RE-HUMANISING CRITIQUES OF SUBURBIA

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British and North American suburban development is infrequently celebrated.[1] More typically it is subject to consistent criticism by academics and designers who bemoan its qualities. Criticisms range from the measured to the anecdotal and include, for example, recent writing by Southworth and Owens,[2] Langdon,[3] Rogers,[4] Southworth and Parthasarthy,[5] and Conran.[6] In Britain a documentary style television series 'Heaven, Hell or Suburbia' even popularised these critiques by attempting to favourably compare urban to suburban lifestyles, in contrast to a previous celebrated, but whimsical, celebration of life in north London suburbs: 'Metroland' presented by the poet John Betjeman. More recently these critiques have been supplemented by 'New Urbanist' literature, where complete development concepts such as 'Pedestrian Pockets', 'Traditional Neighbourhood Developments' or 'Urban Villages' are offered as a suburban counterpoint.[7] Typically criticism is wide ranging, including how and why the resulting environments fail to achieve the visual quality, vitality, variety, sense of place, or perceived sense of community affiliation achieved in traditional more mixed use and denser neighbourhoods. Generic issues such as achieving environmental sustainability have added fuel to this fire, by arguing that suburban lifestyles require greater consumption of energy, whilst the housing itself simply takes up too much land.[8] Here we aim to broaden this debate about the strengths and weaknesses of suburbia by discussing how we should analyse whether the patterns of development support or discourage activity within its public realm.

The standardised solution of detached houses lined up along a suburban cul-de-sac does not seem to offer much environmental choice to housing consumers. Nor does it seem to seriously address the potentially wide range of needs of residents and users of the public realm. The *structure* of typical residential layouts is dictated by the cold calculations of engineers who demand certain roadway configurations to meet the needs of vehicles. The *character* of the estates results from the grip of developers' marketing departments who direct what has been referred to as either, the 'kerb appeal' of individual houses or, the 'scenographic' potential of a whole estate.[9] Solutions that meet the concerns of a regulatory planning process have been standardised. Areas of creativity or experiment in housing layout are subsumed within a process of development that thrives by producing and selling a product quickly, whilst companies also want little commitment to an estate once the houses are sold. This process is as simple as possible, and it has been argued that the resulting product exploits the willingness of consumers to compromise on issues of quality and lifestyle, so that they can live in certain locations at a reasonable price.[10]

Not much is generally said about how various people use these resulting environments to live out their lives. This is despite quite a clear understanding about the variety of settings different people enjoy, and despite the fact that the history of housing design offers a great variety of potential solutions. Standardised developments should be criticised because they encourage residents to adopt lifestyles which are influenced by the spatial relations manifest in the layout:

> Can you buy a new house without a parking space or two?
> Can you buy a new house close to a regular bus service with a high frequency of buses running into the evening?
> Can you live life without a deep freeze?
> Can you buy a new house offering a pleasant and convenient walk to a variety of pubs, shops or a local school?
> Can you buy a new house located on a street in which other citizens incidentally pass?
> Can you buy a new house without a garden?
> Can you buy a new house attached to a larger communal space with dedicated seating and play equipment, or a house located in a courtyard or a formal square?
> Can you comfortably sit outside your house and watch the world go by?

The answer to these and other similar questions is increasingly no. Whilst consumers vary in their age and aspirations, and whilst the history of housing forms offers a wide variety of precedents, the housing industry still defends the one-dimensional environments that it produces.

THE NEED FOR CHANGE

There are three reasons why change is needed. Firstly, studies of how people use the built environment

tell us that different social groups demand a great variety of environments as their lives progress and their aspirations differ and change. This research also provides clear advice about the types of environment that provide people with the opportunity to undertake different types of activity. In this tradition Marcus and Sarkissian[11] present the most comprehensive advice, based on the analysis of previous post-occupancy evaluations[12] like that more recently undertaken for children by Millward and Wheway.[13] Much of this research argues that the suburban environment could include more variety to accommodate different types of space. The second reason is because people may start to demand these alternatives. Building to accommodate an estimated 4.4 million households in Britain before 2016 is going to require people to think more carefully about where and how they want to live, especially if large green field areas are not going to be lost.[14] The tendency is to promote the reuse of brown-field land, and consider opportunities for re-evaluating the capacity of existing urban areas. Studies by Llewelyn Davies[15] suggest that more urban patterns of development should be encouraged. This should be done with positive benefits for the public realm by acknowledging people's needs for differing types of space. Less emphasis on the private garden should allow people to explore the positive benefits of other types of residential setting. Such a process could assist in reversing the trend towards suburbanisation of some existing cities, as suburban housing creeps into city centre or edge of centre locations.[16] The final reason that change is needed is that nuclear and patriarchal families, for which suburbia was conceived, now represent only a small proportion of households. Housebuilders are very defensive of their standardised product, and they continue to provide evidence that families demand a detached house with its own garden.[17] The trend away from the nuclear family, however, provides us with scope to promote alternative patterns of development that may even better reflect the aspirations of the growing number of childless couples, single person households, adult households and pensioners groups that now represent 69.2% of households in Britain.[18]

This paper presents a framework for analysing existing, and thinking about new housing forms which focuses on the extent to which layout configurations (and subsequently the features of the public realm) can be designed to meet the varying needs of the resident and non-resident population. In particular the framework aims to allow analysis of the diversity of housing environments provided in terms of what people can and cannot do in the public realm. This methodology will allow us to more critically consider how people live within and use the public spaces as well as also knowing whether these environments meet the needs of certain social groups better than others. We need to understand whether the environments support a variety of both formal and informal activities, or whether the activities are limited to certain types. In this respect it would also be useful to understand what types of environment can support the greatest diversity of activity.

