded from expensive leisure spaces through poverty and unemployment. The redevelopment of 'urban nightscapes' has therefore sometimes led to the demise of older notions of public space, diversity and universal access (see also Box 5.4 on Barcelona and Box 11.3 on Dublin).

Key concepts associated with 'urban nightscapes' (see Glossary)

Commodification, externalities, liminal space, postindustrial cities, 'scanscape', surveillance.

Further reading

Chatterton, P. and Hollands, R. (2003) *Urban Nightscapes: Youth cultures, pleasure spaces and power* Routledge, London

Roberts (2006) From 'creative city' to 'no-go areas': the expansion of the night-time economy in British towns and cities, *Cities* **23**, 331–3

Skelton, T. and Valentine, G. (eds) (1998) *Cool Places: Geographies of youth cultures* Routledge, London

Talbot, D. (2007) *Regulating the Night: Race, culture and exclusion in the making of the night-time economy* Ashgate, Oxford

Links with other chapters

Chapter 5: Box 5.5 The growth of culturally driven urban regeneration

Chapter 7: Box 7.1 The growth of Bohemian enclaves

TRESPASSERS
WILL BE EATEN

The consequences of social polarization: defensive measures within gated communities. Photo Credit: Geoffrey DeVerteuil.

violence at the hands of men whom they know; hence they are much more at risk in their own homes or in semi-private places than in public spaces. However, this does not mean that women's fear of strangers in public spaces is 'irrational'. As Pain (1997) notes, women are flooded with media reporting of violent sexual crime, which tends to exaggerate the risks of certain types of behaviour while ignoring others. And, of course, fear is of major concern even if it is exaggerated. Valentine (1992) argues that women's fear of violent crime is linked to the social construction of space within a patriarchal society. 'Traditional' ideologies about the role of women place them in the home while the public sphere is dominated by men. Crime or the fear of crime may be seen as yet another way in which a particular section of society is able to dominate space (as outlined in Chapter 3).

10.2 Cognition and perception

Cognition and perception are associated with images, inner representations, mental maps and schemata that are the result of processes in which personal experiences and values are used to filter the barrage of environmental stimuli to which the brain is subjected, allowing the mind to work with a partial, simplified (and often distorted) version of reality. The same environmental stimuli may evoke different responses from different individuals, with each person effectively living in his or her 'own world'. Nevertheless, it is logical to assume that certain aspects of imagery will be held in common over quite large groups of people because of similarities in their socialization, past experience and present urban environment.

What are these images like? What urban geographies exist within the minds of urbanites, and how do they relate to the objective world? It is possible to give only tentative answers to these questions. It is clear, though, that people do not have a single image or **mental map** that can be consulted or recalled at will. Rather, we appear to possess a series of latent images that are unconsciously operationalized in response to specific behavioural tasks. In this context, a useful distinction can be made between:

- the *designative* aspects of people's imagery that relate to the mental or cognitive organization of space necessary to their orientation within the urban environment; and
- the *appraisive* aspects of imagery that reflect people's feelings about the environment and which are related to decision making within the urban environment.

Designative aspects of urban imagery

The seminal work in this field was Kevin Lynch's book *The Image of the City*, published in 1960 and based on the results of lengthy interviews with (very) small samples of middle- and upper-class residents in three cities: Boston, Jersey City and Los Angeles (Lynch, 1960, 1984). In the course of these interviews, respondents were asked to describe the city, to indicate the location of features that were important to them and to make outline sketches, the intention being to gently tease out a mental map from the subject's consciousness. From an examination of the resultant data, Lynch found that people apparently structure their mental image of the city in terms of five different kinds of elements: *paths* (e.g. streets, transit lines, canals), *edges* (e.g. lakeshores, walls, steep embankments, cliffs) *districts* (e.g. named neighbourhoods or shopping districts), *nodes* (e.g. plazas, squares, busy intersections) and *landmarks* (e.g. prominent buildings, signs, monuments). As Lynch pointed out, none of these elements exists in isolation in people's minds. Districts are structured with nodes, defined by edges, penetrated by paths and sprinkled with landmarks. Elements thus overlap and pierce one another, and some may be psychologically more dominant than others.

