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SOCIAL HOUSING IN WATERFRONT REGENERATION:

A CRITICAL EVALUATION

by

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ABSTRACT

SOCIAL HOUSING IN WATERFRONT REGENERATION:
A CRITICAL EVALUATION

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This thesis provides a critical analysis of the suitability of mixed-use waterfront revitalisation as a setting for social housing schemes. Although the latter have become increasingly common on British waterfronts in recent years, it can be argued that for a variety of reasons the waterfront may be an inappropriate location in which to create new, and possibly vulnerable, social housing communities. This proposition is tested through three empirical investigations. Each of these assesses resident satisfaction with respect to the housing itself, the immediate revitalised environment and the regenerated waterfront's degree of integration with the city and its services. A variety of research methods was employed, including desk-top studies involving literature searches, qualitative investigations to assist questionnaire design, the use of self-administered questionnaires by sample populations, postal proformas and postal and telephone correspondence. The empirical results are presented and discussed against the background of introductory chapters reviewing processes of waterfront decline and revitalisation, the evolution of UK social housing policy and approaches to the analysis of waterfront regeneration. The concluding chapter reviews results, proposes a conceptual model for the analysis of today's regenerated waterfronts and outlines a research agenda.

The main findings were that anticipated problems were greatly over-estimated by the hypotheses adopted, and that mixed-use waterfronts have substantial appeal for the large majority of social housing tenants. This reflects a complex range influences. Despite high satisfaction levels, however, the work also demonstrated that potential problems should not be ignored. To a great extent their avoidance depends on successful design at the micro-scale, but the overall morphology of the waterfront may also be important in terms of its ability to isolate communities from inner-urban problems.
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Signed:

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"And you really live by the river? What a jolly life!' ....'But isn't it a bit dull at times?' the mole ventured to ask. 'Just you and the river, and no one else to pass a word with?' 'No one else to - well, I mustn't be hard on you', said the rat with forbearance. 'You're new to it, and of course you don't know. The bank is so crowded nowadays that many people are moving away altogether. Oh no, it isn't what it used to be, at all'."

Keneth Grahame *The Wind In The Willows*
CHAPTER 1

WATERFRONT REVITALISATION IN THE POSTWAR ERA:
TOWARDS RESEARCH OPPORTUNITIES AND A SOCIAL HOUSING FOCUS

INTRODUCTION

Over the last two decades waterfront regeneration has become more and more important. Not only have the waterfronts of many cities around the world been regenerated, but the very fabric of many of the United Kingdom's cities has been radically altered by this process. Yet although many millions of pounds, thousands of people, and large amounts of effort have helped to implement a new role for the world's waterfronts, it is striking that little research has been undertaken to assess the success of such schemes. It is with this in mind that academics have recently began to call for detailed work to be undertaken to evaluate the outcomes of revitalisation. This thesis can be regarded as a response to these calls, as later sections of this chapter will make clear. In making this response the focus chosen for the research is social housing on the waterfront and, in particular, the issue of whether mixed-use waterfronts are appropriate locations for social housing developments. The rationale for selecting this focus will also be set out later, but at this point it is important to emphasis that the work is set firmly in the context of waterfront regeneration. Consequently, before considering the research theme itself it is appropriate to explore through a cross-section of the literature the concept of the waterfront and forces that have driven its evolution in recent decades.

PORTS, HARBOURS AND WATERFRONTS

In trying to understand the waterfront it is important to become acquainted with its reality as a complex organism or construct. This does not simply mean considering what is occurring and has occurred in ports; it is also necessary to define what a port is, in general and specific terms. Many previous studies have failed to do this, but it is
difficult to assess waterfronts without at least a basic knowledge of definitions, morphological types and physical characteristics relating to ports and harbours within which waterfronts are set. This section examines these subjects as a first step towards the development of a more critical approach to waterfront evaluation.

A port is, of course, a physical construct that is usually located in a town or city and exists to enable ships to take on or discharge cargo. In addition, it may also provide shelter. But, as Schenker and Brockel (1974) have emphasised, a particular port may have a great many functions, some of which might be unique and therefore not covered by general definitions. This diversity is alluded to by Mayer (1988, 78) in his approach to the problem of definition. He argues, firstly, that harbours can be distinguished from ports in that they are 'places that provide protection against winds, waves and currents'. In performing this function, they may be natural or artificial, 'although the configuration of most harbours includes elements of both'.

Secondly, ports are seen by Mayer (1988, 78) as 'places where there is interchange of cargo and passenger traffic among vessels, and between vessels and overland carriers or sites along the shore'. In terms of operations, a port may be a specialised unit of organisation (for example, for handling ferry, cruise ship or other traffic). But it may also have extremely varied activity through the

'operation of a set of facilities associated with the transfer or interchange of waterborne commerce, or of other maritime activities such as naval installations, or the servicing of fishing fleets or pleasure craft' (Mayer, 1988, 78).
Bringing together the concepts of 'port' and 'harbour', Mayer also emphasises that large ports may extend to cover more than one harbour, as at Piraeus, and that some large harbours may have within them more than one port. San Francisco Bay, for example, includes the ports of San Francisco itself, Oakland, Richmond and several other smaller developments. Nearer to home, Plymouth similarly has the commercial ports of the Cattewater and Millbay, as well as the city's major naval installations. Whatever the precise configuration, however, from the perspective of this thesis the significant point is that harbours and ports are normally geographically integrated with the city, with the urban-port waterfront occurring in the zone of contact.

The waterfront itself, as Vallega (1993) has pointed out, has gained a wide range of meanings, and the term is applied in many contexts. There are, for example, numerous port-urban interfaces on lakes and rivers. However, the waterfront concept is most closely associated with maritime port cities (Hoyle, 1992) and it is with the maritime waterfront that this thesis will be chiefly concerned. On this waterfront is to be found the 'concentration and juxtaposition of urban and maritime influences' (Hoyle and Pinder, 1992, 11) which may be viewed in two quite different ways.

The first relates to the actual outcome of developments that have taken place, usually over many generations. On the seaward side, the historic character of an individual waterfront inevitably reflects the nature of past port development. Here we return to Mayer's (1988, 80) emphasis on diversity. Ports may be industrial, dominated by the transshipment and processing of bulk commodities such as coal, petroleum, grains and ores. Others are commercial, in the sense that they are primarily concerned with general cargo, which in developed countries today tends to be largely containerised. Some are highly specialised, being designed to focus, for example, on ferry services, cruising or
naval activity. But many are essentially diverse, and therefore bring to the waterfront an extremely broad range of influences from the maritime foreland. Meanwhile on the landward side is to be found what Hoyle and Hilling (1984) have termed city-port interdependence. This in turn reflects many influences, including the level and nature of port industrialisation, transport network development, trade patterns, policy preferences and decision-making at a variety of levels. In each instance these seaward and landward influences have combined to produce a waterfront that is unique.

While this is a relatively obvious interpretation, however, Vallega (1993) has argued that urban communities have subjective perceptions of the waterfront which research in this field should recognise. Moreover, the suggestion is that these perceptions are diverse, so that the waterfront will be a different mental construct for separate groups in society. Hilling (1988, 27) has underlined this effectively by citing the work of Daunton (1977). Writing about Cardiff's waterfront community in the late nineteenth century, but offering this community as a model of others around the world, Daunton argues that it was 'an alien enclave ... a mysterious world that was impenetrable to outsiders'. Clearly, these ideas suggest that waterfront studies should approach 'the waterfront' as something that can be seen as both a physical and a perceived entity. As later chapters will demonstrate, this observation has been highly influential in the current research. Chapter 3 examines the nature of typical waterfront revitalisation from both an objective and a perceptual standpoint, while Chapters 5, 6 and 7 all explore in depth residents' perceptions of revitalised dockland environments.
Figure 1.1  Derelict dockland on the Glasgow waterfront
CHANGE AND DECLINE ON THE PORT-RELATED WATERFRONT

In the second half of this century, many port-related waterfronts have undergone extensive change, in most instances leading to the abandonment and dereliction of relatively old port areas (Figure 1.1). This has generated large tracts of wasteland, which in some instances have been more extensive than the centres of the neighbouring port cities. The diverse forces causing these changes are summarised in Figure 1.2 and, as this section demonstrates, have been operating over a substantial period of time.

Hoyle and Pinder (1992, 14) as well as Hayuth and Hilling (1992, 41) have emphasised the importance that technological changes in shipping and cargo-handling methods have had in bringing about waterfront decline. In the case of shipping there has been an increasing emphasis on scale which, in many instances, has left older port basins unable to accommodate new types of vessel. This trend has been driven by economics which, as van den Bremen (1982) has demonstrated, meant that by the 1960s and 1970s significant operating economies could be obtained by using vessels of 100,000 dwt or more on long global routes. In this context the way was led by the development of crude oil supertankers. For example, by the mid-1970s even a modest tanker of 100,000 dwt operating over 10,000 km could reduce transport costs by a third compared with those for a 50,000 dwt vessel (van den Bremen, 1982, 67). Lessons learnt in oil tanker construction were quickly applied to other forms of marine transportation (Hilling, 1989). Dry bulk carriers, container ships, roll-on/roll-off vessels and, later, car transporters all gained valuable economies of scale by applying innovations which would enable many other cargoes to be carried in bulk (Figure 1.3). As this happened, the increasing size of the ships in question made them less and less suitable for use in the older port areas.
Figure 1.2  Factors influencing waterfront decline and regeneration

Source: Pinder, Hoyle and Husain (1988, 249)
In addition, many of the 'new' bulk cargoes, such as coal, ores and containerised general cargo, demanded greater and greater areas of quayside space which traditional port areas were unable to provide. Beyond this, however, the new generations of ships were designed so that much less labour-intensive handling methods could be employed to load and discharge their cargoes. In the past the use of highly labour-intensive methods had meant that ships might spend 50 to 80 per cent of their time in port. Now new handling technologies meant that vessels need allow only a matter hours for loading and discharging. As Hayuth and Hilling (1992, 46) state, previously 'an average productivity of 1.5-2.0 tonnes per worker per hour was commonplace. In contrast ... a thirteen man team recently completed 1,275 container moves in a period of 22.4 hours'. This, too, was a development which worked against older port areas and their communities (Figure 1.4). The need for hundreds of dockers could be reduced by the new equipment to demand for just a few dozen, and even these few jobs could not be based in traditional port areas because of the space requirements of the new transshipment methods.

In some instances these forces stimulated ports to develop extensive expansion schemes specifically designed to attract the new vessels and cargoes, as well as cargo-handling companies that would install the latest transshipment equipment. When this occurred these schemes were in many instances given government support and encouragement because it was believed that port development and industrialisation were of fundamental importance for national development (Pinder and Witherick, 1990). However, not all ports could afford large-scale expansion programmes, and some did not have appropriate space available. This led to a growing tendency for the more impressive new developments to concentrate in a smaller number of large ports (Gilb, 1992). Yet despite this distinction the outcome for the early waterfronts in most ports was the same. The forces described above pulled shipping and related transshipment away from the heart
of the cityport towards more spacious locations elsewhere in the vicinity or sometimes in an entirely different port (Pinder, Hoyle and Husain, 1988, 250).

Pinder and Hoyle (1992, 486) also suggest that, because 'future economic viability' was seen as all important, this process led port authorities to concentrate their attention on port areas that showed promise of survival or were still clearly economically healthy. Older port zones, in contrast, tended to be marginalised because they were regarded as exhausted assets from which the authorities could gain little. Through this perception a culture of abandonment grew up as port managements lost confidence and became increasingly inclined to shut down their traditional docklands.

In addition to these forces, several others have been significant. Some of these are highly localised. For example, Herschman (1988a, 18) has argued that in some instances port activity has been adversely affected by pressure from the neighbouring city. Thus successful business districts, residential demand and an emphasis on recreation and aesthetic uses may produce an un-welcoming environment for maritime activity. An example of this can be found in Swansea Maritime Village where there has been an overt move to remove traditional maritime uses from the waterfront. Industries which did not own their premises found that their rents were increased to encourage them to move, while incentives were also given for relocation (Swansea Housing Options Officer, 1994, pers.comm).

Most other influences, however, have been much more general. One, for example, is the changing pattern of overseas trade caused by the readjustment of international relationships. The effect of this has been to work against some ports and to benefit others. An example of this is provided by shifts in British overseas trade (Hilling, 1987).
Figure 1.3

Container handling at Thamesport, Isle of Grain

Source: Thamesport P.L.C.
Figure 1.4 Liverpool docks in their heyday
Source: Fijuder, D.
Historically Britain traded with colonial overseas trading partners in North America, Africa, Asia and Australia, stimulating London, Southampton and the west coast ports of Bristol, Liverpool and the Clyde. But today new European trading partners are much more important, and cargo has also started to go to large European ports (notably Rotterdam) before distribution to Britain. Given this reversal the traditional ports have declined, in contrast to the growth of the specialised ferry and container ports on the country's North Sea and Channel coasts.

Linked with this, it is important to recognise the influence that changing consumer demand has had on the types of cargo passing through ports and, therefore, on the waterfront (Jones and North, 1982). An excellent example of this is provided by the coal ports of South Wales. By the mid-nineteenth century Cardiff had developed as the world's largest energy port, chiefly supplying steam coal to overseas markets (Daunton, 1977; Hilling, 1988). By the end of the century this early focus had broadened, so that South Wales had the world's greatest concentration of energy export ports (Pinder and Edwards, forthcoming). But in the twentieth century the basis of this port system collapsed, partly because consumers around the world changed to competing sources of coal, but chiefly because coal's markets were lost to petroleum products and natural gas. Today, therefore, the South Wales coal ports make a major contribution to the UK's total stock of redundant waterfront land, even though revitalisation has begun in a number of them (Figure 1.5).

In addition, competing transport modes have contributed to waterfront decline. The clearest example is provided by the rise of international air travel, which has generated substantial redundant land in the world's major ports by eliminating global passenger steamship routes. And, while this decline has been partly offset by the rise of cruise
Figure 1.5  Now-redeveloped redundant coal handling facilities in Cardiff
traffic, the growing popularity of fly-cruising is accentuating the downward trend. Returning to the UK, the Channel Tunnel project has meant that ports will have to transform to survive (Riley and Shurmer-Smith, 1992). One major effect of this development will be to increase competition faced by ports on both sides of the English Channel, raising the prospect of waterfront decline in any port unable to compete.

Lastly, ideological changes have also had their effect, as two examples demonstrate. First, in 1956 political conflict over the Suez Canal led to war between Britain and Egypt, her ex-colony, causing the closure of the canal itself. Oil shipments from the Middle East to Europe were diverted around Africa, significantly extending the journey and therefore increasing the pressure to gain economies of scale by using supertankers (Odell, 1983, 122). Second, the strength of many of the port-migration forces outlined above was underpinned by a lack of emphasis on environmentalism. From the 1950s to the 1970s, port activity could migrate to new sites with little opposition, chiefly because the environmental consequences for the coastal zone were not recognised (Pinder and Witherick, 1990). Today this is no longer the case in most developed countries, largely as a result of much higher environmental awareness. But prior to this ideological revolution a lack of environmental concern undoubtedly assisted migration to new sites and the consequent abandonment of old port areas.

Although this analysis has concentrated on forces leading to the decline of port-based waterfronts, the negative effects have gone much wider. Run-down docklands have had knock-on effects on the areas that surround them, increasing urban management problems in many cities (Hoyle and Hilling, 1984). Districts close to such docklands have often been residentially linked or economically tied to them, and have therefore become depressed and have lost the original meaning of their existence (Figure 1.6).
Unemployment and other social problems have risen as a result, and often a 'crescent-shaped 'zone of discard' has emerged] around the periphery of the CBD where it touched the waterfront' Goodwin, 1988a, 291). This has increased the tendency for declining port areas and their neighbouring districts to become 'repulsive to investment capital' (Pinder and Hoyle, 1992, 486), resulting in a situation in which urgent remedial action has been needed at the heart of many cityports.

While it is important to recognise the reality and severity of this far-reaching process of decline, it is also necessary to examine the underlying structures that explain such change. In this context it is appropriate to note two alternative conceptual standpoints. Firstly the New Left argues that Marxism still has much to offer in the field of planning policy and theory (Rydin, 1993, 82). This point is also made by Harvey (1985) who argues that land-use is a product of class-struggle. According to this thesis, to meet the requirements of capital the bourgeoisie (the dominant class) commandeered the accessible heart of the city for its own production, dictating that the waterfront should create capital through old style port industries. Workers were exploited to this end, and excess profit from their work was absorbed by the bourgeoisie. However, as it became increasingly necessary to appease the labour force in order to guarantee their continuing compliance (Castells, 1977), technological change was applied to the waterfront in order to lessen the workforce required. This limited the extent to which proletariat disquiet could affect port industry, and also drastically reduced the diversion of profits to the workers. Beyond this, however, technological change spurred on by the needs of capital eventually led to the redundancy of port land, which was no longer needed for production. Thus social stresses caused by the substitution of capital for labour were augmented by advancing dereliction in the physical environment. As a whole, the process is an example of capital surging 'in and out of the built environment, creating
periods of development activity followed by slumps' (Rydin, 1993, 273). Through the withdrawal of capital, 'industrial and commercial premises are vacated and, without an alternative use by a capitalist, become derelict and devalued' (Rydin, 1993, 273).

While this is one interpretation of the emergence of vast tracts of dereliction during the latter part of this century at the heart of many of our port cities, a second is provided by the liberal political economy perspective. This has much to offer, especially in terms of the concept of market failure. This occurs 'when market processes do not result in an effective equilibrium' (Rydin, 1993, 265) and in the case of the waterfront it could be argued that decline can be linked to two versions of the process. One stems from the idea that the future holds risks for all markets, which therefore require planning to identify strategies which will ensure success in later time frames (Rydin, 1993, 268). This planning, however, may be imperfect, so that, in the case of the waterfront, planning systems do not foresee sufficiently early the decline of traditional port industries. As a result, it becomes impossible to avert the redundancy of many waterfronts, leaving the centres of many cities abandoned. Secondly it can be argued that market failure - at least in Britain - reflects distortions caused by monopolistic ownership and management. Imperfect competition bolstered many ports which, if normal competition had occurred, would have closed. Then, when the 'stress' of technological change in shipping became too much, the forces of normal competition took over on the waterfront. This in turn devastated many ports, and especially those that could not compete in the new world of advanced technologies such as containerisation.
Figure 1.6  Industrial dereliction on the Liverpool waterfront

Source: Pinder, D
TOWARDS REGENERATION

Whatever the conceptual standpoint adopted, the major areas of port-related land needing redevelopment accumulated rapidly in both North America and Europe. Unsurprisingly, as the resulting image problems of cityports grew, high levels of concern emerged among city authorities, urban planners, port administrations and city populations. New directions were demanded for the waterfront, eventually leading, as this section will show, to dramatic change. Often this change is simply attributed to factors such as the emergence of public-private partnerships and the activities of developers who came to specialise in this field. But, as Hall (1993) has emphasised, any explanation must also take into account the growing wealth of western urban societies, increases in leisure time and a rising interest in maritime living (Figure 1.2). This last point, it can be argued, was related to the emergence of a new romantic attitude to the waterfront. Water and the land-water interface came to be seen as highly desirable environments, not least because of new awareness brought about by the environmental movement. Demand for the waterfront was revolutionised at least partly as a result of this changed attitude, in a similar way to that in which Civil war ruins - once hidden from view because of the memories they evoked - became romantic icons of the past in the eighteenth and nineteenth centuries.

Hall (1993) argues that the revitalisation story began in North America at the end of the 1950s, in Baltimore and at Boston's Union Wharf. Initially waterfront revival was often based on opening up the waterfront physically by creating public parks, such as in New Orleans, Boston and Toronto. This was the era in which Goodwin (1988a, 292) argues that Ladybird Johnson (the incumbent President's wife) and Federal generosity caused trees to be planted, side-walks to be widened, new mass transit schemes to be funded and grants for historic preservation to be given (Figure 1.7). By its nature, this
movement began to focus attention on the waterfront, and transformation began through
dynamic city programmes. A new appreciation of the waterfront appeared, its depressed
land values began to rise and as a result investment started to return.

The passage of the USA's Coastal Zone Management Act in 1972 reinforced interest in
the waterfront, while the onset of world recession in the mid-1970s intensified the
problem of port discard and highlighted the urgent need for new urban activities
(Goodwin, 1988a, 292). To foster these, waterfront schemes became 'progressively
integrated into multi-functional projects, as in Boston and Baltimore; these projects were
widely reported and much visited, and so became models for similar development almost
everywhere' (Hall, 1993).

An example of this emulation was in Britain, where initial action to rekindle demand
on the waterfront often took the form of public investment to clear redundant land.
Local authorities, sometimes backed by government grants, set out to make unproductive
and unattractive land ready for productive use. This, in turn, was expected to increase
confidence among private investors because clearance programmes raised potential land
values and reduced investment costs. In addition, local authorities often invested directly
in early waterfront regeneration programmes in order to raise confidence further. This
investment was usually made in activities which would attract the public (such as
museums) but would not normally be provided by private investment. Added to this, the
well-publicised progress of regeneration in the USA raised confidence by encouraging
investors to perceive the waterfront differently and be prepared to invest in it (Goodwin,
1988a).
Figure 1.7 Waterfront mass transit scheme, the Skytrain, Sydney
Source: Hoyle, B
In the 1980s revitalisation continued across the globe and, as many papers in Bruttomesso (1993) demonstrate, was refined and modified to fit the needs of the decade and the countries in which revitalisation was taking place. Sometimes this process of evolution took the form of increased government support provided through the involvement of new institutional actors. In the USA, for example, the Department of Housing and Urban Development (HUD) increasingly supported public housing; and in Britain many Urban Development Corporations - such as those for the London Docklands, Liverpool, Glasgow and Newcastle - became responsible for the regeneration of extensive port areas.

Very often, however, another significant trend was for the revitalisation process to move down the port hierarchy to medium-sized and small towns (Goodwin, 1988b, 177). This proliferation was naturally less closely linked with public investment, and it may well be that the growing ability of the movement to spread down the hierarchy was a sign that waterfront land was now seen as real asset (Pinder and Hoyle, 1992, 487). But what is also clear is that, as developers' initiative has grown in importance, revitalisation has become sensitive to the investment climate. This is again well demonstrated by Britain's experience. Here recession since the late 1980s has severely damaged the housing market, causing many high-value waterfront housing programmes to be halted or abandoned (Figure 1.8). Also, recessional influences have affected other important waterfront land uses such as office development. The best known examples of these problems are in the London Docklands, especially because of the bankruptcy of the Canary Wharf developer, Olympia and York. But the downturn in waterfront housing has been very widespread, and there are other examples of development failing to live up to expectation (Pinder and Hoyle, 1992). For example, while revitalisation in the former coal ports of Cardiff and Swansea has been relatively impressive, in other parts
of the South Wales port system - such as Newport and Barry - the pace of change remains sluggish. As will be shown later, this recessional setback has arguably been of considerable importance for social housing on Britain's waterfronts. Indeed, one case study examined by the research has aimed specifically to explore the prospects for social housing in a locality severely hit by recessional influences.

Against this background of growth and, at least in some instances, recession in waterfront regeneration, it is important to examine the nature of revitalisation schemes. Sometimes they are highly specialised. An outstanding example of this is Rotterdam's insistence that, outside the city core, social housing should be the first priority for redundant port areas (Pinder and Rosing, 1988). In other instances, the private sector is almost totally dominant, as Hall (1993) has shown in the case of Hong Kong. But as Hall also stresses, in the large majority of cases revitalisation has conformed to a mixed-use model that is now extremely familiar around the globe. Typically, such developments might include marinas, other water-based leisure activities, museums, the refurbishment of heritage buildings, restaurants, high-value private housing and hotel and conference facilities (Pinder, Hoyle and Husain, 1988, 254-5).

The character of this type of development is considered further in Chapter 3, but several key features of it may be noted here. First, it can be considered mixed use in two senses. One, often used by architects, is that individual buildings can have quite different but compatible uses, such as ground-floor seafood restaurants with offices above (Goodwin, 1988a). The other, more generally recognised, is that schemes are mixed use because of the very wide range of activities that can be brought together on the large sites that are often available (Hall, 1993). While these contrasted uses are also assumed to be compatible (Goodwin, 1988a), little has been done to test this and, as will become
apparent, one important aim of this thesis will be to assess the ability of these schemes to provide good living environments.

Beyond this, several processes appear to have been central to the rise of mixed-use schemes. Hall (1993) suggests that their uniformity reflects a perception that this group of activities is likely to yield the most certain economic returns from the waterfront. In addition, there has been a tendency for developers to replicate their early schemes in later projects, usually because they appear to have worked and replication will reduce risk (Pinder, Hoyle and Husain, 1988, 255). Similarly, developers lacking experience in waterfront revitalisation naturally tend to copy completed schemes. While these are the widely quoted factors, however, it can also be argued that the mixed-use model has become commonplace because local communities are rarely asked to contribute to the regeneration process. This may mean that the neighbourhood flavour of a particular waterfront is to some extent lost and, once again, this will be the subject of later research.

Here, too, it is appropriate to examine conceptual interpretations of these processes. In particular, three different philosophical approaches can be considered useful: the arguments advanced by the globalisation school, the perspectives offered by the 'National Heritage' tradition, and the analyses advanced by the New Right.

Giddens (1990, 64) argues that globalisation is 'the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa'. In this analysis a dominant power's ideas are adopted by countries throughout its sphere of influence. Waterfront regeneration can be seen as a good example of this process as it has spread from the
USA across the entire globe in a period when the USA can be seen as the most
dominant world power. Through this process the waterfront has become 'westernised'.
Added to this the world has become a smaller place over the latter half of this century
with the advent of the information technology revolution, the mass media, cheap mass
transportation by air and the end of the cold war (Giddens, 1990, 77 and 141). This has
reduced each location's 'regionality', so that cultures and built forms present across the
globe are being amalgamated into a global culture and architecture. Thus a building on
the Toronto waterfront may be very much the same as a scheme in Docklands London.
This tendency for the world of the waterfront, like the world in general, to become
increasingly homogenous owes much to marketing. If the marketed product is the same
throughout the world, multinational companies know what they are buying into; visitors
feel reassured that they will receive the same quality of experience; and developers and
financiers, at least until recession strikes, should be reassured by the apparent success
of schemes elsewhere. As Giddens (1990, 140) states

"the reassurance of the familiar, so important to a sense of 'ontological
security', is coupled with the realisation that what is comfortable and
nearby is actually an expression of distant events and was 'placed into' the
local environment rather than forming an organic development within it.
The local shopping mall is a milieu in which a sense of ease and security
is cultivated ... yet everyone who shops there is aware most of the shops
are chain stores, which one might find in any city, and indeed that
innumerable shopping malls of similar design exist elsewhere".
Figure 1.8 Unfinished private residential waterfront development, Plymouth
Waterfront regeneration can also be linked to the consumer culture of the 1980's through the 'National Heritage' tradition. It is argued by Thrift (1989) that sanitised images of the past are injected into the present. The reason for this, Thrift argues, is that the heritage tradition helps to provide images that aid cultural cohesion in times of great social and economic change. National heritage sites have become places 'where you go and look at values and ideas, and I think shopping is becoming one of the great cultural experiences of the late twentieth century ... The two things merge'. The tradition is also closely linked to the relatively new obsession of conserving the built environment, which has recently become a 'national mania'. Incorporated in this urge to communicate with the past, there is the growth of museums and other heritage sites.

'Nowhere outside Africa, I thought, were the tribespeople so willing to dress up in 'traditional' costume and caper for the entertainment of their visitors ... the thing had become a national industry ... England was being made more picturesquely merrie ... even the morris dancers ... were new' (Thrift, 1989, 29).

Clearly, the waterfront can be seen as being very intimately bound up with this phenomenon. Indeed London's Docklands are referred to by Thrift as the 'temple of conservation-led redevelopment'. According to this interpretation the waterfront has been 'sanitised', becoming a living museum of the past, without the reality of noise and pollution. In this living museum the ideas of heritage are particularly suited as marketing tools giving appeal to areas that only 10 years ago were seen as urban disaster zones. This has been a powerful force helping waterfronts to become the work places and residential areas of the new 'service' class.

Lastly the waterfront can be linked to the New Right. This approach places its emphasis
on how the market reacts and deals with urban and environmental problems (Rydin, 1993, page 259). The New Right sees markets as self regulating; if left to their own devices they create an equilibrium between supply and demand. In terms of land the market 'operates to ration space between users so that each site is allocated to its highest and best use' (Rydin, 1993, 261). Land is therefore divided according to benefit and the ability to pay, and it is also argued that the market will respond to environmental decline and the problems of economically backward areas by perceiving profitable opportunities. This can be seen on the waterfront where private sector development revitalises decaying inner-city port land, converting it into economically valuable business, housing and tourist space. It is argued by Rydin that it is in the market's self interest to do this, as it creates a marketable product, and in this regard the waterfront can be seen as an example of the benefits of giving the market free rein. Simultaneously, however, the process may also highlight market limitations. On the one hand, the centres of many of the United Kingdom's port cities have been transformed from dereliction into new environments for living, working, and tourism. But, on the other hand, with the onset of the recession many of these new environments have been left empty, unfinished or abandoned by the private investment and market forces which created them. As has already been indicated, this is a perspective to which we shall return both later in this chapter and in the thesis as a whole.

**REVITALISATION PROBLEMS**

Although much is now known about revitalisation processes, little has been said in the literature about problems associated with regeneration; most texts chiefly discuss or assume the success of schemes and do not take a critical approach. One recent example of this is provided by Breen and Rigby (1994). However, some academics have pressed for more emphasis on evaluation in recent years, this being a main theme of van der
Knaap and Pinder (1992, 164). In their words:

'it is natural to regard the movement [waterfront regeneration] as successful, and there is no shortage of developers, port authorities or city administrations who claim this to be the case. However, it is striking that studies of change on the waterfront concentrate overwhelmingly on the details of redevelopment policy and, in general, offer little critical analysis of project achievement.'

Given this concern, it is important to survey the disquiet that has been voiced.

Goodwin (1988a) believes that waterfront regeneration may have a negative impact on cities if policy turns its back completely on traditional maritime uses. Harbours, he suggests, are relatively rare resources, and to push maritime uses from them in order to extend the CBD is to close off options for the future. Herschman (1988, 18-19) similarly feels that there are dangers in spiralling land values, which may come to mean that traditional activities have little chance to compete. This may be considered a romantic notion of the past, and not entirely practical in the real world of the 1990s. However, here we may note that, at least in Europe, port authorities are now increasingly interested in the redevelopment of old port areas for continued port use. Charlier (1992), for example, has shown how Gent, Antwerp and Rotterdam have all successfully pursued such schemes. Today, therefore, it is not always clear that ports must allow their outmoded docks to be taken over by non-port uses.

Hall (1993), in contrast, suggests that maintaining traditional activities is likely to generate conflict, and has gone beyond this to identify several issues which may be
associated with 'mainstream' revitalisation. Problems can arise, for example, when separate administrative agencies, with different powers and responsibilities, are involved in the process. In the case of Vancouver's Expo '86, the city of Vancouver disagreed with British Columbia's profit-based 'megaproject' approach to the fair, but had little power to influence it.

Other conflicts, Hall argues, are likely to centre on social versus commercial motivations. Such conflicts, he believes, are most visible in big cities. Toronto, for example, has experienced growing pressure for high-income housing redevelopments, with the danger of commercial overdevelopment that has become a national political issue. Physical and visual public access; recreational open space; and lower-income housing have all been put at risk. In Hall's words, since 'these areas are among the few remaining to house the displacees of the gentrification process, this risk may be extreme' (Hall, 1993, 16). This conclusion is important because it suggests that the social housing resident is an undervalued part of the waterfront regeneration process. Low-income housing may be marginalised, a danger that, once again, has significantly influenced the orientation of this thesis.

Thinking more generally, Hall sets conflicts between social and commercial interests in the context of perception:

'different groups have different perceptions of the ideal waterfront: the former dock workers want to see a return to the old economy, some community activists want to see non-profit uses such as parks and community centres, while commercial developers and local treasurers are interested to maximise commercial potential' (Hall, 1993, 14).
Thus misunderstanding and friction arise in the regeneration process as different groups battle for what they feel revitalisation should achieve.

Beyond this, Sapieri (1986) has argued that - compared with other forms of urban development - the waterfront is the most difficult and complex area to redevelop. His view is that the problems are partly physical, but also financial and organisational. It is again echoed by Hall (1993) who has underlined the importance of appreciating that waterfronts are the opposite of new developments in that they already have their characteristics and problems. These include their size, their position in the city, their distance from the water itself, the number of historic buildings they contain, and environmental issues such as soil and other pollution left by previous uses. All these are seen as exerting added pressure on the planning and development process. Pinder and Hoyle (1992, 487) add to this one further significant point: although there is a widespread belief that urban managers can now cope with all cases of port decline, this is ill-founded. In particular, as the case of Liverpool shows, progress with redevelopment can be very difficult when the supply of land to be regenerated far outweighs the demand for it (Figure 1.6).

From this it is evident that the range of difficulties which may face waterfront revitalisation is considerable, which in turn leads to the view that an important task of academics in the field is to assess the outcomes of regeneration. To what extent do schemes succeed in overcoming existing problems and avoiding the creation of new ones? Pinder, Hoyle and Husain (1988, 256) suggest that the few studies that have approached the waterfront in this way appear to indicate that projects are less satisfactory and useful to society than the changes in the urban environment may indicate. One problem here is that the range of potential subjects for analysis is
extensive but van der Knaap and Pinder (1992) have attempted to encourage progress by proposing a systematic framework for future investigations. According to their analysis future research might usefully be concentrated under five main headings: the economic impact of waterfront revitalisation; the role of housing on the waterfront; the re-integration of former docklands and the remainder of the city; the regional role of the changing cityport; and the adaptation of outmoded port areas for continued port use.

Many studies will obviously be needed to deal thoroughly with this research agenda, and full treatment is certainly beyond the scope of this thesis. However, the research reported later is offered as one contribution towards this goal, a contribution which focuses particularly on two related themes proposed by Pinder, Hoyle and Husain. The first of these is the role of housing on the waterfront, and in particular the possible advantages and disadvantages of incorporating social housing in revitalisation programmes. The argument for adopting this focus is set out in the following section, but may be distilled at this point into a single question: to what extent is there evidence that the providers of social housing can confidently invest their limited resources in redevelopment areas normally considered the preserve of private housing initiatives? If this theme is to be pursued effectively, however, it is also necessary to examine a second research priority from the agenda proposed by Pinder, Hoyle and Husain, namely the problem of reintegration with the city. As will be argued below, the success of social housing on the waterfront is most unlikely to be decided by factors relating to the waterfront itself. Instead, an important additional issue will be the extent to which port-city reintegration allows residents to interact effectively with the remainder of the urban area.
Figure 1.9  Waterfront social housing scheme, PeperKlip, Rotterdam
Source: Municipality of Rotterdam
As many authors have emphasised, in the UK housing has been an important element in most mixed-use revitalisation schemes over the last ten or fifteen years. This can be understood in the context of recent changing perceptions of the waterfront noted earlier. The waterfront's improved image has not simply influenced business to move there, but in society's eyes has made it aesthetically pleasing and a good place to live. In the process, it has become widely accepted that it is high-value housing that is appropriate for these regeneration schemes. One economic argument for this that is offered by developers is that development costs in these areas are too high to allow the construction of cheaper property on a significant scale. But the trend has also been encouraged by demand, which before the current recession raised the price of waterfront property, and also by the fact that profit margins are greater on high-quality housing.

While it has become the norm to concentrate on this type of housing, however, there are arguments against the view that other forms of housing are unsuitable for the waterfront (van der Knaap and Pinder, 1992, 167). First, there is the idea that social justice should mean that lower income groups have a claim on waterfront property. Dockland decline has been hardest on these groups, greatly reducing employment and blighting the areas surrounding derelict docks. From this the Marxist interpretation is that these sections of society are owed a debt which can partly be repaid by the provision of low-cost and social housing. If these groups are also hit by inner-urban gentrification, then the case may be even stronger because the absence of waterfront social housing would increase displacement from the inner city.

Secondly, social housing has been made a major feature of waterfront revitalisation in other parts of the world. For example, as was indicated earlier, it has high priority in the
Netherlands, and especially in Rotterdam. Here, as Pinder and Rosing (1988) have demonstrated, social waterfront housing has been central to many dockland regeneration projects (Figure 1.9), and is closely linked with the city's inner-urban rehabilitation programme. Thus although the rehabilitation of nineteenth-century tenements reduces the size of the community that can be housed locally, those displaced have normally been accommodated in new social housing in nearby regenerated docklands. What may be noted also is that this strategy is not simply one devised to benefit local communities. For example, large-scale social housing construction is seen nationally as a way of protecting the building industry from recessions.