The conceptual framework presented here is derived from empirical work and thinking that comes from a humanist tradition. This is a tradition that offers a strong perspective on housing form that needs reviving. The methodologies adopted by housing producers in evaluating the types of environments that residents demand remain partial and biased towards justifying their own product. For example, the recent work commissioned and heavily promoted by the Housebuilders Federation[19] asked resident adults with young children who had recently purchased a new suburban house in a cul-de-sac what type of housing they want. The result was, not surprisingly, that they want suburban houses in cul-de-sacs. The report then generalised this result to infer that most people with young children would like to buy this product. The research never asked a wide range of residents and non-residents currently living in differing settings to comment on specific features of a layout or alternative configurations. It also did not ask residents to consider trade-offs between certain features of a layout (for example a few less parking spaces for the sake of providing a children's play area). Instead the work was published in the British planning press as evidence of a convenient consensus amongst consumers as to where and how they want to live.

The conceptual framework presented here seeks to be more positive in allowing analysis of a greater variety of participants in a variety of residential settings; a method that both acknowledges difference in needs, and also seeks to promote variety in residential form to better meet those needs. It takes as its starting point the idea that design in and of the physical environment should be about generating an appropriate setting for human behaviour. The paper initially reviews the features of the standard suburban layout to provide the basis for the critique. Following this the features of the conceptual framework are introduced. This involves reviewing the range of activities that might be observed, and an explanation about the relationship between aspects of layout in the environment and the patterns of human activity that can be encouraged. Finally some examples of design features in a variety of residential schemes are introduced to illustrate how different types of activity have been previously accommodated in some residential schemes.

THE STANDARDISED LAYOUT

Figure 12.1 shows a typical British suburban residential layout. Normally the resulting environment is
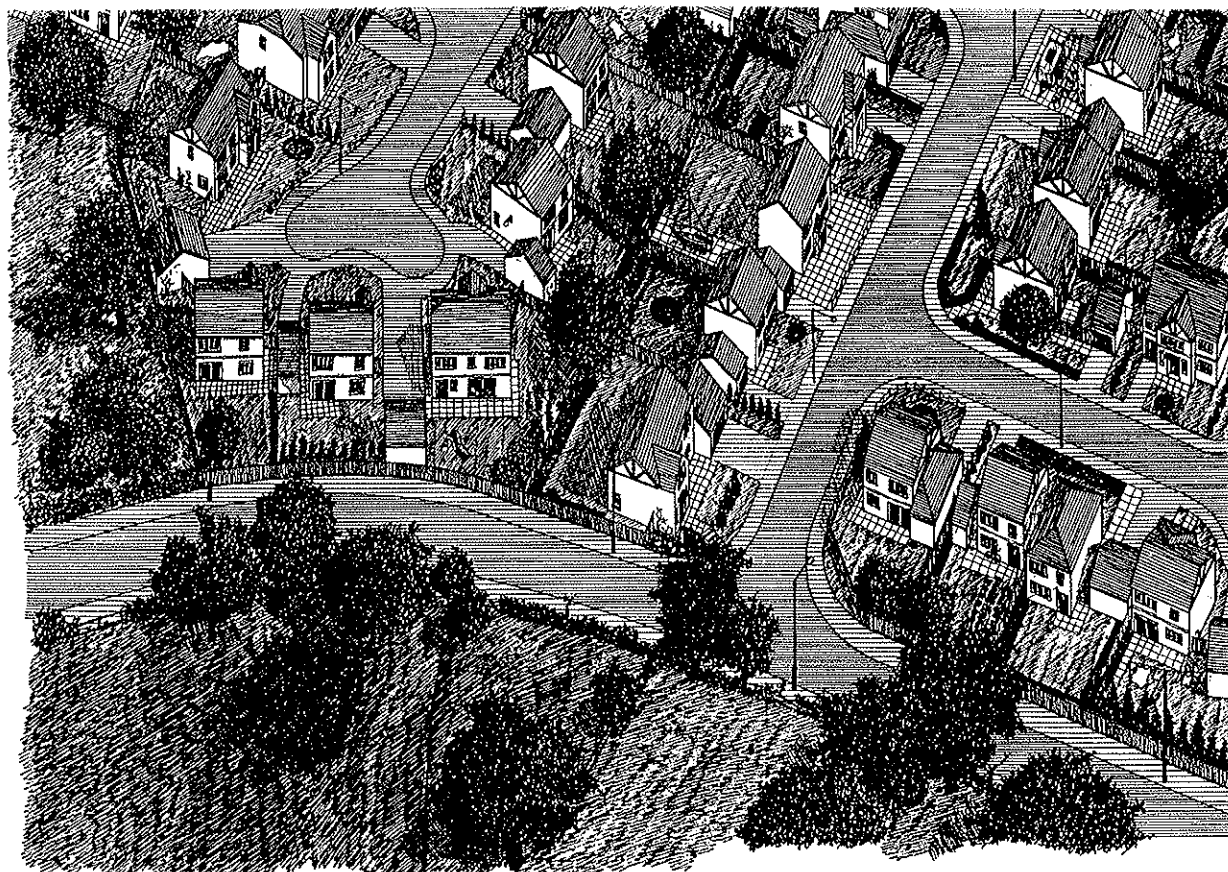
fig. 12.1 Typical British suburban residential layout arranged around cul-de sacs.