Lynch also found that the residents of a given city tend to structure their mental map of the city with the same elements as one another, and he produced ingenious maps with which to demonstrate the collective image of Boston (Figure 10.5), using symbols of different boldness to indicate the proportion of respondents who had mentioned each element. Another important finding was that, whereas the collective image of Boston was structured by a fairly dense combination of elements, those of Los Angeles and Jersey City were much less complex. Lynch suggested that this reflected a difference in the *legibility* or imageability of the cities resulting from differences in the 'form qualities' of the built environment. These, he argued, include the clarity and simplicity of visible form, the continuity and 'rhythm' of edges and surfaces, the dominance (whether in terms of size, intensity or interest) of one morphological unit over others, and the presence or absence of directional differentiation in terms of asymmetries, gradients and radial features.

Although Lynch's work has been criticized for its intuitive approach to the identification of image elements, and the validity of attempting to aggregate the imagery of people with quite different backgrounds and experience has been questioned, these techniques have found wide application. One consistent finding derives from the differences that exist between the social classes in their images of the city. Basically, middle-class residents tend to hold a more comprehensive image than lower-class residents, covering a much wider territory and including a larger number and greater variety of elements. This is certainly true for Los Angeles, where ethnicity is closely associated with socio-economic status. The high-status, white residents of Westwood (a 'foothills' neighbourhood situated between Beverly Hills and Santa Monica) have a well-formed, detailed and generalized image of the entire Los Angeles Basin (Figure 10.6a), whereas the middle-class residents of Northridge (a suburb in the San Fernando Valley) have a less comprehensive image that is oriented away from the city proper (Figure 10.6b). At the other end of the socio-economic ladder, residents of the black ghetto neighbourhood of Avalon, near Watts, have a vaguer image of the city which, in contrast to the white images that are structured around the major east–west boulevards and freeways, is dominated