Against this background, it can be argued that recent recession in the UK provides an opportunity to redress the balance. To some extent this may already be occurring because more social housing schemes have been incorporated in revitalisation programmes by local authorities and housing associations since the mid-1980s (van der Knaap and Pinder, 1992, 166) (Figure 1.10). But as these authors have also noted, it is perhaps prudent to suggest that a change in this direction should be made with caution. This is because it is not clear that UK waterfront environments are necessarily able to meet the needs of many people for whom social housing is designed. Here it is important to emphasise that there is no suggestion that the housing itself may be inadequate. Although, as Chapter 2 demonstrates, social housing programmes have come under many pressures since 1945, these have on the whole affected the volume of construction rather than the quality of provision. In many respects social housing standards have risen while in the rest of society they have been deregulated, and it can therefore be suggested that waterfront communities are likely to find the accommodation itself at least satisfactory. Conversely, however, it may also be argued that the broader waterfront environment might be less hospitable.
Figure 1.10  Mannheim Quay: social housing on the Swansea waterfront
For example, by definition, many waterfront projects set out to create bustling, dynamic environments, not least in the evenings and at weekends. Are these appropriate for groups such as the elderly and perhaps the disabled? Similarly, these are usually areas of high consumption, especially through leisure activities. How well suited are they, therefore, for low-income housing? Although retailing is often an element in regeneration, it is typically leisure-related and unlikely to serve day-to-day needs. What are the implications of this for social groups who may not be highly mobile? And, again with respect to mobility and reintegration with the city, in these traditionally isolated areas, how accessible are other activities such as dental and medical services, schools and appropriate employment? Questions such as these are of considerable importance given the fact that, by definition, households in social housing command predominantly low incomes. Moreover, they assume even greater significance when they are related to the role of the car in port-city reintegration in most mixed-use waterfront revitalisation schemes. In almost all instances it is assumed that the car will be the dominant form of transport between the city and the waterfront, bringing into question the extent to which limited public transport services can serve the needs of low income waterfront communities.

These issues highlight a need for substantial research into social housing on the waterfront, and it is this need that this research has attempted to meet. Working in Exeter, Swansea and Glasgow, it has investigated a selection of contrasted waterfront social housing projects and - largely through questionnaire surveys of residents - has attempted to evaluate their experiences of the waterfront environment. The rationale underpinning the selection of Exeter, Swansea and Glasgow is set out in Chapter 4, as are the details of research design. Consequently these issues need not be considered at this point. What should be emphasised, however is that in all three cities the research
has been conducted by exploring residents' perceptions, and reactions to, the waterfront at three scales: at the level of the individual dwelling; in relation to the revitalised dockland as a whole; and in the context of access to the city and its services. The choice of this framework reflects points made in the earlier critical discussion, and the emphasis on the possible importance of contrasting scales of analysis may be formalised into a number of hypotheses to be tested by the empirical investigation. These are:

1. that high levels of satisfaction prevail at the level of the home, since disadvantaged groups have the benefit of relatively new and well-designed accommodation very similar to that now found in many parts of cities.

2. that revitalised docklands cause friction because they do not provide basic services and create environments ill-suited to the interests and lifestyles of social housing residents.

3. that, for many social housing residents, dockland locations are unsatisfactorily isolated from the city and its services, because port-city reintegration has frequently emphasised the car rather than public transport.

**THESIS ORGANISATION AND STRUCTURE**

Before the empirical investigation can be considered in greater depth, further background material relating firstly to housing and secondly to waterfront environments must be explored. In a thesis concerned with social housing, it is clearly important that the long-term evolution of social housing policy and associated legislation are incorporated, and this has therefore been made the focus of the following chapter. Chapter 2 initially examines local authority provision, concentrates particularly on the post-war era and
culminates in a discussion of the problems of local authority provision in the years since 1979. It then turns to housing associations, which successive Conservative governments have argued should be the main providers of social housing. In Chapter 3 attention once more focuses on the mixed-use waterfront environment. Here the contributions which architectural and planning influences have made to regenerated docklands are discussed, as is the importance of an awareness of perception in studies of this type.

The discussion then turns to the investigation itself. As has been indicated, research design and methodologies are presented in Chapter 4, together with an overview of the selection process for the communities surveyed and a summary of their characteristics. Chapters 5, 6 and 7 then present the main empirical findings. Each of these chapters concentrates on the results from one of the three cities investigated, commencing with a small former port and cathedral city (Exeter) and ending with a major seaport (Glasgow) where regeneration has been severely hit by recession. Finally, Chapter 8 draws together and assesses the empirical results, relates them to the objectives of the research set out above, discusses their significance for waterfront studies in general and identifies opportunities for further research.
Housing Options coordinates social housing across the city. It is council run but helps allocate accommodation and advise the public about all types of housing (public, private and housing association) in Swansea.

This format has been chosen in preference to a systematic approach which might consider in separate chapters the findings at the three contrasted scales of investigation. This was considered preferable because the research aims to explore the full range perceptions in individual cities, making it appropriate to establish an overall assessment of waterfront revitalisation at each location.
CHAPTER 2

HOUSING POLICY BACKGROUND:
LOCAL AUTHORITY HOUSING, HOUSING ASSOCIATIONS
AND THE WATERFRONT

INTRODUCTION

Harloe (1988, 42) argues that it is easier to provide an approximate rather than a universal definition of social housing. The difficulty is that in most countries there are several providers of accommodation in this sector, and their importance may vary considerably through space and over time. Despite this, however Harloe proposes that three key features of social housing may be identified:

First, 'It is provided by landlords at a price that is not principally determined by considerations of profit. These landlords are usually formally limited to 'non-profit' or 'limited-profit' status in-so-far as their social housing activities are concerned.'

Second, 'It is administratively allocated according to some concept of 'need' .... Ability to pay can be important but, in contrast to private provision, is usually not the dominant determinant of allocation'.

Third, 'Government control over social rented housing is extensive and has increased as it has become a central feature of state housing policies.' In other words, it is political decision-making, rather than the market, which exerts the dominant influence on the quantity, quality and terms of provision.

Harloe (1988, 42)
In the UK, as in other countries, housing policy and legislation have not been devised specifically for the waterfront or for social housing alone. Instead they are national measures, intended to guide the scale, nature and (sometimes) location of private- and public-sector housing development throughout the country as a whole. As a result it is not simply sufficient for a study such as this to provide an overview of policy itself. It is also necessary to relate policy to the waterfront theme, seeking to establish the interrelationships - if any exist - between policy and the waterfront social housing movement.

This chapter approaches this task through an examination of government policy for, firstly, local authority housing provision and, secondly, housing association activity. In considering trends in local authority and housing association approaches to social housing, the present chapter begins by adopting a largely chronological perspective, emphasising political shifts and the impact of economic cycles. As the discussion develops, an important aim is to improve our understanding of why - despite decades of housing policy and investment in major residential projects which might be thought ideal for large derelict port areas - most waterfront council and association housing comprises limited, rather unobtrusive, developments.

**LOCAL AUTHORITY HOUSING AND THE WATERFRONT**

*Social Housing Under Labour, 1945-51*

World War II had a deep effect on postwar housing policy because six years of bombing and very little housebuilding reduced Britain's housing stock to a very poor condition. During the war almost half a million houses were either completely destroyed or
irreparably damaged, and far greater numbers were damaged to a lesser extent (Short, 1982). In addition, the end of hostilities led to increasing marriage and birth rates, and rising expectations from a population that had made sacrifices (Balchin, 1981). This all meant that the new Labour government faced a vast and growing housing shortage when it came to power in 1945.

The initial long-term policy adopted to deal with this was to focus on a single strategy: investment in publicly constructed council housing.² This was to be achieved by a series of measures, but particularly the Housing (Finance Provisions) Act of 1946 and the Housing Act of 1949 (also known as the Bevin Act, after its architect) (Balchin, 1981). As Burnett (1991) and Short (1982) have argued, these measures in turn reflected the recommendations of the influential Dudley Report of 1944, which focused on the design element of social housing. These recommendations included significant increases in the floor space of standard (usually three-bedroomed) council houses, and design guidelines to ensure that council estates should have a mix of dwelling types.

In part this policy was a continuation of prewar housing policy, but postwar policy included two major modifications: removal of the prewar idea of providing 'housing for the working classes' and introduction of the aim of creating 'general needs housing'. Thus new projects were in theory to be for any citizen, not simply the working classes or 'slum dwellers' (Short, 1982, 45). Simultaneously, consumption of materials for private-sector housing was to be restrained by building controls in order to make scarce building resources available for social housing.

As Figure 2.1 reveals, the restraints on private-sector housebuilding were extremely effective in these early postwar years. Less than 50,000 privately owned houses were
Figure 2.1  Change in dwelling stock, 1955-93

(Source: Social Trends, 1995, 174)
built in 1947, and by 1951 the figure had fallen to only 20,000. However, the target set for council housing was less easy to achieve. This target was to give Britain 240,000 publicly funded homes a year but, although construction figures rose impressively up to 1948, in the whole period up to 1951 construction totalled no more than 900,000.

This failure was largely the result of a sharp cutback imposed in 1949-50 (Figure 2.1). As Short (1982) has indicated, this cutback that was the first sign of a recurrent problem in postwar public housing: economic crisis. Postwar financial difficulties demanded severe government economies and, in a time of balance-of payments problems and materials shortages, the social housing programme was forced to compete with other areas of expenditure, such as industrial reconstruction, nationalization and welfare state programmes. In fact housing was one of the first policy areas to be pruned back, not least for ideological reasons, leading Short to conclude that it is since this era that the role of the state as a housing provider has been constantly worn away.

Important though these developments were for large sections of the population, their implications for the waterfront were very limited. The natural tendency at this time was for town planners to revive the prewar practice of appropriating swathes of countryside on the periphery of cities in order to build extensive council estates to which residents in need could be decentralised (Figure 2.2). Here they could enjoy the benefits of relatively spacious housing, large gardens and population densities much lower than those typical of nineteenth- and early-twentieth century residential districts. Although environmental design standards may have slipped, this approach was a direct descendant of the Garden City movement; as a result it continued to nurture the belief that the future of social housing lay on the urban periphery. In the older parts of cities, therefore, local authority building was often confined to rebuilding war-damaged areas. In the early
Figure 2.2  Early post-war council housing, Plymouth
Source: Western Morning, News Plymouth
years, at least, this often amounted to the construction of 'temporary' prefabs or low-cost flat developments to replace bomb-damaged property (Figure 2.3), and there was no suggestion that social housing might encroach on port areas. In this era port facilities that had survived the war unscathed continued to operate as they had in prewar years, with no threat to them being apparent from technological change or structural economic shifts. And where port facilities had been damaged, as in Southampton, London and Liverpool, they were usually rebuilt as rapidly as possible in order to assist national economic recovery (Denton and Thomas, 1964).

Conservative Approaches, 1951-64

The Conservative administration which came to power in 1951 was committed to bettering Labour's housebuilding record, the specific goal being the construction of 300,000 houses a year (Balchin, 1981). This was achieved by 1953, partly through the relaxation of controls on private housebuilding (Burnett, 1991) but also through growth in the local authority housing programme. This growth was encouraged by generous subsidies made available by the Housing Act of 1951, and by the mid-1950s more than 200,000 public-sector houses were being completed annually (Figure 2.1).

From then on, however, the fortunes of local authority housing changed radically. Whereas the private sector enjoyed almost continuous expansion up to the late 1960s, council housing construction fell dramatically after 1954, to less than 100,000 per year by the end of the decade. To a great extent this reversal was initiated by a 1953 White Paper, which heralded new funding arrangements for the sector and reversed the relatively attractive financial situation typical of this Conservative government's early years. Thus subsidies for general needs public housing were, firstly, reduced by the Housing Repairs and Rents Act (1954) and, secondly, abolished by the Rent Subsidies
In addition, in October 1955 local authorities were required to go to the money markets to finance their housebuilding programmes, and this too impacted on the construction that was feasible. For example, by the late 1950s almost two-thirds of local authorities' housing expenditure was taken up by interest payments rather than building itself (Short, 1982). Beyond this, economic crisis in 1957 led to a 20 per cent cut in expenditure on council housing and, although general needs subsidies were later reintroduced by the 1961 Housing Act, this did little to revive council housebuilding in the areas of greatest need. This was chiefly because the measure employed a complex allocation formula which favoured rural rather than urban areas (Balchin, 1981; Short, 1982).

To a great extent, social housing's reversal of fortunes reflected the administration's view that there was no longer a general needs housing problem. This view, in turn, meant that public sector housing was returned "to its perceived 'rightful' role as a residual tenure category, mopping up those who could not afford owner-occupation" (Short, 1982, 49). As Balchin (1981) has underlined, the outcome was that - in only five years - Aneurin Bevin's philosophy of concentrating on the large-scale production of classless high-quality council housing had been reversed.

As this occurred, a change also set in with respect to the geography of social housing provision. As has been indicated, the preference in the late 1940s and 1950s was for large-scale housing schemes to be grafted onto the outskirts of existing towns and cities, echoing the Garden City movement. Now, although peripheral expansion continued, an emphasis on residual groups meant that increasing attention was given to slum housing problems in the inner city. From 1952 onwards this shift led to a significant rise in
Figure 2.3  Post-war reconstruction of bomb damaged areas, Devonport, Plymouth
activity in inner-urban areas. Within ten years more than 50,000 slum dwellings were being removed from the housing stock annually, to be replaced by the country's first major redevelopment schemes (Figure 2.1).

So far as cityports were concerned, this period therefore witnessed a spatial reversal in which social housing construction turned away from greenfield sites and began to move back much closer to the waterfront. What is very clear, however, is that this movement still stopped short of turning the waterfront into a major focus of recolonisation. Inner-urban schemes from this era rarely involved significant construction in former port areas, and it can be suggested that this reflected two main influences. On the one hand, the scale of the problems to be overcome in slum areas was such that most local authorities were fully occupied by their renewal, and had no need for the added complications of housing programmes aimed at waterfront rejuvenation. On the other, although redundant port land was starting to emerge as a significant cityport problem - in, for example, the South Wales coal ports - in most cases the full impact of the forces causing port decline was still not being felt. Also, there was uncertainty as to whether ports themselves would re-use redundant space, while the cost of derelict port clearance was considerable. As housing projects turned towards the inner city, therefore, conflicts of timing meant that redundant port land had still not become perceived as a potential social housing resource.

In addition to questions of scale and location, the quality of social housing provision in this period may also be noted. Once again, two points are of significance. First, the economies and interest burdens forced on local authorities after 1954 encouraged a trend towards lower-quality provision in order to boost housing completions. Short (1982) has argued that this caused many of the physical problems which later afflicted a great deal
of council housing. Even if waterfront social housing had become a significant phenomenon, therefore, it would not necessarily have been good quality housing.

Secondly, however, this reduction in quality provoked towards the end of the period an important attempt to improve housing quality by the introduction of new standards. In 1961 the Parker Morris Report proposed new guidelines for both public and private housebuilding, and placed particular emphasis on the improvement of space and heating standards. Because this development significantly influenced later social housing, including some on the waterfront, the discussion will return to Parker Morris standards later in the thesis.

**Fluctuating Fortunes, 1964-79**

It is arguable that, if large-scale waterfront social housing programmes were to become established in the UK, this was the period in which they could have been established most easily. As Chapter 1 has indicated, during this period the factors causing the decline of traditional port areas exerted a powerful influence, causing redundant port land to become a commonplace phenomenon reinforcing widespread inner-urban decline. At the same time local authority house building proceeded at a relatively high level, certainly compared with the 1980s and 1990s. Yet public housing policy still did not bring these two trends together on a significant scale and employ local authority housing programmes to draw the new redundant space back into the city once more.

This failure can be partly explained by the fact that inner-city housing programmes continued to improve slum districts (Figures 2.4). As Figure 2.1 reveals, for most of this period slum clearance dealt with more than 50,000 dwellings annually. In addition, rehabilitation grants were in most years made for between 100,000 and 150,000
Figure 2.4  Tower block development, Devonport, Plymouth
properties, and for many more than this between 1971 and 1973. But it can also be suggested that other factors contributed to ensuring that abandoned waterfronts remained largely outside the scope of social housing programmes.

One of these was the regular changes of government experienced at this time, which prevented the maintenance of momentum in social housing provision. Thus an incoming Labour administration in 1964 published in 1965 a White Paper which set a target of 500,000 public- and private-sector completions in 1970 (House of Commons, 1965). It also expanded financial resources to stimulate building by local authorities and presided over growth which took social housing construction from little more than 100,000 units a year in 1964 to more than 170,000 in 1967. Then, during the subsequent Conservative administration which gained power in 1970, public-sector completions were reduced by a third as emphasis in housing policy was tipped even further towards home ownership and the private sector (House of Commons, 1971). Re-expansion of the public-sector programme then came with the return of Labour in 1974 (Figure 2.1). By boosting council housing at the outset, and through measures such as the 1975 Housing Rents and Subsidies Act, this administration raised output by 50 per cent between the mid- and the late-70s. But although the effect of this was to take the annual level of social housing completions above 150,000 once more, this was still less than the peak levels reached in the mid-1950s and mid-1960s. Unfortunately, in the long term, the downward trend in the numbers of council homes still continued (Figure 2.1).

Secondly, although changes in the political orientation of successive governments was certainly important, this was not the only factor holding down the scale of public housing programmes and therefore reducing pressure which could have led to growth on the waterfront. In addition, financial constraints were also of great significance,
especially for the period's two Labour administrations. Thus in the middle of the period
the decline in the local authority housing programme did not start with the election of
the Conservative government. Instead it began in 1968, as Labour imposed economies
following an economic crisis and devaluation of the pound (Figure 2.1). In this climate
of cuts the housing programme was inevitably vulnerable because of its large scale, but
other factors also encouraged the downturn. For example, Short (1982, 55) states that
Labour lacked a 'fully argued socialist case for public housing' and that this weakened
the construction programme's defence. Also, although Parker Morris standards were seen
as progressive and were in fact made compulsory in 1969, they were expensive to
implement. In general they increased the cost of a dwelling by a fifth, making a
reduction in the number of homes constructed 'a prime target in the scheme for public
expenditure reductions' (Short, 1982, 57). Similarly, in the aftermath of the first oil
shock (1973-74) economic crisis forced the second Labour government in this period to
seek significant expenditure reductions. Housing investment therefore fell by £646
million by 1977-78, and the second half of the administration's term of office saw
completions down to 95,400 in 1979 (Burnett, 1991; Doling, 1983).4

Beyond this, it can also be suggested that waterfronts remained isolated from housing
programmes for institutional reasons. In this connection the main point is that, while
some UK port lands have been owned by local councils, many others have instead
belonged to separate port authorities. At the time in question the best known of these
were the British Transport Docks Board (now Associated British Ports) and the Port of
London Authority. The effect of this factor was to ensure that, even though port land
became derelict, it did not always automatically become a potential resource available
to the local authority. Much more frequently it remained a blighted area which the local
authority could not influence directly, even though it might severely detract from a
cityport's urban image. As Pinder and Rosing (1988) have shown, municipal ownership of a port can be highly relevant to the development of city-oriented revitalisation strategies.

**Social Housing Since 1979: The Thatcher Years and Beyond**

The Conservative government headed by Margaret Thatcher which came to power in 1979 was very different to its predecessors. New Right values became firmly established (Bosanquet, 1989) and, with an almost religious fervour, the administration began to pursue

>'the restoration of competition and personal responsibility for effort and reward, [and the rejuvenation] of the over-taxed individual, enervated by welfare coddling, his initiative sapped by hand-outs by the state' (Hall, 1979, 17).

So far as housing policy was concerned, the Conservative Government made it clear in the 1980 Housing Act that the market would be the main provider of housing, a New Right ideological change which led directly to two developments. The first was even greater emphasis on the principle of private ownership and owner occupation. Previous governments since the early 1950s had encouraged the private housing sector, whatever their political standpoint, and since 1958 private housebuilding had almost always exceeded public-sector completions (Figure 2.1). But faith in the private sector now elevated this policy strand to a position of overwhelming dominance. Secondly, and as a mirror image to this, traditional social housing programmes became the focus of an attack designed to limit very severely the ability of local authorities to embark on council housing schemes. Once again, the tendency to impose limits on local authorities was not new. As the previous section has shown, social housing had long been the
victim of political swings and economic necessities. Now, however, local authorities were perceived to be wasteful and incompetent, and policy therefore set out to impose drastic limits on their activities in this and other fields (Parkinson, 1987; Parkinson and Evans, 1990).

Movement in these directions was achieved through a number of major measures, the landmarks being the 1980 Housing Act, a 1987 White Paper on housing, the 1988 Housing Act and the 1989 Local Government and Housing Act. Complex though these are, the main strategy strands can be readily identified.

First, as much social housing as possible was to be moved from the public to the private sector. The attempt to do this involved various policy approaches. These included, firstly, 'tenants choice', a scheme to enable tenants to opt _en masse_ for council housing to be transferred to non-council landlords and, secondly, Housing Action Trusts to take over estates from councils, refurbish them and then sell them (Doling, 1993, 586). However, easily the most popular step was the introduction of the Right to Buy scheme by the 1980 Housing Act. This entitled council tenants to purchase their homes at discounts of between 33 and 50 per cent, and by 1989 had led to the sale of a million council properties (Forrest, Murie _et al_., 1990). Also, linked with this 'carrot' was the 'stick' of significant increases in council rents, engineered by a new Block Grant System which cut housing subsidies and therefore made owner occupation appear even more attractive (Doling, 1983, 477).

Secondly, as the existing housing stock was sold off, severe constraints were placed on local authorities' ability to build replacement housing. One aspect of this was that the authorities were required to bank the proceeds of council house sales, rather than invest
them in new accommodation. But, beyond this, Doling (1983, 476) has argued that the
general attack on public sector spending 'demonstrated a commitment not simply to cut
public expenditure but to place the burden of those cuts disproportionately on the
housing programme'. Funding for Housing Improvement Programmes was therefore
drastically reduced during the 1980s, with very obvious consequences. Public-sector
completions fell from virtually 100,000 in 1979 to 21,000 in 1986 and 4,000 in 1992
(Figure 2.5). Moreover, the cutbacks did not simply impact in terms of the quantity of
social housing being made available; they also affected its quality. Thus what was
known as the Housing Cost Yardstick was abolished and, twenty years after their initial
introduction, the Parker Morris standards were abandoned on the grounds that the nation
could not afford them.7

The net result of these changes was that the public housing sector shrank in both
absolute and relative terms. In the process, council housing became more and more
'residualised' - the welfare arm of the system providing a safety net for those who could
not gain entry to owner occupation. New properties became available in much smaller
volumes than was previously the case and - except where special needs groups were
involved - were also constructed to smaller space standards. Also, the council housing
which remained unsold tended to be unmarketable because it suffered from disrepair and
was concentrated in poor locations such as the inner city, tower blocks and run-down
estates (Doling, 1993, 584; Malpass and Murie, 1990; McGuckin and Smith, 1991, 2).

In these new circumstances, the possibility that redundant port land might form the arena
for major local authority housing projects rapidly evaporated. So far as is known, the
concept that these extensive areas of dereliction might be appropriated for this very
fundamental social use was never contemplated. Instead, New Right beliefs pointed
Figure 2.5  Housing completions, 1976-92

England and Wales

(Source: Social Trends, 1994, 111)
clearly to the conclusion that market solutions should prevail, paving the way for the mixed-use model of revitalisation outlined in Chapters 1 and 3. Where overt planning was undertaken it was usually to facilitate this trend, and in a number of major cityports it entailed placing effective control in the hands of Urban Development Corporations (Adcock, 1984; Church, 1988; Lawless, 1988; Parkinson, 1988; Parkinson and Evans, 1990).

Paradoxically, however, it was in this period that local authorities instigated significant housebuilding on the waterfront. No comprehensive data exist as to the scale of this movement, but present-day waterfronts commonly have projects dating from this period (Figures 2.6 and 2.7). No explanation of this has been proposed in the literature, but it can be suggested that it is a reflection of several factors. First, the enforced contraction of council housebuilding described above meant that housing departments now concentrated on relatively small schemes. These could be inserted into many different types of location, including port areas undergoing mixed-use revitalisation. Second, it is likely that the smaller scale of housing projects made them more immediately acceptable to developers, particularly as residualisation meant authorities increasingly wished to build for 'acceptable' disadvantaged groups such as the elderly. Third, planning authorities granting permission for mixed-use schemes were well placed to encourage proposals which incorporated a social housing element as a form of planning gain. Fourth, the onset of recession in the late 1980s meant that even small-scale public housing schemes could help to maintain the flagging momentum of market-oriented mixed-use projects. In Swansea, for example, land initially earmarked for private-sector housebuilding, after lying idle for some time, was handed over for a series of social housing schemes. The best recent example is Mannheim Quay, a social housing project occupying prime dock frontage which could no longer generate interest amongst private
Figure 2.6  Paxton Drive, Swansea Maritime Village

Figure 2.7  Social Housing, Govan, Glasgow
developers (Housing Options, 1994, pers.comm). Lastly, in the cases of several port-cities, it can be argued that the waterfront offered both the opportunity to initiate an 'environmentally friendly' building programme away from more controversial 'green field sites', and the prospect of reducing initial housing development expenditure because projects could be sited on land already owned by councils. Whatever the factors involved in the equation, however, and whatever their relative importance, this era of social housing cutbacks witnessed the quiet yet significant encroachment of council housing on the waterfront. This, in its turn, paved the way for much of the investigation which follows.

Finally, during the 1990s, the council house sector has continued to experience sweeping changes and 'residualisation' (Doling, 1993). This reflects a number of measures, prominent among them being the 1988 Housing Act and the 1989 Local Government and Housing Act. As a result, local authorities have experienced continued tightening of borrowing controls, the outcome being that some have levied 'secondary' rents in order to make repairs on their properties, while most have virtually abandoned their building programmes (Fraser, 1991). Despite the growth trend noted above, therefore, in many places this has naturally led to a cessation of direct council involvement on the waterfront. Conversely housing associations, as part of the 'independent rented sector', have been given the main role of 'providers' of new 'subsidized rented housing', but at a much-reduced level than in previous years. This has established a new role for councils, which have become 'enablers' assisting housing associations to build small scale projects, from the limited funding available to them, in locations such as the waterfront (Fraser, 1991). Moreover, it is clear from the latest housing White Paper, published in June 1995, that there is no intention of reversing this situation (DoE and Welsh Office, 1995). Indeed, even if the political climate changes, Malpass (1995, 7)
argues that:

'the damage done to the image of council housing, and the fact that a large proportion of Labour voters are either home owners or aspire to be, means that it is not possible for Labour to build its policy around large scale investment in ... council houses .... there can be no going back in policy terms'.

Local authorities can therefore expect no re-expansion of their role as providers, and must envisage a future in which their predominant purpose is that of the 'enabler' facilitating housing provision (Fraser, 1991). While this role will encompass, as in the past, support for the private housebuilding sector through the provision of planning permission, in the social sector it will chiefly entail support for housing associations. As the following section demonstrates, these have now been given the main role in providing subsidized rented housing, but with restricted resources which offer no prospect of returning to the large-scale construction typical of earlier decades.

**HOUSING ASSOCIATIONS AND THE WATERFRONT**

This section investigates the changes that have occurred within the housing association movement since the Conservative government came to power in 1979, outlines significant regional contrasts in the movement that are relevant to this research, and highlights major resource issues which have recently emerged.

**Housing associations under the Conservatives**

The housing association movement\(^9\) was the only real provider of social housing in the United Kingdom before 1919 (Figure 2.8). However, the Addison Acts of 1919\(^10\) in
Figure 2.8  Early housing association scheme, Miles Mitchell Village, Plymouth

Figure 2.9  General need housing association scheme, Honicknowle, Plymouth
effect transferred this responsibility to the local authorities, relegating housing associations to a minor role in fulfilling the housing needs of the British population. Even when they were encouraged they were seen only as being the providers of housing for a very small percentage of society\(^\text{11}\). But then, following with the introduction of the Housing Corporation in 1964\(^\text{12}\) to coordinate the movement\(^\text{13}\) in England, the scene was set for dramatic changes to be imposed on the movement by the Conservative party after 1979.

The 1979 Conservative government saw a new role for housing associations (Short, 1982). From their viewpoint the housing situation in the United Kingdom prior to 1979 was unacceptable, primarily because of the New Right philosophy's belief in a free housing market, and its demand for a drastic reduction in the numbers of people within the public rented sector. In the Conservatives' eyes, the housing association movement was uniquely placed to make the transfer to a free housing market possible, and associations should therefore become the main social housing providers in place of local authorities.

In order to achieve this new system a series of changes was introduced by the Conservative government throughout the 1980s, starting with a series of measures in the 1980 Housing Act. Firstly housing associations were given the right to help people enter the owner-occupied sector through low-cost and shared ownership schemes. And secondly, non-chargeable\(^\text{14}\) association tenants were now able to buy their homes. This was made possible by the deregulation of building societies, which began actively to search for custom amongst association tenants. Loans for housing association schemes also became much easier to obtain, placing housing associations in a much better position to build new projects.
This primed the movement for the major new role that the Conservative government envisaged for them, which included the aim of finding new ways of reducing the numbers of council-owned dwellings (Doling, 1993). But by the mid-1980s the Conservative aspirations for social housing remained far from fully realised, prompting a 1987 White Paper which outlined even more sweeping changes. In this, housing associations were specifically identified as the main 'providers' (Figure 2.9) of social housing, while local authorities were relegated to the position of 'enablers' (Fraser, 1991).

Attempts to implement this sweeping change were made through the 1988 Housing Act, and the 1989 Local Government and Housing Act. However, as Fraser (1991) has emphasised, this reorientation was one of the greatest the housing association movement has ever been asked to undertake, and the magnitude of the task led initially to widespread reluctance to co-operate. To a great extent this reflected the fact that housing associations are incompatible, in many respects, with the Conservatives' monetarist ideals. For instance, the associations were part of the 'voluntary sector' and could not make a profit; they were very similar to the local authorities, especially in the fact that they engaged in large-scale expenditure; 'they [were]... not private, and yet [could not] ... be privatised' (Coleman, 1989, 53); and their customers did not compete for places in an open market, but queued. Also, because many associations had close links to local authorities and depended on their goodwill for planning permission to undertake new projects, they were reluctant to take over local authority housing (Coleman, 1989). And, as an ultimate obstacle, the government offered no reform to help the movement cope with its new and demanding role (Coleman, 1989). Problems such as these led to a series of legislative disasters\(^{15}\) and few successes\(^{16}\) (Doling, 1993). As a result the government now realised it needed 'the solidity and respectability of the housing
association movement for its reforms to work (Coleman, 1989, 52), and by the late 1980s this had led directly to government attempts to woo the movement by persuading associations that it was in their interests to accept their new role.

Although the government's ultimate goal of transferring all UK local authority stock to the housing associations was seen as impossible, some progress was now made. Local authorities began to accept the benefits of working with associations, and a few associations saw the benefits of owning ex-council stock (Coleman, 1989). Restrained bidding for council stock took place, and limited transfers were made for local authorities to the associations. However, just as associations began to settle into their new role, they were further challenged by the effects of a deepening recession (figure 2.10). Thousands of new private sector houses originally intended for owner-occupiers were left vacant; and many families were made homeless due to repossession and unemployment. With their chances of re-election apparently seriously damaged by the longest recession since World War II (The Housing Centre Trust, 1993a), the government naturally sought solutions to this worsening problem. These included measures which, for the first time since the early twentieth century, involved the housing associations in the short-term alleviation of social problems. They included a mortgage rescue scheme; the purchase of property in serious mortgage arrears by the housing associations, which then rented them to their former owners; and the allocation of £6000 million to the associations to buy owner-occupation housing for letting to homeless families (Doling, 1993).

So far as this thesis is concerned, the consequences of all these policies, measures and trends have become apparent on the waterfront in three specific ways. Firstly, the recession has given the associations the opportunity to purchase un-sold units originally

65
Figure 2.10  The effects of recession, empty units, Sutton Harbour, Plymouth

Figure 2.11  The effects of recession, empty units, Sutton Harbour, Plymouth
intended for owner-occupation. An outstanding example of this is to be found in the purchase of private properties in London Docklands by housing associations. Secondly, as local authorities have been starved of funding, the small-scale projects which many were starting to provide on the waterfront have become the province of the housing associations. Although the properties now provided by the associations may be very similar to those previously built by councils, their origins and ownership structures are entirely different. And thirdly, the impact of recession has made it easier for housing associations to gain entry to the waterfront. Recessional conditions have meant that waterfront land has lost many of its attractions for private housebuilders (Figure 2.11) so that prime dock frontage has become affordable for the associations. Swansea's Mannheim Quay development, noted in Chapter 1, is a prime example of this process in action.

Although the recent evolution of the housing association movement is relevant to the waterfront in a variety of ways, it is necessary to appreciate that the movement itself is not of equal importance in all the regions of the United Kingdom. Firstly, as will be shown below, housing associations are a less significant a force in Northern Ireland and Scotland and consequently have not been used so intensively as the vehicle of change as they have in England. In these regions, therefore, any move towards social housing on the waterfront has been largely in the hands of other agencies. Secondly, in Wales there has been a great deal of conflict between the housing association movement and the government over the implementation of the housing associations' new role, again with ramifications for waterfront social housing.

In Northern Ireland the main governmental policy is still the containment of sectarianism, a priority which applies to housing as it does to all aspects of life (Mason,
1993a). In terms of housing this has meant that the Northern Ireland Housing Executive, instead of local authorities, controls all public housing stock (160,000 units). There is therefore a virtual government monopoly within the public housing sector and, conversely, no political pressure to reduce local authorities' role in this field. This has greatly reduced the need to expand the housing association movement within the region, to the extent that there are only 46 registered housing associations owning 10,000 units (Mason, 1993a). In fact the only real change for the movement in this region has been a gradual increase in special needs units and association mergers, and even this has not been significant (Mason, 1993a). In these special circumstances all the signs are that, for the foreseeable future, the housing association movement in Northern Ireland is likely to remain extremely restricted. In terms of the waterfront, therefore, any social housing schemes implemented on regenerated port land are likely to be in the hands of the Northern Ireland Housing Executive rather than the associations.

Although Scotland is traditionally the testing ground for legislation to be introduced into England, housing associations here have been relatively untouched by many of the sweeping changes that have been introduced south of the border. Three factors largely account for this. Firstly, it has been difficult to implement the English housing legislation in Scotland because the latter has different financial rules and structures. Secondly, the limited size and fragmented nature of the movement has also prevented change. Altogether there are 54,000 units, yet they are managed by 180 housing associations. Lastly, Scottish associations have shown great reluctance to abandon a number of deeply entrenched traditions, and in particular their commitment to small-scale schemes, strong tenant involvement, and collaborative work with the Scottish local authorities (Mason, 1993c). Consequently, although Conservative policy has successfully established Scottish Homes as a new development agency specifically for Scotland by
amalgamating the Scottish portion of the Housing Corporation and the Scottish Special Housing Association\textsuperscript{17}, Scottish associations have not been asked to take on the all-encompassing role that the English associations perform. Instead a gradually expanding role is predicted for associations in Scotland (Mason, 1993c)\textsuperscript{18}, with the result that most moves towards social housing on the waterfront are likely to remain in the hands of local authorities.

The situation in Wales has been very different from that experienced in Northern Ireland or Scotland, largely because of measures that have been specifically directed at Wales rather than the UK as a whole. This has led to considerable conflict between the Welsh associations and government policy.

This conflict originated in 1989, when Tai Cymru was created as a version of the Housing Corporation\textsuperscript{19}. Although Tai Cymru was seen as a positive step forward for Wales by the government, it quickly angered (and united) housing associations through two new proposals. Firstly it wished to introduce 'approved development bodies' (ADBs\textsuperscript{20}, so that only the 'best' ten associations, out of the 102 associations in Wales, would be allowed to build new units. The argument for this major shift was that new housing would be provided at lower cost to the taxpayer. Secondly Tai Cymru also proposed to introduce a 'pattern book' of approved housing designs. Clearly, both proposals had serious implications for the Welsh housing associations' independence and room for manoeuvre, and it is unsurprising that they precipitated a major battle with Tai Cymru. Mason (1993b, 29) argues that this battle was valuable in that it both crystallised what the associations wanted for the future, and made Tai Cymru realise that it must listen to its associations. So far as the immediate issues were concerned, the movement was partially successful since it managed to persuade Tai Cymru to abandon the idea.
of supporting only ten ADBs. However, the pattern book concept was adopted, and on the waterfront the consequence has been the implementation of more standardised social housing designs within port regeneration schemes. On the one hand this can be seen as beneficial, creating social housing of a very high standard but, on the other hand, the strategy might be considered to impose an undesirable degree of conformity with respect to the architectural contribution which social housing may make to the unique environment of the waterfront.

Quite apart from these regional contrasts, it is necessary to highlight the consequences of financial constraints imposed on the housing association movement by the government. In reality the government has, on the one hand, expected associations to expand their activities but, on the other, has reduced and restricted the resources available in order to restrain public expenditure. In this sense, recent official attitudes are strongly reminiscent of those adopted by many postwar governments, and outlined earlier in this chapter.