still organised into cul-de-sacs, and frequently the houses are turned away from the adjacent roads and sometimes even adjacent open spaces. The houses are then arranged around the access road, and are typically set back with a grass area and a space for off-street parking which also provides access to a garage. It is not unusual for schemes to therefore have parking on plot for at least two cars. The grass area is then used for varying degrees of planting, and is typically not defined by a wall principally because of the costs, although an intention to create a more open environment might also be suggested. The provision of detached and semi-detached housing, which it is argued consumers prefer, also results in varying degrees of spacing between the houses. Sometimes, however, few clear environmental benefits result from this spacing. Other types of public space are very rare although where they are provided they are frequently not designed to be used, but are more likely to be grassed and planted with trees to provide a visual setting for the houses.

In many respects these types of configuration work. The environments seem to be quiet and safe for very young children. They also comfortably accommodate the spatial needs of the car and limit driving speeds within the vicinity of houses. However, they may also limit some other activities. Whilst parking spaces are provided it may be argued

that appropriately designed playing spaces are less commonly accommodated. There may be limited scope to play ball games within the vicinity of the home, or little scope for older children to safely explore and make friends in a wider network of streets and spaces. There may be few outdoor spaces for people, especially the elderly, to incidentally meet and sit to watch the world go by. There may be few comfortable spaces for adolescents to hang out, and access for pedestrians both within the scheme, and between the scheme and neighbouring areas, may be less convenient than it could be. Whilst developers seem happy to continue to generate schemes of this nature, these types of housing scheme make assumptions about how people want to live. Scope for innovation in design must therefore also be extended to the configuration of housing, and not just remain with concern for the design of individual houses. It should be possible to suggest that other types of housing environment are possible and that speculative house builders are in a position to provide the alternatives.

EVALUATING ACTIVITY IN THE PUBLIC
REALM OF HOUSING SCHEMES

Life in public space, and generating the conditions for that life, has been the subject of considerable

analysis and developing understanding, although this previous research seems to have focused less on the suburban public realm and more on traditional city centres.[20] This is despite the fact that it is the suburban public realm that is the most common development form, and the realm which is subject to most criticism, especially for undermining the conditions for public life.[21] A starting point in devising a conceptual framework for assessing life in the public realm of suburban housing schemes must therefore involve an evaluation of the value of this previous work to an assessment of suburbs.

There are three parts to this process. The first is to examine the types of activity that might be observed in housing areas. The second is to examine the types of environment in which those activities might be accommodated. The third is to consider the features of the relationship between human activity and design of the environment.

TYPES OF ACTIVITY

Gehl[22] provides a useful starting point by determining types of activity. It is argued that we can distinguish between necessary, optional and resultant (or social) activities. Necessary activities are those that we have to undertake in an environment, whatever its quality. Optional activities are those that we undertake out of choice because we like a place. Resultant social activities are those that we engage in as a product of optional involvement. Figure 12.2 is a diagram devised by Gehl to illustrate how these types of activity are influenced by the quality of the environment. Gehl argues that necessary activities will always occur, whether the environment is good or not. For example people will always walk through a place because it provides a route to the shops. Interestingly it is also fair to say, however, that this may be the case whether the environment was consciously designed for that use or not. There may be instances where people develop shorter routes than those planned, for example, because a poor design has not recognised the need

to accommodate a necessary activity on a desired route. Optional activities are more greatly effected by the quality of a place. If a place is well designed for the activity they want to undertake, then people will use it. If the environment does not suit people then they will go elsewhere or refrain from the activity. Importantly where an environment is well designed for a particular activity or a range of activities there is likely to be a considerable increase in its optional use, whilst its use for other necessary activities will only increase slightly. Related to optional activities are resultant social activities. Where people have chosen to be in a space social exchanges are also more likely to occur.