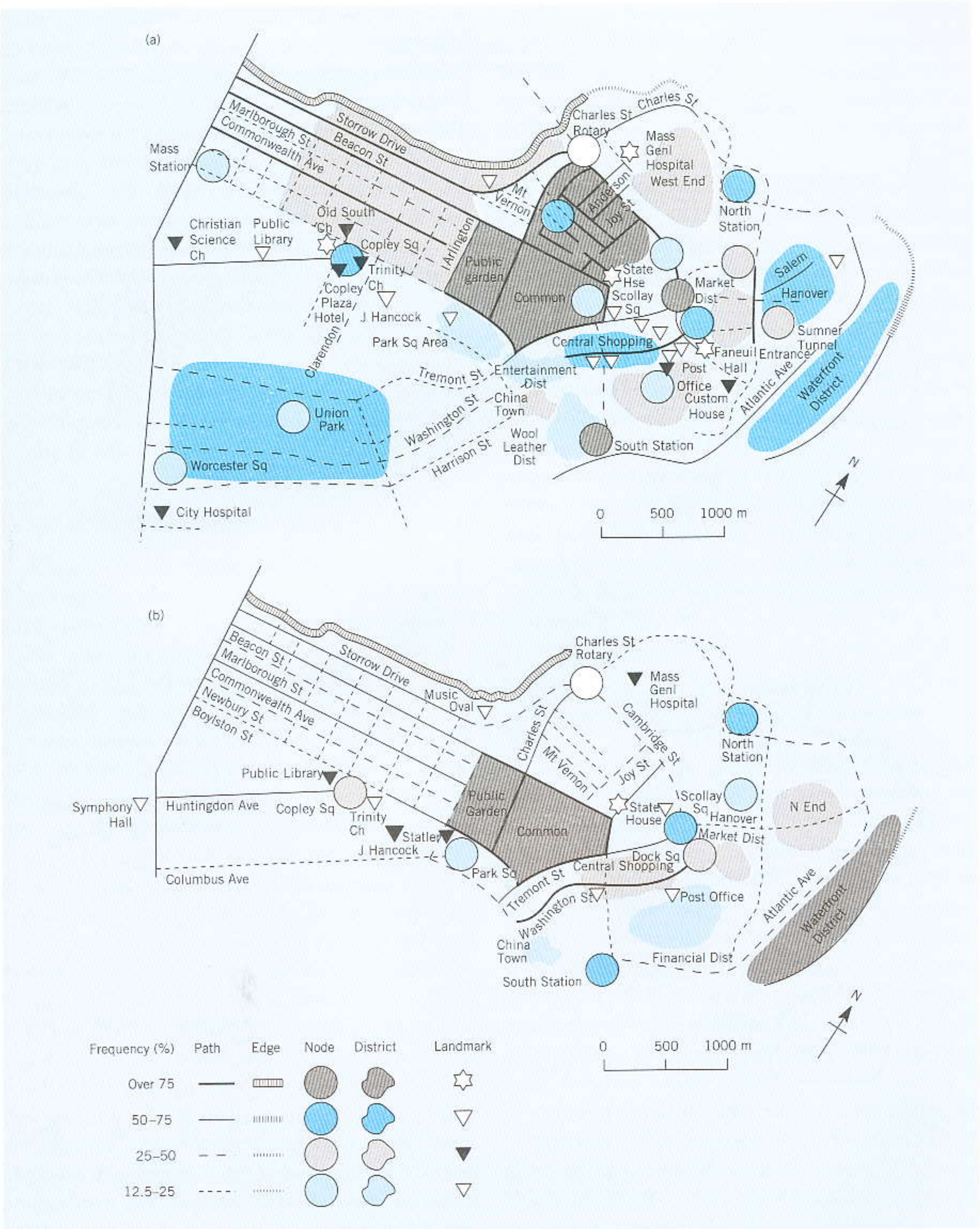
(a)
Mass Station
Christian Science Ch
Public Library
Marlborough St
Commonwealth Ave
Storrow Drive
Beacon St
Old South Ch
Copley Sq
Trinity Ch
Copley Plaza Hotel
J Hancock
Clarendon
Arlington
Public garden
Common
Mt Vernon
Anderson
Joy St
Charles St Rotary
Charles St
Mass Genl Hospital
West End
North Station
State Hse
Scollay Sq
Market Dist
Salem
Hanover
Sumner Tunnel Entrance
Central Shopping
Faneuil Hall
Post Office
Custom House
Atlantic Ave
Waterfront District
Park Sq Area
Tremont St
Entertainment Dist
China Town
Washington St
Harrison St
Wool Leather Dist
South Station
Union Park
Worcester Sq
City Hospital
0 500 1000 m
N
(b)
Beacon St
Marlborough St
Commonwealth Ave
Newbury St
Boylston St
Storrow Drive
Music Oval
Charles St Rotary
Mass Genl Hospital
Charles St
Mt Vernon
Cambridge St
Joy St
North Station
Public Library
Symphony Hall
Huntingdon Ave
Copley Sq
Trinity Ch
Statler
J Hancock
Public Garden
Common
State House
Scollay Sq
Hanover
Market Dist
N End
Dock Sq
Central Shopping
Park Sq
Tremont St
Washington St
Post Office
Atlantic Ave
Waterfront District
China Town
South Station
Financial Dist
Columbus Ave
0 500 1000 m
N
Frequency (%)
Path
Edge
Node
District
Landmark
Over 75
50–75
25–50
12.5–25

Figure 10.5 Designative images of Boston as derived from: (a) verbal interviewing; (b) sketch maps.