The mechanism employed to restrict financial resources has been to lower the Housing Association Grant\(^2\) (HAG) (Fraser, 1991). Until 1985 HAG capital grants could be gained to cover the net cost of association projects (Baker, 1976), but this subsidy has been progressively reduced since the 1988 Housing Act. This introduced 'challenge funding\(^2\) and required associations to find a growing proportion of their finance from private sector sources. For example in England the average HAG was reduced from 75% in 1988, to 67% in 1993 and 55% by 1996 (Whitehead and Pryke, 1993). In the regions it was lowered in 1993 to 82% in Scotland and 65% in Wales\(^3\). Traditional subsidisation and levels of completions, it is true, were maintained for housing for the elderly and special needs groups\(^4\) (Figures 2.12 and 2.13), but in practice this did little to solve the
associations' new 'provider' problems (Mason, 1993a and 1993b).

The most serious consequence of HAG reductions was a change of attitude among lenders to the housing association movement. These became increasingly reluctant to fund association projects, especially if they were not low risk, with the result that the conditions on which loans were made become more demanding. Associations therefore found loans for building projects much harder to secure, while the interest on these loans also increased. Thus the growing gap between the cost of housing and the support the government provided quickly became more costly to bridge, forcing associations to increase their rents (The Housing Centre Trust, 1993a).

The direct result of this deteriorating funding situation was that the social groups able to benefit from housing association activity changed. Increasingly, only tenants so poor as to gain Housing Benefit or rich enough to afford the new higher rents could hope to be association tenants. Meanwhile many other types of potential tenants fell between these two categories because they were no longer able to afford association property (Fraser, 1991). As time goes on, therefore, the types of tenants which associations are able to house, and the types of scheme they are able to build, inevitably become less varied. Housing association provision is becoming residualised, and this residualisation of the sector is naturally affecting all association schemes, including those on the waterfront. This clearly underlines the importance of assessing the suitability of the waterfront as a setting for social housing communities.

As a postscript, the publication in June 1995 of a White paper on housing must be noted (DoE and Welsh Office, 1995). Although this has yet to produce legislation, it is an indicator of how attitudes to the housing association movement are likely to evolve, at
Figure 2.12  Completions of specialised dwellings for the elderly, 1981-92

(Source: Social Trends, 1994, 111)
Figure 2.13  Sheltered housing association scheme, Anchor Trust, Efford, Plymouth
least while the Conservative party remains in office. Perhaps the key point to emerge is that associations will be expected to operate in an increasingly competitive environment, which may include legislation enabling commercial providers to compete for government support alongside the associations. Like their local authority predecessors, housing associations will have to learn that - as the main provider of social housing - they will be at the mercy of the financial climate. From this it seems probable that, while the movement will retain its role as the main social housing provider, it will do so for an increasingly narrow band in society. If anything, this trend is likely to continue to limit the associations' ability to provide general needs accommodation, and this will in turn define the movement's contribution to social change on the waterfront as much as in any other part of the city.

CONCLUSION

This chapter has charted the main threads of national policy for council housing, and subsequently association housing, and has attempted to correlate it with the decline and rejuvenation of waterfront activities. What has been demonstrated is that, in very broad terms, the relationship that can be identified is inverse. In the early postwar decades, although there were periods of intense social housing construction, little impact occurred on the waterfront. Large-scale, and therefore usable, redundant areas took time to emerge; housing authorities were often occupied elsewhere in and around the city, political shifts and resource fluctuations worked against the development of major waterfront social housing schemes, and in most instances cityport authorities did not actually own the redundant land which became available. Conversely, although the level of council housebuilding has been drastically reduced in the last 15 to 20 years, the same period has witnessed increased local authority activity on the waterfront. This owes much to a cluster of factors that has constrained the scale of local authority building and
has made it easier for more modest projects to enter waterfront schemes.

Since the early 1980s, this housing association movement has been asked to take over many of the roles that were traditionally administered by the local authorities. By the early 1990s, although the associations had become the main 'providers' of new social housing within England, in the regions (Northern Ireland, Scotland, and Wales) the associations experienced other pressures, which in some cases has prevented much of this change. Even in England attempts to transfer all the local authority stock to associations has made virtually no progress. Today the movement is at a 'cross-roads', pressured into solving recession-based housing problems, with its funding reduced but its 'provider' role still remaining. This has meant that the future for the movement is a continuation of its new role but with further residualisation of its stock and tenants. On the waterfront, social housing built in the 1980s and 90s is inevitably small scale and association managed, and - as with association stock in other areas of the city - contains mainly the 'deserving' poor.
NOTES

1. In some periods, for example, policy has steered council housing towards the periphery of cities, whereas at others there has been greater concern for inner-urban redevelopment. Shifts of this type are discussed later in the chapter.

2. In the short term, many people were either homeless or living in overcrowded conditions, causing squatting to become commonplace by the summer of 1946 (Short, 1982). Short-term needs were met by a variety of measures, including the construction of 'prefabs', the requisitioning of dwellings, the conversion of premises to residential use and the repair of damaged properties.

3. Prefabs were small prefabricated bungalows, usually with asbestos outerwalls and a flat or low-pitched roof. They could be erected very rapidly on a simple concrete foundation which covered the whole area of the dwelling. Although intended to be temporary, many were used for decades.

4. Doling (1983, 476) has argued that the gross value of cuts can be misleading. As families were encouraged into home ownership the cost of mortgage tax relief rose rapidly and this should be set against the gross savings in social housing programmes.

5. Neither of these policies has shown significant signs of success.

6. These rights applied to tenants of three years' standing or more.

7. In 1983 the Institute of Housing and the Royal Institute of British Architects published a joint report Homes for the Future. This was an attempt to update Parker Morris in the absence of other definitive guidelines. Its recommendations
were intended for all tenure types and centred on the use of low-level dwellings, more space, security and personalisation (Burnett, 1991). This report was sanctioned by the government, but its recommendations were not made mandatory and it has not, therefore, achieved its general aim of improving housing standards.

8. In the one area in which local authorities kept their traditional role, housing the homeless, the waterfront saw the continued presence of local authorities through the transfer of un-bought private units to council control. An example of this is London Docklands, where the homeless have been housed in empty condominiums, sparking inevitable anger by owner-occupiers.

9. A housing association can be best defined as 'either a society, or body of trustees, or a company, that has the object of constructing houses, or improving them, or at least of managing them. It must not trade for profit, or at any rate its rules must prohibit the issue of capital with interest or dividend exceeding the current rate prescribed by the Treasury' (DoE, 1971, 3).


11. Associations fall into two main categories, 'traditional' and 'new-style'. Traditional associations include 'special needs' and 'general family' associations which have become more important in recent years, as well as 'industrial' and 'self build' associations which are in the process of becoming less important. New-style associations fall into two categories. Firstly, 'cost-rent' associations, which were first introduced into the UK through 1960s housing legislation, but
never gained popularity, and secondly, 'shared-ownership' (co-ownership) which is actively encouraged and very popular (Doling, 1993 and DoE, 1971).

12. The Housing Corporation was set up under Part I of the Housing Act 1964 (Baker, 1976). It can be defined as 'the government quango which provides capital and revenue funding for housing associations and housing co-operatives' (Fraser, 1991, 125).

13. The National Federation of Housing Associations (NFHA) was introduced after the first world war to coordinate the movement.

14. A non-chargeable tenant is a person who does not pay rent.

15. For example 'tenants choice'.

16. These included making housing associations more efficient and allowing the voluntary transfer of stock by local authorities.

17. The Scottish Special Housing Association was the only governmentally linked housing association. It provided overspill schemes in areas which were economically deprived. Scottish local authorities managed a third of its stock but, as it operated at a loss, it ceased to exist in 1988 when it joined the Housing Corporation to form Scottish Homes (DoE, 1971).

18. Scottish Homes was in fact popular amongst associations, as it was hoped that it would have real power to invest in the future of the association movement in Scotland.
19. The Housing Corporation was the coordinator of the Welsh Housing Association movement up until the creation of Tai Cymru.

20. This is outlined in the section for the UK as a whole.

21. HAG was introduced in the 1974 Housing Act to be the mechanism by which funding for new building schemes and the rehabilitation of existing housing was administered. Traditionally HAG funding covered 80 to 100% of each association project. HAG is not paid directly to the associations but is given to local authorities in part repayment of the money they have temporarily advanced to associations (Baker, 1976). The field of social housing funding is complex and no attempt has been made in this thesis to cover all aspects of this subject. For a detailed investigation of it see Whitehead (1993).

22. This encouraged associations to use HAGs for only 30% of their funding (Whitehead and Pryke, 1993).

23. In Northern Ireland funding has actually increased in real terms to £38.8 million in 1993 (Mason, 1993a).

24. 100% for special needs groups and 80% for sheltered housing.
Social housing exists on the waterfront, not in isolation but interwoven into a complex mixture of architectural forms and land uses. This means it cannot be investigated without a working knowledge of the waterfront in which it lies. Perhaps surprisingly, research to date has not approached and analysed port regeneration in this way. Instead the mixed-use waterfront has been accepted relatively uncritically and treated to little genuinely analytical work. The main aim of this chapter, therefore, is to subject mixed-use revitalisation to detailed examination in order to shed light on the nature of the environment in which social housing has frequently been developed. To do so, it adopts and adapts for analytical purposes a descriptive framework recently suggested by Breen and Rigby (1994, 29). The basis of this framework is that revitalisation produces not just one new waterfront, but a series of waterfronts which are superimposed on each other. Thus the mixed-use waterfront is a composite feature, comprising a variety of interrelated - and perhaps conflicting - elements.

In addition this chapter has two further aims. The first is to distinguish between the external and internal environments that are created on the waterfront. The external environment, the composite entity identified above, is clearly of great importance if the outcome of revitalisation is to be understood. But recognition of this should not obscure the fact that for waterfront residents there is also an internal environment that is experienced just as much - the home. This, too, must be considered as an important dimension of the mixed-use waterfront, as the central section of the chapter will
demonstrate. Secondly, while the aim is to be analytical, it is also necessary to recognise that reactions to waterfronts must to a great extent be subjective. Much of the empirical research conducted for this study was essentially concerned with residents' subjective reactions to their living environments, and in preparation for this the chapter's final section therefore provides a brief introduction to the notion of waterfront perception.

THE EXTERNAL ENVIRONMENT

As has been indicated, the main thrust of this section is that insight into the mixed-use waterfront is gained when this new environment is disaggregated into its component parts. Elements of the waterfront environment will be examined using an adaptation of the typology advanced by Breen and Rigby (1994, 29), which identifies five urban waterfront types - cultural, historic, recreational, working, residential and mixed-use. The commercial waterfront has been added to this so that all the elements present within cityports can be explored in turn. This emphasises the variety that is typically found, enables the main features of each type to be identified and also highlights potential conflicts between the different waterfronts that can be discerned.

The cultural waterfront

Elements of the cultural waterfront exist at various physical scales, ranging in size from the large-scale aquarium to the small fountain; it is the size of these features that determines their impact on other land-uses.

Smaller-scale cultural elements exist within a wider land-use context, frequently forming focal points, giving symbolic representations of particular uses, and adding texture to landscaped areas (Figure 3.1). They also add regional markers to dockland areas that tend to lack a sense of place, and allow the personalisation of spaces by their
users. Due to all these factors, such features tend to lie 'passively' within the environment, and are typically compatible with other activities.

The Fisherman's Memorial, Fishermen's Terminal, Seattle is a good example of this type of land-use. This 30-foot memorial, of a fisherman hooking a halibut, forms the focal point of this waterfront project. It lies at the centre of a plaza used to bless the fleet, giving it special significance for the terminal's users. In addition, this local significance is increased by the fact that it was paid for through the fund-raising efforts of the local fishing community, and its design was chosen through a competition between Seattle artists. The memorial was then personalised by plaques listing over 400 Seattle fishermen (Breen and Rigby, 1994, 308). The memorial consequently forms an important part of the revitalised terminal in several ways. Firstly, it has given the fishermen an opportunity to put their mark on the scheme. Secondly, it symbolises both the fishing industry and the people that have worked within it. Thirdly, it forms a focal-point where fishermen can undertake both 'cultural' and religious activities. Lastly, it embraces the local community through its design. Due to all these factors, the memorial is a positive element of the environment, personifying the place in which it stands.

Larger-scale cultural elements, unlike small-scale features, normally draw in large numbers of external visitors on a daily basis (Figure 3.2). Largely for this reason such features lie in the environment less passively, and can be incompatible with other uses. Because the routes to them tend to be busy thoroughfares filled with traffic and pedestrian noise, these areas tend to be unsuitable for land-uses such as housing. To overcome this problem it is appropriate to cluster cultural elements of this type with relatively similar land uses. This is shown by the example of Centro del Mar, on the Espana Dock,
Figure 3.1  The Mayflower Steps, Plymouth

Figure 3.2  Aquarium, Plymouth Hoe
Barcelona. This centre covers 13,000m² and combines an aquarium, laboratory and underwater show³. In architectural terms it is a pioneering and diverse building, leading the visitor through a conventional aquarium, as well as a journey to a submarine base supposedly located 'at the bottom of the sea' (Sastre, 1993, 60). This scheme has overcome the difficulty of compatibility with other waterfront uses by being located within a site designated for amusement, recreation, commerce and culture. This 'honey potting' of compatible uses can be an important design stratagem for the successful integration of such features into the wider waterfront (Sastre, 1993, 59).

The historic waterfront

The historic waterfront encompasses the surviving elements of the traditional dockland, from small items of ironwork to large buildings (see Chapter 1) (Figure 3.3). It is the size and number of these features that determines their impact on the waterfront as a whole. In some waterfronts few historical features remain, due to their low historical value and ill repair, whereas in others abundant historical material has been retained. Reasons for these retentions include the existence of listed building status, public pressure, commercial value and the development strategy adopted for the area.

For such waterfronts to be successful, new architecture and landscaping have to complement the old, and the old has to be renovated to lie happily within a new 'townscape'. Unfortunately, for a variety of reasons, this has often been a difficult result to achieve. For example, architecturally sympathetic schemes are expensive. Also, original buildings can be difficult and hugely expensive to convert to new uses. And, not least, in schemes where local planners do not demand that sympathetic architecture is built, the waterfront can appear dislocated and lacking architectural continuity.
An example of the problems associated with converting historic waterfront features is provided by Thames Tunnel Mills, a nineteenth century warehouse and flour mill sited on the bank of the Thames in London. Although this is now an outstanding complex of 71 'fair rent' flats which received a Housing Design Award in 1985 (Bone, 1985, 81), its conversion was an enormous problem for its architects and developers. The mill had been unoccupied for ten years, was the wrong shape for conversion, and without subsidy was impossible to renovate economically for any alternative use. At the same time, it lay in a conservation zone and could not be demolished. Consequently progress only became possible when the Historic Buildings Council was able to make the building's rehabilitation viable through a conversion grant.

Other historical features suffer from very similar problems, and their conversion to new uses also relies very heavily on the funding that is available. Particularly since the recession, this has led to many historic buildings remaining unconverted, not least because currently only those within conservation areas (or of great individual significance) can gain conversion grants. Although this is not necessarily a problem for large warehouses with extensive internal space, which can be utilised without conversion, it is a frequent problem for specialised and unusual buildings.

Even if funds are made available, it is easy to convert a historic building badly and create an eyesore (Bone, 1985). This potential pitfall is of great importance because the historical elements of waterfront areas contain some of the best examples of English architecture, and can be the starting point for the architectural direction a waterfront takes. Historical features, such as Portsmouth's Naval Heritage Site, can also contribute greatly to the commercial value of a dockland by attracting visitors (Figure 3.4). This, too, underlines the need for careful conservation. In this case, tourists are drawn through
the less-publicised conservation area\(^8\) that surrounds the site, making it the central element of a 'historical waterfront park' (Pinder, 1993, 161). As such, it gives the visitors a wide variety of experiences, while limiting the tourists' exposure to the working waterfront, which is beneficial to both them and the navy.

Small historical features, such as bollards, do not impinge so greatly on the waterfront environment. Consequently they need not be considered at length. However, it is important to note that they are able to add character to 'mass-produced' environments, and may also provide a reassuring link with the past for many waterfront users. Because of these factors such elements have a significant role to play in revitalised port zones, from which it follows that care should be taken to avoid clashes with newer architectural styles or land-uses.

**The recreational waterfront**

The recreational waterfront covers three main types of land-use. The first of these is water-based leisure, which encompasses a variety of activities including marinas, water sports\(^9\) and nature watching. As many water-based activities are sources of disturbance and pollution, they are seen by coastal zone managers as one of the major sources of conflict at the water's edge. However, from a revitalisation viewpoint it is arguable that a more balanced stance is appropriate. On the one hand, marinas pollute the enclosed water bodies in which they lie; boats release into water bodies toxins from their hull coatings, effluent and small quantities of oil; and jet skis and power boats churn up the water and cause noise pollution. But, on the other hand, recreational uses are an important part of the ambience and economic opportunity that the waterfront offers. This leaves those who manage waterfronts with the task of juggling the obvious benefits that water-based activities bring with the serious environmental hazards they create.
Figure 3.4  Portsmouth's naval heritage site

Source: Pinder, D (1993)
A good example is provided by Southampton's Ocean Village, a 29-ha site with a wide range of uses including high-class housing, offices and a cinema (Figure 3.5). This scheme relies heavily on its water-based activities for a focus\textsuperscript{10}. Central to this are berths for 450 yachts in the Eastern Dock marina (Pinder, 1993). Pollution and engine noise from yachts, jet-skis and power boats entering the marina are clearly a potential problem for the nearby housing, but the noise of stationary yachts' rigging and the view of the marina add to the ambience of the locality, drawing in visitors and boosting residential desirability. Ocean Village's main selling point, water-based activity, is therefore not only beneficial, but also detrimental to its continued prosperity. This leaves its managers with a quandary: how to create a homeostatic system centred around a potentially damaging focus.

The second recreational land-use is open space, which includes waterfront walks, parks and access (Figure 3.6). These recreational features also have the potential to create friction between visitors, waterfront workers and residents. Access to the water is often seen as a right by many taxpaying citizens, who see substantial government funding regenerating once-derelict areas; yet those who work and live on the waterfront need 'defensible space' between their land uses and those of the visitor. This may require steps to be taken which allow tourists access, but also contain their movement away from zones of potential conflict with other waterfront uses. Southbank Riverwalk on the St John's River in Jacksonville, Florida\textsuperscript{11} is a mile-long scheme built out into the water, rather than on existing land. Because of this design feature, it allows access to the riverfront, both on foot and by boat, without causing major conflicts with other waterfront users. Before the walk was constructed there was very limited access to the river, and little linkage between the facilities that had been constructed along the waterfrontage. The walkway effectively solved this problem, and has now become a focal
point facilitating good access to the waterfront for all\textsuperscript{12} (Breen and Rigby, 1994, 210).

The third type of recreational land-use, entertainment\textsuperscript{13}, has the capacity to be particularly incompatible with residential waterfront schemes. Because it is a mainly nocturnal activity, it can create a range of problems as revellers can be rowdy, sick or amorous. Moreover, given that waterfront housing tends to have no physical barriers between schemes and the street, people's homes can be at risk, not only from the noise such venues create, but also from the revellers themselves. Plymouth's Sutton Harbour effectively illustrates such problems. In recent years this area has become a popular night spot, focused on a group of clubs and public houses. Entertainment around the harbour has caused many problems for the local residents, ranging from late-night noise to prostitution and violence. In their view, night-time revellers have had a clearly detrimental effect on their living environment, and should be drastically reduced if the area is to survive as a successful residential community (Jowit, 1995, 17).

\textit{The commercial waterfront}

The commercial waterfront includes businesses, light industry, shops and offices. Even when development is progressing well, commercial activity can cause conflict, particularly with the residential waterfront. Shops may be too exclusive for residential shopping; commercial sites might draw strangers through residential areas; and commercial areas might be deserted at night. Added to this, those employed in recreational and tourist activities may feel that the commercial waterfront spoils their 'tourist' image. Beyond these potential difficulties, however, United Kingdom waterfronts have recently experienced problems because recession has dislocated planned commercial developments. Due to this factor, many of the buildings designed and built for these uses are still unoccupied, half-finished or under-utilised. Many businesses that
relocated to the waterfront in the 1980s found waterfront life difficult. Declining demand brought a halt to numerous schemes, partly as a result of the poor economic climate, but also frequently because of high rents and the locational isolation which many waterfronts experience. These factors forced many businesses to be liquidated or move to cheaper locations.

For waterfront users these empty units and derelict sites have caused two particular problems. Firstly, they have tarnished the waterfront's main selling point, its image. Secondly, as less commerce is present on the waterfront, fewer people are drawn into the area\(^4\). Clearly, both difficulties threaten the momentum of revitalisation. Perhaps the best example of this is to be found at Canary Wharf in London's Dockland (Figure 3.7). The scheme is the largest of its kind in Europe\(^5\), representing an investment of eight billion dollars that was predicted to generate 50,000 direct jobs (Shaw, 1993). Yet much of the office space in the complex is empty, and most of the jobs have not materialised. For Olympia and York, the company that developed the site, the project was one of the main factors that caused its business to collapse. Although the government has now decided to link the underground to the Wharf, the immediate future for the site seems bleak. While this project is a spectacular example of recessional problems, however, in reality it is no more than a high-profile illustration of a much more widespread difficulty. Returning to the Southampton case study, for example, Pinder (1993, 164) has highlighted both the low occupancy of the Ocean Village shopping centre and the high failure rate of businesses located there.

*The working waterfront*

The working waterfront, based on maritime activity, might have declined in importance, but it still retains a place within many port cities. Some working uses are totally
Figure 3.6  Waterfront promenade, Salford Docks

Figure 3.7  Canary Wharf, Docklands, London
incompatible with the regenerated areas in which they lie, such as chemical factories, large naval or commercial yards, and container or oil terminals. Consequently, to reduce friction in the revitalisation process, such industries have often been faced with a double-edge assault: incentives and sharp rent rises have been employed to induce many of them to relocate (see Chapter 1). Yet other vestiges of the working waterfront, such as small ship repair yards, ferry terminals (Figure 3.8) and fish markets, can lie happily alongside new uses and enhance the ambience.

All too often, however, there is a failure to recognise that potentially compatible port industry can be retained in new schemes, producing inevitable conflict between those working in port-related industry and the developers. Much of this friction could be alleviated if the working waterfront was seen as a legitimate partial use for such areas in the 1990s. As has been indicated, this legitimacy is based partly on the contribution the working waterfront may make to the ambience of revitalisation. But it is also arguable that longer-term strategic issues are relevant in this connection. After all, dockland sites are specially suited for sea-based activity, such locations are limited and can be seen as a non-renewable resource to conserve for the future. By retaining elements of these industries in city locations, all land-use options are kept open.

**The residential waterfront**

The residential waterfront can, of course, be divided into two main tenure types, private and social housing. Traditionally, the attractions of waterfront sites have made private housing extremely viable, affording it the best locations and architecture. Social housing in contrast has been less prominent, often being sited on land surplus to other uses. Overtime, however, the spatial distribution of these two tenure types has altered significantly in response to economics and the recession. Social housing used to be sited
Figure 3.8  Brittany Ferries, Millbay Docks, Plymouth
(View from Millbay Marina Village)

Figure 3.9  Walkway at Swansea Maritime Village
on the lower-cost land, away from the prime dock front or on pockets of land already owned by social-housing providers. But during the recession this situation has changed as unoccupied private dwellings have been converted to social housing, and prime sites left vacant by developers have gone to housing associations and local authorities (see Chapters 1 and 2).

Other sections in this chapter have investigated which land uses can be incompatible with residential development. To a considerable extent, the problems likely to be encountered arise from the fact that waterfronts comprise a collection of public and semi-public areas with little defensible space between housing schemes and other uses. Conflict over defensible space will be examined in more detail later in the thesis and need not be considered further at this point, but brief consideration of two quite different issues is appropriate. First, it must be recognised that in the long term the residential waterfront is vulnerable because many flood defences are not designed to deal with very high-magnitude events. Secondly, and much more immediately, there are safety issues relating to waterfront communities. For example, railings are rarely provided to separate residential developments from what have now become ornamental water bodies (Figure 3.9). This has led to several drowning accidents across the United Kingdom, suggesting that developers still have a much to learn if they are to create a 'resident friendly' environment. Thamesmead illustrates this problem, where open access to the water is a potential threat for parents with children. Here it is ironic that this site was seen as one of the leading examples of landscaping in its genre, prompting Perkin (1975, 42) to claim that 'one of the most significant points about Thamesmead is the attention given to landscaping, which is excellent'.
Figure 3.10  The Watershed, Bristol

Figure 3.11  Traditional three-bedroomed post-war housing
Mixed-use properties

Although they are not widely recognised, some waterfront structures house several contrasting land uses. Consequently they mirror on a small scale and internally the larger mixed-use environment commonly encountered in revitalised docklands. These mixed-use buildings tend to allocate the most accessible units to uses that rely on close and frequent contact with browsing visitors\(^\text{16}\), leaving other floors for residential and office space. A good example of this is the Watershed in Bristol (Figure 3.10), a two-storey building designated for mixed public and commercial use by Bristol City Council. The Watershed contains a shopping arcade on the ground floor, leaving the upper floor for workshops, cinemas and a restaurant (Falk, 1993, 132). In these buildings, therefore, space is normally allocated on market principles, allowing exclusive dockland uses to enjoy the best space, and leaving other uses space further away from walkways and the dockfront. On the one hand this may be presented as a rational economic approach to the arrangement of land uses, but it may also be argued that it subjects some users to 'space poverty' and replicates at the micro-scale some of the less desirable features of mixed-use waterfronts in general.

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From this discussion it is evident that the mixed-use waterfront contains a variety of potentially incompatible land uses. To overcome potential problems, planners, developers and architects must combine their skills to create an environment with appeal for many different users. While it is valuable to recognise that the external environment should be analysed in this way, however, it is also necessary to acknowledge that for residents there is an internal environment - inside the dwelling - which will also influence the success of waterfront developments. At this point, therefore, it is appropriate to turn to this internal environment, particularly in relation to social housing residents.
Satisfaction with the internal environment is based on personal preference, and in this respect waterfront social housing tenants are no different to those who live elsewhere, or for that matter people in general. What is special about social housing tenants is that they tend not to choose their homes, as accommodation is offered to them. At the extreme, this can result in tenants being very grateful for having a roof over their heads, but very unsatisfied with the accommodation they are given.

In recent years, the sizes and types of dwelling that have been built in the UK have changed dramatically. This has been linked to changes in family structure and expectations of home use within Britain since the Second World War. Today, there are fewer nuclear families with two children and two parents, and far more people living alone or as single parents. Added to this, couples marry later, have fewer children, and do not live with their parents in adulthood. Simultaneously, the United Kingdom's population has become progressively older with people living longer. This has led to a drop in demand for the traditional postwar, three-bedroomed, terraced 'family' house, and a rise in demand for smaller dwellings (Figure 3.11). There has also been a sharp rise in specialist dwelling types, such as sheltered housing for the elderly. All these changes have influenced the social housing that can be found on the waterfront, making homes smaller, and generating a significant number of units for the elderly.

Added to the changes within the family and age structure, certain other factors have changed the way the home is used. Since the Second World War, people have used their homes differently. For instance, the home has seen the arrival of labour-saving equipment, such as washing machines. Added to this, it has taken on a central role in family entertainment due to the arrival of television, satellite broadcasting, cable tv and
video films. Resident satisfaction has become more important as more time is now spent in the home. There has also been a change in eating habits, with the family meal around a table becoming outdated as people eat around the television and at different sittings. Cooking has moved out of the main living area to the scullery kitchen. Cooking space has also increased to accommodate the vast array of time-saving equipment now available for the home. Bathrooms have become a household necessity, rather than an optional extra, and in most instances have been moved from the scullery to the upper floor. Added to these internal changes, an increase in car ownership has meant that more external space is needed for parking (Burnett, 1991). All these trends have led to waterfront social housing being planned with room for new appliances and added space for home entertainment, eating, washing and car parking.

In the earliest British waterfront regeneration projects, internal space specifications for council housing were mandatory, due to the implementation of Parker Morris Standards in 1969 (Chapter 2)(Short, 1982 & Burnett, 1991). The Parker Morris report required homes to have two day-rooms, central heating, a kitchen in the 'heart of the house', increased storage space and built-in furniture such as wardrobes (Burnett, 1986, 306). These standards remained in place during the 1970s, during which time Official Design Manuals were also employed to give new local authority housing better layouts and improved architectural designs (Burnett, 1991). Very soon, however, the cost of progress with dwelling size and internal design became a matter of concern, with the result that a 'Cost Yardstick' was introduced to curb spending on local authority house building. This led to council homes being built as cheaply as possible to gain the subsidies available. Homes were therefore badly built, but well designed (Short, 1982, 106). Waterfront council housing built during this period was, therefore, generally of a good size and layout, but not well constructed. An example of Parker Morris waterfront
Figure 3.12  Furze Park Estate, St Budeaux, Plymouth

Figure 3.13  Laganside, Belfast waterfront
housing is the Furze Park Estate in St Budeaux, Plymouth (Figure 3.12). The estate was built in the early 1970's for the Ministry of Defence and consists of 262 two-bedroomed, and 25 three-bedroomed houses. The site's two-bedroomed dwellings are 77.8 m², sufficient to give the family a home with a large room size, two day-rooms, and large amounts of storage space (Perkin, 1975). Even so, the pressure to economise is strikingly evident in the housing's external appearance and its uninteresting open-plan setting.

While the early approach to waterfront housing reflected the Parker Morris era and the economic pressures it created, the majority has been built since these standards were abandoned (Chapter 2). Since the Parker Morris standard was removed in 1981, there has been no mandatory minimum space requirement, except for special dwelling categories such as for the disabled and elderly (Burnett, 1991). There have also been the continued reductions in the social housing budget outlined in Chapter 2, and these two developments have led to new-build social housing being densely packed and as small as possible. The expression of this in the urban landscape has been a return to more traditional low-rise, high-density accommodation reminiscent of Victorian bylaw housing. This architectural U-turn has been particularly popular in urban redevelopment programmes (Burnett, 1991), and has focused on the nostalgia that the past can create. The argument has been that people feel a need for small, intimate architecture and a traditional, familiar environment. Sometimes this reorientation may appear to have gone too far, for example in the re-introduction of back-to-back dwellings, a despised housing form (Burnett, 1991). But most recent housing schemes have avoided such pitfalls while remaining heavily influenced by more traditional housing methods. Thus there has been a return to red brick, pitched roofs and terraces, with the development as a whole being modified to avoid Victorian monotony and safeguard privacy. For instance, both these
Aims can be met by using staggered terraces and L- or U-shaped courtyards, and by avoiding windows facing each other at close range or overlooking walkways.

Added to this return to general needs terraced houses, the flat has also grown in importance as the new housing type for certain groups in society\(^{18}\) (Figure 3.11). This growth was fuelled during the 1960s by the unsuccessful 'high-rise' movement\(^{19}\), but has continued to increase in importance through the introduction of the 'low-rise' flat\(^{20}\) (Short, 1982). Low-rise living has become advocated by developers, as such schemes are far cheaper, per unit, to build.

The return to more traditional housing forms has been welcomed by social housing providers, as low rise, high-density dwellings are particularly suited to the elderly and small families (Figure 3.13). The impact of this on the waterfront is very evident in the construction of socially rented terraced maisonettes, elderly persons' flats and low-rise flats. A good example of this is Exeter's Shilhay development (see Chapter 4). This scheme is based around a series of U-shaped courtyards, containing a mixture of red brick maisonettes, low-rise flats, and terraced houses at a very high density. Similarly, waterfront social housing at Elm Village in Camden ably illustrates the genre. Originally a Grand Union Canal railway marshalling yard, Elm Village\(^{21}\) now comprises 162 housing association dwellings, ranging in size from one-bedroomed flats\(^{22}\) to six-bedroomed houses. So far as space is concerned, the two-bedroomed dwellings on the estate have 55.6 m\(^2\) (Colquhoun and Fauset, 1991)\(^{23}\), and are therefore only two-thirds the size of those at Plymouth's Furze Park. This reduction in internal space has been achieved through a variety of measures, including reduced storage space, smaller kitchens, the removal of an entrance hall, the provision of only a small second bedroom and the combination of bathroom and toilet\(^{24}\).
It is interesting to compare these reductions with the most recent recommendations on housing standards, drawn up by the Royal Institute of British Architects in 1993 and published in their report 'Homes for the Future'. Although this report had no official government sanction, it was an attempt to update the Parker Morris Standards in the absence of generally accepted guidelines at the time. Major recommendations included a reduction in fittings rather than space; the improvement of central heating and insulation; the use of a separate utility room to isolate water vapour; larger kitchens; and generous electrical installation (Burnett, 1991). Although 'Homes for the Future' was never given government backing, the recommendations are still important in highlighting the elements in new homes which are needed, but may not be provided. Certainly, the mismatch between this list and that which could be compiled following the impact of economies in Camden is striking.

In general, therefore, the immediate living environment that it has been possible to create on the waterfront has undergone extensive change. In particular, economics have driven design towards denser, more intimate schemes, based on significantly smaller dwellings and a reduction in some facilities. At first sight it may appear that the result of this would be lower satisfaction levels on the part of residents, but it must also be remembered that the social composition of these housing schemes has changed significantly. Because of today's smaller households, the mismatch between needs and provision may be more apparent than real. The resolution of this possibility was, of course one aim of the investigation conducted during this research, and the discussion will therefore return to the issue in later chapters. Before leaving the internal environment, however, one further point must be stressed. While it has been convenient to consider the internal and external environments separately, some studies have produced evidence that for residents the distinction is not clear cut. For example, the
Department of the Environment (1972) and Housing Development Directorate (Department of the Environment, 1981, 1) suggested that the two are closely interlinked. Consequently, although the distinction has been maintained for convenience in the analytical chapters which follow, the attempt has also been made to find evidence that the two environments merge in the minds of the residents. Again, the discussion returns to this issue later, in this case in Chapter 5.

**PERCEPTIONS AND THE WATERFRONT**

As has been outlined in the previous two sections, tenants' satisfaction levels are likely to be related to the types of internal and external waterfront environment in which they live. This, however, is an oversimplification. Added to the bricks and mortar reality there are the people, all of whom perceive their environment in different ways. What a person perceives is a combination of the experiences that they have collected through time (Birks and Southan, 1992), and these experiences will reflect many factors, including personal characteristics, social characteristics, culture and regionality. Perception is, of course, an exceptionally large and complex subject area, and it is not possible in this thesis to attempt a full analysis of it. What is appropriate, however, is to provide a brief survey illustrating the range of factors likely to influence individual viewpoints. By doing this the background will be provided for later analyses of resident satisfaction levels, which are essentially the collective outcome of individual perceptions. To achieve this aim, this discussion will focus first on the perception of water and the waterfront, and then on social housing.

People see the world in very different ways, depending on who they are. Everyone has a different perception of reality. Personal characteristics such as age, sex, colour and level of disability can drastically alter their perception of an environment. For example,
male and female residents might have quite different perceptions of the waterfront when walking home at night. For the woman the area might appear poorly lit, and frequented by rowdy strangers visiting the night clubs. For her this could be the perfect place to be attacked, whereas the man might not perceive any of these threats. Therefore, the same bricks and mortar can be perceived in very different ways by people, depending on who they are. Similarly Knopp (1995) argues that, in addition to the objective threats which urban space can create, city areas are extensions of the prejudices of the people who inhabit them. In this she takes the example of 'black' areas which are seen as dangerous to white women (Knopp, 1995, 157). On the waterfront, it could be argued that 'youth' areas, such as nightclubs, might well attract a similar fear.

Added to these personal characteristics, tenants' social characteristics are also important in determining their attitudes. These social characteristics include family structure, relationships, employment and class. For example, a person with children living on the waterfront might have a very different perception of the area to that of a childless resident. As has been suggested earlier in this chapter water - perhaps seen as a beautiful resource by the childless - could be viewed as a potential source of danger by anyone with a small mobile child.

Similarly, locational position on the globe may be an important influence. Depending on the culture in which one is raised, water is likely to symbolise different things. Thus it may be seen as a medium of transport, a natural hazard, a spiritual force, an aesthetic resource and as a combination of these things. The importance of water to a particular culture is dependent upon factors such as religious beliefs, the local environment, climate and topography. In one area, water might be associated with danger, and in another with healing. Even within the United Kingdom, the image of
water is different in different regions. For instance, in Glasgow the majority of buildings face away from the Clyde, symbolically suggesting the concealment of the river as an industrial axis and transportation system. In England, in contrast, buildings vie for a position on the river front, and land prices have reflected this, at least until the recent recession.

What is also evident is that 'satisfaction occurs in a social context'; external influences such as peer groups, complete strangers and the media are also important in moulding perceptions of the localities and homes in which people live (Birks and Southan, 1992, 304). In recent years the media and government have expounded the benefits, and positive advantages, of waterfront living. Goodwin (1995, 67) argues that this has created a 'celebratory space' and a 'three-dimensional fantasy' on the waterfront, not just to sustain the growth of homes, employment and shops, but also to serve as 'a flagship for the city's new image'. To achieve this the media have manipulated the waterfront users' true feelings about their environment by making such areas appear so desirable. This theme of image creation as a means of city marketing has also been highlighted in the waterfront context by van der Knaap and Pinder (1992, 156-64), who have argued that it has been an increasingly important force since the mid-1980s.