It is possible to relate a more specific set of activities which we can observe to those terms used by Gehl. Carr et al.[23] for example, in discussing how people use public space to meet their various needs, present a range of activities with which different people engage. Table 12.1 relates domestic activities
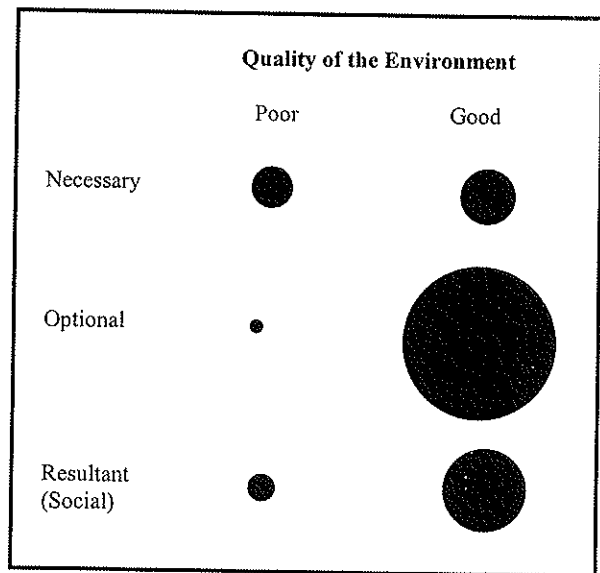

fig. 12.2 Environmental evaluation as process and mechanism.

From Gehl (1987)	From Carr et al. (1992)
Life Between Buildings	Public Space
Necessary	Coming and going
	Passing through
	Working
Optional	Hanging out
	Sitting
	Lying
	Playing
	Gardening
Resultant (Social)	Talking and Listening
	Observing

Table 12.1 The relationship between types of activity observed by Gehl and Carr et al.

Contextual Factors			Population density
			Diversity of Land-uses
			Street patterns/Networks
Pattern of Access			- pattern of streets
			- pattern of intersections
			- number of blocks
			- number of access points to an area
			- number of loops and cul-de sacs
Content of the interior	Public		- roadway
			- roadway - pavement
			- shared surface
	Public/		- large, optional activity, managed space
	semi-public		- small, optional activity, managed space
			- accessible unmanaged space
			- large sports area (playing pitches)
			- small sports area (kickabout/basketball hoop)
			- adventure play area
			- small child's play area
	Semi-private		- front garden
			- porch
			- balcony
			- off street parking
	Various		- other landscaping: noise buffers and visual enhancements

Table 12.2 Features of a housing scheme that may influence opportunities for social activity.

derived from Carr to those of Gehl. It can be suggested that where we visit a residential area and see hanging out, sitting, lying, playing or gardening within the public realm, that this indicates a better public environment, where we should also be able to observe a greater degree of talking, listening and observing. Public areas dominated by a higher degree of coming and going from houses, passing through or working may be regarded as less good, or places where other activities are relegated to private spaces only.

TYPES OF ENVIRONMENT

Analysis of the types of activity occurring should be undertaken concurrently with analysis of the layout of the scheme. Life in public space is effected by the scheme's context, the pattern of access through an area, how the interior spaces have been designed, and also by how the edges of the spaces have been designed.[24]

The context of the scheme, patterns of access and the content of the interior spaces

Table 12.2 presents features of the scheme context, the pattern of access and the types of interior space that influence the opportunities for social activity within the environment of housing schemes. Through their design these features could allow for certain activities to occur. In studies of the Ameri-

can context by Southworth and Owens[25] and Southworth and Parthasarathy[26] the influence of density, land use practices and patterns of access on the patterns of activity and movement that are likely to occur are stressed. They argue that higher densities, greater provision of local shops, employment and leisure opportunities, and also a more open pattern of accessibility results in more sustainable and diverse communities, with a higher degree of incidental coming and going. Specific types of space or features of a streetscape can then be identified. These can, to varying degrees, influence the types of activity that occur whilst also signalling an intention to allow certain opportunities for other types of activity. Some of these features might be regarded as more social on the basis of their categorisation. A scheme that is dominated by a pattern of interconnected streets for pedestrians, with a high number of intersections and blocks, a high proportion of shared surfaces, a number of small public managed spaces, a play area and balconies may see more signs of social activity than a scheme dominated by a less well connected pattern of streets with fewer intersections, a large amount of roadway and off-street parking. Much research has addressed how particular social groups respond to public space, but fewer authors have tried to be more prescriptive about how to generate layouts that create settings for particular activities. Hester,[27] Alexander et al.,[28] Coulson,[29] Beer,[30] Marcus and Sarkissian,[31] Stine,[32] and Marcus and Francis[33] are of this latter tradition,

fig. 12.3 A public space in Cambridge, England where its location and the lack of direct access from neighbouring properties along its edge prohibits its productive use.

and offer considerable insight into how to design features of the residential environment so that the needs of different social groups are met. A comprehensive list of performance criteria relevant to housing schemes would be extensive, but the list referred to in Table 12.2 represents a starting point for examining the extent to which activity settings have been considered as an intrinsic factor in design. However, Gehl's diagram (fig. 12.2) reminds us that the quality of the spaces is as important as the fact that particular types of space have been provided. A poorly designed activity space will probably be little used.