Source: After Lynch, Kevin., *The Image of the City*, drawing from p. 146. © 1960 Massachusetts Institute of Technology, by permission of the MIT Press.

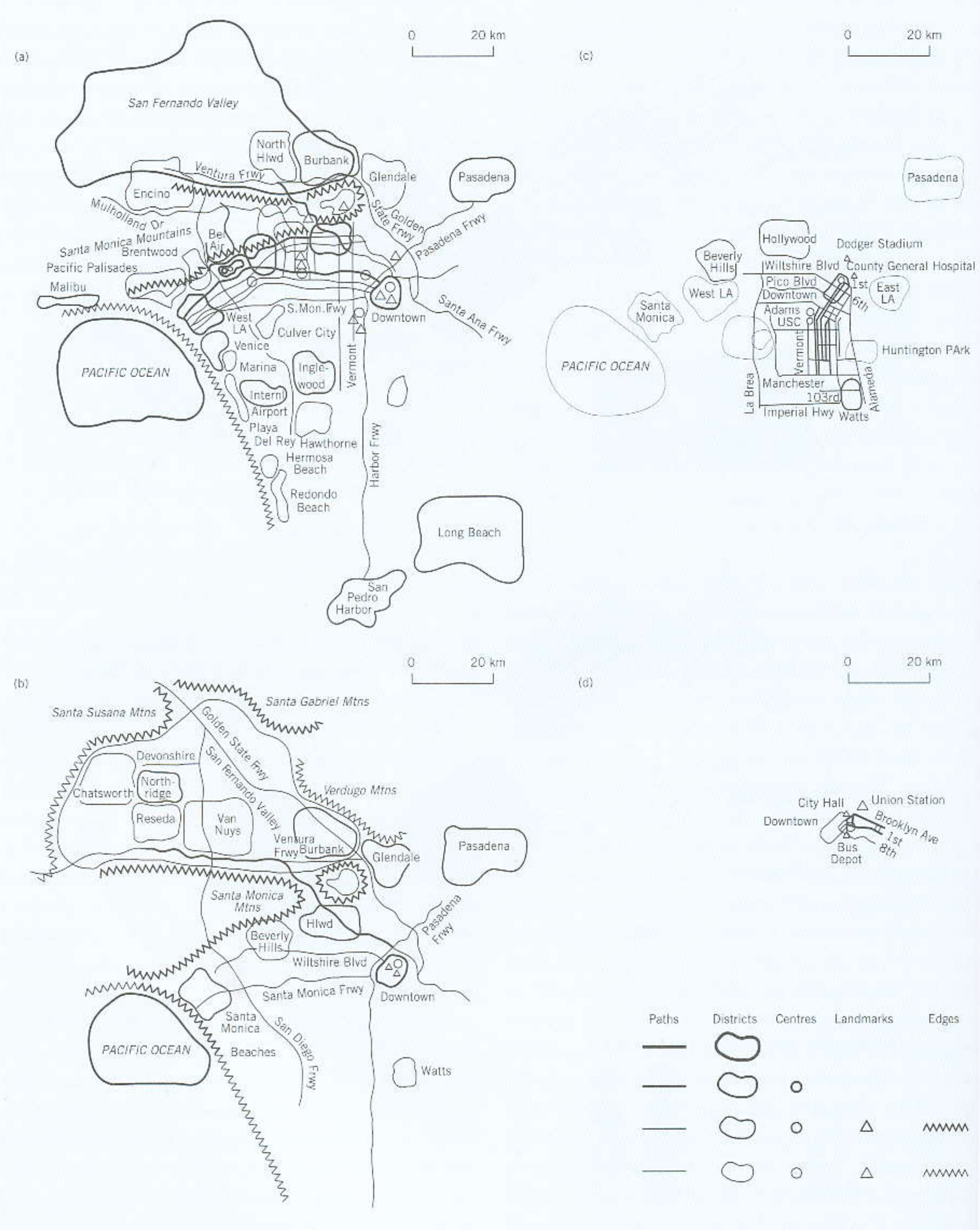
(a)
0
20 km
San Fernando Valley
North Hlwd
Burbank
Ventura Frwy
Encino
Glendale
Pasadena
Mulholland Dr
Santa Monica Mountains
Brentwood
Bel Air
Golden State Frwy
Pasadena Frwy
Pacific Palisades
Malibu
S.Mon.Frwy
West LA
Culver City
Downtown
Santa Ana Frwy
Venice
PACIFIC OCEAN
Marina
Inglewood
Vermont
Internl Airport
Playa Del Rey
Hawthorne
Hermosa Beach
Harbor Frwy
Redondo Beach
Long Beach
San Pedro Harbor
(b)
0
20 km
Santa Gabriel Mtns
Santa Susana Mtns
Golden State Frwy
Devonshire
San Fernando Valley
Chatsworth
Northridge
Verdugo Mtns
Reseda
Van Nuys
Ventura Frwy
Burbank
Glendale
Pasadena
Santa Monica Mtns
Hlwd
Pasadena Frwy
Beverly Hills
Wiltshire Blvd
Santa Monica Frwy
Downtown
Santa Monica
San Diego Frwy
PACIFIC OCEAN
Beaches
Watts
(c)
0
20 km
Pasadena
Hollywood
Dodger Stadium
Beverly Hills
Wiltshire Blvd
County General Hospital
Pico Blvd
1st
East LA
West LA
Downtown
6th
Santa Monica
Adams
USC
Huntington PArk
PACIFIC OCEAN
Vermont
La Brea
Manchester
Alameda
103rd
Imperial Hwy
Watts
(d)
0
20 km
City Hall
Union Station
Downtown
Brooklyn Ave
1st
8th
Bus Depot
Paths
Districts
Centres
Landmarks
Edges