Tenants' perceptions are determined not only by these influences, but also by their attitude to social housing. This is in turn likely to be affected by their housing history. For instance, a person's opinion of their present home is often dependent on where they lived previously. If a tenant moved into socially rented accommodation from a large detached house, they would probably feel that the accommodation was very poor, whereas social housing tenants who came from slum demolition would obviously see a vast improvement in their accommodation.
Another factor that may influence the perceptions of tenants is the difficulty in securing a tenancy. Social housing completions have reduced in absolute and relative terms over recent years. This has left those who wish to rent social housing with less chance of gaining a property, with either a housing association or a local authority. Because of this, some tenants who have succeeded in gaining a tenancy might feel that they were exceptionally fortunate to have their present homes. But, on the other hand, others could feel that social renting is a stigmatised and abnormal housing type, because of the post-war promotion of home ownership which culminated in the sale of council properties. These tenants might see their present lifestyle in an overly negative light.

Finally, in addition to these general trends, it can be suggested that there are also regional differences within the United Kingdom relating to the perception of social housing. For instance, in the English heartland, social housing is seen as being for marginal groups in society, and home-owners do not like to buy property near such housing. This has caused privately owned houses near social housing to be lower in price, and harder to sell. In Wales, in contrast, there is less stigma attached to social housing, and house-owners are therefore more prepared to buy homes near such properties (Housing Options Swansea, 1993, pers comm.). Even more clearly, in Scotland a continuing high level of support for the political left, a weaker tradition of home ownership, and a strong commitment to public housing, have all combined to reduce the stigmatisation of local authority accommodation.

**CONCLUSION**

This chapter has examined both the external and internal environments which waterfront social housing tenants experience, and has gone on to outline how responses to reality may be influenced by the ways people perceive it. One major theme has been that the
external waterfront environment has been seen as a single entity, the 'mixed-use' waterfront, when in fact it is a unique mixture of different waterfronts ranging from the working to the commercial and the residential. Given this complexity, the success of a dockland regeneration scheme is likely to be determined not just by economics, but also by progress towards the successful integration of potentially conflicting land uses. Very little work has been done to determine which mixtures of land-use types are compatible and which are not, or to examine how compatibility can be encouraged. While the issue has been raised in this chapter, therefore, it can be argued that it justifies considerable future research.

So far as the internal environment is concerned, the chapter has demonstrated that, for social housing tenants, waterfront life has changed because of the removal of mandatory space requirements, the return to traditional building methods and the introduction of the low-rise flat. These policy shifts have meant that most of the social housing built on the waterfront since 1982 has been low-rise, high-density, red brick terraces and flats. Finally, with the introduction of perception, the discussion has emphasised the importance of subjectivity in determining satisfaction with both the waterfront environment and the social housing within it. Satisfaction levels in relation to the waterfront and its social housing are determined by individuals who have a variety of personal experiences, and have often been subject to intense societal pressures. These experiences must be seen as important underlying influences determining the success of a scheme from the viewpoint of residents, and it is essential that this is taken fully into account in future research. As Chapter 4 will demonstrate, this conclusion has been highly influential in the current investigation, most of which relies heavily on personal attitudes and their evaluation.
NOTES

1. These include features such as street art, monuments and focal street furniture.

2. Examples include bandstands, arbors, various forms of 'follies', aquariums, galleries and cultural centres.

3. Aquariums are the largest of these features and have become an increasingly fashionable addition to a waterfront regeneration project. Breen and Rigby (1994) point out that, although there have been objections to the 'trendy' nature of such schemes, the simple fact is that they have unparalleled 'pulling power' and commercial value. They are therefore bound to grow in importance.

4. This was a Housing Design Award (Greater London) for 'Private and public sector improvement or conversion' (Bone, 1985, 81).

5. This problem was overcome by using the original silo for 'vertical circulation' (Bone, 1985, 82) topped by a vast conservatory, and by creating the flats' entrances around it. This created a light, interesting complex with great character, scale and domesticity. A positive point assisting conversion was that an appropriate amount of the original internal structure remained. What should be left and what should go is a particular problem with historic buildings, and the balance between old and new is rarely achieved.

This site houses HMS Victory, the Royal Naval Museum, the Mary Rose and HMS Warrior.

The conservation area contains 41 ancient monuments, and some of the best Georgian industrial storehouses in the UK.

These include jet skiing, power boating, yachting and fishing.

The centrepiece is a marina which is linked to a relocated Southampton Yacht Club (Pinder, 1993).

The scheme includes several pavilions, an observation point, a war memorial, fountains, landscaping, a security office, a rest room and a bridge connecting the north and south waterfronts.

The security office (note 11) has ensured that the access the walkway provides is 'safe' for both visitors and residents (Breen and Rigby, 1994).

Waterfront entertainment includes cinemas, bars and night clubs.

This has been a particular problem for the shops that have survived the recession.

It contains 1.4 million m² of office space and many of the elements that make up a city centre (Shaw, 1993).
These include shops, restaurants, museums, markets and visitor facilities.

This may not be the case in recently built Welsh housing association properties, due to the introduction of a 'pattern book' (Mason, 1993b, 29) by Tai Cymru in 1989 (see Chapter 2). This has restricted the types of built forms that associations can use to those in the pattern book. It is envisaged that this will give all tenants in Wales a good dwelling standard, but this is yet to be seen.

Low-rise flats are seen as appropriate for the elderly, one-parent families and single people.

High-rise schemes were an economic and design solution to the problems of modern city living and housing needs, but not a people-based solution (Short, 1982). High-rise ultimately was not successful because the developers of such schemes failed to consult residents before, during or after the process of construction (Burnett, 1991).

It must be noted that these flats have always been popular in Scotland, where tenemental living is favoured over 'detachment', and there have always been communal buildings, particularly in large cities such as Glasgow. It is therefore likely that tenants in these areas will be far more at ease in waterfront flats.

This scheme was built in 1985.

There are 65 one-bedroomed flats and six four-bedroomed houses.
To make a comparison with the pre-1982 example of the Furze Estate, only the two-bedroomed houses (54) will be outlined in detail here.

Other tenure types in the UK also do not have any minimum space requirements, but they are less constrained in terms of finance. This has meant that owner-occupied units built on the waterfront since 1982 will also be small and densely packed, but not to the same extent as social housing.

As in the case of the Jordan and the Ganges.
CHAPTER 4

INVESTIGATIVE DESIGN AND BACKGROUND:

CASE STUDY SELECTION, QUESTIONNAIRE DEVELOPMENT

AND COMMUNITY ANALYSIS

INTRODUCTION

Earlier chapters have reviewed the need for, and emergence of, waterfront revitalisation; United Kingdom social housing policy and its relationship to waterfront redevelopment; the dominance and complexity of mixed-use revitalisation; and the importance of residents' perceptions in the evaluation of regeneration schemes. As an introduction to the empirical dimension of the project, attention now turns to the investigation itself, focusing on discussion of three main themes. How were social housing schemes selected as case studies, how was the investigation itself designed and, of considerable importance for a project with a substantial sociological dimension, what types of communities became the focus for the research?

SELECTION OF CASE STUDIES

The initial objective when planning the fieldwork for this thesis was to select three sites which would allow comparisons to be made at contrasting scales. Three case studies were considered manageable in the time available, and a focus on small-, medium- and large-scale waterfront developments was necessary to ensure that the influence of cityport scale and morphology on residents' satisfaction levels would be investigated. In addition the selection process aimed if possible to achieve a regional perspective on waterfronts. As England, Scotland and Wales all have different systems for implementing social housing, leading to different types, styles and amounts of provision (see Chapter 2) it was considered appropriate to include in the investigation an example
from each region. While it was realised that examining waterfronts of different scales in different regions could pose a problem of interpretation, allowances were made for this potential difficulty at the questionnaire design stage.

The literature on port regeneration was used to identify cities with waterfront regeneration projects. The planning departments of these cities were then contacted in order to remove from the list any waterfronts that were under-developed; had not been regenerated for more than five years; did not contain social housing of at least 2 years of age; or were represented by key actors who felt that they would not be able to cooperate with the research. At this stage the justification for removing waterfronts of less than five years of age, and housing schemes newer than two years, was that it was believed these developments might still be in flux and therefore suffering from short-term problems associated with large-scale developments such as ongoing building work. From the shortlist of waterfronts produced by this process, further information on each development was then gained through the appropriate key actors (such as planners, housing officials and developers) to ascertain if there was a sufficient quantity of social housing present on the waterfront to justify the primary data collection. This step identified potential case study sites at Cardiff, Swansea, Exeter, London, Hull and Glasgow.

At this stage London Dockland was excluded from further consideration as the Dockland Development Corporation felt that the area had been 'over researched', and Cardiff was also excluded because Cardiff Development Corporation did not wish to be involved in the study, most probably due to controversy over its proposed barrage scheme. The other four remaining sites were then visited to gain contact with the key actors, and reconnoitre the developments. During these visits comprehensive field notes and
photographic evidence were taken of each of the waterfronts, meetings took place with council officials, and access was gained to council records detailing the social housing developments likely to be covered by any survey work.

At this point, two significant decisions were taken. First, Exeter was selected as a case study in preference to Hull. In part this decision was pragmatic in that Exeter was the more accessible of the two possible sites. In addition, however, it seemed that key actors in Hull were unlikely to provide a high level of co-operation, and it was also felt that the Hull Marina site (4 ha.) was rather small to provide a good example of a mixed-use waterfront. Second, it was decided to include in the study Glasgow's Govan waterfront, even though it did not meet the requirement that development should have been complete for at least five years. This in part reflected the fact that this waterfront provided excellent examples of waterfront social housing in a major city setting. However, Govan was also chosen because it was realised that this site offered an excellent opportunity to study the impact of recession on the satisfaction levels of waterfront communities. As will become apparent later, Govan's waterfront has suffered severely from the economic downturn, leaving social housing residents apparently stranded in a sea of semi-dereliction.

During the case-study selection process, therefore, the initial research strategy underwent significant modification. Much of the initial strategy, it is true, was retained. Three sites were chosen, representing England, Wales and Scotland. Two of these sites (Exeter and Swansea) enabled the planned comparisons to be made between mature mixed-use waterfronts of different scales. But the introduction of Govan was a major departure which enabled the research to examine a rarely studied but quite common phenomenon, the consequences of failure to regenerate. It is argued that, while this modification
reflects the pragmatic influences of site availability, it also brings to the study a new and valuable dimension: the social impact of economic stagnation on the waterfront. Against this background, we turn now to the case study sites themselves.

**CHARACTER OF CASE STUDIES**

**Exeter**

Exeter, on the River Exe, has been an administrative centre for over 2000 years. In the thirteenth century the river became impassable due to the building of a weir and, in order to allow shipping to gain access to the city, the Exeter canal was built between 1564 and 1566. Exeter then used this waterway to trade wool products, reaching its greatest prosperity in the early years of the eighteenth century, during the reign of Queen Anne. Widening and deepening of the canal maintained access for ships to sail right up to the city centre, where they unloaded at the Quay. However, in the later eighteenth century Exeter's status began to decline. Competition from the Yorkshire towns hit the wool industry, and the canal became inadequate as ships of a larger size came into general use. When the first railway reached the city in 1844, this spelt the end of Exeter as a port of real importance (Exeter City Council, 1995). From this time on, although the river floodplain was used for industrial purposes, the economic significance of the canal and the Quay dwindled.

In modern times the use of the flood plain has changed dramatically due to the implementation of a flood defence scheme and river canalization. This work was undertaken between 1962 and 1977, after extensive flooding of the city in 1960⁷. Before the improvements, land use on the flood plain was restricted to working-class housing, parks and industry. Subsequently, land no longer under the threat of flooding became
Figure 4.1 The Exeter waterfront in its city context
available for other uses, and the council (the dominant landowner) consequently adopted
the Central Riverside Detailed Advisory Plan (1973). This, it was believed, would
provide a broad framework for developing the riverside as an area of historic and 'high'
design standard architecture (Exeter City Council, 1994) (Figure 4.1). By this time, most
of the riverfront was derelict, although it contained several listed buildings, night clubs
and the Exeter Maritime Museum (Figure 4.2). Early pressure to convert much of this
land into a leisure centre was averted on the grounds that it did not conform with the
Plan, and the city's housing and waterfront policies were instead integrated to guide the
locality's future. Social housing would now be built on the waterfront, in line with a
policy of placing this type of accommodation centrally in the city. This led, in the
1970s, to the planning, design and construction of the Shilhay housing scheme, near the
Quay, on a site previously used as a tannery2 (Figure 4.3). This project, for sheltered and
general needs housing3, was designed around horseshoe-shaped courtyards4, and
consisted of 63 one-bedroomed flats, 73 two-bedroomed flats5, 3 two-bedroomed houses,
6 three-bedroomed houses, a community centre and a small shop6 (Figure 4.4). Finished
in 1977, the development was heralded by the Royal Town Planning Institute as turning
'a problem area into a high quality riverside environment' (The Royal Town Planning
Institute, undated, 29). A decade later, Shilhay was awarded both a DOE/RIBA Good
Design in Housing Award, and a coveted Europa Nostra Award, for its 145 socially
rented units.

Although one night club had been established in an abandoned warehouse before
residential development began, up to this point revitalisation had relied primarily on
housing policy. However, this situation changed significantly during 1980s as the newly
formed Exeter Canal and Quay Trust7 began to conserve the Quay area and bring in
commerce (The Royal Town Planning Institute, undated, 24). Partly due to its efforts,
Figure 4.2  Quay area prior to regeneration

Source: Exeter City Council

Figure 4.3  Shilhay
as well as the increased popularity of waterfront regeneration (see Chapter 1), the 1980s saw a renewed interest in the riverfront, and increased commercial investment on the Quay. By the early 1990s the area had come to contain a museum, a riverside walkway, night clubs, shops, cafes, commercial units, several recreational spaces and private and council housing. Over a period of approximately ten years, therefore, this 16.2 ha site had become a fully mature mixed-use waterfront (Falk, 1992; The Planning Exchange, 1988) (Figure 4.4).

One important development associated with the emergence of the Quay as a mixed-use waterfront has been the provision of public transport. This takes the form of a tourist bus which runs every 30 minutes between 8am and 6pm from Monday to Saturday and is naturally also available for residents to use. In addition, it is possible to cross the river by footbridge to Haven Road/Water Lane where a park-and-ride service operates every 7 minutes from 8am to 6pm on Mondays to Saturdays. Because both these services post-date the construction of Shilhay, it can be suggested that integration with the city is now better than when the project was first completed. As this site has many elderly residents, and is separated from the city centre by a steep river cliff, it would appear that this improvement is of considerable significance, and the discussion will therefore return to this theme in the final section of Chapter 5.

Although it provides the most obvious example, revitalisation on the Exeter waterfront has not been confined to the Quay. In addition attempts have also been made to revitalise three areas on the East side of the river. These extensions of the regeneration process have given the Exeter waterfront a discontinuous morphology, although there are signs of inherent linkage between its distinct elements. The first of these areas lies immediately opposite the Quay, on the other side of the river adjacent to a small dock.
In the 1980s Lovell Urban Renewal\textsuperscript{9} was contracted to regenerate this Haven Banks area\textsuperscript{10}, chiefly by building high-quality private flats and a 'Continental style plaza' for commercial activity (Exeter City Council, 1994, 6) (Figure 4.4). Due to the recession, land to the south of the site remains derelict, all the commercial units in the Plaza are unoccupied, and the flats sell with difficulty and at depressed prices (Figure 4.5). Haven Banks therefore provides a sharp contrast with the Quay and highlights the fact that waterfront revitalisation in Exeter cannot be considered entirely successful. It is, however, physically separate from the Quay and for this reason it does not invalidate the strategy of treating the latter as a well-developed mixed-use waterfront with a strong dependence on social housing.

A 1.8 ha site opposite Exebridges provides the second, and much more successful, attempt to regenerate the west bank of the river (Figure 4.4). In 1977 Exeter City Council decided to promote the development of this site as a leisure and shopping centre by making the land available with planning permission for these uses. Even with these favourable conditions, it took a considerable length of time to gain the interest of a developer. Eventually, however, three offers were received, Arlington Securities was selected to implement the Council's plans and, following a takeover, the work was carried on by Rush and Tompkins in 1983. The terms of the agreement included a 125-year lease at a pepper-corn rent, and the Exebridge leisure complex was opened in 1986. Today the scheme is a successful development\textsuperscript{11} containing a branch library, a swimming pool, a sports hall, squash courts, a snooker hall, a health club and a Sainsbury's superstore (Exeter City Council, 1994). Located as it is within 350m of the Quay and Haven Banks, this development clearly has the potential to act as an important service centre for Exeter's waterfront communities.
Figure 4.5 Haven Banks

Figure 4.6 Flowerpots
Upstream from Exebridges lies the third regeneration scheme on the west side of the river, the Flowerpots sheltered and general-needs council housing project (Figure 4.6). Prior to redevelopment, the site contained a mixture of light industry and a plant nursery. By the 1980s these had been cleared for redevelopment; rebuilding then ran smoothly, and in 1989 the first homes in the scheme were occupied. Flowerpots now contains 25 family homes, one bungalow for disabled residents, 20 sheltered flats served by the warden from Shilhay, and a small community centre. Twenty two of the units are two-bedroomed flats, 4 are two-bedroomed houses, 13 are three-bedroomed houses, 6 are 4 or more bedroomed houses, and one is a terraced two-bedroomed bungalow. Externally, the site is not open plan, and contains 26 private gardens and 24 resident car parking spaces.

Because Flowerpots provides a good example of waterfront social housing, it was also included in the Exeter case study. What must be emphasised, however, is that it brought into the investigation a development rather different to that at Shilhay. Flowerpots was not developed as a full mixed-use waterfront. Instead, the only major land use apart from housing is recreational land. Most of this is in the form of sportsfields immediately to the north of the housing, but there is also an elevated walkway and cycle track on the flood-defence embankment which runs along the river (Figure 4.7). In addition, Flowerpots is distinctive in that it is arguably more isolated than Shilhay. At the micro-scale, it is almost completely cut off by three car parks which serve the development itself and the local recreational facilities. More broadly, isolation is a function of the recreational land to the north, the river to the east, a railway embankment to the west and a major road crossing the Exebridges to the south. For residents without cars this isolation is partly ameliorated by a local 30-minute bus service. However this does not operate before 8am or after 6pm, and there is no Sunday service.
Figure 4.7  River walk at Flowerpots
Swansea

Swansea lies on the banks of the River Tawe. It has two dock areas, the older lying to the west of the river and the more modern to the east. This section focuses on the western docks, which were abandoned and then revitalised to create Swansea Maritime Village (Figure 4.8).

The western docks were first opened in 1851, with the development of the North Dock and Half Tide Basin. By 1859 two more facilities (the South Dock and Tawe Basin) had been added, and until the beginning of the twentieth century the port as a whole was heavily used. In 1937, however, 'operational difficulties and competition' (Edwards, 1988, 130) forced the closure of the North Dock and, although activity continued for another 30 years, the 1960s witnessed the beginning of the end. In 1966 the Half Tide Basin shut, followed by the South Dock and Tawe Basin in 1969. By 1971, the British Transport Docks Board had infilled all the docks, apart from the South Dock, at which point the area was bought by the City of Swansea. At this time the strategy for the western dock area was to use the newly available land for relief roads and industrial units, but with local government reorganisation in 1974 these plans were shelved. The newly created planning department of Swansea City Council instead undertook an economic and environmental assessment of the city, which highlighted the decline of the traditional coal and metallurgical industries in the area, and the city's increasing unemployment problem. Because the possibility of sufficient firms moving into the area was considered unrealistic, 'locally generated growth' was seen as the way forward for the economy. Revitalisation of the western dock area was made a major element in this strategy and, after twelve major policy documents, the district was divided into 'three distinctive sub-areas' for redevelopment purposes. These sub-areas were the 'Dockland Zone' containing the South Dock, Tawe Basin and manufacturing land to the south-east;
Figure 4.8  Swansea Maritime Village in its city context
the 'Conservation Quarter' or 'Sailortown' including the area north of the Tawe Basin; and a 'Peripheral Belt' comprising the Half Tide Basin, the railway land in the south-west and a small amount of housing (Edwards, 1988, 133-135). Each of these sub-areas has subsequently been planned separately, but all have been governed by a series of underlying objectives. The aim of the redevelopment was to improve the environment, thereby encouraging local business and private investment. These objectives were implemented by a quasi-Urban Development Corporation, with the council taking control of the land and making a long-term commitment to renewal. Funding to the value of £4.77 million was attracted from a range of national and international sources, including the European Development Fund; the Urban Development Scheme; the Urban Aid Programme; the Welsh Development Agency; and the Industrial Development Act.

By 1988 the redundant land of the western docks had been transformed into a 38.5 ha site containing new residential, industrial and commercial land uses (Edwards, 1988)(Figure 4.9). Within this complex the redundant water areas have become a focus for leisure-orientated commerce including a 550-berth marina. Around the Tawe Basin a zone of private housing was created that encircles the dock itself, and extends along the sea-front promenade to an observatory (Figure 4.10). Most of this housing consists of flats, with much of the ground floor taken over by walkways, commercial units, night clubs and pubs. The area to the north of the basin, 'sailortown', has been transformed into an artisan's quarter with renovated buildings and a gallery (Figure 4.11), while in the west there is a major mixed-use area containing car-parks, housing, council offices, a leisure centre and a hotel (Figure 4.12). At the periphery of the site, along the main coastal route out of Swansea, a second mixed-use zone contains housing, renovated buildings and a Sainsbury's superstore (Figure 4.13). Because of its position south of the coast road, the Maritime Village is physically isolated from the rest of central
Figure 4.10  Private housing and promenade

Figure 4.11  'Sailor Town' area
Figure 4.12  Council offices

Figure 4.13  Surviving dereliction near Somerset Place
Swansea. If anything, this isolation is increased by the fact that the revitalised dockland is not served by a bus route: this leaves residents to walk at least 7 minutes to the city centre 'quadrant' for buses to other parts of city.

Apart from the private housing noted above, the 'Village' also contains three council housing schemes; several rehabilitated Gwalia Housing Association buildings; three new-build Gwalia Housing Association developments and the Mannheim Quay project. The latter is a 100-unit shared-ownership and rental scheme developed by SHAW Cost Rent Housing Association and Swansea City Council. This is the newest social housing scheme in the area and was still under construction in 1995 (Figure 4.14).

From this group of projects, two council schemes and two Housing Association developments were selected for the Swansea case study. Firstly, to enable a close comparison to be made with the waterfront in Exeter, a council-owned sheltered housing scheme at the mouth of the Tawe Basin was chosen. This was Gloucester House, a development adjacent to the Mannheim Quay social housing scheme and a variety of public and leisure activities (Figure 4.9). It comprises 48 sheltered units, two flats for the wardens and a community room. All the units are still under council ownership and consist of 40 one-bedroomed flats, 8 two-bedroomed flats and 2 three-bedroomed flats. None of these have gardens, but there are 20 residents' parking spaces. In its provision for special needs among the elderly, this development thus parallels the older housing found in Exeter's Shilhay. A doctor's surgery and pharmacy are attached to the Gloucester House development and it is within 350m of local shops, including Sainsbury's (Figure 4.15 and 4.16).

The second council housing development selected was Paxton Drive and Bathurst Street,
Figure 4.14  Mannheim Quay

Figure 4.15  Pharmacy
Figure 4.16  Marina Surgery

Figure 4.17  Paxton Drive and Bathhurst Street
which was mainly constructed to house residents displaced by demolition in inner Swansea, and was first occupied in 1988 (Figure 4.9). This scheme lies at the western end of the dockland zone, adjacent to two car parks, a private housing development and a hotel. Due to its position it is the most isolated of the schemes, being more remote from the city centre. In this respect it resembles Exeter's Flowerpots scheme. The development consists of 42 units, 36 of which are socially rented, while eight are 'right to buy'. There are 23 three-bedroomed terraced houses in the scheme, five (OAP designed) two-bedroomed terraced bungalows and 14 (OAP designed) two-bedroomed purpose-built flats. Thirty-one of these units have private gardens and 20 have parking spaces\(^5\) (Figure 4.17).

The two housing association schemes included in the investigation were both constructed in the 1980s and owned by the Gwalia Housing Association. Known as Somerset Place and Pier Street, these schemes back onto each other and are opposite the goods entrance to Sainsbury's at the edge of the Maritime Village (Figure 4.9). Somerset Place comprises of 40 flats, built on four storeys, 21 of which are one-bedroomed and 19 of which are two-bedroomed. The scheme also includes open-plan gardens and a car park for the residents (Figure 4.18). The Pier Street development adjoins both Somerset Place and two other Gwalia housing developments. It has 17 units in the form of 15 one-bedroomed flats and 2 three-bedroomed houses. The latter have small gardens, and there is a residents' car park (Figure 4.19).
Figure 4.18  Somerset Place

Figure 4.19  View into Pier Street from East Burrows Road
In Glasgow Govan was selected for investigation, partly due to its use as the site for the Glasgow riverside garden festival, partly to reflect the emphasis placed on waterfront social housing in the locality, but also because it gave an outstanding example of the effects of recession on the regeneration process. Other sites in Glasgow could have been studied, including the East End 'GEAR' area, but after initial survey work these were ruled out as being too large or unconsolidated and, mostly, less closely related to waterfront uses.

Govan lies to the south of the River Clyde, within three miles of Glasgow's city centre (Figure 4.20). Unlike many port areas, it has never been cut off from the city by a full-scale dock wall, but instead has been dominated by the Govan Road, with its characteristic red tenements and shops. The waterfront has a linear morphology, sandwiched between the river and the Govan Road (Figure 4.21). At the same time, however, this linearity should not be overemphasised as there are several port-related zones and railway lines that extend into the city (Robertson and Pateman, 1987).

Just over 100 years ago Govan was a village noted for its salmon fishing and weaving, but towards the end of the last century the area became industrialised. Several docks, including the Princess Dock, the Yorkhill Basin and the Fairfield fitting-out basin were constructed, as well as Govan Pier and local tramways. A series of shipbuilding yards was also opened, including Fairfield's, Stephan's and Harland & Wolff's. In addition, shipbuilding and cargo handling were intermixed with passenger traffic. For example, liners operated out of the Yorkhill Basin, including the Transylvania and California en route to the USA. Not least because of the success of the local economy, a network of ferries linked Govan with the other side of the Clyde, and were provided free by the
Figure 4.20  The Govan waterfront in its city context
Clyde Navigation Trust. This heyday of the docks lasted until the Second World War (Robertson & Pateman, 1987), after which the area began to decline. With improved road links across the river (the Clyde Tunnel and the Kingston Bridge) ferries were withdrawn in the 1970s. In this period the shipbuilding yards also closed, one by one, so that by 1987 only Stephan's (renamed Govan Shipbuilders) remained. This yard's last major order was the cruise-ferry Norssea, delivered to P&O in 1987; at the time this was the most luxurious passenger ship built in the UK since the QE2 twenty years previously.

Revitalisation began in the late 1980s, when the Princess Dock was converted into the Garden Festival site (Figure 4.21). Linked with this initial project, a private waterfront housing development was also built. Although these flats remain, the Garden Festival site itself has been cleared, and is now once again derelict. Plans have been produced for it to be redeveloped as a business park, but due to the recession no progress has been made, and the same problem has beset all other private-sector proposals on this waterfront. The tramways and railway shunting yard lie derelict; other docks designated for leisure use are still untouched; and a proposal to develop a ship museum near the Princess Dock has made no progress. As a result the waterfront at Govan is far less developed than those at Swansea and Exeter, and the revitalisation process has had to be led by social housing. The Govan area is therefore punctuated by alternate tracts of redeveloped social housing and large areas of derelict land (Figure 4.22).

The Local Authority was the main provider of this housing until 1975, when Govan Central Housing Association was established. Together, these two agencies have created four 'new build' social housing schemes. As one of these, Riverside I/II, is still under construction by Govan Church, it was considered inappropriate to include it in this
Figure 4.21 The Govan waterfront
study, even though it will provide several special needs units (Figure 4.21). Out of the other three developments, one was excluded for safety reasons on the advice of the local authority. This was because it contained tenants who were likely to attack strangers. Consequently the Govan case study was based on the two remaining schemes, Riverside and Harmony Row.

Riverside, built in 1977, lies on the banks of the Clyde close to Govan town centre. Developed on the site of several slipways, which can still be traced in the development, it backs onto a riverside walkway and is surrounded by open-plan landscaping. This is a council development of 350 units, 321 of which were still owned by the council at the time of the survey. Built on four storeys, the scheme is dominated by grey concrete flats, but there are 17 semi-detached and terraced houses which have their own gardens (Figure 4.23). Harmony Row, meanwhile, was built a year later in 1978. It also lies close to Govan town centre (200 yards), but a little further from the immediate waterfront than Riverside. This is also a council housing development. Out of 194 units, 183 of which were still council owned when the survey was undertaken, around a third are terraced or semi-detached houses. As with Riverside, however, the dominant dwelling type is grey concrete flats constructed in blocks of between 6 to 12 units (Figure 4.24).

Both schemes are served by the nearby Govan underground station, where tube trains run every 46 minutes during the day and every 78 minutes at night. In addition a bus service runs along the Govan Road to the City Centre every 20 minutes during the day and every 30 minutes at night and during the weekends (Figure 4.21). Consequently, these developments would appear to be far less isolated than those at Swansea Maritime Village, despite the greater scale of the Glasgow waterfront (Figure 4.25).
Figure 4.22 Derelict land along the Govan Road

Figure 4.23 Riverside
Figure 4.24 'Harmony'

Figure 4.25 The Govan Road, Govan waterfront
FIELDWORK DESIGN

Proposition sets
The first planned form of primary data collection devised for the research was a proposition set (Appendix 1) designed to evaluate the perception which key actors held of specific waterfronts. The key actors that were appropriate for this aspect of the investigation were waterfront planners, housing officials and social housing developers as these all had a working knowledge of aspects of the social housing tenants' environment. The intention was that their responses would provide assessments of the waterfront which could later be compared with the attitudes of residents themselves.

The proposition set was constructed to be administered by an interviewer who would then tape each interviewee's responses. However, steps were also taken to ensure that, if a key actor was unable to be interviewed, the proposition sets could be left for self completion. A pilot survey was undertaken in Exeter City Council, using a group of key actors who would not be involved in the main survey, and on the basis of this experience appropriate modifications were made to the full-scale survey.

Despite this preparatory work, however, this element of the thesis proved largely unproductive. This was chiefly because the key actors in each of the cities refused to be put 'on the record'. Although they did not mind providing official information or discussing from the council's perspective the waterfronts on which they had worked, they felt that they were not free to give their personal views. At the time this appeared to be a major setback which would require the investigation to focus on residential perception more heavily than was initially considered appropriate. However, key actors did provide valuable unstructured information during and following their interviews.
This led to the distribution of a proforma (Appendix 2) on the developments under investigation which was designed to be completed quickly by officials and returned by fax. In each city this was sent to a known individual who had already been approached. The proforma questions were all closed and were designed to provide data on subjects such as the composition of each housing scheme and the date of first occupation. This proforma allowed information to be gained from key actors without experiencing the problems associated with the unpopular proposition set.

**Questionnaire development**

The difficulties experienced with the proposition set underlined the necessity for an effective survey of residents. As a first step, the housing departments and housing associations with properties on the waterfronts at the three cities were contacted to gain detailed information on their total housing stock. Permission to undertake a survey was also gained at this stage, and time was spent with planning officials attempting to identify not only appropriate waterfront social housing schemes, but also developments away from the waterfront to use as controls in the survey. However, in all three cities no satisfactory controls could be found, for a variety of reasons. For example, the waterfront social housing was normally different architecturally to that elsewhere in the city. Similarly, much of it was also built at a time when social housing completions were low, so that social housing of a similar age was in short supply. For reasons such as these the idea of employing control groups of social housing tenants had to be abandoned. Inadequate matching might well have led to spurious comparisons between waterfront communities and those elsewhere.

Before any specific survey research methods were chosen, two waterfront social housing communities were observed and consulted. The aims of this qualitative phase of the
research were to gain impressions of the realities of waterfront life and gather initial qualitative insights which could be used in planning further research. Exeter was selected for this work as it provided ready access to two community centres, Shillhay and Flowerpots. Fieldwork in these communities provided the opportunity to visit residents' homes, as well as to hold discussions with the sheltered housing warden and Shillhay's local shop. Equally important impressions of waterfront life were gained by joining in activities and chatting with residents at the two sites' community centres. Over a period of two weeks, trust was built up in the community and much was learnt as to how its members viewed their homes, the waterfront and their involvement with the remainder of the city. It was also possible on these occasions to gain residents' reactions to possible data collection methods (e.g. discussion groups, structured and semi-structured interviews, and administered and self-administered questionnaires). These reactions were highly influential when the main primary data survey was planned.

As a direct result of the qualitative feedback collected during the initial research, it was decided that the main investigation would be based on a self-administered questionnaire. This reflected the fact that residents expressed concerns about being approached by strangers who wished to enter their homes or gain information about them. It was later discovered that several bogus officials had visited the sites in Exeter to gain access to residents' homes in order to burgle them, and this had clearly had a strong influence on the communities' receptiveness to outsiders. While emphasis was placed on self-completion, however, it was also recognised that some residents might need or prefer assistance. To allow for this possibility, the questionnaire was designed so that it could be administered by the researcher.

For ease of analysis, and understanding by the respondents, the questionnaire was
structured in three main sections (Appendix 3). These related to the housing itself, to the local environment, and to the integration of the waterfront with the rest of the city. In addition, a further group of questions explored the personal characteristics of the respondents. The personal characteristics chosen were marital status; age; sex; financial situation; special needs; number of people living in the dwelling and their relationships; and the occupational status of the respondent. The latter was based on the Registrar General's classification of social class (Office of Population Censuses and Surveys, 1991). It was felt that the wide range of personal characteristics in this section would allow any groups which were not satisfied with aspects of waterfront life to be easily identified.

These four sets of questions were then arranged so that the questionnaire focused first on the local environment, then on the wider integration with the city, followed by the housing itself and the section on personal details. This sequence was chosen in order to focus the respondents' minds on the waterfront at an early stage, giving a context for the rest of the questionnaire. Also, the sections on housing and personal characteristics were placed at the end of the questionnaire so that the respondents would not be confronted with difficult or potentially embarrassing questions at an early stage. The importance of care in this respect was underlined in pilot survey work, when a number of residents expressed concern over questions relating to landlord satisfaction and age. The questionnaire as a whole was introduced by a section explaining in straightforward terms why the survey was being undertaken, and emphasising that it was a bona fide and confidential investigation.

All three main sections - on the waterfront, city integration and the housing - were constructed with 'closed' elements which it was hoped all the respondents would
complete, and 'open' elements which enabled them to give fuller explanations of their responses. It was noted that open-ended questions were likely to gain a lower response rate but it was felt that it was important to include questions that did not lead the respondents in any way. This was considered particularly important due to the fact that, as has been outlined (Chapter 4), what subjects perceive can be very different from the images received by the outside observer. As a researcher it is easy to construct closed questions outlining a series of 'realities', but impossible to construct ones which profile 'perceptions' entirely accurately as these depend on the respondent. It was therefore felt that open questions should be included in order to ensure that residents' perceptions were identified as effectively as possible.

The draft questionnaire was piloted in Exeter, amongst a group of 25 residents who were not to be involved in the main survey. One important advantage of pilot work in Exeter was that it enabled respondents' reactions to be discussed face to face. As a result of these responses the questionnaire was modified in several significant ways to alleviate design problems that had been identified. These modifications included some restructuring of the questionnaire to improve its logical flow, and more guidance and explanation for the respondents. Because these changes were not fundamental, it was then felt that the full-scale survey could be undertaken in the three cities without the need for further pilot investigation.

The questionnaire was delivered by hand door-to-door by the author at Exeter and Swansea. In Glasgow, however, key actors warned that residents might be hostile to outsiders, and it was therefore decided to employ a local researcher (located at Glasgow University) to undertake the Govan survey. This researcher was carefully briefed before the fieldwork and adopted an approach as close as possible to that employed by the
author at the other two sites. In all three cases, therefore, each property was visited during daylight hours, with up to three visits being paid to each dwelling. If the door was answered the purpose of the research was explained and a time was arranged for the questionnaire to be collected a week later. If on the third visit the occupier of a property had still not been contacted, a letter was attached to the questionnaire explaining that attempts to make contact had failed, and that the researcher would return on a specific date to collect it. Three attempts were made to collect the questionnaires if occupiers were out. If no answer was gained on the third attempt a letter and pre-paid envelope were left for the respondent to return the questionnaire by post.

Several respondents who were confused by a question or had difficulty in reading asked the researcher for assistance. However, problems were readily overcome, and less than 5 per cent of all residents responded in this way. Any method of questionnaire survey has its own problems, and in the context of other such surveys the difficulties which emerged were not serious. Indeed, the response rates for the three cities were good for an investigation of this type (see below), and the quality of the responses was more than satisfactory. Closed questions were completed very thoroughly in almost all instances and, although many of the open-ended questions were not completed by the majority of the respondents, those who did respond to them gave a valuable insight into perceptions of waterfront life.