The edges of the interior space

One critical qualitative factor influencing the extent to which spaces are used is the design of the edges to the spaces. This influences the level of activity that is likely to occur by providing actual physical opportunities and reasons to enter a space, and also by influencing opportunities for surveillance. The number of separate households with pedestrian access onto public or semi-public spaces will certainly effect how many people use the resource. Figure 12.3 is an example of a space where its location and lack of direct access from neighbouring properties along it edge heavily inhibits its productive use. The number of direct surveillance opportunities might also influence people's feelings of security and comfort in a space. In this latter respect this could be viewed in one of two ways. In some instances streets and other spaces have a configuration that encour-

ages public access, in such a circumstance surveillance from neighbouring property can be regarded as generally positive. In environments dominated by cul-de-sacs, however, high levels of surveillance will favour local people, but must be regarded as intimidating to non-residents. Unless we want to pursue the negative ideology of treating all people as potential criminals, we must seek to develop levels of 'publicness' appropriate to the residential setting, where the activities of both residents and non-residents can be accommodated with mutual respect, whilst issues such as crime are addressed through appropriate 'target hardening' of private property and a belief that 'eyes on the street' (both resident and non-resident) are a deterrent.

Implicit within this type of analysis is an invitation to recognise that people have differing needs and that notions of, for example, family housing may not be able to adequately tolerate the needs of all members of a family. Marcus and Sarkissian[34] note that environments around the 'family house' do not typically respond to the needs of children, adolescents and wives left at home. Table 12.3 stresses the idea that mobility, in particular, influences the choices of activity domain available to people. Schemes dominated by road or parking space are likely to be of less value to children, the elderly or disabled, adolescents or adults without cars, than they are to adults with cars who have access to a wider number of social settings within an area or region. In this respect environments dominated by such features should be said to be biased in favour of certain members of a family.

Less mobility and choice

Young child (3-7)
Child (5-11)
Elderly/Disabled
Adolescent (10-17)
Adult (no car)
Adult (car)

More mobility and choice

Table 12.3 Mobility and choice of activity domains.

THE RELATIONSHIP BETWEEN TYPES OF ACTIVITY AND THE DESIGN OF THE PHYSICAL ENVIRONMENT

You cannot force people to act in a certain way in an environment. Despite this it is certainly possible to open up opportunities for people to act in certain ways, or limit opportunities for them to act in others.[35] Urban space is used in complex ways with particular types of space sometimes being used for more than one purpose (Table 12.4), and if a space designed for a particular purpose is also used for other activities, this can be regarded as a significant strength of the design unless the space so created invites anti-social uses. So if a traffic calmed road is not only used for coming and going, but also for playing and sitting, then it should be regarded as a greater success than a street only used for coming and going.

Space Type	Designed Activity Secondary activity
Calmed Roadway	Coming and going Playing Sitting

Table 12.4 The relationship between space type and primary and secondary activities.

RESEARCHING HOUSING ENVIRONMENTS

The ideas introduced above are important because they encourage us to do two things. Firstly they encourage us to re-evaluate existing housing areas. We have a strong tradition of evaluating housing according to how it looks. This visual tradition is important, but can mask the importance of the issues presented here. We need to evaluate schemes according to how they are used, or how they could be used. This can be done by either continuing with the tradition of post-occupancy evaluation whereby lessons can be learnt from the failings or successes of existing places, or we can use these previous lessons to re-evaluate existing areas. This is a mutually reinforcing process that should encourage a fundamental shift in the way that we look at and think about the environments in which we live. If we can say that an environment looks good, and meets some of the needs of residents, but fails to meet the

needs of others, then that is, at least an acknowledgement that alternative patterns of development might be possible.

The second thing that these ideas encourage us to do is generate new layout configurations that might better respond to a more refined sense of what people need. Housing developers currently generate variety in housing environments by varying what the houses look like.[36] Developers could vary their product by providing variety in both the house and the environment so that both respond better to household types or people's position in the life cycle. Whilst developers have responded, with only varying degrees of success, to criticism that their housing is visually monotonous, the most compelling area of criticism must be that the environments that they create are functionally monotonous. There is tremendous scope to innovate in terms of how the public realm allows residents and non-residents to engage in activity and subsequently socialise, and the next section uses some examples from previous schemes to illustrate what might be possible.

GENERATING AWARENESS OF PRECEDENTS

Existing housing schemes contain a wide range of typological precedents that accommodate a variety of activity settings. Examples of these settings are provided below.

The interior space within a periphery block

These can be either newly developed or retro-fitted into existing situations. Figure 12.4 illustrates a plan by Haworth Tompkins for a residential block at Coin Street, south-east London. The plan includes a shared space within the block for use by residents living in the neighbouring housing. Spaces such as this are becoming a more common feature of development with similar spaces being developed, for example, in Crown Street, Glasgow and Hulme, Manchester. These spaces are typically developed for informal activities and children's play. The use of such a space could be collectively resolved by residents with the help of the developer, whilst management of the space is undertaken by a residents' or housing association.