Figure 10.6 Designative images of Los Angeles as seen by residents of: (a) Westwood; (b) Northridge; (c) Avalon; (d) Boyle Heights.

Source: Orleans (1973), pp. 120–123.

by the grid-iron layout of streets between Watts and the city centre (Figure 10.6c). Reasons for these differences are not hard to find. The greater wealth and extended education of higher-status whites confers a greater mobility, a greater propensity to visit other parts of the city, and a tendency to utilize a wider range of information sources. In contrast, the less mobile poor, with a shorter journey to work, and with less exposure to other sources of environmental information, will naturally tend to have a local rather than a metropolitan orientation: something that will be buttressed by racial or ethnic segregation. Where language barriers further reinforce this introversion, the likely outcome is an extremely restricted image of the city, as in the Spanish-speaking neighbourhood of Boyle Heights (Figure 10.6d).

Cognitive distance

Underlying the organization of people's mental maps is the **cognitive distance** between image elements, and this is another aspect of imagery that has been shown to exhibit interesting and important regularities. Cognitive distance is the basis for the spatial information stored in cognitive representations of the environment. It is generated from a variety of mechanisms that include the brain's perception of the distance between visible objects, the use patterns and structure of the visible environment, and the impact of symbolic representations of the environment such as maps and road signs. For the majority of people, intra-urban cognitive distance is generally greater than objective distance, regardless of city size and their usual means of transport, although there is evidence to suggest that this overestimation declines with increasing physical distance.

It has been suggested that people's images and cognitive distance estimates are a function of the number and type of environmental stimuli, or *cues*, they encounter along the paths, or *supports*, that they normally use, and that the actual form of the city is of greater importance in determining the cue selection process than any personal characteristics, including length of residence. It is also suggested that different types of urban structure will result in the selection of different cues, thus generating a different metric of cognitive distance and producing different kinds of mental maps. Residents of concentrically zoned cities might be expected to respond more to changes in land use, for example, than residents of sectorally structured cities, who might be expected to respond more to traffic-related cues along the typical path from suburb to city centre and back.