At both Exeter and Swansea all tenants in the case study schemes were given the opportunity to participate in the survey. This was possible partly due to the co-operation of the sheltered housing wardens, but also because of the small-scale nature of the selected developments. This comprehensive survey strategy produced 87 completed questionnaires in Exeter and 65 in Swansea, giving response rates of 46 and 44 per cent.
respectively. Bearing in mind the emphasis placed on the use of multiple visits to distribute and collect the questionnaires, it is believed that these samples did not seriously over- or under-represent individual groups in the community. Moreover, sampling theory suggests that participation on this scale is likely to generate reliable samples, especially when it represents a substantial proportion of small finite populations. Techniques proposed by Silk (1979, 79 and 161) for example, indicated with 95 per cent probability that - at worst - sampling error for the Exeter residents’ responses is in the range ±1-8 per cent. For Swansea the slightly smaller sample extends this range, but still not beyond ±1-10 per cent.

Due to the larger scale of the selected developments in Govan, and the finite resources available to conduct the investigation, a 50 per cent systematic sample was taken by visiting alternate homes. By adopting this approach it was argued that the chances of generating serious biases in the sample would be minimised, particularly as distribution and collection again entailed multiple visits when necessary. The maximum number of responses possible with this strategy was 272 and, although the response rate (37 per cent) was lower than those for Exeter and Swansea, in absolute terms this proportion produced the largest sample in the investigation: 101 participants. When the techniques proposed by Silk (1979, 79 and 161) are used to relate this figure to the total number of households in the schemes studied in Govan (544), the results again suggested that sample responses are likely to be accurate to within ±1-9 per cent.

Although considerable efforts were made to ensure that samples were not seriously biased, it is recognised that they are unlikely to be entirely accurate. When necessary, therefore, subsequent analyses have been supported by statistical testing, normally through the use of the Chi-squared test to assess the reliability of apparent contrasts in
the data. As required by the assumptions of Chi-squared, these tests have all been conducted on the absolute values produced by the three investigations, although in tables the results are normally presented as percentages for ease of interpretation. The statistical package employed for all data analysis was SPSS for Windows version 6.0.

COMMUNITY ANALYSIS

Because Chapters 5, 6 and 7 will present the main empirical findings it is unnecessary to embark on the full analysis at this stage. What is appropriate, however, is to focus at this point on the social housing communities encountered on the Exeter, Swansea and Glasgow waterfronts. What characteristics do the communities that have been investigated possess, and to what extent is it necessary to recognise contrasts between the three selected sites? Consideration of these social questions will complement the earlier analysis of the case study waterfront environments, and provide a valuable backdrop for later analyses.

Several significant socio-economic differences between the communities can be identified, particularly with respect to age, employment status and financial situation. For example, in terms of age the Exeter sample, with half its members in the over 60 age group, appears to be more elderly than those of Swansea and Glasgow (Table 4.1). When the absolute data are tested using Chi-squared, this apparent contrast is shown to be reliable at the 5 per cent significance level. Similarly, although its population is relatively elderly, the Exeter sample also has the highest proportion in employment, almost one third (Table 4.2). Conversely Swansea is dominated by the retired, while Glasgow's employed respondents (15 per cent) are no more numerous than its unemployed. Chi-squared testing again revealed these sample differences to be significant, in this case at the 0.5 per cent level. Three factors largely
Table 4.1  Respondents' age profiles

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Total sample 87 65 101 253

Source: Main survey, question 30.

Table 4.2  Respondents' employment status

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<th>Glasgow %</th>
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<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Retired</td>
<td>47</td>
<td>57</td>
<td>45</td>
<td>49</td>
</tr>
<tr>
<td>Doing house work</td>
<td>8</td>
<td>-</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>8</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>No answer</td>
<td>9</td>
<td>26</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Total sample 87 65 101 253

Source: Main survey, question 31.
account for this. First, the incidence of unemployment in Glasgow reflects the state of
the local economy, and in particular the problems of inner-city job availability. Second,
low employment levels in Swansea are primarily a consequence of local authority
policy, which is to reserve waterfront social housing for the elderly. Third, relatively
high employment levels in Exeter are in part the outcome of a relatively buoyant
cathedral-city economy, but are also a consequence of policy. In this instance the policy
in question is that relating to housing allocation. Although, as has been indicated,
provision has been made for the elderly through the implementation of sheltered
housing, the attempt has also been made to gear social housing on the Exeter waterfront
to adults of working age. This is particularly true of the Shilhay development, which has
a substantial mix of elderly and working age residents, as well as a ban on children.

Differences between the samples are also evident with respect to the former employment
of residents who are now retired. As Table 4.3 indicates, these differences suggest a
need to distinguish between Exeter on the one hand and Swansea and Glasgow on the
other. Thus, whereas respondents in Swansea and Glasgow most commonly reported that
their previous occupation was in manufacturing or transport, in Exeter the bias was
towards professional, managerial and office employment. Chi-squared testing suggested
that these differences are significant at the 5 per cent level\textsuperscript{18}, and it seems likely that
they arise primarily from the very different economic histories experienced by the cities
in question.

Differences between communities were also evident with respect to the financial
situation of respondents. Perhaps surprisingly, however, these differences did not involve
frequent reports of debt in Glasgow, despite the high unemployment noted earlier (Table
4.4). Instead an unusually large proportion of the Govan community reported that they
Table 4.3 Respondents’ employment before retirement

<table>
<thead>
<tr>
<th></th>
<th>Exeter %</th>
<th>Swansea %</th>
<th>Glasgow %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>12</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Managerial</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Clerical</td>
<td>8</td>
<td>5</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Selling</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Security</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Catering/personal</td>
<td>8</td>
<td>2</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Farming</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Making/transporting</td>
<td>9</td>
<td>11</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>3</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>No answer</td>
<td>49</td>
<td>70</td>
<td>49</td>
<td>55</td>
</tr>
<tr>
<td>Total sample</td>
<td>87</td>
<td>65</td>
<td>101</td>
<td>253</td>
</tr>
</tbody>
</table>

Source: Main survey, question 31.

Table 4.4 Respondents’ financial situation

<table>
<thead>
<tr>
<th></th>
<th>Exeter %</th>
<th>Swansea %</th>
<th>Glasgow %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running into debt</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Drawing on savings</td>
<td>16</td>
<td>15</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Just managing...</td>
<td>56</td>
<td>55</td>
<td>67</td>
<td>61</td>
</tr>
<tr>
<td>Saving a little</td>
<td>10</td>
<td>6</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Saving a lot</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>12</td>
<td>22</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>Total sample</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Main survey, question 35.
were 'just managing to make ends meet', while the numbers who were drawing on their savings were low compared with Swansea and Exeter. When tested, these results appear reliably different at the 5 per cent significance level. In Swansea it is likely that they reflect the large numbers of retirees, but in Exeter - given the relatively high incidence of employment - the cause is less clear.

While it is important to distinguish between the communities in these ways, it is also necessary to emphasise that they have much in common. Indeed, differences might be considered nuances compared with the common strands which can be identified. Thus there is a slight bias in all communities towards women (Table 4.5); towards the elderly (Table 4.1); and therefore toward retirement (Table 4.2). As a result of the fact that the elderly and retired are so common, large numbers 'just manage to make ends meet' (Table 4.4). Around a third of all households still comprise married couples, or people living in partnerships, but larger numbers are either widowed or divorced/separated (Table 4.6). Single or two-person households are therefore the norm; any family with more than four members is highly unusual (Table 4.7); and, although households sometimes include lodgers or other relatives, those with more than two members normally have children (Table 4.8).

Working from the above it is in fact possible to model the typical resident. This person is retired; slightly more likely to be female than male; may live alone or with a partner; and financially finds life something of a struggle. Almost half the Glasgow respondents fit this model, while in Exeter and Swansea the proportions are even higher: between 55 and 60 per cent. Other resident models might be proposed. For example, divorced residents under the age of 65 account for 15 per cent of all respondents; in Glasgow, unemployed respondents living in a marriage or partnership account for a similar
### Table 4.5  Respondents' sex

<table>
<thead>
<tr>
<th></th>
<th>Exeter</th>
<th>Swansea</th>
<th>Glasgow</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>40</td>
<td>35</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>Female</td>
<td>55</td>
<td>42</td>
<td>55</td>
<td>51</td>
</tr>
<tr>
<td>No answer</td>
<td>5</td>
<td>23</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: Main survey, question 29.

### Table 4.6  Respondents' marital status

<table>
<thead>
<tr>
<th></th>
<th>Exeter</th>
<th>Swansea</th>
<th>Glasgow</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married/living as</td>
<td>32</td>
<td>33</td>
<td>36</td>
<td>34</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>29</td>
<td>14</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>Widowed</td>
<td>25</td>
<td>35</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Single</td>
<td>9</td>
<td>5</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>2</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>5</td>
<td>11</td>
<td>10</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: Main survey, question 28.
proportion; and all three waterfront communities include a significant number of special needs residents accounting for around a fifth of all respondents (Table 4.9). While it is important that such groups are not overlooked, however, the dominant model outlined above underlines the significance of the research conducted in this project. How compatible are mixed-use waterfronts and these elderly communities in which residents may live alone and are far from wealthy? How easy is it for communities of this type, which have less car access than society in general, to interact effectively with the health care, shopping and social facilities they require? It is to issues such as these that attention will shortly turn.

Table 4.7 Household composition

<table>
<thead>
<tr>
<th>Number of members</th>
<th>Exeter %</th>
<th>Swansea %</th>
<th>Glasgow %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>49</td>
<td>40</td>
<td>36</td>
<td>42</td>
</tr>
<tr>
<td>2</td>
<td>28</td>
<td>35</td>
<td>27</td>
<td>29</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>6</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>2</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>7+</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>7</td>
<td>15</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Total sample</td>
<td>87</td>
<td>65</td>
<td>101</td>
<td>253</td>
</tr>
</tbody>
</table>

Source: Main survey, question 33.
### Table 4.8 Respondents' relationship with other household members

<table>
<thead>
<tr>
<th></th>
<th>Exeter %</th>
<th>Swansea %</th>
<th>Glasgow %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner</td>
<td>23</td>
<td>29</td>
<td>31</td>
<td>28</td>
</tr>
<tr>
<td>Child</td>
<td>17</td>
<td>6</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Relative</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Lodger</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Landlord</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>27</td>
<td>11</td>
</tr>
<tr>
<td>No answer</td>
<td>52</td>
<td>59</td>
<td>28</td>
<td>44</td>
</tr>
</tbody>
</table>

Total sample | 87 | 65 | 101 | 253 |

Source: Main survey, question 33.

### Table 4.9 Respondents with special needs

<table>
<thead>
<tr>
<th></th>
<th>Exeter %</th>
<th>Swansea %</th>
<th>Glasgow %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21</td>
<td>23</td>
<td>17</td>
<td>20</td>
</tr>
</tbody>
</table>

Total sample | 87 | 65 | 101 | 253 |

Source: Main survey, question 34.
CONCLUSION

Methodologically, the research was focused on eight carefully selected social housing schemes in three waterfront cities. This selection ensured that the investigation included an appropriate mix of local authority and housing association property, and also covered waterfronts differing both in terms of their scale and their regional location. While it was possible during the research design phase to adhere to large parts of the methodological plan, two significant changes were made prior to the main fieldwork. The first of these was the decision to abandon the use of a proposition set intended for key actors in the revitalisation process, a step forced by low levels of co-operation among potential participants. Although it prevented the research from undertaking a comparative analysis of the perceptions of officials and residents, it is argued that this adjustment was not serious because, from the outset, the overriding intention was to view and evaluate the waterfront through the eyes of social housing residents. Secondly, the research strategy was adapted to include in the investigation a case study (Govan) enabling the relationship between recession and waterfront perceptions to be examined. This, it is believed, introduced a new and valuable diversity into the project.

The research itself was conducted using standard self-administered questionnaire techniques based on a preliminary qualitative investigation. The questionnaire elicited a good response, enabling the analysis to be based on the views of 253 respondents. Although these were not evenly distributed between the three case studies, in all instances the samples were considered sufficiently large and representative to support the necessary analyses. While the communities themselves were naturally not identical, preliminary analysis of the samples nonetheless underlined a number of strong similarities between them, enabling the 'model' resident - essentially retired, possibly widowed and certainly not well-to-do - to be characterised. This model applied to
slightly more than half the sample, and against this background attention may now turn to the three waterfront studies themselves.
NOTES

1. For centuries the city had suffered extensive flooding, particularly around the Exebridges area. The first recorded incident was the flood of 1286 when a great part of Exebridge was destroyed. Other serious floods affecting the Exebridge area were in 1384, 1447, 1539, 1775, 1800, 1810 (when three large boats were thrown up onto the Quay), 1894, 1917, 1920, 1929, 1950 and 1960. In the latter year, no less than six floods occurred, two of which inundated more than 100 properties. There seems little doubt that this was instrumental in forcing the authorities to consider flood defence improvements that were eventually to become effective in the 1970s. These improvements included a warning system; floodplain clearance between Countess Weir and St James Weir; relief channels including 6 weirs around Exebridges; and the Exewick radial flood gates. It is argued by Makin et al. (1995) that the river Exe undergoes a 50 year cycle of floods of a magnitude which the defences could withstand, as well as a catastrophic 100-year event that would overwhelm them. It is therefore very likely that eventually Shilhay will be severely affected by such a flood event.

2. The site may still have some ground contamination, although exact data on the type and amount are unavailable.

3. The scheme actively excluded families with children under 12.

4. The courtyards contain 48 residents' parking places, 29 residents' garages and 9 private gardens.
5. Twenty four of the flats were sheltered units served by a warden who was to live at the site in one of the three-bedroomed houses.

6. In 1993 the scheme's shop closed due to competition from a variety of sources including the nearby Sainsbury's, a 'Home Brew' shop that has branched out to sell residents essential items and a café on the Quay. Added to this, by the end of 1995 35 of the units have become privately owned under the right to buy scheme.

7. The Trust is a joint venture between the riverside's business community and the Council.

8. There is still in fact room for more development beside the Quay in an area known as 'Cricklepit Mill'. Although very run down, this site contains two listed buildings and has been proposed for development as an 'artisans' quarter' once the city council acquires the land (The Planning Exchange, 1988).

9. Lovell Urban Renewal fell victim to the recession.

10. In order to achieve this a footbridge was opened in 1988, linking the leisure and tourist destination of the Quay with Haven Banks on the other side of the river.

11. Despite current success the Riverside Leisure Centre has in fact been threatened by the recession. In 1993/1994 the managing company experienced financial difficulties, the receivers were called in and the centre was closed. However, for the last three years it has been under new management and trading profitably.
12. None of the 46 units at Flowerpots have been purchased under the 'right-to-buy' scheme.

13. In the two-bedroomed houses and flats, the second bedroom is unusually large. Because of this they are frequently, if rather confusingly, termed two-and-a-half bedroomed dwellings.

14. The scheme consists of 57 rented and 43 shared ownership properties.

15. At the time of the survey, all of these units were occupied.

16. The balance of respondents above and below aged 60 was compared in the three cities. Chi-squared equalled 12.82 and, with 2 degrees of freedom, was significant at the 5% level.

17. Chi-squared tested differences between the number employed, and those who had retired. Chi-squared equalled 9.66 and, with 2 degrees of freedom, was significant inside the 5% level.

18. When Exeter and Glasgow were compared, Chi-squared was equal to 19.39 with five degrees of freedom. This was significant within the 5% level.

19. Chi-squared was equal to 7.51. With 2 degrees of freedom this was significant at the 5% level.
CHAPTER 5

WATERFRONT LIFE IN A CATHEDRAL CITY:

EXETER EVALUATED

INTRODUCTION

This chapter investigates waterfront life in Exeter, the first of the three port cities in this study. As Chapter 4 has already demonstrated, Exeter is a small cathedral city with a discontinuous revitalised waterfront along both banks of the River Exe. One part of this waterfront, the Quay, lies in the historic port area. Here, social housing is represented by the Shilhay development, which is set in a small yet diverse mixed-use revitalisation scheme. Upstream, and on the opposite (west) bank of the river, is the Flowerpots project. This is not a fully developed mixed-use waterfront, its social housing being above all set in the context of formal and informal recreation. Between these two developments lie two other elements in the revitalisation: the Exebridges shopping and leisure centre, and the recession-hit Haven Banks scheme for private residential and commercial redevelopment.

Against this background, the chapter explores waterfront life, firstly in terms of attitudes to the housing itself; then with respect to the immediate revitalised environment; and finally in terms of integration with the city as a whole. In doing so, it aims not simply to establish satisfaction levels at these three contrasting scales, but also to investigate underlying attitudes which do so much to determine perceptions of the waterfront.

RESPONSES TO HOUSING

As might be anticipated, analysis of the responses revealed that residents' motivations for moving to housing on the Exeter waterfront were broadly related to age. Among the
under-60s, the most common responses were that they had moved because of the availability of accommodation there, and that they were attracted to the housing on offer and its location (Table 5.1). In contrast, although the over-60s also cited availability, the proportion doing so was relatively low and there was a greater concern to move to accommodation that was smaller and more appropriate for those with health disabilities. These age-related differences, which can be shown to be statistically significant at the 0.5 per cent level\(^1\), were displayed equally by men and women, and also by those in the special needs group. They were, of course, consistent with changing housing needs related to individual life cycles.

Although motivations for moving to housing on this waterfront were varied, reactions to the housing itself were in general extremely uniform. In response to question 12, 83 per cent of the participants indicated that they were positive or strongly positive about their accommodation, with less than 3 per cent suggesting that they actually disliked it. Various other questions (for example, questions 25 and 26) confirmed this high level of approval, whereas adverse reactions were few and far between. Indeed, the only substantial negative issue raised in this part of the questionnaire related to parking: almost a quarter of the respondents felt that insufficient provision had been made for private cars\(^2\).

Given this generally high level of satisfaction, little scope existed for groups within the sample to show differing attitudes. Thus, for example, no evidence emerged that perceptions of the housing varied according to sex; to age; to length of residence; or to the type of housing development. To expand on this latter point, although the Shilhay and Flowerpots sites are contrasted in terms of their housing stock\(^3\), no difference could be established between the attitudes of the two communities. The first main finding,
therefore, is that Exeter's waterfront social housing community appears homogenous in terms of its positive reaction to the housing itself.

This finding, however, emerged from broad questioning and, when participants were asked to respond on more specific issues, one significant problem relating to housing satisfaction emerged clearly. Eighteen respondents, 21 per cent of the sample, believed that the accommodation offered insufficient privacy⁴. Given the different settings of the two sites - Shilhay with its close contact with the public and Flowerpots well removed from tourist traffic - it might be expected that this privacy problem would be associated particularly with Shilhay. However, further analysis (Table 5.2) demonstrates that this issue is in fact much greater at Flowerpots, the site with least interaction with the public. Here, 48 per cent of the respondents were dissatisfied with their privacy and, compared with the numbers at Shilhay, Chi-squared testing shows this incidence of concern to be significantly high at the 5 per cent level⁵.

This is an interesting and unexpected result which the evidence suggests is related to approaches to housing design. When the Flowerpots residents who were concerned about privacy were asked to explain their feelings, the most common responses were that their housing was in view of the car park and people in the vicinity could see into their homes. This, in turn, appears to be related to aspects of the design of this site, already introduced in Chapter 4. Flowerpots is to a significant degree outward-looking - towards the car park on the west, further car access on the north and, to the north and east, elevated pedestrian access to a recreation ground and the river embankment (Figure 4.7 and Chapter 5).
Table 5.1  Leading\(^1\) reasons for moving to present home

<table>
<thead>
<tr>
<th>Reason</th>
<th>Up to 60 (%)</th>
<th>Over 60 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health considerations</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td>Availability of accommodation</td>
<td>37</td>
<td>13</td>
</tr>
<tr>
<td>Attractiveness of accommodation</td>
<td>24</td>
<td>-</td>
</tr>
<tr>
<td>Need for smaller accommodation</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>Attractiveness of location</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>Percentage of respondents</td>
<td>42</td>
<td>41</td>
</tr>
</tbody>
</table>

\(^1\) Those quoted by at least 10 per cent of respondents

Source: main Survey, question 19

Table 5.2  Privacy problems identified: traffic and passers-by

<table>
<thead>
<tr>
<th></th>
<th>Shilhay (%)</th>
<th>Flowerpots (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privacy:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>adequate</td>
<td>79</td>
<td>48</td>
</tr>
<tr>
<td>inadequate</td>
<td>13</td>
<td>48</td>
</tr>
<tr>
<td>No response:</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Percentage of respondents</td>
<td>62</td>
<td>21</td>
</tr>
</tbody>
</table>

Source: main survey, question 22

At Shilhay, in contrast, the substantially lower level of concern is found on a site that is physically much more inward-looking. Properties here are grouped around a series of courtyards which do not invite public access. Moreover, the development as a whole is separated from the river by a broad grassy area which for much of the time provides a 'buffer' between residents and members of the public on the waterfront promenade (Figure 4.3). Consequently it may be site design, rather than location, that is either causing or preventing problems with privacy. This finding - that design at the micro-
scale can be of great importance in the creation of successful developments - is one to which we shall return in this and subsequent chapters.

One final observation is also appropriate in this section. Although residents were asked to talk specifically about their housing, many found it difficult to separate their attitudes to their home from those relating to the external environment. This is indicated partly by responses to the privacy question discussed above, which suggest that the home and the immediate environment are to some extent perceived as the same thing. This interpretation is also supported by responses given when participants were asked to explain their positive feelings towards their homes. Although most comments referred to the accommodation, 15 per cent of the sample indicated that strong satisfaction with the waterfront location and views were important in this context (Table 5.3).

<table>
<thead>
<tr>
<th>Table 5.3</th>
<th>Leading attitudes towards home</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(%)</td>
</tr>
<tr>
<td>The housing:</td>
<td></td>
</tr>
<tr>
<td>Suitable</td>
<td>15</td>
</tr>
<tr>
<td>Easily maintained</td>
<td>13</td>
</tr>
<tr>
<td>Good housing</td>
<td>12</td>
</tr>
<tr>
<td>Modern</td>
<td>7</td>
</tr>
<tr>
<td>The wider location:</td>
<td></td>
</tr>
<tr>
<td>Convenient</td>
<td>16</td>
</tr>
<tr>
<td>Waterfront location and views</td>
<td>15</td>
</tr>
<tr>
<td>Responses analysed</td>
<td>56</td>
</tr>
</tbody>
</table>

Other factors, each cited by less than 5 per cent of respondents, are excluded from the table.
Source: main survey, question 12

Beyond this, however, the responses also indicated that, at least for a significant
minority, the link between the home and wider environment is strong. Thus 16 per cent of respondents considered their accommodation's convenient location within the city to be important for their satisfaction with their home (Table 5.3). From this it is evident that divisions in thinking between the home, the waterfront environment and the wider city should not be considered crystal clear. While they provide an appropriate framework for this investigation, in reality the distinctions are often blurred. This point must be borne in mind as an important element in the background to the whole investigation.

**PERCEPTIONS OF THE WATERFRONT ENVIRONMENT**

Feelings towards living in the local environments that had been created were also strongly positive. No less than 83 per cent of those surveyed either liked living in their area or liked it very much. Moreover, half the remainder were non-respondents to this question (question 1), so that only 8 per cent expressed neutral or negative feelings. Similarly, when asked to compare the quality of their locality with other parts of the city (question 2) a quarter replied that it was about average, while 61 per cent considered it better than most other areas. 28 per cent, indeed, felt that it was one of the best districts. Also, when questioning turned to specific aspects of the local environment the dominance of positive responses tended to remain. For example, only two people had any adverse feelings concerning the river.

On one level, this high level of approval means that it is difficult to draw distinctions between groups within the population as a whole. Most analyses based on sex, length of residence and site (Shihay versus Flowerpots) emphasised the homogenous nature of responses. Moreover, this was even true with respect to the elderly and special needs respondents. Although intuitively these might be expected to react against aspects of the waterfront environment, and particularly the tourist-related environment surrounding
Shilhay, in fact the attitudes they revealed were very similar to those of other groups. When comparing the waterfront with other parts of Exeter the over-60s, for example, perceived it in a very similar fashion to younger elements in the community (Table 5.4). In the same way, special needs respondents were as positive as their neighbours with no handicaps (Table 5.5).

Table 5.4  
Age and attitudes to the local area

<table>
<thead>
<tr>
<th></th>
<th>Up to 60 (%)</th>
<th>Over 60 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One of the best</td>
<td>26</td>
<td>29</td>
</tr>
<tr>
<td>Better than most</td>
<td>36</td>
<td>31</td>
</tr>
<tr>
<td>About average</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Worse than most</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>One of the worst</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>No answer</td>
<td>8</td>
<td>13</td>
</tr>
</tbody>
</table>

Number of respondents  
42 45

Source: main survey, question 2

Despite this widespread consistency, however, additional results suggest that care must be taken to avoid over-emphasising high satisfaction levels. First, a minority of respondents expressed specific concerns about aspects of their localities. Approximately 14 per cent of the sample had worries about vandalism, and 7 per cent about crime, but the largest single cause for complaint was the disturbance caused by Club 30, Exeter's waterfront nightclub. Fifteen per cent of respondents identified this as a nuisance, producing the strongest evidence so far of friction between the waterfront's leisure and residential functions.
Table 5.5  
Special needs and attitudes to living in the local area

<table>
<thead>
<tr>
<th></th>
<th>Residents with no special need (%)</th>
<th>Residents with special need (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents replying:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Like it very much</td>
<td>62</td>
<td>56</td>
</tr>
<tr>
<td>Quite like it</td>
<td>29</td>
<td>28</td>
</tr>
<tr>
<td>No strong feelings</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>Some things I don't like</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>Really don't like it</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>No answer</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Number of respondents  
45 18

Source: main survey, question 1

Secondly, there is evidence that concerns of this type, and more general nuances of attitude to the waterfront, are not necessarily associated with the most obvious groups within the community. It might be assumed, for example, that adverse reactions to the nightclub and other nuisances would be strongly associated with the elderly, but the evidence refutes this. Only 11 per cent of the over-60s expressed worries about living in their area, compared with a third of the under-60s, and when this contrast is tested it is shown to be significant at the 5 per cent level. Similarly, although crime, vandalism and rowdiness arising from the nightclub might be thought to be most threatening to women, in reality their positive response to the waterfront environment appears stronger than that of men. As Table 5.6 reveals, 71 per cent of women in the sample gave the most positive reaction to their locality, compared with only 34 per cent of male respondents. Once again this difference can be shown to be statistically significant, in this case at the 5 per cent significance level.
Table 5.6  Gender and attitudes to living in the local area

<table>
<thead>
<tr>
<th>Response</th>
<th>Female (%)</th>
<th>Male (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents replying:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Like it very much</td>
<td>71</td>
<td>34</td>
</tr>
<tr>
<td>Quite like it</td>
<td>19</td>
<td>40</td>
</tr>
<tr>
<td>No strong feelings</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>Some things I don't like</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Really don't like it</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>No answer</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Number of respondents 48 35

Source: main survey, question 1

Further research is needed to establish explanations for these findings, but for the purposes of this investigation the main conclusions are clear. High satisfaction levels may mask significant minority concerns which should not be overlooked, and these concerns are not necessarily held by the most obvious elements in the community that has been created.

Apart from these caveats, the data appear to indicate that the waterfront environment has considerable appeal for the social housing occupants studied. However, the final point to be made in this section is that - just as it is possible to over-emphasise the homogeneity of approval - there is a danger of assuming that strong satisfaction is directly due to the water and waterfront developments, rather than to other factors.

Evidence that this may not be a reliable assumption is provided by Table 5.7, which summarises the responses given when participants were asked to account for their positive feelings about their area. In the case of Flowerpots, access to services was considered as significant as the local area by the respondents. For the residents of this...
scheme, centrality within the city, and the proximity of facilities such as shops, appear to be as dominant as the waterfront in explaining their satisfaction. For Shilhay factors related to the waterfront environment in one way or another are the most dominant. Yet, even so, the convenience factors of centrality and retailing account for one third of the responses.

Table 5.7 Attractive features identified about the local area

<table>
<thead>
<tr>
<th>Response</th>
<th>Shilhay (%)</th>
<th>Flowerpots (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local area:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>River features</td>
<td>35</td>
<td>13</td>
</tr>
<tr>
<td>Quiet</td>
<td>19</td>
<td>-</td>
</tr>
<tr>
<td>Full of activity</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Open space</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>Views</td>
<td>-</td>
<td>17</td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Close to shops</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Family ties</td>
<td>6</td>
<td>-</td>
</tr>
</tbody>
</table>

Other factors, each cited by less than 5 per cent of respondents, are excluded from the table.
Responses analysed 61
Source: Main survey, question 1

Four conclusions may be proposed on the basis of these findings. First, although a community may live directly on the waterfront, as at Flowerpots, its members may attach as much importance to access to services as to the waterfront *per se* as a factor contributing to the locality's attractions. Second, rather than being problematic - the general effect of mixed-used developments may be to encourage a sense of the waterfront which residents may appreciate. Third, however, even though this may be achieved, for a significant number of people the appeal of a locality may still depend
to a large extent on factors unrelated to the waterfront. The outsider's perception may be that it is the waterfront which dominates attitudes, but this is by no means always supported by reality.

Finally, in relation to research design, the findings once more underline the fact that survey participants may find it difficult or inappropriate to respond in ways anticipated by the researcher. Just as the distinction between the home and the waterfront environment was blurred in the previous section, the emphasis which some respondents placed on centrality and retailing indicates a similar merging between the perceptions of the waterfront and the remainder of the (central) city.

**INTEGRATION WITH THE CITY**

As Chapter 1 made clear, if the ability of waterfronts to be appropriate environments for social housing is to be investigated fully, progress towards reintegration of the waterfront and the city must be considered. Given that many revitalisation schemes appear to place little emphasis on reintegration, are social housing residents in these areas likely to experience mobility problems and access to major services? If this proved to be the case, the argument for social housing in these schemes would clearly be weakened substantially. Also underlining this need to explore integration is the fact that a substantial proportion of the Exeter respondents (37 per cent) were primarily dependant on public transport. Allowing for sampling error, with 95 per cent confidence in the total population this proportion is unlikely to be less than a quarter and could be almost a half.

In the Exeter case the possibility that interaction with the wider city may be problematic is raised to a degree by survey results. Although the majority of respondents believed
that the waterfront sites were adequately served by public transport, 23 per cent were either unsure or found transport provision unsatisfactory (Table 5.8). Moreover, no differences were established between the views of those who actually used public transport and those who owned their own vehicles. While this might be an overestimate arising from sample error, it is also possible that it is an underestimate, and with 95 per cent probability it is arguable that up to 32 per cent of the whole waterfront community may experience these concerns.

Table 5.8 Responses to proposition that public transport is sufficient

<table>
<thead>
<tr>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Unsure</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Strongly disagree</td>
</tr>
<tr>
<td>No answer</td>
</tr>
</tbody>
</table>

Number of respondents 87

Source: main survey, question 7

In addition, physical aspects of the Exeter waterfront also suggest that mobility and accessibility might involve difficulty, particularly for elderly residents without the permanent use of a car. Although the walk from Flowerpots to the main bus route and local services is level, it is more than 100 metres. At Shilhay, meanwhile, the pedestrian route to the city centre involves walking up a steep river cliff and using either an underpass or a footbridge to cross one of the city's major traffic arteries (Figure 4.4).

The strongest evidence that integration difficulties are a reality is provided by the
contrasting perceptions of shopping held by the over-60s and the under-60s. Table 5.9 clearly suggests that the latter group find this activity easier than their older neighbours, and Chi-squared testing demonstrates that this difference is significant at the 5 per cent level\textsuperscript{10}. Even so, this result cannot be used as evidence that the elderly in general consider access to shopping facilities to be poor. In fact the contrast between the younger and older groups lies in the degree of ease with which shopping can be done, and less than 10 per cent of the over-60s reported actual difficulty in making the necessary journeys.

<table>
<thead>
<tr>
<th>Table 5.9</th>
<th>Age and access to shops</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Up to 60 (%)</td>
</tr>
<tr>
<td>Respondents replying:</td>
<td></td>
</tr>
<tr>
<td>Very easy</td>
<td>74</td>
</tr>
<tr>
<td>Quite easy</td>
<td>24</td>
</tr>
<tr>
<td>Quite difficult</td>
<td>-</td>
</tr>
<tr>
<td>Very difficult</td>
<td>-</td>
</tr>
<tr>
<td>No response</td>
<td>3</td>
</tr>
<tr>
<td>Number of respondents</td>
<td>100</td>
</tr>
</tbody>
</table>

\textbf{Source:} main survey, question 6

Similarly, the large majority of those in employment reported no difficulties in their journey to work (Table 5.10); parents with school-age children found access to schools adequate; visits to the doctor were overwhelmingly considered easy or very easy; and leisure facilities were felt to be at least reasonably accessible. Moreover, although it may be argued that the low response on child care masked a lack of availability, and that high non-response in the case of leisure meant that people did not take up opportunities because it was too difficult, the evidence does not fully support this. Certainly, when
leisure activity participants are compared, there is no suggestion that the over-60s find this aspect of life especially problematic (Table 5.11). And the proportion of special needs respondents participating in leisure activities (28 per cent) was strikingly similar to that of the general population (33 per cent). Here, indeed, we may note that the special needs group did not respond significantly more negatively than the general population with respect to any accessibility question.

Table 5.10  Access to a range of private and public services

<table>
<thead>
<tr>
<th></th>
<th>Shops (%)</th>
<th>Doctor (%)</th>
<th>Leisure (%)</th>
<th>Work (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents finding access:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very easy</td>
<td>53</td>
<td>22</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>Easy</td>
<td>35</td>
<td>64</td>
<td>26</td>
<td>18</td>
</tr>
<tr>
<td>Difficult</td>
<td>3</td>
<td>8</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Very difficult</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No answer</td>
<td>6</td>
<td>2</td>
<td>47</td>
<td>66</td>
</tr>
</tbody>
</table>

Number of respondents  87  87  87  87

Source: main survey, questions 6, 8, 9, and 10
Table 5.11  Age and access to leisure facilities

<table>
<thead>
<tr>
<th></th>
<th>Up to 60 (%)</th>
<th>Over 60 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents finding access:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very easy</td>
<td>29</td>
<td>20</td>
</tr>
<tr>
<td>Quite easy</td>
<td>29</td>
<td>24</td>
</tr>
<tr>
<td>Quite difficult</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Very difficult</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>No response</td>
<td>40</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Number of respondents 37 44

Source: main survey, question 9

When responses from Shilhay and Flowerpots were compared, an apparent contrast was identified with respect to access to leisure facilities. This was primarily because Flowerpots residents expressed lower satisfaction levels than those of Shilhay (Table 5.12). However, Chi-squared testing indicated that this apparent contrast might not be reliable, and in other respects the results indicated that it was inappropriate to make distinctions between the two sites' level of integration with the city. This similarity was particularly marked with respect to shopping (Table 5.13), but in all other cases the findings suggested that no clear distinctions could be drawn between the perceptions of the two groups of residents.
Table 5.12  Site and access to leisure facilities

<table>
<thead>
<tr>
<th></th>
<th>Shihay (%)</th>
<th>Flowerpots (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents finding access:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very easy</td>
<td>52</td>
<td>35</td>
</tr>
<tr>
<td>Quite easy</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>Quite difficult</td>
<td>22</td>
<td>39</td>
</tr>
<tr>
<td>Very difficult</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Number of respondents 64 23

Source: main survey, question 9

Table 5.13  Attitudes to the accessibility of shops

<table>
<thead>
<tr>
<th></th>
<th>Shihay (%)</th>
<th>Flowerpots (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents finding access:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very easy</td>
<td>53</td>
<td>52</td>
</tr>
<tr>
<td>Quite easy</td>
<td>36</td>
<td>30</td>
</tr>
<tr>
<td>Quite difficult</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Very difficult</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>No answer</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>

Number of respondents 64 23

Source: main survey, question 6
In general, therefore, these results do not support the hypothesis that integration between waterfront and city may be so inconvenient that the occupants of social housing are likely to be seriously handicapped in their day-to-day lives. However, in addition to being in itself a finding, this failure to support the hypothesis leads the discussion towards an important issue: why is integration apparently so satisfactory in this example? In seeking to explore this question, it is important to focus on the role of the planning system and to ask a further question: has planning consciously sought to create good integration between the waterfront and the city, or has integration developed unintentionally as a result of other forces?

Investigations conducted in Devon County archives produced no evidence that, when either site was constructed, serious efforts were made to ensure effective integration with the remainder of the city. The one positive planning initiative that was taken was to provide space for a small local shop in the Shilhay development, but while this can be interpreted as recognition that the possibility of isolation existed, it was not a step designed to eradicate the problem entirely.

Conversely, it can be argued that effective integration has been closely associated with a range of factors which, without giving the needs of these waterfront communities priority in any sense, have nonetheless worked to their benefit. These factors are: the role of city scale; spin-off benefits from the growth of the mixed-use waterfront; and chance in the evolution of land-use patterns.