Figure 12.5 illustrates a child play area and seating area introduced into the rear of a periphery block of housing in Dortmund, Germany. This is a semi-public space, as anyone can get access to the area during the day, although at night the entrances are automatically closed. The block is still large enough for ground floor residents of the neighbouring apartments to have a private yard, with a high degree of surveillance into the space from neighbouring properties. These interior spaces are a variation on collectively owned semi-public spaces which are a common historic precedent. They are a
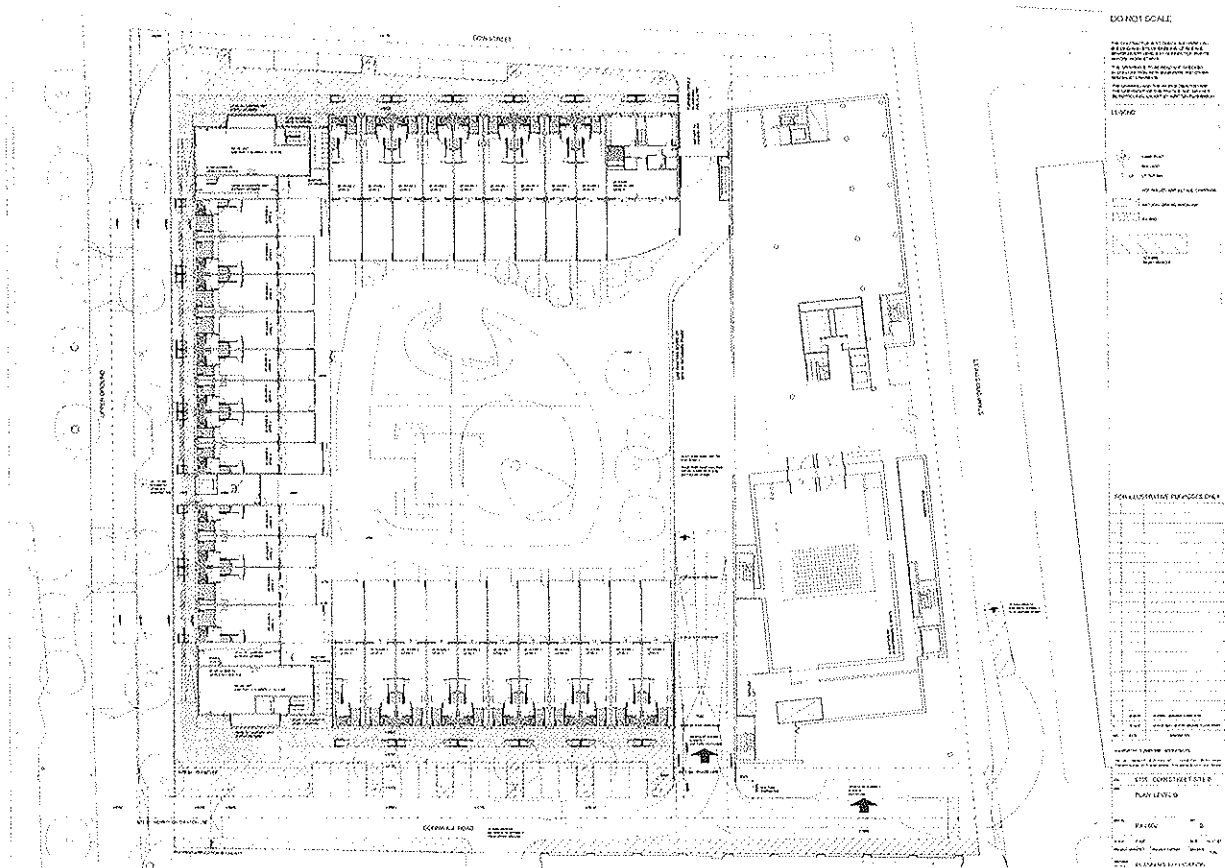
fig. 12.4 New build residential scheme by Haworth Tomkins at Coin Street, London SE1, containing a shared space within the periphery block for use by residents of adjacent houses (illustration courtesy of Haworth Tomkins).
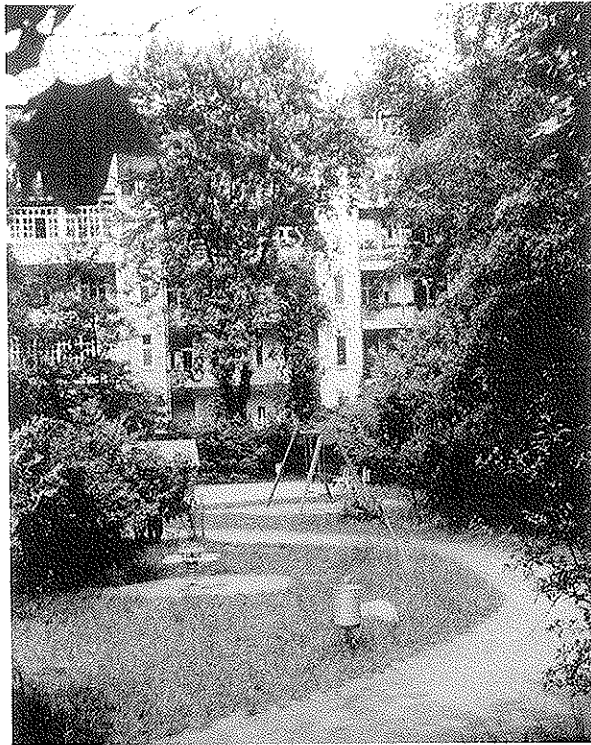

