

**From Sheltered Housing to Lifetime Homes:
an inclusive approach to housing**

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Summary

The paper opens by introducing the distinction between medical and architectural disability and goes on to define the concepts of micro-environmental and macro-environmental design. It describes the micro-approach as currently practised in the UK, where housing is divided into normal family housing and secondary housing for adults who do not live as a family and who are therefore deemed to have ‘special needs’. Sheltered and retirement housing, the housing solution that has been invented to serve the needs of older people in the UK, is first presented and then evaluated to show that the design embodies a stereotype of ageing that is repudiated by many older people. The concept of Lifetime Homes is proposed as a more inclusive, less stigmatising approach that has the potential to render the concept of ‘special needs’ otiose. It is suggested that the main challenge that faces the Lifetime Homes movement in the UK is that, if its implementation is confined to the social housing sector, it may simply perpetuate the existing distinction between mainstream and secondary housing in a new form. However, if it is more widely adopted,

the Lifetime Homes paradigm has the potential to widen choice and provide a firm foundation for integrated housing, support and care for people of all ages.

Medical and architectural disability

In his most recent edition of 'Designing for the Disabled', sub-titled 'the new paradigm', Selwyn Goldsmith (Goldsmith, 1997) sets out his theoretical position on the relationship between 'medical disability' and 'architectural disability'. His central concern is with architectural disability; that is, how the physical design, layout and construction of buildings and places can confront people with hazards and barriers that make the built environment inconvenient, uncomfortable or unsafe for everyone to use and may even prevent some people from using it at all.

Medical disability describes a process by which individuals are disabled in that they cannot do things because their bodily functions are impaired. Within any normal population, there is a continuum running from the most able-bodied and active individuals to the most severe disability imaginable. Where the built environment is sufficiently generous to meet the needs of all or most medically disabled people, they will not be architecturally disabled by the building. Where normal provision is not so accommodating, the people who are not architecturally disabled will be

those who are not inconvenienced by their environment, whereas all those who are inconvenienced will be architecturally disabled, regardless of their physical or medical condition.

Most architectural disability originates in one of two deficits: difficult changes of level or insufficient space. Because of these generic design defects, the built environment is capable of discrimination every bit as harmful and undermining of people's self-esteem as the denial of equal opportunities or verbal abuse. People often assume that it is only medically disabled people who are discriminated against by buildings in this way, but a moment's thought confirms that buildings can also disable children, adults with babies in pushchairs, larger, taller or smaller people, those carrying heavy loads and older people. Some features of buildings may not even be convenient for normal, able-bodied people. Almost everyone experiences problems in using the built environment at some time in their lives. Seen in this light, we are all potential or actual victims of architectural discrimination as a result of conventional building design. Indeed, one design manual has suggested that as many as 90% of individuals may be architecturally disabled in some way or other at some time in their life, (Wylde et. al., 1994, p. 8).

But there is one particular way in which we are all vulnerable to impairment, and by implication to medical or architectural disability,

which is through the process of growing older. As we age chronologically we experience functional ageing and its associated decline in biological efficiency. The list of impairments associated with ageing is extremely wide and most people cannot predict which problems will affect them. The physical process of ageing varies from individual to individual. It may begin early in the middle years or late in old age. Growing older may be perceived as a mild inconvenience, associated with niggling, non-specific symptoms, or it may be experienced as traumatic and severely disabling. Once it is underway, the process can be rapid or slow.

Advances in medicine can help to alleviate some of the worst effects of ageing but, as these changes take place, some older people become less confident in their abilities or feel more exposed to the risk of an accidental injury, disabling impairment or long-term illness. We may become less resilient and adaptable. We may feel that our independence is threatened, less able to live life to the full, that our horizons are narrowing or that that we have to change the habits of a lifetime. Mobility is the most widespread problem associated with growing older. Many older people find it difficult to go out alone, climb the stairs, get out of bed or use the bath, (Jarvis et. al, 1996).

However, lowered physical performance or functional competence may not be just the inevitable by-product of growing older; it could also be a

product of architectural disability or 'environmental deprivation'. This is a state induced by "the necessity of dealing with environments built for younger people" which may render the older person more vulnerable, or more docile and accepting of environmental constraints, (Lawton, 1974, p.257). Lawton warns that either a drop in competence or an increase in environmental pressure could account for the apparent negative effects of ageing, particularly as older people are only able to adapt within a relatively narrow range of architectural variables. More positively, he asserts that small changes in the older person's physical environment may produce a substantial reduction in environmental pressure, so that "the payoff for effective environmental intervention is very high for older people in poor mental or physical health", (Lawton, 1974, p. 259). It would seem that this particular form of architectural disability is eminently treatable by 'environmental therapy' which has a good prospect of a payoff in terms of improved functional competence and enhanced quality of life.