It must be remembered that Exeter is essentially a small-scale city. With an urban core no more than half a mile in radius, and waterfront social housing schemes only slightly outside that core, the scope for isolation from centralised private and public services is
necessarily limited. In addition, and particularly for the 39 per cent of respondents with the use of a car, the city's limited size facilitates movement throughout the urban area. In this sense, therefore, it is arguable that this case study should be one in which the port-city reintegration problem is minimised.

Spin-off benefits from the growth of other waterfront activities have chiefly favoured the Shilhay development, since it is this scheme which lies in the historic port area. As the tourist function has developed over the years, an increasing amount of convenience shopping has become available and has, in the process, helped to provide for local needs. In addition, and of greatest significance in ensuring that isolation is reduced as a problem, the success of the mixed-use waterfront has been encouraged by the introduction of a tourist bus service (see Chapter 4). While the main purpose of this route is to transport tourists from the city centre to the historic waterfront, for Shilhay residents it offers a shuttle service eliminating the problem of the hill to the city centre, and also providing an effective link with other city transport services.

It may also be argued that the development of the maritime museum and the growth of private housing on the mixed-use waterfront have worked to the benefit of social housing residents. As was indicated in Chapter 4, the private Haven Banks development lies on the opposite bank to the main waterfront complex, so that the owners of private housing are cut off from the city centre. To solve both problems a footbridge was constructed (see Chapter 4), and for Shilhay residents the fortuitous outcome of this has been to create a quiet pedestrian route which gives access to both a park-and-ride service to the city centre and Sainsbury's supermarket. Compared with the nearby main road this route has the attractions of greater quietness and safety.
The role of chance, meanwhile, is best illustrated by shopping provision and, in particular, by the Sainbury's development. This is situated between Shilhay and Flowerpots, was used on a daily and weekly basis by over 50 per cent of the respondents at both the sites, and clearly made a major contribution so far as their service accessibility was concerned. Yet this was in no sense a facility planned to serve the needs of the waterfront communities under investigation (Exeter City Council, 1994) (see Chapter 4). Sainsbury's decision to invest depended on the availability of this waterfront development at a time when it was investing in city-centre branches as well as out-of-town stores. Thus the respondents' good access to this form of retailing depends more on the convenient convergence of the investment strategies of a developer, a retail chain and redundant space than on a conscious decision by planners to benefit waterfront residents. Above all, the location of the redundant space was crucial so far as the waterfront communities were concerned. Had an alternative site become available with equally good access elsewhere on the edge of the city centre, this could well have been selected and approved - to the detriment of waterfront integration.

Table 5.14  Most popular doctors' surgeries

<table>
<thead>
<tr>
<th></th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>St Thomas' Health Centre</td>
<td>51</td>
</tr>
<tr>
<td>Pinnoe</td>
<td>12</td>
</tr>
<tr>
<td>Southernhay</td>
<td>10</td>
</tr>
<tr>
<td>Barnfield</td>
<td>6</td>
</tr>
<tr>
<td>Other locations</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Number of respondents</td>
<td>87</td>
</tr>
</tbody>
</table>

*Source: main survey, question 8*
Finally, the role of chance can also be illustrated by reference to the availability of general practices. Those used by the Exeter respondents are to some extent distributed around the city. For example, 12 per cent of the sample were registered in the Pinhoe practice, north east of the city centre (Table 5.14). Similarly 6 per cent attended Barnfield, again to the north east, but a little nearer. And another fifth had doctors in a variety of dispersed locations. To a great extent this willingness to travel substantial distances across the city reflects the fact that many residents had retained the doctor they used before moving to the waterfront.

Conversely, however, 60 per cent of the sample had registered with nearer doctors, some with the Southernhay practice, just east of Shilhay, but most with St Thomas's Health Centre (Table 5.14). This offers a wide range of health services and is less than 1 km from Shilhay and Flowerpots. Neither of these closer practices was established with the needs of the waterfront community in mind, and it can therefore be argued that chance proximity contributed significantly to the fact that 86 per cent of the sample considered access to their doctor was easy. This conclusion is also supported by Chi-squared testing, which reveals a strong association between the use of more distant doctors and difficulties in travelling to them. From this result it would appear that if more residents had changed their GP when they moved to Shilhay or Flowerpots, satisfaction levels would have been even higher. What may also be noted is that further Chi-squared testing shows that difficulties are not linked to special needs or mode of transport. If difficulties are encountered they are therefore chiefly a reflection of distance, a variable that is under the control of the resident rather than the local planners in either the city council or the health authority.
CONCLUSION

From this analysis it is clear that satisfaction levels among the social housing communities studied are overwhelmingly high. This is true with respect to all three levels: the home, the immediate waterfront environment; and the wider city context. It also holds good for all social groups and with respect to both housing projects, Shilhay and Flowerpots, although they are very different in their design and setting. Here, therefore, there is little to support the initial hypotheses predicted that social housing will not fit well into the waterfront, either because of conflicts within mixed-use waterfronts, or as a consequence of isolation from the city.

Beyond this, however, several other findings are significant. One is that, while the outside observer may naturally assume that high satisfaction is generated by the fact that life is lived on an attractive waterfront, this is not necessarily the case. At both Shilhay and Flowerpots, but particularly at Flowerpots, other factors such as convenience and centrality are of great significance. In some instances, indeed, residents appear to have difficulty recognising that they live in a waterfront environment. In similar vein, the results also show that chance can play a significant role in raising residents satisfaction levels. Neither the tourist bus serving the Quay, nor the footbridge to Haven Banks were planned with the waterfront communities in mind. Yet both have improved services or movement to a degree that has been clearly beneficial to many residents.

Finally the prevailing high levels of satisfaction should not be allowed to obscure the fact that problems can be identified at the micro-scale. The night club problem at Shilhay, and the lack of privacy at Flowerpots, fall into this category and are intrusive for significant minorities of residents. This suggests that greater attention to positive planning may be required at the detailed design stage, for example to screen car parks.
and minimise the intrusion of visitors in residential developments, particularly at night.

The discussion will return to these themes in Chapter 8, not least when consideration is given to planning a model for revitalisation. At this point, however, attention must turn to the second empirical investigation, at Swansea. To what extent does this support the dominantly favourable Exeter findings?
1. Chi-squared tested differences between the over-60s, and under-60s. Chi-squared equalled 9.53 and, with 2 degrees of freedom, was significant inside the 1% level.

2. The standard error of the binomial frequency distribution suggests that, with 95 per cent probability, the proportion holding this view in the full population is between 11 and 29 per cent.

3. See Chapter 5.

4. The standard error of the binomial frequency distribution suggests that, with 95 per cent probability, the proportion holding this view in the full population is between 12 and 30 per cent.

5. Chi-squared tested differences between the Shilhay and Flowerpots respondents. Chi-squared equalled 9.43 and, with 1 degree of freedom, was significant at the 0.5% level.

6. Chi-squared tested differences between the over-60s and under-60s. Chi-squared equalled 5.3 and, with 1 degree of freedom, was significant inside the 5% level.

7. Chi-squared tested differences between women and men. Chi-squared equalled 7.90 and, with 1 degree of freedom, was significant at the 0.5% level.
8. Chi-squared tested differences between those who owned their own vehicle and those who used public transport. Chi-squared equalled 0.0063 and, with 1 degree of freedom, was well outside the 5% level significance level.

9. The standard error of the binomial frequency distribution suggests that, with 95 per cent probability, the proportion holding this view in the full population is between 14 and 32 per cent.

10. Chi-squared tested differences between the over-60s and the under-60s. Chi-squared equalled 5.6 and, with 1 degree of freedom, was significant at the 2.5% level.

11. Chi-squared tested differences between the respondents at Shilhay and Flowerpots. Chi-squared equalled 1.19 and, with 2 degrees of freedom, the result lay well outside the 5 per cent significance limit.

12. Chi-squared tested differences between the respondents who attended St Thomas's Health Centre and those using other surgeries. Chi-squared equalled 8.2 and, with 1 degree of freedom, the result was significant inside the 0.5 per cent limit.

13. Chi-squared tested differences between those with, and those without, special needs. Chi-squared equalled .09 and, with 1 degree of freedom, the result lay well outside the 5 per cent significance limit.
14. Chi-squared tested differences between those who drove, walked or got the bus to their doctor's surgery. Chi-squared equalled 4.34 and, with 2 degrees of freedom, lay outside the 5 per cent significance limit.
CHAPTER 6
LIFE AT THE WATER'S EDGE IN
SWANSEA MARITIME VILLAGE

INTRODUCTION

This chapter focuses on life in the Swansea Maritime Village. As was outlined in Chapter 4, Swansea is a South Wales seaport with a substantial yet compact revitalised waterfront at the mouth of the River Tawe. The Maritime village has a wide variety of land-uses including several social housing developments, four of which provide the focus for the research. Two of these, Somerset Place and Pier Street, lie near the river and, it will be recalled, are both housing association schemes. Meanwhile Gloucester House, a council sheltered housing scheme with an associated doctors' surgery, lies towards the dockfront; while at the head of the dock lies Paxton Drive, the second council scheme included in the investigation (Figure 4.9).

Against this backdrop, the chapter adopts the analytical structure employed in Chapter 5. Thus it examines life in the Maritime Village firstly in terms of the home; then in relation to the waterfront setting; and finally in the context of city integration. In doing so, it once again aims to examine and clarify satisfaction levels underlying residents' attitudes and perceptions, but also extends the analysis through comparisons with Exeter.

PERCEPTIONS OF THE HOME

The results obtained at this scale point strongly to the conclusion that high satisfaction levels are typical of Swansea's waterside community. For example, when asked to indicate the extent to which they liked or disliked their home (question 12), more than two thirds of the respondents gave positive replies, and a third were extremely positive.
Similarly, when asked to describe the adequacy of their home, only a handful of those who responded considered it in some way unsatisfactory, whereas the large majority felt it to be either good or ideal (Table 6.1). Here, it is true, a degree of caution is necessary, since only 55 per cent of the sample completed this question. However, error estimates suggest that, with 95 per cent probability, the actual proportion of the community that was in some way dissatisfied with the housing was no more than 10 per cent$^1$. Moreover, the proportion considering it good or ideal might have been as high as 40 per cent$^2$.

Table 6.1 Description of present home

<table>
<thead>
<tr>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideal</td>
</tr>
<tr>
<td>Good</td>
</tr>
<tr>
<td>Satisfactory</td>
</tr>
<tr>
<td>Rather unsatisfactory</td>
</tr>
<tr>
<td>Very unsatisfactory</td>
</tr>
<tr>
<td>No answer</td>
</tr>
</tbody>
</table>

100

Number of respondents 65

Source: main survey, question 26

The impression of dominantly high satisfaction levels was also reinforced by other questions relevant to this section. For example, although initial analysis suggested that women were somewhat less satisfied with their landlord than men, statistical testing did not support this conclusion, and men and women displayed similarly positive attitudes in relation to all other questions relating to the home. Table 6.2 provides but one example of this similarity. In the same way, although tests between age groups were complicated by the fact that the Swansea respondents were dominated by the over-60s,
no reliable evidence was found to indicate that satisfaction levels varied with age.

Table 6.2  Gender and attitude towards present home

<table>
<thead>
<tr>
<th></th>
<th>Male (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like it a lot</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>I like it</td>
<td>39</td>
<td>44</td>
</tr>
<tr>
<td>It's all right</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>I dislike it</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I dislike it a lot</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>26</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Number of respondents 23  27

Source: main survey, question 12

These results suggest that, at least with respect to attitudes to housing, Swansea and Exeter should be seen in a very similar light, and this conclusion is reinforced when direct comparisons are made between data for the two cities. Examples of the results are provided by Tables 6.3 and 6.4. Although the response profiles recorded vary in detail, the differences observed are well within the limits of sampling error and, when non-respondents are discounted in Table 6.4, there is nothing to indicate that distinctions should be made between satisfaction levels in these two case studies.

At this stage, therefore, there is substantial evidence that proves the first hypothesis proposed in Chapter 1. Housing is not only highly regarded in Swansea, but produces similarly good satisfaction levels among waterfront communities in at least two of the three case studies investigated by the research.
Table 6.3  Location and attitude to the present home

<table>
<thead>
<tr>
<th></th>
<th>Exeter (%)</th>
<th>Swansea (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like it a lot</td>
<td>46</td>
<td>31</td>
</tr>
<tr>
<td>I like it</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>It's all right</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>I dislike it</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>I dislike it a lot</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Number of respondents 87 65

Source: main survey, question 12

Table 6.4  Location and residents' description of their present home

<table>
<thead>
<tr>
<th></th>
<th>Exeter (%)</th>
<th>Swansea (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideal</td>
<td>29</td>
<td>18</td>
</tr>
<tr>
<td>Good</td>
<td>40</td>
<td>18</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>25</td>
<td>14</td>
</tr>
<tr>
<td>Rather unsatisfactory</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Very unsatisfactory</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>5</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Number of respondents 87 65

Source: main survey, question 26

Despite the general validity of this conclusion, the results also suggest that it should be qualified in several respects. It is evident that - as in Exeter - not all respondents were able to draw a clear demarcation line between their home and the locality in which it was set. For example, when asked to explain their feelings towards their home (question 12) 11 per cent gave its convenient location as a primary influence. Allowing for sampling error, with 95 per cent probability this proportion could be as high as 18 per
cent in the community as a whole. As in Chapter 5, this once again underlines the importance of avoiding too rigid assumptions concerning the manner in which home and locality are perceived and experienced.

There are also signs suggesting that housing satisfaction levels are not identical in all four schemes studied in the Swansea docklands. Admittedly the analysis in this context is complicated by the small numbers that are encountered when the data are disaggregated to the level of individual housing developments. The total number of respondents in any one scheme ranges from a maximum of 25 (in Paxton Drive) to only 6 (in Pier Street), and this inevitably makes reliable statistical testing difficult. However, if a generalised analysis is undertaken, in which the individual developments are ranked according the satisfaction levels of their residents, it can be suggested that a pattern begins to emerge (Table 6.5). First, although tenants were in general very satisfied with their landlords, there are indications that this is rather less true of the local authority than of the Gwalia housing association. In Gloucester House, for example, only 80 per cent of respondents felt that the authority was good or very good, compared with almost 100 per cent in the two Gwalia developments (Somerset Place and Pier Street). Conversely, however, it is local authority tenants who show the greatest signs of satisfaction with the housing itself. In particular, Gloucester House, the large local authority sheltered housing scheme, ranked first in relation to three criteria listed in Table 6.5, whereas Somerset Place occupied the bottom position in two of the three instances.
<table>
<thead>
<tr>
<th>Very positive</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gloucester</td>
<td>Gloucester</td>
<td>Gloucester</td>
<td>Pier St.</td>
</tr>
<tr>
<td>Paxton Dr.</td>
<td>Pier St.</td>
<td>Paxton Dr.</td>
<td>Somerset</td>
</tr>
<tr>
<td>Pier St.</td>
<td>Somerset</td>
<td>Pier St.</td>
<td>Gloucester</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

Source: main survey, questions 12, 22, 26 and 24

Some indication of the possible causes of this can be gained if responses to open-ended questions are examined more closely. To a degree, when there is dissatisfaction with housing association accommodation, it appears to be associated with specific aspects of housing design. There was, for example, a feeling among some residents that the density of housing was too great; flats and houses were simply packed too close together. Also, Somerset Place produced complaints of inadequate soundproofing. Both of these issues could well be linked to the trend, noted in earlier chapters, to retreat from the construction standards which previously applied in social housing. In addition, however, there are indications that concern - admittedly at low levels - is associated with the integration of the individual's home into a mixed-use revitalised environment. In particular, 18 per cent of respondents expressed concern over noise nuisances such as those caused by delivery lorries, a figure which in the full waterside community might be as high as 27 per cent4. Because the discussion will return to this point in following section, here it is sufficient to note, once again, the importance of recognising that attitudes to the home may well be at least partly structured by the environment in which it is set.
THE HOME IN ITS WATERFRONT SETTING

From earlier discussions in this and previous chapters, it is clear that the Swansea waterfront is physically very different to that in Exeter. Instead of a fragmented small-scale waterfront, Swansea possesses a true dockland zone, the protracted rundown of which created a single substantial area in need of regeneration. Given this contrast, it does not necessarily follow that residents' perceptions of the revitalised waterfront environment should mirror those in Exeter. In Swansea the artificial mixture of leisure, business, retailing, housing and civic functions is on a much greater scale, and it must be envisaged that the scope for friction between these activities and the social housing community is proportionately greater. Hypothesis 2, therefore, could well be more relevant here than in the Exeter context.

Table 6.6 Attitudes to the local area

<table>
<thead>
<tr>
<th></th>
<th>Swansea (%)</th>
<th>Exeter (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like it very much</td>
<td>59</td>
<td>55</td>
</tr>
<tr>
<td>Quite like it</td>
<td>23</td>
<td>28</td>
</tr>
<tr>
<td>No strong feelings</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Something I don't like</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Really don't like it</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Number of respondents 65 87

Source: main survey, question 1

Despite the scope for contrasting attitudes, the immediate impression created by the Swansea respondents is that they, too, find life in the regenerated area highly attractive. For example, only 3 per cent of respondents were neutral about living in the area, and a similarly small group (8 per cent) had genuinely adverse reactions to it (Table 6.6). Conversely, more than 80 per cent had positive feelings towards the environment, while
the modal response (no less than 59 per cent) was that the respondent 'liked it very much'. Similarly, 29 per cent felt that their area was better than most in Swansea, and no less than 43 per cent rated it 'one of the best' (Table 6.7). Further evidence of high satisfaction is provided by the fact that only 14 per cent had worries about living in the area. Beyond this, no evidence was found that satisfaction levels vary with socio-economic factors such as age, sex or education level. For example, Table 6.8 underlines the striking similarity of attitudes held by men and women, while apparent differences of view held by special needs and other residents cannot in fact be shown to be statistically significant (Table 6.9).

Table 6.7  Attitudes to the local area in relation to the remainder of city

<table>
<thead>
<tr>
<th>Swansea (%)</th>
<th>Exeter (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compared with the rest of the city, the local area is:</td>
<td></td>
</tr>
<tr>
<td>One of the best</td>
<td>43</td>
</tr>
<tr>
<td>Better than most</td>
<td>29</td>
</tr>
<tr>
<td>About average</td>
<td>22</td>
</tr>
<tr>
<td>Worse than most</td>
<td>0</td>
</tr>
<tr>
<td>One of the worst</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>6</td>
</tr>
<tr>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Number of respondents</td>
<td>65</td>
</tr>
</tbody>
</table>

Source: main survey, question 2

These results do little to suggest that the contrasting scale of revitalisation in Swansea and Exeter may produce differing attitudes, and this conclusion is strengthened when direct comparisons are made between responses by the two communities. From Table 6.6 it is apparent that the pattern of feelings was almost identical in the two case studies; unsurprisingly, Chi-squared testing indicates that the probability of there being significant differences between these sets of responses is extremely low. Table 6.7,
meanwhile, at first sight suggests that the Swansea community's opinion of the quality of its living environment was if anything higher than that of the Exeter sample. However, Chi-squared testing again indicates that the observed differences could well be the result of chance, and the general conclusion to be drawn from the evidence is that satisfaction levels among the two samples of residents are similarly high. Given this agreement, Hypothesis 2 - that life on the waterfront may entail friction - can be said to have no more validity in this context than in Exeter.

Table 6.8  Feelings about the local area in comparison to the rest of the city, by sex

<table>
<thead>
<tr>
<th></th>
<th>Male (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One of the best</td>
<td>39</td>
<td>41</td>
</tr>
<tr>
<td>Better than most</td>
<td>35</td>
<td>33</td>
</tr>
<tr>
<td>About average</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>Worse than most</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>One of the worst</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Number of respondents</td>
<td>23</td>
<td>27</td>
</tr>
</tbody>
</table>

15 respondents did not give their sex

Source: main survey, question 2

Explanation of the Swansea respondents' views is complicated by the fact that the open-ended questions produced few comments. For example, the first such question - which would be expected to yield the best response - had only a 55 per cent response rate, compared with 70 per cent in Exeter. Even so, a number of useful indications emerged.

Although the majority of respondents felt part of a port area, only 6 per cent made a link between their strong satisfaction and features of the revitalisation per se. In contrast, a fifth highlighted the importance of centrality, while other points made were that the
area is appealing because of factors such as low crime (11 per cent); tidiness (8 per cent); and peacefulness (6 per cent). Others, it is true, mentioned attractions stemming from the fact that revitalisation has occurred on the coast. For example, 9 per cent highlighted the appeal of the sea and 8 per cent the opportunities for flat walks. But these features are not part of the revitalisation as such, and the overriding impression given by the respondents is that the revitalised waterfront itself is of far less importance than aspects of its setting, such as centrality.

Table 6.9  Attitudes to waterfront life in relation to special needs

<table>
<thead>
<tr>
<th></th>
<th>No special need (%)</th>
<th>Special need (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like it very much</td>
<td>53</td>
<td>33</td>
</tr>
<tr>
<td>Quite like it</td>
<td>37</td>
<td>20</td>
</tr>
<tr>
<td>No strong feelings</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Something I don't like</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Really don't like it</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Number of respondents 19 15

31 people did not reveal if they did or did not have a special need

Source: main survey, question 4

This finding is similar to the situation identified in Exeter, where a distinction could be drawn between residents who saw the appeal of the waterfront as being important, and those who felt that its central location was crucial. If anything, however, the Swansea community appears to place substantially more stress on non-waterfront influences. The few who attributed their satisfaction to the outcomes of redevelopment were certainly outnumbered by those who placed far more emphasis on where the waterfront is in relation to the rest of Swansea and the city's position on the coast.
What may also be suggested is that - perhaps paradoxically - the revitalised dockland was thought to offer an attractive and safe residential environment at least in part because of its separation from the rest of the city. In discussions with local people during the qualitative research that was conducted to assist questionnaire design, a striking theme to emerge was that the move to the waterfront was in retrospect seen partly as an escape from problems in the residents' previous home areas. Thus a degree of separation from the city brought with it perceived benefits such as less crime and vandalism. As has been noted, this was echoed in the survey itself, in which attractions such as the waterfront's tidiness and peacefulness were also emphasised.

Although generally high satisfaction levels were identified, a substantial minority of residents also indicated that they had concerns about life in the area. Altogether a fifth came into this category, again an almost identical proportion to that found in Exeter, with the main issues identified being noise, traffic and crime (Table 6.10). On the one hand, these types of concern are likely to be common to many social housing communities, irrespective of whether they are set in waterfront revitalisation schemes. Also, the fact that the Swansea waterfront community is predominantly elderly might be said to predispose it to worry. On the other hand, however, this level of concern can be interpreted as a signal that the revitalisation should not be regarded as perfect. Closer examination of the occurrence of dissatisfaction is therefore necessary.

At this point micro-scale design issues - already identified as significant in Exeter - once more take on importance. This is especially evident with respect to the noise disturbance noted in the previous section. Some residents, for example, felt their homes to be too close to the road and other facilities, while among a small minority there was a clear feeling that the hustle and bustle of the area could be too great. To a degree these
problems were perceived disadvantages stemming from the fact that Swansea - as with so many revitalisation schemes - is heavily dependent on car transport to support its various activities. Traffic and visitor parking were general sources of complaint. But, while this was the general backdrop, the noise disturbance issue was particularly associated with individual developments. In particular, traffic-related concerns focused on Paxton Drive and Somerset Place; the former lies close to a large car park, while the latter is sited opposite Sainsbury's goods entrance. As in Exeter, therefore, the importance of micro-scale design can be identified on the Swansea waterfront. Perceived deficiencies in the living environment are closely associated with the juxtaposition of conflicting land uses at the small scale. Although this is not necessarily an argument for changing the land uses themselves, it does underline the need for the sensitive arrangement of potentially conflicting activities in schemes of this type.

Table 6.10 Leading worries identified about the local area

<table>
<thead>
<tr>
<th></th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise</td>
<td>20</td>
</tr>
<tr>
<td>Traffic</td>
<td>19</td>
</tr>
<tr>
<td>Crime</td>
<td>19</td>
</tr>
<tr>
<td>Vandalism</td>
<td>6</td>
</tr>
<tr>
<td>Air pollution</td>
<td>11</td>
</tr>
<tr>
<td>Water pollution</td>
<td>14</td>
</tr>
<tr>
<td>Responses analysed</td>
<td>65</td>
</tr>
</tbody>
</table>

Other factors, each cited by less than 5% of respondents, are excluded from the table. Source: main survey, question 5

What must be added is that the socio-economic characteristics of the communities in each of the four housing developments do not appear to explain these variations. Pier Street and Paxton Drive, it is true, have a greater mix of residents above and below age 60 than do the other two schemes. However, there is no evidence that this feeds directly
through to the differences noted. Moreover, in other respects the communities in the four developments have many similarities and, statistically, cannot be shown to be significantly different.

The apparent association between specific issues and individual housing projects adds further weight to the conclusion, reached in Chapter 5, that residents' perceptions may to an appreciable extent be influenced by the urban designers' ability to avoid land-use conflicts at the local scale. Extending this idea, it can be suggested that the environment which is critical in triggering negative perceptions of redevelopment is essentially local. To the external observer the relevant space might appear to be the waterfront as a whole, but for the resident this could well underplay the significance of the immediate locality.

Although they are unrelated to issues causing concern, other findings support the need to recognise the role of the micro-environment in moulding perceptions. For example, Paxton Drive and Somerset Place are on the outskirts of the waterfront, relatively close to the city centre. It was in these locations, and not in Gloucester House or Pier Street, that residential satisfaction was linked with centrality relative to the city centre. Meanwhile the sheltered housing residents in Gloucester House, who have particularly good access to facilities such as GPs and day-to-day shopping, were the only ones to stress the value of local amenities such as the local convenience shop and the pharmacy. Likewise only the Paxton Drive residents identified the nearby beach as a significant factor in residential satisfaction.

Thus, although low response rates admittedly make it necessary to treat with caution the evidence emerging from open-ended questions, findings relating to perception of the
waterfront environment nonetheless appear to replicate those reported for Exeter. Satisfaction levels are high for all groups in the population. At the very least, high satisfaction is partly related to external factors, because respondents do not make neat distinctions between the waterfront environment and the remainder of the city. Concerns do exist, despite high satisfaction. And concern generally appears to be related to residents' immediate environments. Design deficiencies or strengths at this scale can be highly influential for the individuals concerned.

**PERCEPTIONS OF CITY INTEGRATION**

Because of the policy of using Swansea's revitalised dockland primarily to house the elderly (Chapter 4), the standard of access to a number of facilities significant for younger age groups is in this instance not relevant. Nonetheless, an evaluation can be made in terms of four types of service: public transport, shopping, primary health care and leisure facilities.

Initial analysis suggests that integration with the city may in Swansea's case be perceived to be substantially worse than in Exeter. Although nearly 50 per cent of the respondents expressed no opinion on the standard of public transport provision, almost half of those who did respond considered the level of service inadequate. Moreover, less than 10 per cent agreed strongly that it was sufficient (Table 6.11). This contrasts with Exeter, where only 15% of the respondents felt that public service provision was not adequate and 39% agreed that it was to some extent sufficient.
Table 6.11 Responses to proposition that public transport is sufficient

<table>
<thead>
<tr>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>8</td>
</tr>
<tr>
<td>Agree</td>
<td>19</td>
</tr>
<tr>
<td>Unsure</td>
<td>3</td>
</tr>
<tr>
<td>Disagree</td>
<td>14</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>11</td>
</tr>
<tr>
<td>No answer</td>
<td>46</td>
</tr>
</tbody>
</table>

Number of respondents 65

Source: main survey, question 7

Further analysis, however, indicates that adverse reactions to public transport provision are not matched by perceptions of other services. Over 70 per cent of respondents reported no difficulty in visiting their GPs; for shopping the proportion reporting no problems was almost 90 per cent; and, although the question on leisure produced a large number of non-respondents, for more than half the sample access was still at least easy (Table 6.12). Beyond this, the results do not suggest that there are clearly perceived differences between these services in terms of ease of access. When respondents reporting access difficulties are excluded from Chi-squared analysis because of their small numbers, ease of access appears to be consistent across all three activities (Table 6.13). From these results, therefore, a paradox emerges. In an area in which social housing is allocated chiefly to the elderly, poor public transport provision does not feed through to substantial dissatisfaction with access to other services.
Table 6.12  Access to a range of private and public services

<table>
<thead>
<tr>
<th></th>
<th>Doctors (%)</th>
<th>Shops (%)</th>
<th>Leisure (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very easy</td>
<td>43</td>
<td>52</td>
<td>35</td>
</tr>
<tr>
<td>Quite easy</td>
<td>29</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>Quite difficult</td>
<td>5</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Very difficult</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>20</td>
<td>2</td>
<td>43</td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>65</td>
<td>65</td>
<td>65</td>
</tr>
</tbody>
</table>

Source: main survey, question 5, 6, 8 and 9

To some extent this paradox may be more apparent than real, in that the data may underestimate the extent to which residents find access difficult. If so, this is most likely to be true with respect to the responses on leisure access. Leisure activities are, of course, optional, and the large number of non-respondents on this question could indicate that transport difficulties have led some residents to opt out of leisure pursuits. However, because shopping and primary health care certainly do not fall into this optional category, this is at best a very partial explanation.

Table 6.13  Comparative ease of access to major types of service

<table>
<thead>
<tr>
<th></th>
<th>Shops (No.)</th>
<th>Doctors (No.)</th>
<th>Leisure (No.)</th>
<th>Total (No.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents finding access:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very easy</td>
<td>34</td>
<td>28</td>
<td>23</td>
<td>85</td>
</tr>
<tr>
<td>Quite easy</td>
<td>23</td>
<td>19</td>
<td>13</td>
<td>55</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>47</td>
<td>36</td>
<td>140</td>
</tr>
</tbody>
</table>

Source: main survey, questions 6, 8 and 9

205
It must also be noted that, particularly as far as shopping is concerned, the high incidence of favourable responses is partly due to the fact that many residents of the Gloucester House sheltered housing scheme receive assistance from the social services. Care assistants can relieve the burden of shopping if a resident wishes, while the provision of some meals in this complex can reduce the need for food purchases.

However, of fundamental significance is the fact that - as has already been noted in Chapter 4 - market forces and planning have combined to bring into Swansea's mixed-use revitalised waterfront a number of key services. These are now very conveniently located for residents, whose need for integration with localities away from the waterfront is consequently sharply reduced. In its turn this has meant that the standard of public transport provision has become less important than might be assumed. So far as market forces are concerned, the prime example is provided by the presence of the Sainsbury's superstore. This is within 600 metres of all the housing schemes surveyed, is used weekly by no less than half the sample, and in addition meets the day-to-day needs of 40 per cent of respondents. Meanwhile the outstanding example of planned provision is the Marina Surgery and its associated pharmacy. These stand on the dockside, adjacent to the Gloucester House sheltered housing scheme, and were specifically introduced to minimise potential problems of health care access which might arise from an influx of the elderly into a relatively isolated location. Leisure opportunities, in contrast, were not planned specifically with the incoming residents in mind, but even so have arguably been of benefit to them. Thus both the Swansea Leisure Centre (with its swimming pool) and the waterside promenade were built to encourage the city population to use the waterfront; but in the process planning has significantly improved the recreational opportunities on the local community's doorstep. One index of the importance of this local provision is provided by the high proportion of respondents whose access to their
major services is on foot. Half the respondents indicated that they normally walked to their leisure activities and their doctor, while for shopping the proportion was as high as 75 per cent.

While the provision of services on the waterfront itself is an important feature contributing to high satisfaction levels in Swansea, this does not mean that all social housing residents use them to the exclusion of those elsewhere in the city. In the case of shopping, the responses indicated that Safeway's supermarket, which was in the city centre until it closed in 1995, was important for both day-to-day and weekly purchases. Similarly the market in the city centre, a good 15 minutes walk, was also used by almost a third of the sample for weekly purchases. Clyne Park, some 4 km westwards along the coast walk, was a popular recreational facility. And, despite the locational convenience of the Marina Surgery, most respondents were registered at practices distributed around the city. As in Exeter, this reflected patients' tendency to retain their doctor even when they moved home.

In the case of primary care access, this wider activity pattern gave rise to differing perceptions of accessibility. Thus, whereas virtually all respondents using the Marina Surgery understandably considered access to it to be very easy, only a quarter registered with other doctors held this view. Chi-squared testing showed this difference to be significant at the 0.1 per cent level. But this distinction was essentially a matter of degree, and in the whole sample only five patients experienced genuine difficulty in making the journey to their doctor. Similarly, only four individuals who did their weekly shopping elsewhere in the city reported problems; and the access perceptions of those with leisure pursuits inside and outside the regenerated area showed no significant difference. Consequently, even though the waterfront is certainly not self-contained,
there is once again little indication that broader interaction is the source of substantial accessibility problems. Moreover, it cannot be argued that this merely reflects the use of cars by those using services outside the waterfront. Only 26 per cent of those surveyed owned a car; those who did so did not always take advantage of it by using services outside the waterfront; and - most important of all - car owners did not report that movement was significantly less problematic than those using local buses. Despite concern over public transport, isolation is not a serious drawback to life on this waterfront.

**CONCLUSION**

As was the case in Exeter, it is clear from this chapter that social housing residents living in the Swansea Maritime Village are overwhelmingly positive about their residential environment. This is the case at the level of the housing itself, with respect to reactions to the revitalised local area, and in relation to the waterfront's integration with the city as a whole. What is also striking is that - in both cities - high levels of satisfaction are typical of all sections of the community. At this point, therefore, the investigation has provided no substantial evidence that social housing is inappropriate for inclusion on the waterfront, despite the predictions of two of the initial hypotheses.

What is also evident, however, is that high satisfaction levels must be interpreted with caution in three respects. First, they do not necessarily mean that, from the residents' viewpoints, life on the revitalised waterfront cannot be improved. Attention to the arrangement of land uses at the micro-scale is clearly of significance in this context; errors of judgement may undoubtedly intrude nuisances such as noise, traffic and parking into individual's lives. Moreover, once the land-use pattern is set, these intrusions may be difficult to overcome. Similarly, widespread general satisfaction may
mask other more specific concerns such as unresponsive landlords although, in theory at least, difficulties should be easier to correct because they are not literally set in concrete. Second, the results presented in this chapter underline the finding in Exeter that it is not just the revitalised waterfront itself which promotes satisfaction. Residents respond readily to influences such as centrality or a location on the coast, neither of which is a direct feature of revitalisation *per se*. Conceivably, therefore, without these independent influences revitalisation projects could be viewed considerably less favourably by their communities. Third, this time in contrast to Exeter, where chance played a major role in fostering success, there seems little doubt that planning has been of fundamental importance in ensuring that Swansea offers the social housing resident a good environment. Public investments, particularly in primary health care and leisure facilities, provide important local services on the doorstep; and - while the attraction of a superstore to the dockland may have caused problems for those nearby - it has been of enormous benefit for the waterfront community in general. While it is true that these services are not used by the entire community, they are readily available for those who need them. Moreover, it may well be that they will assume increasing significance as the community ages and becomes less mobile.

As was the case in the previous chapter, therefore, satisfaction can be seen as a complex phenomenon, which in this case relates not only to the site's waterfront location, but also to planning, micro-scale design approaches and the general setting for the regeneration. These themes will be focused upon in greater depth in Chapter 8. Meanwhile attention will now turn to the final empirical investigation, into the very different waterfront environment of Govan, Glasgow.
NOTES

1. Estimate based on calculation of the standard error of the binomial frequency distribution. $P = 5\%; \ q = 95\%\; n = 65$.

2. Estimate based on calculation of the standard error of the binomial frequency distribution. $P = 32\%; \ q = 68\%\; n = 65$.

3. Estimate based on calculation of the standard error of the binomial frequency distribution. $P = 11\%; \ q = 89\%\; n = 65$.

4. Estimate based on calculation of the standard error of the binomial frequency distribution. $P = 11\%; \ q = 89\%\; n = 65$.

5. Chi-squared testing of the data suggested that observed differences may well be the result of chance. Chi-squared $= 0.20\; \text{degrees of freedom} = 2$; the result is well outside the 5 per cent significance limit (5.99).

6. Chi-squared tested differences between those that used the Marina Surgery and those that used other GPs. Chi-squared equalled 16.18 and, with 1 degree of freedom, was significant inside the 1% level.

7. Chi-squared tested differences between those that owned a car and those that used other forms of transport. The highest chi-squared value produced by a series of tests, was related to ease of access to shops, and equalled 0.92, with 1 degree of freedom. This was well outside the 5% significance level.
CHAPTER 7
SOCIAL HOUSING AND REVITALISATION OF THE GOVAN WATERFRONT

INTRODUCTION
So far in this research, two substantial case studies have demonstrated that the waterfront can be a very effective location for social housing. Both have shown high levels of satisfaction with the housing itself; despite some design and land-use conflicts, both have underlined that there can be positive advantages to life on the mixed-use waterfront; and the few problems identified with city integration, such as the use of relatively inaccessible doctors, have in many instances be shown to be a consequence of resident behaviour, rather than planning failures.