fig. 12.5 Children's play area and semi-public communal space introduced to replace older workshops in the centre of a residential block in Dortmund, Germany.

simple inversion of the Georgian Square which allowed residents exclusive access to a larger area of open space abutting the public-realm. This space in Dortmund has low maintenance landscaping, and is otherwise successfully managed by the local authority.

Shared surface or car-free settings

Figures 12.6-9 illustrate a variety of shared surface settings, not dominated by motor vehicles. Figure 12.6 shows a short section of street closed to vehicles, but safe to play in. This simple idea is being applied to a larger area in the Millenium Village at Greenwich. The level of demand for car free housing is not fully understood, but why should non-car owners have to suffer the burden of vehicles on their locality?

Figure 12.7 illustrates a narrow shared surface street where the sense of enclosure, the orientation to the sun, and the quality of greenery even in a very narrow street has encouraged people to sit out. Figure 12.8 shows a courtyard where cars are required to move carefully between, and park where the trees allow. In such a context it is the character of the built form and the planting that creates both the activity setting and the sense of place, whilst the

fig. 12.6 A short car free section of street in Delft, Netherlands.

fig. 12.7 A narrow Local Authority maintained shared surface street in Delft, Netherlands used for sitting out and parking.

fig. 12.8 Housing scheme in The Hague, Netherlands with parking between trees.

fig. 12.9 Car free courtyard provided with cycle parking and an incidental seating area in Cambridge, England.

fig. 12.10 Play area provided with the Pijp district of Amsterdam, Netherlands.

needs of the car are still accommodated. Finally figure 12.9 illustrates a car free courtyard provided with cycle parking and an incidental seating area. The adjacent space is used by children for cycling and other forms of play.

The schemes presented in figures 12.6-8 are all built to adopted highway standards, although some of the planting is maintained by residents. In each case the landscaping requires little maintenance. The housing area in figure 12.9 is maintained by a large institution, although the area is mainly hard landscaping planted with some mature trees. Other planted spaces adjacent to houses are maintained by residents.

Play Areas

Figures 12.10-11 illustrate the play areas that young children enjoy. In Britain, where they exist, such facilities are usually provided by the local authority, and are typically located in parks away from the domestic environment. The following examples are all located within housing areas, where children prefer to play and where more incidental observation by parents is also possible. Figure 12.10 illustrates a larger play area located in a formal residential square maintained by the local authority, while figure 12.11 shows an informal and smaller play area managed by a residents association.

Hard Surfaces

These can provide a diverse range of sporting opportunities and such facilities enclosed behind high fences can be either located close to roads which themselves generate a fair amount of noise, or within a scheme where their use could be limited and managed for the benefit of residents. A fenced school playground in a residential area can be popular with adjacent residents as the facility is 'vandal proof'.

Balconies

Communal open spaces would seem to provide scope for a greater variety of activity opportunities than the small private garden, especially when balconies provide a space with aspect and a degree of privacy so that people can incidentally sit out. In areas where people are choosing to live in denser urban settings a balcony can provide a very adequate outdoor area with space for planting, clothes drying (if permitted), or just sitting. Although a common and popular feature of apartment housing in continental Europe (fig. 12.13), balconies are not a standard part of the layout in Britain.

Incidental seating

At the heart of a residential scheme you hardly ever see a small incidental space with good quality