Given the distorting effect of the values attached to different 'origins' and 'destinations', it seems likely that people possess a basic image of the city consisting of the branching network of their 'action space' that undergoes topological deformation, perhaps hourly, as they move about the city from one major node – home, workplace, city centre – to another. Who, for instance, has not experienced a homeward trip to be shorter than the identical outward journey? The relationship of such a cognitive structure to the more general Lynch-type image of the city has not yet been properly explored, but it seems logical to expect that most people will possess an interlocking hierarchy of images that relates directly to the different geographical scales at which they act out different aspects of their lives.

Appraisive aspects of urban imagery

In many circumstances it is not so much the structural aspects of people's imagery that are important as the meaning attached to, or evoked by, the different components of the urban environment in their mental map. Behaviour of all kinds obviously depends not only on *what* people perceive as being *where*, but also on how they *feel* about these different elements. A specific node or district, for example, may be regarded as attractive or repellent, exciting or relaxing, fearsome or reassuring or, more likely, it may evoke a combination of such feelings. These reactions reflect the *appraisive* aspects of urban imagery.

In overall terms, the appraisive imagery of the city is reflected by the desirability or attractiveness of different neighbourhoods as residential locations. This is something that can be measured and aggregated to produce a map of the collective image of the city that can be regarded as a synthesis of all the feelings, positive and negative, that people have about different neighbourhoods.

The cognitive dimensions of the urban environment

Given that people are able to make these overall evaluations of residential desirability, the question arises as to their derivation. In other words, what are the components of people's overall evaluation of a given place or neighbourhood, and how do they feel about these particular aspects of the environment?

There remains a good deal of investigation to be undertaken before the composition of appraisive imagery in cities can be fully understood. There are many facets to the dialectic between places and people's perceptions of them. In addition to this layering of imagery, we must recognize that both people and neighbourhoods are continually changing.

One attempt to come to grips with residents' perceptual responses to change found that *neighbourhood stability* was the dominant cognitive concern (Aitken, 1990) – other, more specific aspects of appraisive imagery have been elicited by researchers pursuing particular themes. David Ley (1974), for instance, illustrated the local geography of perceived danger in an inner-city neighbourhood in Philadelphia, showing how most people recognized – and avoided – the danger points near gang hang-outs, abandoned buildings and places where drugs were peddled. The imagery of fear is often time dependent: public parks, for example, may be felt to be tranquil and safe places by day but might induce quite different feelings at night. It is also gender dependent, women being subject to fear of crime and harassment in a much greater range of settings and to a much greater degree than men. This is an important (but underresearched) topic, since the spatial patterns of women's perceptions of risks, of the actual risks they are exposed to and of their behavioural responses have implications for their equal participation in society (Smith, 1989a; Pain, 1991).

Another important aspect of appraisive imagery is the way in which some areas of larger cities become *stigmatized*, their inhabitants being labelled as 'work shy', 'unreliable' or 'troublesome', thus making it difficult for them to compete in local housing and job markets. Another concerns the role of clothes and personal objects (rather than buildings and social characteristics) in contributing towards our feelings about different parts of the city. Many of our material objects are used, consciously or not, to communicate what we like or believe in: the pair of shoes, the book, the wall poster and the cut of a pair of jeans become briefly exhibited signs and badges that not only help their owners to say something about themselves but also help others to attach meaning and significance to their owners and to *their owners' environment.*

Images of the home area

Just as individual personality is reflected in home and possessions, so collective personality and values are translated into the wider environment of cultural landscapes. The existence of such relationships between places and people leads to the idea of a 'sense of place', which incorporates aspects of imageability, the symbolic meaning of places and 'topophilia' – the affective bond between people and place (Tuan, 1974).