The picture is therefore not one of unmitigated gloom. Modern health care policies promote a more positive perception of later life, particularly by stressing the importance to older people's self-esteem of maintaining a full, independent and active life in their own home. Most older people in the UK live in their own homes, (Tinker, 1997, p.110). Older people enjoy a lifetime of accumulated experience, wisdom and memories. The 'grey

vote' and the 'grey purse' are set to become increasingly powerful mechanisms for change as our society ages. This may enhance the power older people wield and the respect in which they are held. One important arena for the exercise of 'grey power' could be through greater advocacy for health-engendering, architecturally enabling and non-discriminatory environments.

Macro versus micro-approaches to design: the genesis of 'special needs'

No one sets out deliberately to design a disabling environment and most people would probably welcome buildings that are accessible to everyone. Yet the degree to which the built environment disadvantages its users and the strategies which are employed to counter architectural disability, are different not just among different groups of users, but in different parts of the world. Goldsmith traces these differences in provision to social attitudes, and to the different legal frameworks which result from fundamentally different value systems, (Goldsmith, 1997, pp.243-249). For example, the self-help culture which dominates the American way of life has resulted in civil rights legislation that guarantees equality of opportunity for all citizens. According to this ethos, access to buildings is a matter of civil rights. Eliminating architectural discrimination does not stop at 'de-barriering' the built environment but extends to realising

people's lifestyle aspirations. In an American context, living independently is treated as synonymous with the autonomous control of a person's lifestyle - the right to live as one chooses - rather than as an issue of physical independence - the ability to cope alone.

Britain, on the other hand, has no civil rights or written constitution. Its citizens do not have any entitlements other than those granted legally, and even these can be overturned by subsequent legislation. The UK attitude to disability of all kinds is exemplified by a culture of welfare provision that is intended to ensure that disadvantaged individuals and groups are identified and then adequately supported, (Goldsmith, 1997, p. 244). To minimise architectural discrimination, special environments are provided for the disabled wherever possible, so that the designer can respond sensitively to the needs of the particular kind of disabled people who will use the building. Living independently, on the other hand, is all too often interpreted as a matter of providing coping strategies to minimise the impact of reduced physical mobility. Goldsmith contrasts these different socio-cultural attitudes - of normalisation and enablement (USA) as opposed to specialisation and pragmatism (UK) - as 'macro-environmental' and 'micro-environmental' approaches to design, (Goldsmith, 1997, p.92).

A macro-approach to the built environment starts from the assumption that accessibility is a right for everyone - what Goldsmith terms a 'treat-as-

normal' starting-point, (Goldsmith 1997, p. 19). Macro-environmental design aims to extend the parameters of normal provision until no one is excluded. So far as the built environment is concerned, this means that no one should ever be prevented from using a building or public place because of its inappropriate design. The ultimate goal of a macro-approach is to eliminate all sources of architectural disability, so as to produce a more enabling environment for everyone. A macro-approach insists that there are ways to specify and design the built environment so that it accommodates everyone's requirements. The specification can be 'got right', and it is a single definitive package of measures which meets everyone's needs. Because everyone can be accommodated by normal provision, the concept of 'special needs' becomes redundant. Everyone who is disadvantaged by design should be emancipated by a macro-approach to design; everyone becomes a mainstream client.

The micro-approach originates from a 'treat-as-different' assumption, (Goldsmith, 1997, p.19). It assumes that some members of the population, be they people with mobility problems, sensory impairments, learning difficulties, mental health problems or older people, have special needs that are best served by environments that are designed to meet their specific requirements. To those who adopt a micro-environmental paradigm, offering people the special facilities they so evidently require seems to be a pragmatic response to a practical problem. A 'tailored'

micro-approach might involve the adaptation of a house so that it is specifically geared to the needs of an individual inhabitant. A 'categoric' micro-approach would mean special provision for each distinct group of users, blind people, single young people, older people. Either way, people who need specially adapted environments are treated as 'them' not 'us'. They become welfare clients, see **Table 1**.

Micro-environmental approach	Macro-environmental approach
Families are normal	Households vary
Treat as different	Treat as normal
Others, old people	Us, our future selves
Special needs	Generic needs
Specialisation and pragmatism	Normalisation and enablement
Welfare	Mainstream

Table 1. Key dimensions of a micro-environmental and a macro-environmental approach to design.

The two approaches may start from different societal attitudes, and people may feel strongly that one approach is 'better' than the other but, as Goldsmith points out, so far as the built environment is concerned they are not mutually exclusive. It is always open to the designer to provide some augmented accommodation or upgrading even within a macro-approach, in

order to include the few users whose particular requirements do not fall within the extended scope of 'design for all'. This view acknowledges that, however inclusive the provision, there will always be a few whose needs even the most people-friendly building cannot meet and who therefore need supplementary provision.

This is an important concession, as it can be very cost-effective to design for, say, 90-95% of a building's potential users but extremely costly to cater for the remaining 5-10% whose needs may be unique and so cannot be specified in advance. This stance is best exemplified by the approach known as 'universal design' that has been widely adopted throughout continental Europe in recent years. The implication of universal design is that there are 'generic needs' as well as 'special needs', and that a design that satisfies generic needs will be one that is appropriate for most people.