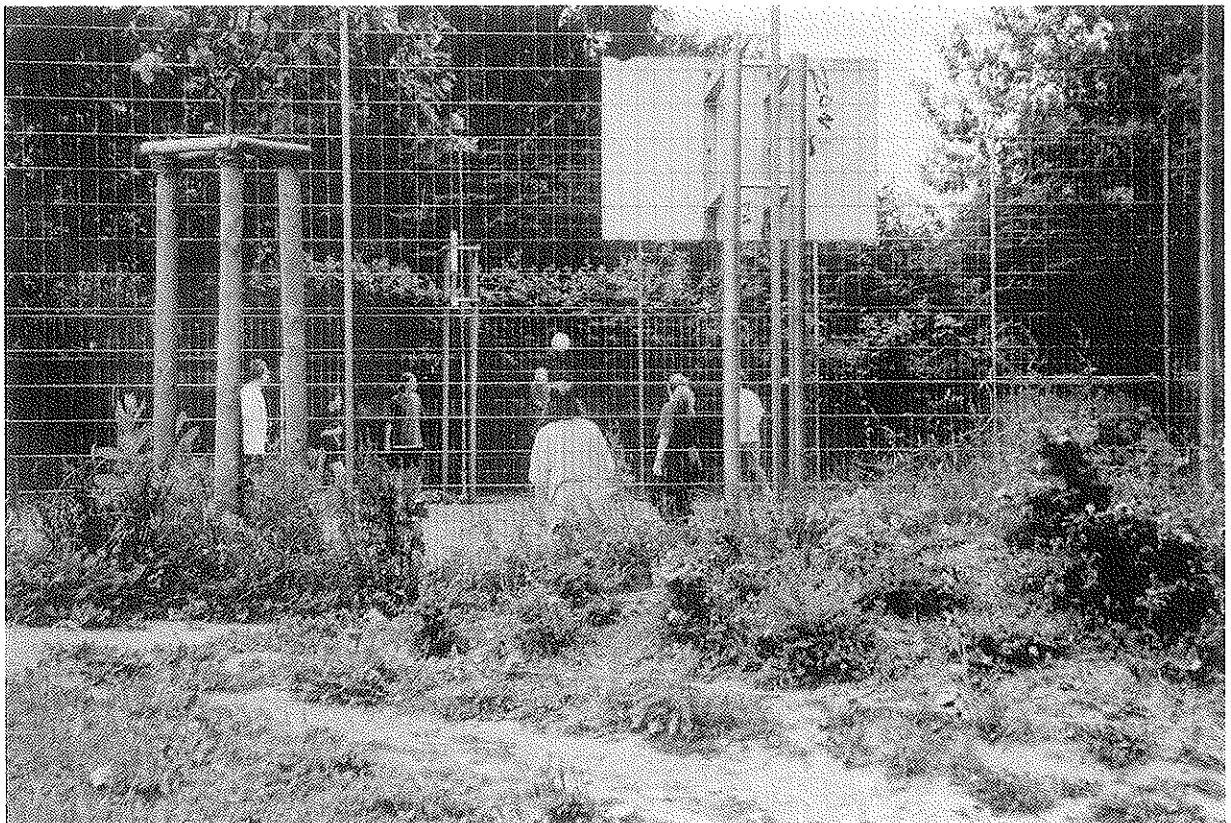fig. 12.11 Seating and children's slide on the communal lawn of a mixed use area in Dortmund, Germany.

fig. 12.12 Fenced sports and exercise area in Dortmund, Germany.

fig. 12.13 Private balconies in Dortmund, Germany.

landscaping and seating. Where they are well managed and maintained such spaces can be popular, especially for the elderly. As a child I walked everyday past a small group of seats located directly outside an elderly persons' home. Even in fair weather the seats were very popular with residents — they could chat amongst themselves, or to visitors and passers by. Despite having a well-manicured garden to the rear of the property, you were more likely to see people sitting at the front because of the social opportunities that existed. The example in figure 12.14 is maintained by the local authority, although residents have also personalised the space.

BREAKING STANDARDISATION

The public realm of suburban housing environments is increasingly standardised. It is organised principally in terms of how it can meet the access and parking needs of the car, simply demarcate areas of ownership and control and also create the right visual impression for house buyers.

This paper has argued that analysis of these environments should reinvigorate debate about how public spaces allow for particular types of activity by sections of the population. Suburban housing is typically regarded as 'family housing' and a good place to bring up children. It has been argued here that, as Marcus and Sarkissian[37] note, the specific needs of children, adolescents, adults without access to a car, and the elderly are not typically met within

fig. 12.14 Communal gardens in a private residential area of Dortmund, Germany.

such housing areas, whilst the nuclear family as a phenomena now represents only a small proportion of households. To develop this critique a conceptual framework has been presented. This applies some previous thinking about how we can analyse the use of public space within city centres to the circumstances of housing schemes. The framework suggests a methodology for looking at existing and recent housing developments by observing the types of spaces that the schemes contain; the types of activity that currently occur and those that currently do not; whilst also suggesting alternative arrangements that may be better suited to the needs of a wider range of public space users. Precedents can be found that illustrate the point that none of this is new. What is needed is an understanding that suburban housing is to a large extent a hegemonic tendency offered by an industrialised housing industry to an uncritical

market, which is kept unaware of the potential alternatives. A better awareness of alternative typologies, which more fully met the needs of public space users could certainly offer alternative layout concepts, whilst also responding positively to social changes and environmental pressures. Consumers should be made aware of the potential trade-offs possible between giving up parking spaces, or at least re-locating them, and providing alternative residential settings. A more creative housing development industry would also see the benefit in diversifying its product base to better meet consumers' unacknowledged needs, especially as they are increasingly encouraged to develop at higher densities within existing urban areas.

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NOTES

Acknowledgements: For permission to reproduce line illustrations the author would like to thank Jan Gehl and Haworth Tomkins Architects. Photographs are by the author.

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