In the specific context of urban social geography, the most important aspect of this sense of place is probably the attachment people feel to their *home area.* There is no doubt that the immediate physical and social environment is crucially important in the early psychological and social development of the individual, and it seems that this generates a strong bond – often amounting almost to reverence – for the territorial homeland: a phenomenon that Yi-Fu Tuan (1976) called 'geopiety'. Such feelings are clearly related to the idea of territoriality, and there is plenty of evidence to suggest that they exist as a kind of latent 'neighbourhood attachment' in most people who have lived in a particular area for any length of time. The most striking evidence of such feelings emerges after people have been forced to leave their home neighbourhood in the cause of redevelopment or renewal schemes, when many report feelings of grief at the loss of their old neighbourhood. People's home area seems to be closely related to their 'activity space' around the home. Here is one person's description of his own 'home area':

> The Greater London Council [was] responsible for a sprawl shaped like a rugby ball about twenty-five miles long and twenty miles wide [40 32 km]; my city is a concise kidney-shaped patch within that space, in which no point is more than about seven miles from any other. On the south, it is bounded

> by the river, on the north by the fat tongue of Hampstead Heath and Highgate Village, on the west by Brompton cemetery and on the east by Liverpool Street station. I hardly ever trespass beyond those limits and when I do I feel I'm in foreign territory, a landscape of hazard and rumour. Kilburn, on the far side of my northern and western boundaries, I imagine to be inhabited by vicious drunken Irishmen; Hackney and Dalston by crooked car dealers with pencil moustaches and goldfilled teeth; London south of the Thames still seems impossibly illogical and contingent, a territory of meaningless circles, incomprehensible one-way systems, warehouses and cage-bird shops. Like any tribesman hedging himself in a stockade of taboos, I mark my boundaries with graveyards, terminal transportation points and wildernesses. Beyond them, nothing is to be trusted and anything might happen.
>
> The constrictedness of this private city-within-a-city has the character of a self-fulfilling prophecy. Its boundaries, originally arrived at by chance and usage, grow more not less real the longer I live in London. I have friends who live in Clapham, only three miles away, but to visit them is a definite journey, for it involves crossing the river. I can, though, drop in on friends in Islington, twice as far away as Clapham, since it is within what I feel to be my own territory.
>
> (Raban, 1975, pp. 166–7)

Box 10.5

Key debates in urban social geography – The first and second nature of cities

This book is primarily concerned with the internal structure of cities, what the eminent political geographer Peter Taylor (2004) has called their 'first nature'. However, as Taylor goes on to point out, cities also have a 'second nature': the interconnections between them. In the past 50 years geographers have somewhat neglected this second aspect. One of the likely reasons for this neglect is the fact that this second nature is rather complex and difficult to analyse, consisting of intricate exchanges of trade, money, people and ideas. Another probable reason is that our thinking about society is heavily influenced by notions of the nation state. This has led to a focus upon connections between a supposed national hierarchy of urban centres to the neglect of connections between cities in different states throughout the globe.

Taylor points out that for many centuries, before nation states became such dominant entities, there were extensive links between cities around the world. Most notably from the twelfth century onwards, Venice was linked via complex trade routes with Constantinople, Samarkand and on to Beijing and other Asian centres. Another important example is the extensive trade linkages between the scores of cities in northern Europe that flourished from the twelfth to the seventeenth centuries in what became known as the 'Hanseatic League'.

According to Taylor, one consequence of this neglect of city interconnections is a serious question mark over the 'world city' hypothesis (see also Short *et al.*, 1996). Thus, Sassen's (2001) highly influential ideas concerning the strategic role of what she calls 'global cities' as strategic command centres for business and financial services, though intuitively plausible, are not substantiated by a great deal of hard evidence. Taylor's own quantitative analysis of linkages between business services in many cities reveals complex networks that form what he calls a 'hinterworld'.

Key concepts related to the first and second nature of cities (see Glossary)

Global cities, spaces of flows, world cities.