In this final empirical chapter the reliability of these findings will be tested through the research on the Govan waterfront, using an alternative chapter structure to present the results. As was indicated in Chapters 1 and 4, this waterfront is unusual in that mixed-use revitalisation has failed to take root, and has therefore left the area's social housing projects largely surrounded by untouched dereliction. Thus a question of particular interest is the extent to which this apparently undesirable local environment has influenced perceptions of waterfront life. Exploration of this issue has been made the culmination of the chapter, and is preceded by sections seeking to replicate the results relating to the home and to integration with the city.

It will be remembered that, in addition to the prevalence of dereliction, the Govan waterfront is unusual in that it is a large-scale linear development. These two features - the failure to regenerate and Govan's linearity - provide the essential backdrop to the analysis. In addition it will be recalled that the Govan research focused on two housing
developments: Riverside, located on the Clyde itself, on the site of a former shipyard; and Harmony Row which, while still within the historic waterfront zone, is set back some 300m from the river in an area of industry and housing. Together, these two sites provide the largest sample obtained in the project, 101 respondents. Reminders of other relevant aspects of local development will be introduced as the discussion proceeds.

**CITY INTEGRATION**

Apart from the results presented earlier in this thesis, several considerations suggest that the Glasgow investigation should produce high levels of satisfaction with access to city services. First, although there has been extensive clearance in the Govan study area, important amenities have either been retained or replaced. Govan itself is a well-established local shopping centre providing a substantial range of small shops catering for many day-to-day needs. To a great extent these have survived the clearance programme that has affected so much of the locality, and in addition a modest shopping centre built in the 1960s has improved the scale of retail provision. Similarly, doctors' practices remain from the time when Govan was a thriving shipbuilding community; Govan Church - which actually stands on the waterfront - remains active; and the limited rebuilding that has occurred in the clearance areas includes a local primary school.

Second, even though it is set in a much larger and more complex city, the Govan waterfront is arguably less isolated from the surrounding urban area than is the case in either Exeter or Swansea. This is a reflection of the waterfront's morphology. As was indicated in the introduction and in earlier chapters, growth along the River Clyde generated linear development rather than a compact, physically separate, dockland. Moreover, along this stretch of the Clyde at least, separation was reduced still further.
by the fact that a dockyard wall was never built. Govan therefore avoided the barrier effects so typical of many other large-scale ports, and in return inherited a morphology which made the potential for interaction with neighbouring areas considerably greater than was often the case elsewhere. In contrast in Partick, on the north bank of the Clyde, the barrier effect caused by an extensive dock wall has undoubtedly delayed progress towards redevelopment (Glasgow City Council Planning Department, pers. com. 1994).

Third, not least because of its setting in a major conurbation, the level of public transport provision in Govan is extremely high. The Govan Road, running the length of the waterfront and providing access to conurbation subcentres eastwards and westwards, is served by a number of bus services which operate from early morning to late evening. In addition, Govan's underground station is centrally placed, adjacent to the original town centre, and allows rapid travel into central Glasgow and - because of the line's circular route - to many other parts of the late-nineteenth and early twentieth-century city. Again, this mode of transport is available throughout the day and evening. Good transport provision therefore allows local residents access to a large number of intra-city destinations.

Fourth, because the local community has enjoyed substantial public transport services for generations, it seems probable that a culture of public transport usage has developed. This is not a locality in which private transport has ever been dominant, and the fact that car ownership remains low - in the survey only 11 per cent of the sample had the use of a vehicle - is unlikely to be a severe handicap to movement.

Almost without exception, the results bear out this interpretation. Virtually all respondents were able to take a view on the adequacy of public transport, and less than
10 per cent had doubts about the standards of provision (Table 7.1). No respondent reported problems with school access, although a fifth of the sample had children of school age. And there was also a virtual absence of negative attitudes concerning access to shops, doctors' surgeries, the workplace and leisure facilities (Table 7.2). Within this overall favourable picture there were, it is true, a number of distinctions between groups in the community. For example, men found it significantly easier to visit the doctor than women\(^1\), most probably because women are less likely to have the use of a car, and two thirds of the women in the sample had child care responsibilities. Similarly, respondents over the age of 60 found shopping a significantly less easy activity than the younger age groups\(^2\). What must be emphasised here, however, is that these distinctions did not amount to the identification of substantial access problems by specific groups in the community. Almost all respondents found their necessary journeys to be unproblematic, but the extent to which this was true depended on the occasion and on personal characteristics and circumstances. This was even true of the special needs respondents, who gave no indication that their experience of using urban services was worse than that of the community in general.

Table 7.1 Responses to the proposition that public transport is sufficient

<table>
<thead>
<tr>
<th>Response</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>29</td>
</tr>
<tr>
<td>Agree</td>
<td>46</td>
</tr>
<tr>
<td>Unsure</td>
<td>5</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
</tr>
<tr>
<td>No answer</td>
<td>4</td>
</tr>
</tbody>
</table>

Total: 100%

Number of respondents 101

Source: main survey, question 7
The strength of satisfaction is also emphasised when the Glasgow results are compared with those for Swansea and Exeter. In Glasgow, almost 70 per cent of respondents felt that access to shopping facilities was very easy, compared with a little over half in Swansea and Exeter (Table 7.3). Chi-squared testing indicated that this difference was significant at the 5 per cent level\(^3\). So far as medical services were concerned, the sample found journeys to the doctor to be just as easy as in Swansea, where the local Marina Surgery was of considerable importance, and access to leisure facilities was as unproblematic as in the two other studies. Above all, however, comparison with the other case studies revealed striking contrasts in attitudes to public transport. Here the analysis is admittedly complicated by relatively large numbers of non-respondents in Swansea and Exeter (Table 7.4). But if these are discounted and a Chi-squared test performed on those providing a response, the result\(^4\) indicates at a very high level of reliability (0.5 per cent) that satisfaction with public transport in Govan is significantly high. Overall, three quarters of the Govan respondents believed that services were adequate, including almost 30 per cent who felt strongly that this was the case (Table 7.4). What must also be noted, however, is that this result chiefly reflected perception.
contrasts between residents in Govan and Swansea rather than Govan and Exeter. This may well be a consequence of the fact that, as was stressed in Chapter 6, Swansea is a traditional dockland redevelopment that is relatively isolated compared with the linear Govan waterfront.

Table 7.3 Location and access to various services

<table>
<thead>
<tr>
<th></th>
<th>Glasgow (%)</th>
<th>Swansea (%)</th>
<th>Exeter (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D S L</td>
<td>D S L</td>
<td>D S L</td>
</tr>
<tr>
<td>Very easy</td>
<td>50 68 25</td>
<td>43 52 35</td>
<td>22 53 24</td>
</tr>
<tr>
<td>Quite easy</td>
<td>43 21 23</td>
<td>29 35 20</td>
<td>64 35 26</td>
</tr>
<tr>
<td>Quite difficult</td>
<td>4 7 2</td>
<td>5 6 2</td>
<td>8 3 1</td>
</tr>
<tr>
<td>Very difficult</td>
<td>0 0 0</td>
<td>3 3 0</td>
<td>3 3 1</td>
</tr>
<tr>
<td>No answer</td>
<td>4 4 51</td>
<td>20 3 43</td>
<td>2 6 47</td>
</tr>
<tr>
<td>Number of respondents</td>
<td>101 101 101</td>
<td>65 65 65</td>
<td>87 87 87</td>
</tr>
</tbody>
</table>

D = Doctors
S = Shops
L = Leisure
Source: main survey, questions 6, 8 and 9

Table 7.4 Location and responses to the assumption that access to public transport is adequate

<table>
<thead>
<tr>
<th></th>
<th>Glasgow (%)</th>
<th>Swansea (%)</th>
<th>Exeter (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>29</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Agree</td>
<td>46</td>
<td>19</td>
<td>32</td>
</tr>
<tr>
<td>Unsure</td>
<td>5</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Disagree strongly</td>
<td>1</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>No answer</td>
<td>17</td>
<td>46</td>
<td>38</td>
</tr>
<tr>
<td>Number of respondents</td>
<td>101 65 87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: main survey, question 7
Irrespective of whether the evidence from this case study is examined on its own or in relation to that provided by the earlier investigations, therefore, the indications are clear. Proximity to local services, and access to good public transport systems, mean that Govan's tenants are not isolated from key services. Nor do they experience significant access or mobility problems as a result of a failure to reintegrate the port with the broader city.

**HOUSING PERCEPTIONS**

Govan's waterfront social housing has been built under the same financial and regulatory regimes as the housing in Exeter and Swansea. Consequently, just as favourable attitudes to integration with the city could be anticipated by this stage in the investigation, the analysis of housing perceptions proceeded on the assumption that the accommodation would in general be well liked by the community.

<table>
<thead>
<tr>
<th>Table 7.5 Description of present home (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideal</td>
</tr>
<tr>
<td>Good</td>
</tr>
<tr>
<td>Satisfactory</td>
</tr>
<tr>
<td>Rather unsatisfactory</td>
</tr>
<tr>
<td>Very unsatisfactory</td>
</tr>
<tr>
<td>No response</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Number of respondents 101

Source: main survey, question 26

The appropriateness of this assumption is underlined by Table 7.5, based on the replies given when respondents were asked to say what best described their home. Only 7 per
cent suggested that it was to any degree unsatisfactory, compared with over 50 per cent considering it good or ideal. Unsurprisingly, given this very substantial degree of approval, these results were replicated when the attitudes of specific groups in the community were compared. Extensive testing failed to establish significantly different views associated with variables such as age, sex, family status or employment. Similarly, no distinction could be drawn between the responses given by residents of Harmony and Riverside.

However, when perceptions of housing in Govan are compared with those for Exeter and Swansea it becomes apparent that a note of caution is necessary. Although almost two thirds of the respondents either liked their homes, or liked them a great deal, the levels of approval recorded appear to be lower than those found in the other two case studies (Table 7.6). The apparent contrast is particularly great between the results for Govan and Exeter, and when these two data sets are tested the differences between them are shown to be significant at the 0.1 per cent level. Thus, while there are few who consider the Govan accommodation unsatisfactory, in the eyes of many there is clearly scope for improvement.

To some extent this outcome was the consequence of specific construction and design problems. For example, a number of respondents in the Riverside development complained of difficulties with their windows; in the Harmony complex condensation was reported; also at Harmony, inadequate soundproofing was linked with a problem of heavy traffic noise from the adjacent road; and here there was also a feeling that privacy was reduced because passers-by could see into respondents’ homes. In addition, however, it seems likely that perceptions of the Govan housing were less favourable because the design standards employed for this local authority housing were in several important
respects less generous than those adopted elsewhere. Particularly at the Flowerpots development in Exeter, room sizes were large, as was emphasised in Chapter 4. At both Exeter and Swansea, external design standards for the housing, as well as for landscaping, were high compared with the very utilitarian approach adopted in Govan. Also the fact that the Govan project included houses, as well as flats, certainly provoked an adverse reaction among some members of the community, most of whom preferred the idea of flats in the tenemental tradition of Scotland. However, given certain results from earlier chapters, it must also be envisaged that perceptions of the home were influenced by external factors. In both Exeter and Swansea evidence was available that many residents could not make a clear distinction between the home and the surrounding waterfront environment. This is particularly relevant to Govan because, as has been emphasised, much dereliction remains untouched. At this point, therefore, it is appropriate to turn from the home to the waterfront environment to question the extent to which perceptions appear to be influenced by the failure to revitalise.

<table>
<thead>
<tr>
<th></th>
<th>Glasgow (%)</th>
<th>Swansea (%)</th>
<th>Exeter (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like it a lot</td>
<td>22</td>
<td>31</td>
<td>46</td>
</tr>
<tr>
<td>I like it</td>
<td>39</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>It is alright</td>
<td>25</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>I dislike it</td>
<td>7</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>I dislike it a lot</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>6</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

**Number of respondents**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Glasgow</td>
<td>101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swansea</td>
<td>65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exeter</td>
<td>87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** main survey, question 12
DERELICTION AND WATERFRONT PERCEPTIONS

Given the contrast between the local waterfront environments of Govan, on the one hand, and Exeter and Swansea on the other, it was in this aspect of the research that the most substantial distinctions were expected to emerge between the three communities' attitudes.

In the event, little evidence was obtained that the Govan community reacts strongly against its local environment, despite the surviving swathes of dereliction. For example, only a handful of respondents felt that their area was one of the worst, or worse than most in Glasgow, a proportion far too low for a significant contrast to be established with the attitudes expressed in the other case studies. Conversely, however, very clear evidence emerged that, while the Govan community may not actively dislike the locality, the degree to which it is actually liked is substantially weaker than in either Exeter or Swansea. As Table 7.7 shows, less than 10 per cent of the Govan respondents felt their area was one of the best, compared with almost 30 per cent in Exeter and more than 40 per cent in Swansea. In addition, half the Govan respondents believed their district to be about average, a view twice as common here as in either of the other cities. Chi-squared testing showed these contrasts to be significant at a very high level of significance (0.1 per cent).

Similarly the conclusion that, while there may be little outright aversion to the locality enthusiasm for it is distinctly muted, is supported by the extent to which respondents' reported that they enjoyed living on the waterfront (Table 7.8). Over a third had no strong feelings, and less than a fifth liked it very much, whereas in Swansea over 40 per cent, and in Exeter 50 per cent, responded very positively. Again, Chi-squared testing shows these differences to be highly significant (at the 0.1 per cent probability level).
Overall, therefore, there is very little doubt that the levels of satisfaction which Govan's social housing residents' have with their waterfront are low relative to those encountered earlier in the research.

Table 7.7 Attitudes to the local area in relation to the remainder of the city

<table>
<thead>
<tr>
<th>Compared with the rest of the city, the local area is:</th>
<th>Glasgow (%)</th>
<th>Swansea (%)</th>
<th>Exeter (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One of the best</td>
<td>9</td>
<td>43</td>
<td>28</td>
</tr>
<tr>
<td>Better than most</td>
<td>28</td>
<td>29</td>
<td>33</td>
</tr>
<tr>
<td>About average</td>
<td>52</td>
<td>22</td>
<td>25</td>
</tr>
<tr>
<td>Worse than most</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>One of the worst</td>
<td>5</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Number of respondents 101 65 87

Source: main survey, question 2

Table 7.8 Location and attitudes to waterfront life

<table>
<thead>
<tr>
<th>Like it very much</th>
<th>Glasgow (%)</th>
<th>Swansea (%)</th>
<th>Exeter (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quite like it</td>
<td>27</td>
<td>33</td>
<td>30</td>
</tr>
<tr>
<td>No strong feelings</td>
<td>38</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Somethings I don't like</td>
<td>9</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Really don't like it</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>8</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Number of respondents 101 65 87

Source: main survey, question 4
Moreover, when respondents were offered the opportunity to explain their feelings, it became apparent that positive attitudes to the area were in many instances not influenced by the waterfront itself. Instead they frequently reflected factors such as the convenience of Govan with its local amenities and good public transport; the attachment many long-term residents felt for a familiar area; the friendliness of the local community in general; and, more specifically, the social networks of family and friends concentrated in the locality.

To an important degree, these findings can be attributed to the area's failure to regenerate effectively. Waste ground left by the demolition of housing, and the remains of abandoned docks and shipyards are clearly likely to damage perceptions of an environment, even though - as has been shown - they may not produce very hostile attitudes to it. Beyond this, however, there is also evidence that urban ecological factors have played an important role in lowering satisfaction levels. For example, almost 40 per cent of respondents reacted negatively against litter in the locality; a similar proportion were concerned about crime; and no less than half identified vandalism as a problem (Table 7.9). When tested statistically, Govan's rating on these three counts can be shown to be significantly worse than those at Swansea. Conversely, whereas noise was one of the more common nuisances reported in the other two case studies, in Govan it was scarcely mentioned, a contrast significant at the 0.1 per cent confidence level. These findings, it may be added, were consistent throughout the Govan community. Despite extensive testing on the basis of age, sex, employment status, etc, no evidence was found that concerns were concentrated in specific social groups.
<table>
<thead>
<tr>
<th></th>
<th>Glasgow (%)</th>
<th>Swansea (%)</th>
<th>Exeter (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise</td>
<td>4</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Crime</td>
<td>35</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>Vandalism</td>
<td>51</td>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td>Air pollution</td>
<td>8</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Water pollution</td>
<td>5</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Soil pollution</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Traffic</td>
<td>16</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>Flooding</td>
<td>7</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Litter</td>
<td>37</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>Responses analyses</td>
<td>101</td>
<td>65</td>
<td>87</td>
</tr>
</tbody>
</table>

Source: main survey, question 5

Results such as these suggest that difficulties of the type which previous chapters have shown are a concern in Swansea and Exeter may have been crowded out in Govan as larger urban problems have permeated the waterfront from the surrounding city. Moreover, it is also possible that this process has been assisted by the Govan waterfront's linear morphology. As has been noted, this contrasts fundamentally with Swansea's compact revitalised dockland, and as the chi-squared test of Table 7.9 has revealed, that it is in these two localities - Govan and Swansea - that differences in attitudes to vandalism, crime and litter are most marked. This may mean that the continuing physical separation of Swansea's dockland has provided the area with a natural advantage unavailable to the Govan waterfront. In other words, greater exposure to urban problems may be the price which the Govan community pays for the high degree of integration with the city which linearity undoubtedly encourages. This interpretation, it may be added, is also supported when the data for Exeter in Table 7.9 are related to its morphology. Morphologically, the Exeter waterfront is certainly more
linear and open to the city than that in Swansea, a difference associated with higher levels of concern, particularly with respect to vandalism and litter.

Table 7.10 Site and responses to the question 'Do you have any worries about living in this area?'

<table>
<thead>
<tr>
<th></th>
<th>Riverside (%)</th>
<th>Harmony (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td>No</td>
<td>80</td>
<td>53</td>
</tr>
<tr>
<td>No answer</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Number of respondents</td>
<td>56</td>
<td>45</td>
</tr>
</tbody>
</table>

Source: main survey, question 5

Finally, however, the results also demonstrate - once again - the importance of urban design at the micro-scale as a determinant of resident attitudes. Indeed, it is arguable that the Govan case study reveals this influence more clearly than either of the other investigations. Strikingly, although the social composition of the communities in Riverside and Harmony Row was essentially the same, the concerns discussed above were much more closely associated with the Harmony residents. No less than 40 per cent of the latter had reservations about living in the area, compared with only 14 per cent of those occupying Riverside (Table 7.10). This difference is significant at the 0.1 per cent level\(^\text{10}\). Similarly, the lukewarm attitudes about life on the Govan waterfront, noted earlier, were significantly less pronounced among the Riverside respondents than was the case at Harmony (Table 7.11). This is not to argue that perceptions at Riverside were so positive that they were essentially the same as those found in the other two case studies. Comparison of Tables 7.8 and 7.11 suggests that there are differences between
the attitudes of respondents at Riverside and those in Exeter and Swansea, an impression strongly supported by significance testing. At the very high 0.1 per cent confidence level, Riverside residents were less inclined to be very positive about their locality and much more likely to lack strong feelings about it. None the less, it is evident that the immediate presence of the water at Riverside is linked with community attitudes that are considerably more upbeat than at Harmony. Moreover, it was only at Riverside that respondents mentioned with approval factors such as the views and opportunities to stroll or sit by the river. Against this background there is very little doubt indeed that the success of the waterfront for any individual is likely to be closely bound up with the question of precise residential location. Even though the Clyde may contain dead bodies - which are occasionally washed up at Riverside - the lives of those who live here appear to gain a great deal from the river's presence on their doorstep.

Table 7.11 Site and attitudes to waterfront life

<table>
<thead>
<tr>
<th></th>
<th>Riverside (%)</th>
<th>Harmony (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like it very much</td>
<td>25</td>
<td>7</td>
</tr>
<tr>
<td>Quite like it</td>
<td>32</td>
<td>20</td>
</tr>
<tr>
<td>No strong feelings</td>
<td>25</td>
<td>53</td>
</tr>
<tr>
<td>Somethings I don't like</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Really don't like it</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>No answer</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Number of respondents 56 45

Source: main survey, question 4

CONCLUSION

It is clear from this final analytical chapter that, even when the regeneration process has
failed, this may not be disastrous in the eyes of the waterfront community. Housing was
generally viewed favourably, despite a number of common defects and indifferent
architecture. Although car ownership was low, city integration was exceptionally good,
primarily because the locations of both Harmony and Riverside were well chosen to
exploit Govan's long-established local service centre and the conurbation's highly
developed public transport system. Moreover, despite the sea of dereliction caused by
the failure of private-sector revitalisation to materialise, few members of the community
were actually hostile to the local environment. Once again, therefore, the results suggest
that social housing is not inappropriate for regeneration schemes.

At the same time, however, the Govan findings also highlight the need for caution.
Satisfaction levels there were significantly lower than in Exeter and Swansea, not simply
at Harmony Row (which lacks the attraction of water on its immediate doorstep) but
also at Riverside. This may well reflect the depressing effect of an unregenerated area,
but it also seems likely to be a consequence of the waterfront's linear morphology. This
promotes strong contact with the surrounding inner-city and, although this can be
advantageous in assisting access to services, there is also evidence that it allows inner-
city problems to percolate in and disturb the waterside community. In some respects,
therefore, relative isolation of the type likely to be associated with more traditional
docklands may in fact be a positive, rather than a negative feature for local people.
1. Chi-squared tested differences between men and women. Chi-squared equalled 4.44 and, with 1 degree of freedom, was significant inside the 5% level.

2. Chi-squared tested differences between those over 60 and those under 60. Chi-squared equalled 11.89 and, with 1 degree of freedom, was significant inside the 1% level.

3. Chi-squared tested differences between Exeter and Glasgow. Chi-squared equalled 5.04 and, with 1 degree of freedom, was significant inside the 5% level. Chi-squared also tested differences between Swansea and Glasgow. Chi-squared equalled 4.82 and, with 1 degree of freedom, was significant inside the 5% level.

4. Chi-squared tested differences between Exeter and Glasgow. Chi-squared equalled 4.74 and, with 1 degree of freedom, was significant inside the 5% level. Chi-squared also tested differences between Swansea and Glasgow. Chi-squared equalled 0.51 and, with 1 degree of freedom, was not significant at the 5% level.

5. Chi-squared tested differences between Exeter and Glasgow. Chi-squared equalled 10.46 and, with 2 degrees of freedom, was significant inside the 1% level.

6. Chi-squared tested differences between Exeter and Glasgow. Chi-squared equalled 17.93 and, with 2 degrees of freedom, was significant inside the 1% level.

7. Chi-squared tested differences between Exeter and Glasgow. Chi-squared equalled 33.2 and, with 2 degrees of freedom, was significant well inside the 1% level.
8. Chi-squared tested differences between Swansea and Glasgow. Chi-squared equalled 9.48 and, with 2 degrees of freedom, was significant inside the 1% level. Chi-squared also tested differences between Exeter and Glasgow. Chi-squared equalled 0.49 and, with 2 degrees of freedom, was not significant at the 5% level.

9. Chi-squared tested differences between the three sites. Chi-squared equalled 12.99 and, with 2 degrees of freedom, was significant inside the 1% level.

10. Chi-squared tested differences between Riverside and Harmony. Chi-squared equalled 9.1 and, with 1 degree of freedom, was significant inside the 5% level.

11. Chi-squared tested for differences between Riverside, Exeter and Swansea. Chi-squared equalled 14.07 and, with 4 degrees of freedom, was significant at the 0.1 percent level.
CHAPTER 8
CONCLUSION

INTRODUCTION
At the start of this thesis it was argued that a more critical approach to waterfront regeneration is needed, in order to appraise the process from a wide variety of viewpoints. Complementary studies are needed because the waterfront is a complex system containing many different 'waterfronts'. These interact with each other, with the wider city and with societies and economies beyond. The investigation undertaken can be seen as a contribution to this process of extensive evaluation, a contribution that has focused deliberately and specifically on one theme: the regenerated waterfront's suitability for social housing communities. To complete the discussion of this theme, this chapter begins by summarising the main findings; synthesises these results with broader waterfront concepts in order to build an analytical model for the evaluation of revitalisation; and ends by proposing a research agenda for further work in the field of port regeneration.

MAIN FINDINGS
In general terms the survey work at Exeter, Swansea and Govan confirmed the first hypothesis, proposed in Chapter 1, that residents would react well to their accommodation. But, more importantly, very little evidence was produced to support the two other hypotheses. The suggestion that mixed-use revitalised waterfronts do not provide appropriate living environments for social housing tenants was discounted, and it was shown that social housing residents in these localities do not experience significant access and mobility problems. Even in Govan, continuing widespread dereliction has not led residents to be negative about waterfront life. In many respects,
therefore, the picture that has emerged is very different to that envisaged at the outset.

Several reasons have been identified which account for the waterfront's success in integrating social housing into mixed-use revitalisation. These reasons, although complex, can be conveniently grouped. Firstly, successful integration of social housing with other waterfront land uses is partially attributable to planning. The best example of this is Swansea, where the waterfront regeneration process has included the introduction of a series of key amenities such as a doctors' surgery, a pharmacy and shopping facilities. This project clearly shows that positive planning measures can reduce the need for substantial reintegration of an area into the city as a whole and can also ease isolation. Similarly, the results have also shown that careful selection of social housing sites can play an important part in ensuring the success of such schemes. In Glasgow, for example, planners redeveloping Govan, through the introduction of social housing selected the area for revitalisation at least partly because it was close to a mature community with its own key services and transport links. Equally, it is also possible for a lack of good planning to place social housing too close to incompatible uses. For example in Swansea, the siting of Somerset Place so close to a Sainsbury's superstore has caused appreciable noise problems for the residents of this development.

The second factor that has been shown to contribute to the success of waterfront schemes is chance. This study has clearly highlighted the reliance which residents may come to have on services not originally intended to benefit them. The best example of this is the building of the Sainsbury's store at Exeter. Although this decision substantially improved access to high-quality shopping facilities for the residents at Shilhay and Flowerpots, the store was not planned with their needs in mind. When assessing the achievements of revitalisation, it is clearly important to recognise the
significant role such advantageous services may play for those who come to live at the water's edge.

Thirdly, a similar point can be made about the contribution that tourist facilities may make to increase residential satisfaction. The results have shown that tourist services, such as bus routes and shops, can also become important amenities for local residents. For instance, in Exeter the problem presented by the steep river cliff has been ameliorated by the introduction of a tourists' bus service; this is used to gain access to the city centre, not only by visitors but also by the residents of Shilhay. Another example from the Exeter Quay is the decision by shopkeepers to stock household items for local residents as well as visitors to the area. Future schemes should expand and encourage multi-purpose retailing, not only as a way to ease the isolation that waterfront residents could theoretically experience, but also to benefit waterfront retailers in the winter months and during recessions.

The fourth factor that is important in determining the success of waterfront social housing schemes is the image of the waterfront that is created in the minds of social housing tenants. It is clear from the survey that the residents feel fortunate living in an area 'hyped' by the media as fashionable and high class. Also evident is the finding that the waterfront is seen by many as a pleasant environment in which to live. Unfortunately, however, it is arguable that this is the least-controllable and possibly the most volatile factor associated with residential satisfaction. In future years the waterfront may be presented in a very different light by the media, as was the case after 'high-rise' developments lost favour. Residents could, therefore, feel very differently about the locations in which they live in the next century.
Fifthly, the thesis has undoubtedly identified the micro-environment as an important influence on the success of social housing developments. In Glasgow this was well illustrated by Harmony Row, where residents were concerned about issues such as vandalism and crime to a much greater extent than at Riverside only a few hundred yards away. Similarly in Swansea, while the residents at Somerset Place perceived the area to be unacceptably noisy, those in the adjacent Pier Street did not identify this as a problem. This latter finding can be linked to the fact that the responses to the survey clearly show how - in their eyes - residents 'homes' include not only the house, but the view outside the dwelling, as well as the immediate land surrounding it. Satisfaction can be closely related to perceptions of the external environment, including the levels of noise, traffic and crime in an area. Thus one person's micro-neighbourhood can be very different from that of a resident living just a few metres away. For example, a goods entrance sited opposite a housing development might affect only the residents on that side of the scheme. From this it can be argued that developers should either build more features into future waterfronts that create 'buffers' between incompatible land uses, or else site social housing within a mixture of essentially compatible land-use types.

Lastly, it was also clear from the investigation that, although residents live within revitalised waterfronts, it may not be the waterfront itself which is the reason for their satisfaction. It is therefore not only the distinction between the home and the local environment that is blurred, but also the distinction between the local environment and the city. Thus residents may to a great extent be very satisfied with their residential environment because of its convenient location within easy reach of a variety of services outside the waterfront. At the other end of the spatial scale, the immediate environment can be the main reason for a person's satisfaction, for example when her or his home is sheltered accommodation. An appreciation of the complex relationship between the
environment and residential perceptions is vital if community attitudes are to be properly understood.

Although the research has shown that, in general, mixed-use waterfronts provide suitable environments for social housing residents, it has also identified several significant problems. Most importantly, some recreational and commercial land uses are not compatible with social housing. Recreational land-uses can clearly cause difficulties for social housing tenants, especially if they are sighted within their 'micro-environment'. At Exeter, even after attempts by the council to ameliorate the friction caused by nightclubs on the Quay, they are still problematic for a significant minority of residents. In Swansea, in contrast, although there are similar land uses, residents did not identify them as incompatible. This is due to the 'honey-potting' of these uses on the Swansea dockfront and the use of retailing and tourism as a buffer between the majority of residential micro-environments and these uses. If a similar buffer had been placed between the Quay nightclubs and Shilhay, or if the housing development had been sited further away from this area, it is highly likely that the Exeter residents would not have experienced significant difficulties.

Another example of problems associated with recreational activities is the lack of privacy. Thus at Flowerpots in Exeter, the siting of three car parks and a river walkway giving access to the playing fields around the development is clearly an irritation for residents. But it is also evident that relatively minor modifications could have ameliorated these problems significantly. For example, if the river walkway had been placed lower than the level of the housing, and if trees had been planted to screen the development from the car parks, privacy would have been maintained. It is therefore clear, once again, that planning on the micro-scale is intimately bound up with a
scheme's success.

Beyond this, as has already been indicated, evidence has emerged that aspects of the commercial waterfront may also be incompatible with residential development. Thus at Somerset Place, in Swansea, the noise nuisance caused by Sainsbury's goods entrance could have been avoided by an alternative location for access to the site. However, although problems such as these should not be under-estimated, it is important to recognise that many other waterfront land uses were not identified by residents as being incompatible. These surprisingly included the working waterfront, derelict land and high-class housing, even though these uses were sited within the micro-environment of the schemes investigated. This underlines the need for those working in this field to test their assumptions concerning land incompatibilities. 'Obvious' problems may have little significance compared with localised difficulties associated with issues such as noise and privacy.

While the majority of the problems identified related to conflicts on the waterfront, the work also revealed the potential for problems to arise in the context of waterfront - city reintegration. This was not, however, a general issue. As has already been noted, the very large majority of residents found interaction with the city to be unproblematic, and when difficulties did occur their solution often lay in the residents' hands, for example through a change to a more local doctor. Instead, the most serious problem to arise in the context of interaction with the city was - somewhat paradoxically - related to the very close linkage which Govan's linear morphology produced between the waterfront and inner-urban Glasgow. Many Govan residents identified a variety of inner-city problems as lowering their residential satisfaction. This points to the conclusion that if a waterfront is placed within the inner-city environment and access to that environment
is good, the problems of the surrounding location, such as crime and vandalism, are highly likely to permeate inwards to affect housing developments. There can therefore be problems with good integration between the waterfront and the city, instead of a lack of integration. Similarly, social housing residents moving into revitalised environments may take their problems with them. Thus, unemployment, linked as it is with a range of personal characteristics such as age and education, will not necessarily be solved by rehousing on the waterfront.

It is therefore clear from this discussion that the main findings from this thesis are that the waterfront, in general, is a satisfactory location for social housing and that residents benefit from mixed-use environments. But it is equally evident that the micro-environment has a central role to play in determining satisfaction levels, and that - especially in the context of major conurbations - waterfront communities may be exposed to inner-city problems on a significant scale. These may either leach inwards from the surrounding city, or be brought with residents as they move onto the waterfront.

**PERCEPTION AND CONCEPTUALISATION**

Against this background it is necessary to examine two other issues, before turning our attention to future research. Firstly, it is important to return to one of the central themes which has run through this thesis, the importance of perception in determining residential satisfaction. It has been argued that it is the perceptions of social housing tenants that are crucial in determining their residential satisfaction. Although this is overwhelmingly the case, academics within the field of hazard perception have identified a range of risks as being generally unacknowledged by most of the general public (Warner, 1981, xi). Consequently, although residential perception surveys can highlight
the majority of problems associated with waterfront life, it must be envisaged that there are some which, that for a variety of reasons, may go undetected. This section therefore starts by highlighting three hazards which were not identified by the majority of the main survey's respondents, but which should nonetheless be considered at this point.

Subsequently the results of the investigation are placed in the wider context of the waterfront system as a whole. In doing so the discussion brings together the preliminary chapters of this thesis with the later analytical work which was conducted at Exeter, Swansea and Glasgow in order to undertake a broad conceptual synthesis of the conclusions that have been drawn from this study. Building on this it is then possible not only to see the implications of the current research for the waterfront as a whole, but also to set the scene for a future research agenda.

**Unperceived Hazards**

Giddens proposes that low levels of concern about potential hazards can, in part, be attributed to the concept of 'trust'. In this, he argues (1990, 83) that people cope with things in the modern world that are out of their control by relinquishing their free will in exchange for peace of mind, believing that 'experts', and others with more knowledge, have control over such external dangers. The best-known example of this is that we each live with the continual threat of nuclear war, yet most people think very rarely about this possibility. Instead they 'trust' that those with political power will use their nuclear arsenals only as a deterrent.

In terms of this thesis, flooding can certainly be seen as a threat which residents 'trust' will be averted by experts. In the main survey, levels of concern about flooding were extremely low. Yet at Exeter there have been several catastrophic floods this century
(Chapter 4); and in Glasgow, only a few weeks before the survey work was undertaken, several areas along the Clyde were inundated on a number of occasions. What residents failed to perceive is that no flood defense scheme is built to withstand storms of all magnitudes, with the result that there remains a continuing element of danger from an extreme event.

Other unrealistically low levels of concern can be explained to a large extent by media coverage. In this connection it can be argued that some events are localised to such an extent that it is only through the media that a problem can be brought to the attention of the majority. Issues lacking media attention can, therefore, remain 'hidden' from the general public. Similarly, the media can portray an event in such a light that it would appear to have little relevance to most of the population.

The relevance of this can clearly be seen in relation to the risk associated with a lack of railings along many dockfronts. In Swansea, for example, residents did not perceive this to be a potential risk, even though environmental health officials recognised that several people had drowned in the dock. This, it can be argued, reflects the fact that such tragedies have been too isolated in time to arouse more than passing media interest. Consequently, although the cost of erecting railings around the Swansea marina would be small compared with the human cost of drownings that have already occurred, the need for this safety measure has not become an issue. Similarly, even though the 'Govan Initiative' police officer identified the stranding of corpses by Riverside as a local problem, less than 5 per cent of respondents found this to be an issue. The potential emotional impact of discovering a body was clearly subconsciously discounted, and it is arguable that, to a considerable extent, this reflected media attitudes. These normally emphasised the reason for a death and the point upstream where the incident occurred,
rather than the point at which bodies were recovered.

Although residential satisfaction surveys are central to determining whether waterfront environments are successful locations for social housing, it is necessary to recognise some problems relating specifically to the water will not necessarily be identified by communities. This in turn suggests that waterfront planning should attempt to take a broader view, to avert potential problems even though they may not cause immediate concern. At this point, therefore, it is appropriate to turn from immediate practical issues towards consideration of the waterfront system as a whole, placing social housing within this wider context and setting the scheme for future research.

**Conceptualisation**

This section aims to set the discussion presented in Chapters 1-4, and the main findings of the research, in a conceptual context and link them with wider theoretical debates. Because the research has focused on the present-day relationship between social housing tenants and the waterfronts in which they live, it has created a picture of waterfront life that is a 'snap-shot' in time. Consequently, the model that has been constructed from these findings focuses on the spatial relationships that exist on the waterfront, rather than on the sequential process of regeneration itself. It therefore has more in common with spatial models, such as those of Hoyle (1988, 14) and Riley and Shurmer-Smith (1988, 49) than with Pinder, Hoyle and Husain's construct (1988, 249) (Figures 8.1, 8.2 and 1.2). In presenting the model, the discussion focuses first on its conceptual bases, before progressing to consideration of the external forces that act upon the waterfront.
Figure 8.1  Factors involved in port-city development (Hoyle, 1988, 14)
INTERNATIONAL

CHANGING

- POLITICO-ECONOMIC ALLIANCES
  Reduction of U.K. trade with enlarged European Community.
- COMMERCIAL CLIMATE
  Post-1973 recession with premiums on vessel operating costs.
- SOCIAL ENVIRONMENT
  Post-war tourist boom.
- TRANSPORT TECHNOLOGY
  Uptake of new RO/RO facilities in smaller Channel ports.

NATIONAL

POLICIES ON

- PORTS
- DEFENCE
  Major rail development of naval ports and Royal Dockyards follows.
- TRANSPORT
  N.D.O. encouraged to release land/surplus buildings for commercial development.
- CONSERVATION

LOCAL

IMPACT OF

- MUNICIPAL ENTERPRISE
  Development planning, in North Harbour reclamation, V.S.F. and Weymouth.
- PRIVATE INITIATIVES
  Local driving companies e.g. Channel Steamers/Commodore Shipping, new instigators of St. George's Park
- JOINT VENTURES
  Local authority, N.D.O., and British Forces in developing the Maritime Heritage area within the Weymouth.
- PORTSMOUTH HARBOUR PLAN
  Published in 1995 to accommodate often conflicting development pressures on the waterfront and its forests.

Scale - Distance between Harbour entrance and North-west reaches approximately four miles.

Figure 8.2  'Top-down' and 'bottom-up' forces at work on the Portsmouth waterfront

(Riley and Shurmer-Smith, 1988, 48)
Model development

As has been argued by Hoyle (1988, 6 and 7), the port and the city have existed over time to a lesser or greater extent as separate identities. Consequently, the waterfront and the city have developed on either side of a port-city interface (Figure 8.3).

As waterfronts declined in importance between the 1960s and 1980s, Hoyle (1988) argues that this separation was at its greatest, but with revitalisation the city has flowed into the spaces that traditional port industry has vacated. This has distended the interface between the port and the city, marginalising port-related land use, and creating city-related land uses on the waterfront. In addition, new port-related activities have come into existence within cityports, uses which need steady flows of visitors from the city as well as strong links to the sea. This has led to the membrane between the city and the port becoming more permeable (Figure 8.3).

As has been highlighted in Chapter 3, revitalised cityport waterfronts have become mixed-use environments made up of a range of activities. Breen and Rigby (1994, 29) equate these activities with distinct waterfront types, such as the historic waterfront, the residential waterfront and the commercial waterfront. What is also important, however, is to divide this schema according to whether activities present are related primarily to the city or to the water, which provides the backdrop to the revitalisation process. Stage 3 of the model incorporates this crucial categorisation in order to emphasise the fact that, while some land uses demand strong links with the sea, others are essentially orientated towards the city, to the extent that they could well exist in alternative urban settings (Figure 8.3).

With this conceptual framework established, it can be operationalised by selecting any
waterfront land use for analysis. When this is done the selected activity will naturally become the focus of the investigation, with the result that stage 4 of the model places it centre stage (Figure 8.3). As this investigation has clearly demonstrated, however, waterfront research will in many instances not simply depend on the objective analysis of revitalisation. Instead it will also require a strong emphasis on the perceptions of waterfront users, be they social housing residents, tourists, or those engaged in commercial activity. Consequently, as well as giving a selected activity a central position in the model, stage four also surrounds it with a perception filter. Stage five, meanwhile, adds additional flesh by incorporating the specific land uses - or in Breen and Rigby's terms 'waterfronts' - likely to be encountered in most investigations (Figure 8.4). Also, to link the model directly with the current research, social housing is placed centre stage.

Beyond this, the division of activities into city- or port-related uses suggests a need to introduce to the model a number of themes. First, although port-related land uses need access to the city, the water is crucial to their existence and such activities therefore require zones of integration with the sea. Conversely, city-related land uses must have effective integration with the urban area, rather than the water, because in their case the latter is a scenic backdrop with little functional value (Figure 8.4). For any mixed-use revitalisation project to be successful, both types of integration must be achieved effectively. This study has necessarily emphasised the importance of integration with the city, which is obviously essential for residential communities. However, this should not be allowed to eclipse the significance of seaward integration, especially as port-related land uses have often been marginalised and the market, rather than need, has dictated which are able to secure prime dockfront locations.
Figure 8.3  Interpreting and operationalising the mixed-use model of revitalisation
STAGE FIVE

Figure 8.4 Port- and city-related uses within the mixed-use model of revitalisation
Added to these types of integration, waterfront uses interact with one another, both on the macro- and the micro-scales. In terms of this project, it is how social housing residents perceive these interactions that determine satisfaction with the waterfront. As has been highlighted in the first section of this chapter, several waterfront uses may be incompatible with social housing, particularly if they are inappropriately sited. These include elements of the recreational waterfront, as at Exeter’s Shilhay development, where nightclubs caused residents a variety of problems. In some circumstances, too, the commercial waterfront may prove contentious, as is demonstrated in Swansea by the noise pollution caused by goods traffic moving to and from the Sainsbury's store. Such tensions create zones of conflict between incompatible land uses and social housing on the micro-scale (Figure 8.5). As has been argued earlier in this chapter, ideally the planning process should avoid siting potentially incompatible uses in close proximity; and, at the very least, buffers or screens should be placed between such conflicting uses.

What must also be stressed, however, is that the results of this research indicate that - at least in the social housing context - only a limited number of land uses appear to produce genuine conflicts. Indeed, there is substantial evidence that the majority of mixed-use waterfront activities are beneficial to social housing tenants, to which it may be added that - perhaps surprisingly - conflicts do not appear to arise from either the working waterfront or remaining derelict land. Similarly, the final stage of the model's development is to recognise that, quite apart from these types of interaction, the waterfront itself should not be seen in isolation from the broader physical and human environments in which it exists. If it is to be complete, any conceptualisation must incorporate a substantial number of external forces and internal pressures which act upon cityport systems (Figure 8.6).

So far as external forces are concerned, the waterfront has been, and still is, influenced
by a series of power structures and a variety of philosophical waves. Although these forces have affected many aspects of life, discussion of them will focus specifically on their effects on British waterfronts.

It has clearly been demonstrated in Chapters 1, 2 and 3 that a variety of policy decisions have affected waterfront environments. Power structures, ranging from international bodies such as the United Nations down to local government agencies, have therefore been highly influential. Given the striking contrasts between them, the effects of these power structures on waterfront environments have varied considerably in scale. For example, Britain's relationship with the European Community has affected cityport geography, favouring ports on the south and east coasts of England relative to those in the west of the United Kingdom. On a local scale, in contrast, Exeter City Council's policy of concentrating social housing towards the centre of the city, and in the process employing it to lead the city's waterfront regeneration programme, has fundamentally influenced the pathway followed by this waterfront during the revitalisation process.

Similarly Chapter 1 has stressed that waterfronts have been affected by changes in technology, recession, global change and the media. These have impinged on cityports in a series of cyclical waves that have been driven by a variety of forces.

In the case of innovation it can be argued that Kondratiev waves have played an important role. These form a series of fifty-year cycles, driven by periods of innovation and the redundancy of old technologies (Massey, 1988, 82). In this context, the decline of old waterfront technology can be seen as being the lowest point in a 50-year wave period, with innovative port technologies - such as containerisation - being the start of a new wave of technology which causes new waterfronts to be created and others abandoned. Similarly, the recession of the 1980s and 1990s can be seen as part of a
STAGE SIX

Figure 8.5 Conflicts and interactions within the mixed-use model of revitalisation

247
cycle of booms and slumps that has affected Britain in modern times, influencing the pace and nature of the waterfront revitalisation process (Harris, 1988, 27). Added to these cyclical waves, cityport systems are influenced by globalisation, the flow of ideas across the globe which cause local happenings to be shaped by events occurring in other continents, and most particularly in recent times, the USA (Giddens, 1990, 64). This has reduced each waterfront's 'regionality', amongst other things creating waterfront environments which are architecturally very similar. Here it is also appropriate to note that waves may be driven by fashion which, as was suggested earlier in this chapter, may to a great extent be inspired by the media. One implication of this is that the value placed on waterfronts may ultimately decline markedly as fashions change, much as the fashionable Victorian terraces of 1900 came to be seen as eye-sores in the post-war period, but have now again become covetable due to gentrification.

As with external forces, internal influences can be divided into two main types, either artificial or natural. Each waterfront exists within a different environment and as such is unique. But, it is clear from this thesis that a series of themes runs through all waterfronts. Primarily, the success of a waterfront environment is governed to a considerable extent by the acceptability of the artificial conditions created by humans. Of particular significance for residential environments is the amount of pressure that humans - in the form of noise, vehicles and pollution - place on waterfronts.

Although from an internal perspective we should obviously recognise the influence of what we create, there is a danger that in doing so we will overlook local issues related to the physical environment. Waterfronts must be seen as being partly governed by, and having a special relationship with, the natural environments in which they are set. To a degree this linkage is related to long-term economic development. As was highlighted
in Chapter 1, port areas can be seen as a limited and non-renewable resource providing access to the sea for many British cities. At the moment the common assumption is that this resource will never again be commercially exploitable, because the advance of shipping technologies has precluded for ever significant maritime activity of the type which dominated when ports thrived. Yet, it is by no means certain that, at some point in the future, new marine technologies will not open up renewed opportunities for commercial port activity. Indeed, recent experience showing this to be a possibility is provided in Belfast, where super-catamarans from Stranraer sail upstream virtually to the Lagan Bridge, to berth in an area otherwise dominated by standard mixed-use revitalisation. The potential for areas which at present have no marine value to become economically viable once again should not be ignored in planning circles. But, if the potential is to be exploited, water must be treated as an environmental resource which is not simply decorative or useful for leisure purposes.

In addition, there is a balance to be kept between the interests of the natural environment and those of waterfront users. Conflict between people and the environment may be immediate. In Exeter, for example, swans are natural residents on the River Exe and the canal, yet the problem of swan attacks on the visiting public is relatively common in the vicinity of the Quay. But in many respects the issues are long-term. For example, leisure-related activity has the potential to cause insidious water pollution, with far-reaching consequences for aquatic life. And the danger of flooding, discussed elsewhere in this chapter from the viewpoint of perception, is likely to be increasingly real in the early years of the next century, when the effects of global warming and sea-level rise may have major consequences for cityport systems. Waterfront managers will increasingly have to tread a fine line between human and environmental considerations, a challenge that is set to grow as issues such as environmental sustainability and Agenda
It is evident from the model that has been proposed that mixed-use waterfront environments are complex systems where land-use types, internal influences and external forces interact, both to determine the form a waterfront will take and to control the success achieved by revitalisation. In this thesis, social housing has been used as an indicator of whether the mixed-use waterfront model of port regeneration succeeds in a British setting, and - despite concerns expressed at the outset - it is evident that to a considerable extent it does. As this section has emphasised, however, revitalisation schemes are multi-faceted, and positive results derived from the study of social housing communities cannot be considered the end of the story. In the final section of this chapter, therefore, it is necessary to focus on research opportunities not covered by this investigation. What further work is necessary to advance both the practical and the academic dimensions of waterfront studies?

**TOWARDS A RESEARCH AGENDA**

Viewed overall, the research has arguably identified issues relevant both to waterfront planners and managers while, for academics, additional questions may be posed concerning the significance of the findings for waterfront studies. As these issues and questions require substantial further investigation, it is appropriate to conclude the thesis by outlining a relevant research agenda.

Two issues are of immediate importance in the planning context. First, it is evident that research should focus on the occasional incompatibilities that have been shown to arise at the micro-scale between social housing residents and a number of recreational and commercial activities. In planning terms it is perhaps not surprisingly that these
incompatibilities should arise. The practice of mixing residential developments with a wide range of other activities is, after all, relatively recent. Even so, given that the consequences of land-use conflicts can impinge heavily on individuals, the need to ameliorate existing problems, and minimize their reoccurrence in future regeneration projects, is evident. This implies that progress is necessary on three fronts. What is the range of land-use juxtapositions that is likely to give rise to friction for incoming residential communities? How can urban design adapt regeneration plans so that these localised problems are avoided? And to what extent can this adaptation be achieved without serious damage to specific interest groups? In other words, how can land uses be arranged and, where necessary, buffer zones be created, so that economic activity and new communities may co-exist effectively?

Second, further research is needed into the extent to which, from the residents' viewpoint, the success of life on the waterfront may depend on chance factors independent of the plan itself. Many of the positive results presented in this thesis may perhaps build a sense of false optimism, cultivating the view that the mixed-use waterfront provides - almost by definition - a successful formula for community development. Yet, as the findings for Exeter highlight, unproblematic day-to-day activity such as shopping may be heavily dependent on planning decisions based on much wider considerations than simply the interests of the waterfront. Would the lives of Exeter's Shilhay residents be as straightforward as they are if Sainsburys' investment plans and land availability had not coincided to bring a superstore to this part of the city? Above all, research into the role of chance is justified to demonstrate the extent to which service provision may fall short if planning assumes it will be adequate. Further development may need to be planned positively to avoid such shortfalls and, arguably, the Swansea experience demonstrates the benefits to be gained from such an approach.
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While it is important to test the assumption that waterfronts will be able to offer good living environments to very different social housing communities, or to existing communities as they age, it is also necessary to question what would happen if the role played by social housing in waterfront revitalisation were to be increased. Would it continue to work well if, instead of being simply one land use among many, it became the dominant or even exclusive use? Although such a development may at present appear unlikely, in the longer term it is not inconceivable on land which is yet to be redeveloped. On the one hand, we now know that the waterfront can provide good social housing environments. On the other, market demand for mixed-use revitalisation currently remains weak due to recessional conditions. Against this backdrop, and in the context of a possible change of political power from the Right to the Left, a scenario can be constructed in which an expanded social housing programme looks increasingly towards the waterfront. Such a scenario has, in fact, already been sketched by Pinder, Hoyle and Husain (1988, 259), the implication being that considerable advantage is gained by reserving abandoned docklands much more extensively for disadvantaged groups in society. Here, however, the potential pitfall is that the benefits of social housing provision in mixed-use revitalisation might be lost in exchange for increasing disadvantages stemming from the 'ghettoisation' of low-income communities in these locations. In other words, at present we do not know whether waterfront social housing would work outside the context of mixed-use regeneration. Would the strength gained from the latter largely disappear, to be replaced by, for example, a rising tide of unemployment and inner-city problems, the effects of which would be to damage substantially the attractions of the waterfront?

Resolving this question is difficult in the United Kingdom, since the shift towards social housing dominance has not, of course, occurred. However, regeneration programmes that
are firmly rooted in social housing provision have been implemented abroad, and it can therefore be suggested that it is on these areas that research should concentrate. For example, the Netherlands - and most particularly Rotterdam - has long pursued a socially oriented approach to dockland revitalisation through the provision of public sector rented accommodation (Pinder and Rosing, 1988). Thus in inner Rotterdam, 80 per cent of the dwellings built on abandoned docklands south of the river are in the public sector; north of the river the equivalent figure is 93 per cent; and in neither case have substantial areas been released or market-driven revitalisation occurred. It is only through research in districts such as these that the implications of a swing towards social housing dominance can be assessed.

Finally a point already stressed several times in this thesis, but particularly in Chapter 1, must be reiterated: the evaluation of waterfront social housing is only one approach to the critical assessment of waterfront revitalisation in general. In Breen and Rigby's (1994) terms, the mixed-use waterfront is in reality a whole series of waterfronts which co-exist and interact in former port areas. Consequently, the success of regeneration must be judged from the perspectives of all significant interest groups before a balanced evaluation can be reached. The extent to which the positive results derived from this initial investigation are likely to be echoed when the work is extended to other activities is by no means clear. This is particularly true with respect to retailing, which often appears to have difficulties surviving some distance from the CBD core; to commercial and private residential developments which have suffered severely in the recession; and to the working waterfront which, where it survives, frequently seems to do so in the face of the assumption that port-based activity - however vestigial - has no future in the post-regeneration era.
Further research into activities of this type will make possible considerably more balanced and informed assessments of waterfront revitalisation as a whole, particularly if they can be integrated into a system-based interpretation of late-twentieth century waterfronts. Systems analysis, it can be argued, should be established as an ultimate goal capable of producing substantial academic and practical benefits. Practically, it may offer the prospect of predictive modelling which, through simulations incorporating various economic, planning, political and environmental scenarios, will lead to much more informed planning decisions for the urban asset which the waterfront represents.

Academically, it may be that the main gain to be made from a systems approach will be to provide an integrated overview not only of the regenerated waterfront itself, but also of the waterfront's interaction with physical, economic and social structures elsewhere in the city and, indeed, more broadly in society. Although waterfronts are undoubtedly open systems, their study from this viewpoint has scarcely begun.

Despite well over a decade of attention, therefore, waterfront revitalisation is far from exhausted as a research focus. Waterfront studies have proved highly popular, yet there is clearly scope for further critical analyses which will undoubtedly extend into the next century. Progress with these analyses is necessary if the spectacular changes on our waterfronts are to be understood with the depth they deserve; and if they are not pursued there is a danger that urban studies, and related planning practice, will be substantially the poorer.
NOTES

Although the subsequent model is spatial it is intended to be a complementary extension of Pinder, Hoyle and Husain's (1988) 'outcome continuums'.
A


B


C


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T


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V


W


APPENDIX I
Proposition Sets
### PROPOSITION SET 1

**INTRODUCTORY STATEMENT: THE WATERFRONT AREA**
Waterfront areas in need of regeneration have been treated differently from other areas in the city in terms of planning.

**PROPOSITION:**
The planning of waterfront redevelopment schemes often relies heavily on experience of other waterfront redevelopment projects elsewhere.

Do you agree or disagree with this proposition?
What are the reasons for your response?

### PROPOSITION SET 2

**INTRODUCTORY STATEMENT: THE WATERFRONT AREA**
Waterfront areas are planned through the co-operation of many different groups of people.

**PROPOSITION:**
The outcome of the planning process is a waterfront scheme that has been designed with the local population's approval.

Do you agree or disagree with this proposition?
What are the reasons for your response?

### PROPOSITION SET 3

**INTRODUCTORY STATEMENT: HOUSING**
Both private and social (public sector) housing are a feature of waterfront redevelopment.

**PROPOSITION:**
Social housing has a minor role to play in the overall design of a waterfront redevelopment.

Do you agree or disagree with this proposition?
What are the reasons for your response?
### PROPOSITION SET 4

**INTRODUCTORY STATEMENT: HOUSING**
It is expected that social housing residents who live in waterfront redevelopments will benefit from their location within such schemes.

**PROPOSITION:**
Waterfront redevelopment areas are desirable places to live for social housing residents.

Do you agree or disagree with this proposition? What are the reasons for your response?

### PROPOSITION SET 5

**INTRODUCTORY STATEMENT: ACCESS TO SERVICES**
Is it usually assumed that there is good access to services for residents living within waterfront redevelopment schemes.

**PROPOSITION:**
Lower income groups living in waterfront redevelopment schemes often have restricted access to affordable services.

Do you agree or disagree with this proposition? What are the reasons for your response?

### SUMMARY STATEMENT

If you were asked to pick out the most important features of this waterfront redevelopment in less than 50 words, how would you describe it?
<table>
<thead>
<tr>
<th>PERSONAL DETAILS:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SEX OF INTERVIEWEE:</td>
<td></td>
</tr>
<tr>
<td>AGE OF INTERVIEWEE:</td>
<td></td>
</tr>
<tr>
<td>POSITION HELD:</td>
<td></td>
</tr>
<tr>
<td>DATE OF APPOINTMENT:</td>
<td></td>
</tr>
<tr>
<td>EMPLOYER NAME:</td>
<td></td>
</tr>
<tr>
<td>TYPE OF KEY ACTOR: (A=ARCHITECT, C=COMMUNITY WORKER, D=DEVELOPER, H=HOUSING, P=PLANNER)</td>
<td></td>
</tr>
<tr>
<td>OTHER INFORMATION:</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 2
Proforma
## Social Housing Scheme Profile

<table>
<thead>
<tr>
<th>Site</th>
<th>Date of first occupation</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Number of resident garages</th>
<th>Number of car parking spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of private gardens</td>
<td></td>
</tr>
</tbody>
</table>

### Number of dwellings:

<table>
<thead>
<tr>
<th>Type</th>
<th>Unoccupied</th>
<th>Occupied</th>
<th>Social Rented</th>
<th>Right to Buy</th>
<th>Owner Occupied</th>
<th>Sheltered</th>
<th>Total</th>
</tr>
</thead>
</table>

### Number of properties by type:

<table>
<thead>
<tr>
<th>Properties by type</th>
<th>Number of bedrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Houses</td>
<td></td>
</tr>
<tr>
<td>Detached</td>
<td></td>
</tr>
<tr>
<td>Semi-detached</td>
<td></td>
</tr>
<tr>
<td>Terraced</td>
<td></td>
</tr>
<tr>
<td>Bungalows</td>
<td></td>
</tr>
<tr>
<td>Detached</td>
<td></td>
</tr>
<tr>
<td>Semi-detached</td>
<td></td>
</tr>
<tr>
<td>Terraced</td>
<td></td>
</tr>
<tr>
<td>Flats</td>
<td>Purpose built</td>
</tr>
<tr>
<td>Converted</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 3
Questionnaire
INTRODUCTION

The Department of Geographical Sciences at the University of Plymouth is undertaking a survey to discover people's feeling about living on the waterfront. We have chosen to use your area in our study and we would be very grateful if you could spare a few minutes of your time to answer a few questions. The questionnaire will take about 20 minutes to complete.

May I assure you that your answers will be treated in the strictest confidence. Your name and address will not be recorded on this questionnaire and your answers will be entirely confidential.

For each question please circle the number in bold you agree with and comment in the space provided. If there are any questions that you do not wish to answer, circle the number beside No answer/don't know.

A researcher from the university will collect this questionnaire in a few days' time. Can you please fill it in and keep it until then? If you need helping at all, the person who collects it will be happy to assist you.

If you need clarification concerning anything about this survey please contact the Department of Geographical Sciences at the University of Plymouth on (0752) 233053.

THANK YOU VERY MUCH FOR YOUR HELP
- IT WILL BE EXTREMELY USEFUL
I would like to begin by asking you a few questions about the local area.

1) How do you feel about living in this area?

I like it very much 1
I quite like it 2
I have no strong feelings about it 3
There are some things I don’t like about it 4
I really don’t like it 5
No answer 0  (9)

Why is this?

(10,11,12,13)

2) Compared with other parts of the city, is your local area...

One of the best 1
Better than most 2
About average 3
Worse than most 4
One of the worst 5
No Answer 0  (14)

Why?

(15,16,17,18)
3) We all know that cities are made up of different parts. What part of the city do you think you live in?

<table>
<thead>
<tr>
<th>Location</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>City centre</td>
<td>1</td>
</tr>
<tr>
<td>Port area</td>
<td>2</td>
</tr>
<tr>
<td>City residential area</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
</tr>
<tr>
<td>No answer</td>
<td>0</td>
</tr>
</tbody>
</table>

(19)

4) How do you feel about living near a river or waterfront?

<table>
<thead>
<tr>
<th>Feeling</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like it very much</td>
<td>1</td>
</tr>
<tr>
<td>I quite like it</td>
<td>2</td>
</tr>
<tr>
<td>I have no strong feelings about it</td>
<td>3</td>
</tr>
<tr>
<td>There are some things I don't like about it</td>
<td>4</td>
</tr>
<tr>
<td>I really don't like it</td>
<td>5</td>
</tr>
<tr>
<td>No answer</td>
<td>0</td>
</tr>
</tbody>
</table>

(20)

Why is this?

(21, 22, 23, 24)

5) Do you have any worries about living in this area?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>No answer</td>
<td>0</td>
</tr>
</tbody>
</table>

(25)

If yes what are your three biggest worries?

1. _____________________________________________

(26)

2. _____________________________________________

(27)

3. _____________________________________________

(28)

Do any of the following worry you about this area?

<table>
<thead>
<tr>
<th>Issue</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise</td>
<td>1</td>
</tr>
<tr>
<td>Crime</td>
<td>2</td>
</tr>
<tr>
<td>Vandalism</td>
<td>3</td>
</tr>
<tr>
<td>Air Pollution</td>
<td>4</td>
</tr>
<tr>
<td>Water Pollution</td>
<td>5</td>
</tr>
<tr>
<td>Soil Pollution</td>
<td>6</td>
</tr>
<tr>
<td>Traffic</td>
<td>7</td>
</tr>
<tr>
<td>Flooding</td>
<td>8</td>
</tr>
<tr>
<td>Litter</td>
<td>9</td>
</tr>
</tbody>
</table>

(29, 30, 31, 32, 33, 34, 35, 36, 37)
I would now like to ask you a few questions about services such as shops, public transport, schools and the doctor.

SHOPS:

6) What shops do you use?

The names of the shops I use daily are:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

The names of the shops I use weekly are:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

( _ _ _ _ _ _ _ _ 38,39,40,41,42,43,44,45,46,47)

On the whole, how easy is it for you to get to these shops?

Very easy 1
Quite easy 2
Quite difficult 3
Very difficult 4
No answer 0

If it is difficult, why is this?
________________________________________________________________________
________________________________________________________________________

( _ _ _ _ _ _ _ _ 49,50,51,52)
What form of transport do you use most often to get to the shops (choose one answer only)?

<table>
<thead>
<tr>
<th>Choice</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car</td>
<td>1</td>
</tr>
<tr>
<td>Public transport</td>
<td>2</td>
</tr>
<tr>
<td>Walk</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
</tr>
<tr>
<td>No answer</td>
<td>0</td>
</tr>
</tbody>
</table>

**PUBLIC TRANSPORT:**

7) Do you use public transport?

- Yes: 1
- No: 2 (54) IF NO, GO ON TO QUESTION 8
- No answer: 0

If Yes:

What types of public transport do you use most often to get to and from this area (e.g. bus or taxi)?

---

(55,56,57,58)

How much do you agree with the following?

There is enough public transport to and from this area.

- Strongly agree: 1
- Agree: 2
- Unsure: 3
- Disagree: 4
- Strongly disagree: 5
- No answer: 0 (59)

**THE DOCTOR:**

8) Which doctor's surgery do you go to?

---

(60)
What form of transport do you use most often to get to the doctors (choose one answer only)?

Car 1
Public transport 2
Walk 3
Other 4 (∆61)
No answer 0

Is it easy to get to the doctor's from this area?

Very easy 1
Quite easy 2
Quite difficult 3
Very difficult 4
No answer 0 (∆62)

If it is difficult, why is this?

______________________________________________________________

______________________________________________________________

(∆_ _ _ 63,64,65,66)

LEISURE FACILITIES:

9) Do you use leisure facilities such as swimming pools, play grounds, sport clubs and parks?

Yes 1
No 2 (∆67) IF NO, GO ON TO QUESTION 10
No answer 0

If yes:

What are the names of the leisure facilities you use?

______________________________________________________________

______________________________________________________________

______________________________________________________________

(∆_ _ _ 68,69,70,71,72)
Is it easy to get to leisure facilities?

Very easy  1
Quite easy  2
Quite difficult  3
Very difficult  4
No answer  0  (_73)

If it is difficult, why is this?

( _ _ _ 74,75,76,77)

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LOCAT ON (C. S. S)  _ _ _  (1-4)
CARD  _ _ _  (5-7)

What forms of transport do you use to get to leisure facilities?

Car  1
Public transport  2
Walk  3
Other  4  (_ _ _ 9,10,11,12,13)
No answer  0

EMPLOYMENT:

10) Are you employed?

Yes  1
No  2  (_14) IF NO, GO ON TO QUESTION 11
No answer  0
If Yes:

What forms of transport do you use to get to work?

Car 1
Public transport 2
Walk 3
Other 4 (-----15,16,17,18,19)
No answer 0

It is easy to get to work from this area?

Very easy 1
Quite easy 2
Quite difficult 3
Very difficult 4
No answer 0

If it is difficult, why is this?

__________________________________________________________

(-----21,22,23,24)

CHILDREN:

11) Do you have children?

Yes 1
No 2 (------25) IF NO, GO TO QUESTION 12
No answer 0

If yes:

a) Do any of them use child care (eg. creche, childminder, playgroup)?

Yes 1
No 2 (-----26) IF NO, GO ON TO PART b) OF THIS QUESTION
No answer 0
If yes:

What form of transport do you use most often to get them there (choose one answer only)?

- Car 1
- Public transport 2
- Walk 3
- Other 4
- Not applicable 5
- No answer 0

It is easy to get child care in this area?

- Very easy 1
- Quite easy 2
- Quite difficult 3
- Very difficult 4
- No answer 0

b) Do you think there is enough space around here for children to play safely?

- Yes 1 IF YES, GO ON TO PART c) OF THIS.
- No 2 QUESTION
- No answer 0

If no:

What are your three biggest worries? (Please list your worries from the worst to the least.)

1. __________________________________________________________
   (_ 30)
2. __________________________________________________________
   (_ 31)
3. __________________________________________________________
   (_ 32)

c) Do you have children at school?

- Yes 1 IF NO, GO ON TO QUESTION 12
- No 2 (_ 33)
- No answer 0
If Yes:

What form of transport do you use most often to get them to school (choose one answer only)?

Car 1
Public transport 2
Walk 3
Other 4
Not applicable 5 (34)
No answer 0

What schools do they go to?

________________________________________________________
________________________________________________________
________________________________________________________
________________________________________________________

(35,36,37,38,39)

Are there are enough schools within easy reach of this local area?

Yes 1
No 2 (40)
No answer 0
I would now like to ask you a few questions about your home.

12) What are your overall feelings towards your house/flat?

- I like it a lot: 1
- I like it: 2
- It's all right: 3
- I don't like it: 4
- I don't like it a lot: 5
- No answer: 0

Why is this?

(42 43 44 45)

13) When did you move into this house/flat?

- Write N YEAR: 19__
- Write N MONTH if you know it: __

(46 47)

(48 49)

14) Where was your last home?

- Withn one mile: 1
- Two to five miles: 2
- Six to ten miles: 3
- Even more miles or over: 4
- Don't know: 0

(50)

15) What kind of area did you used to live in?

- City centre: 1
- Port area: 2
- City residents area: 3
- Town and rural area: 4
- Rural area: 5
- Other: 6
- No answer: 0

(51)
What kind of home was it?

Was it a...

- Detached house: 1
- Semi-detached house: 2
- Terraced/end terrace: 3
- Detached bungalow: 4
- Semi-detached bungalow: 5
- Terraced or end terraced bungalow: 6
- Purpose built flat/maisonette: 7
- Converted flat/maisonette: 8
- Room or rooms not self-contained: 9
- No answer/not applicable: 0 (~52)

Did you...

- Own the property: 1
- Rent the property: 2
- Lodge at the property: 3
- Live with family/friends: 4
- Squat in the property: 5
- Live in an institution: 6
- Live in a hostel/Bed and breakfast: 7
- Other: 8
- No answer: 0 (~53)

If you rented the property who was your landlord?

- This housing association: 1
- Another housing association: 2
- A Council or Local Authority: 3
- A co-operative or charitable trust: 4
- Ministry of Defence: 5
- A property management company: 6
- An employer: 7
- A relative: 8
- Another individual: 9
- No answer: 0 (~54)
18) Why did you move from that house/flat etc?

______________________________

(_ _ _ 55,56,57,58)

19) Why did you move to this house/flat etc?

______________________________

(_ _ _ 59,60,61,62)

20) How many of the following does your home have (ring the number of each?)

| Living rooms | 1 2 3 4 | (63) |
| Dining rooms | 1 2 3 4 | (64) |
| Kitchen/kitchen dining rooms | 1 2 3 4 | (65) |
| Bedrooms | 1 2 3 4 | (66) |
| Bathrooms | 1 2 3 4 | (67) |
| Separate To'ets | 1 2 3 4 | (68) |
| Other rooms | 1 2 3 4 | (69) |

Does your home have any of the following?

| Garden | Yes No | (_ 70) |
| Garage/carport | Yes No | (_ 71) |
| Car parking facilities | Yes No | (_ 72) |

21) What kind of house is this?

Is it a...

Detached house | 1 |
Semi-detached house | 2 |
Terraced/end terrace | 3 |
Detached bungalow | 4 |
Semi-detached bungalow | 5 |
Terraced or end terraced bungalow | 6 |
Purpose built flat/ma'sonette | 7 |
Converted flat/ma'sonette | 8 |
Room/rooms not self-contained | 9 |
Other | 10 | (_73) |

Is it sheltered accommodation YES NO | (_ 74) |
22) Do you feel that your home is private enough from traffic and people passing by?

<table>
<thead>
<tr>
<th>Yes</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2 (75)</td>
</tr>
<tr>
<td>No answer</td>
<td>0</td>
</tr>
</tbody>
</table>

If not why?

........................................................................................................................................................................

........................................................................................................................................................................

(76,77,78,79)

23) Who is your landlord?

........................................................................................................................................................................

........................................................................................................................................................................

(9)

24) How satisfied are you with your landlord? (Please remember that your comments will be totally confidential.)

| Very satisfied | 1 |
| Fairly satisfied | 2 |
| No strong feelings | 3 |
| Fairly dissatisfied | 4 |
| Very dissatisfied | 5 |
| No answer | 0 (10) |

25) Do you intend to stay in this property?

<table>
<thead>
<tr>
<th>Yes</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2 (11)</td>
</tr>
<tr>
<td>No answer</td>
<td>0</td>
</tr>
</tbody>
</table>
If no:

Why do you intend to move?

__________________________________________________________

[12,13,14,15]

Where would you like to move to?

Another property in this local area 1
Away from this area 2
No answer/don’t know 0  (16)

26) What do you think best describes your home?

Ideal 1
Good 2
Satisfactory 3
Rather unsatisfactory 4
Very unsatisfactory 5
No answer 0  (17)

Why?

__________________________________________________________

__________________________________________________________

[18,19,20,21]

27) What is your most usual form of transport
(choose one answer only)?

A car/van/motor home 1
A motor bike 2
A bicycle 3
Public transport 4
Other 5
No answer 0  (22)

If you own a vehicle, do you think there is the right amount of space around here for parking?

Yes 1
No 2  (23)
No answer 0
Could I now ask you some personal details?

28) Which one of the following are you?

- Married/living as married 1
- Divorced/separated 2
- Widowed 3
- Single 4
- Other 5
- No answer 0 (24)

29) What sex are you?

- MALE 1
- FEMALE 2 (25)

30) May I ask your age?

- 17-20 Years old 1
- 21-30 Years old 2
- 31-40 Years old 3
- 41-50 Years old 4
- 51-60 Years old 5
- 61-70 Years old 6
- 71-80 Years old 7
- 80+ 8
- No answer 0 (26)

31) Are you currently:

- Employed 1
- Signed on (unemployed) 2 (QUEST ON 32)
- Retired 3
- Doing housework 4
- Other 5
- No answer 0 (27)

If you are employed what work do you do?

________________________________________________________________________
________________________________________________________________________
(28,29)
**Is this work:**

<table>
<thead>
<tr>
<th>Full time</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part time</td>
<td>2</td>
</tr>
<tr>
<td>No answer</td>
<td>0</td>
</tr>
</tbody>
</table>

32 If you are retired, unemployed or doing house work, what was your main occupation before?

| _31 |

33 How many people normally live in your household?

<table>
<thead>
<tr>
<th>One</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two</td>
<td>2</td>
</tr>
<tr>
<td>Three</td>
<td>3</td>
</tr>
<tr>
<td>Four</td>
<td>4</td>
</tr>
<tr>
<td>Five</td>
<td>5</td>
</tr>
<tr>
<td>Six</td>
<td>6</td>
</tr>
<tr>
<td>Seven or more</td>
<td>7</td>
</tr>
<tr>
<td>No answer</td>
<td>0</td>
</tr>
</tbody>
</table>

What relationship do the other people who live in your household have to you e.g. partner, family?

| _33 | _34 | _35 | _36 | _37 | _38 |

34 Do any of the people in your household have special needs? chronically or disabled?

<table>
<thead>
<tr>
<th>No</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td>No answer</td>
<td>0</td>
</tr>
</tbody>
</table>

If yes, what are their special needs?

| _40 |
Which of the statements below best describes your financial situation? Choose one answer only.

1. We are running into debt
2. We are drawing on our savings
3. We are just managing to make ends meet
4. We are saving a little
5. We are saving a lot
6. Prefer not answer

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE

(WE WOULD LIKE TO STRESS THAT THE INFORMATION YOU HAVE GIVEN WILL BE ENTIRELY CONFIDENTIAL)
APPENDIX 4

Error Calculation Based on the Binomial Frequency Distribution


Estimation of Confidence Limits for Sample Proportions

The 95 per cent confidence limits for a sample proportion (p%) can be calculated through the standard error of the binomial frequency distribution. The formula for this

$$S_p = \sqrt{\frac{p\% \times q\%}{n}}$$

is:

where:

- $S_p$ – estimated standard error of p
- $p\%$ – the proportion for which confidence limits are required
- $q\%$ – the remainder of the sample
- $n$ – sample size

Thus, if 75% of respondents in a survey of 80 households consider their housing ideal, the standard error is:

$$\sqrt{\frac{75 \times 25}{80}} = 4.8$$

Once this error has been calculated, standard probability theory can be applied. The 95% confidence limits for p% therefore become p% +/- 2 standard errors. For the above example this is 75% +/- 9.6%.

When the sample is taken from a finite population, as in this study, the confidence limits can be narrowed by multiplying the standard error by the following adjustment factor:

$$\sqrt{1-f}$$
where

\[ f = \text{sample size expressed as a decimal proportion of the total population.} \]

In other words, if 35% of households in a development have been interviewed, the adjustment factor becomes:

\[ \sqrt{1 - 0.35} \]

See Silk (1979, 161).