Further reading

Sassen, S. (2001) *The Global City* (2nd edn) Princeton University Press, Princeton, NJ

Short, J.R., Kim, Y., Kuss, M. and Wells, H. (1996) The dirty little secret of world city research, *International Journal of Urban and Regional Research* **20**, 697–717

Taylor, P. (2004) *World City Network; A global urban analysis* Routledge, London

Links with other chapters

Chapter 1: Box 1.3 Growing cosmopolitanism in Western cities: the example of London

Chapter 2: Globalization; knowledge economies and the informational city; Box 2.4 Manuel Castells

Chapter 12: Box 12.4 The rise of transnational urbanism

Box 10.6

Key films related to urban social geography – Chapter 10

City of God (2002) A gripping film about the violence surrounding gang wars in the slums of Rio de Janeiro. Not for the faint hearted though.

Rebel Without A Cause (1955) One of the first films to deal with teenage rebellion. Full of expressionist influences that were prevalent in the 1950s (see also the section on *film noir* in Chapter 14).

Slacker (1991) An amusing look at 24 hours in the life of young drop-outs in Austin, Texas.

Twin Town (1997) Like *Trainspotting*, this film deals with 'amoral' youth culture. Although it is far inferior to the Scottish-based film, nevertheless it is something of a curiosity for the unusual setting (the Welsh industrial town of Port Talbot next door to Swansea). It also stars Rhys Ifans (who plays Spike in *Notting Hill*) together with his real-life twin brother Llyr.

Chapter summary

10.1 The geographical distribution of the sites of reported crime and the location of apprehended offenders display distinct patterns in cities. Many theories have been suggested to explain these patterns but the need for a multifactor explanation is paramount.

10.2 People form mental images or representations of cities based upon key legible features such as key landmarks and transport networks. These images influence the people's views about the desirability of different areas within cities.

Key concepts and terms

alienation
behaviouralism
behaviourism
compositional theory
cultural transmission
defensible space
determinist theory
deviant subgroup
ecological fallacy
environmental conditioning
mental map
neighbourhood effect
'psychological overload'
reserve army
subcultural theory
superstructure
territoriality

Suggested reading

Behavioural geography

Gold, J. (1980) *An Introduction to Behavioural Geography* Oxford University Press, Oxford

Walmsley, D.J. (1988) *Urban Living: The individual in the city* Longman, Harlow

Golledge, R. and Stimson, R. (1987) *Analytical Behavioural Geography* Croom Helm, London

Deviance, criminality and urban settings

Atkinson, R. and Blandy, S. (2006) *Gated Communities* Routledge, London

Bottoms, A. and Wiles, P. (1992) Explanations of crime and place, in D. Evans, N. Fyfe and D. Herbert (eds) *Crime, Policing and Place* Routledge, London, pp. 11–35

Cahill, M.E. and Mulligan, G.F. (2003) The determinants of crime in Tucson, Arizona, *Urban Geography* 24, 582–610

Evans, D. and Herbert, D. (eds) (1989) *The Geography of Crime* Routledge, London

Helms, G. (2008) *Towards Safer City Centres: Remaking the spaces of an old-industrial city* Ashgate, Oxford

Jones, H. (ed.) (1993) *Crime and the Urban Environment* Avebury, Aldershot

Pain, R. and Smith, S. (2008) *Fear: Critical geographies and everyday life* Ashgate, Oxford

Sanders, B. (2005) *Youth Crime and Youth Culture in the Inner City* Routledge, London

Smith, S. (1986) *Crime, Space, and Society* Cambridge University Press, Cambridge

Taylor, R. (1999) Urban communities and crime, in M. Gottdiener and C. Pickvance (eds) *Urban Life in Transition* Sage, Newbury Park

Mental maps, perception and the cognitive dimensions of urban settings

Pocock, D. and Hudson, R. (1978) *Images of the Urban Environment* Macmillan, London