'Normal' housing in the UK: a stereotype for young and active families

The primary form of housing in the UK is family housing. Legislation is framed in such a way as to anticipate that most adults live within a family, in a home that is self-contained and has its own services and its own front door. In the UK, the idea of a family home has a strong and persistent stereotype that has influenced the composition of the housing stock for hundreds of years. A family home is a house, not an apartment. It has an

upstairs containing a bathroom and two, three or more bedrooms which are used at night for sleeping, and a downstairs that contains the kitchen and the main public daytime reception rooms, the living room and dining room. Domestic activities are accommodated in separate rooms that are linked together by an upper and lower hall and staircase, see **Figure 1**.

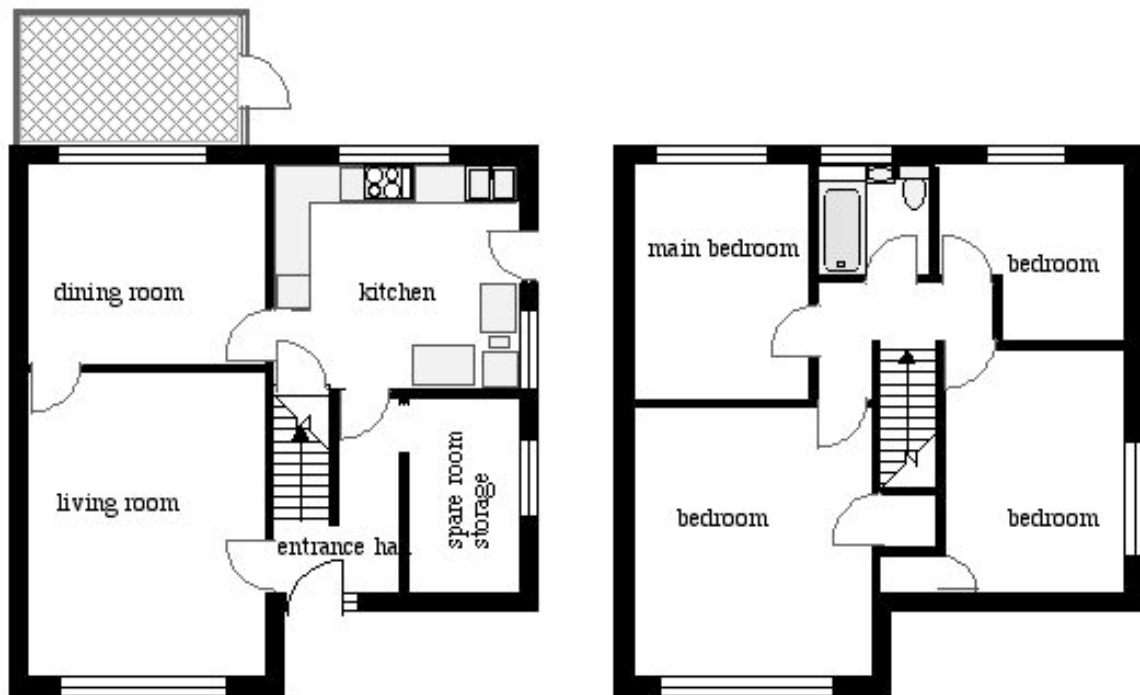


Figure 1. A two-storey semi-detached family home.

Most family homes in the UK are owned, not rented. The housing market is dominated by speculative house builders who target their supply of new

family homes to young families. Because this is so, access and architectural disability are not seen as significant issues by house builders. These issues are felt not to be 'glamorous' and they are certainly not generally regarded as a strong sales point. Houses are designed on the assumption that their occupants are fit and active. Over 70% of all UK homes fit this specification.

However, many older people continue to occupy their family home long after their family has left home and even after the death of a spouse. As people age, they often find that their family home begins to exert environmental pressure. Older people tend to live in older houses with an upstairs bathroom and often no downstairs cloakroom. As physical mobility declines the stairs become more difficult to negotiate. Many older people also experience problems in getting into and out of the bath and in stretching and stooping in the kitchen.

Thus, the home, for so long a trusted, familiar and safe environment, subtly begins to 'let older people down'. As Wright remarks;

"Older people are more at risk of both fatal and non fatal domestic accidents than other groups in the population. Those living alone are particularly vulnerable and at risk. Living alone may well mean having to undertake potentially risky acts such as climbing on chairs to change light bulbs or clearing leaves from outside paths. Nobody else in the household

is there to eliminate potential hazards, by nailing down loose carpeting or ensuring that household repairs are carried out; but others, such as relatives, may visit and carry out these tasks. In the event of an illness an older person living alone has nobody at hand to provide a hot meal or drink. A sick older person, attempting to undertake ordinary everyday tasks, is particularly vulnerable to the risk of falling and possibly lying undiscovered for many hours". (Wright, 1994, p.6)

Stairs are a serious and known hazard for older people living in the UK. One in every four falls is from stairs. As many as 63% of older people may occupy a house with stairs and a high proportion of these report difficulties in managing the stairs. Many people who feel they are becoming frail deliberately restrict activity. Some frail older people cope with the pressure of their home environment by living in just one downstairs room. For these individuals, increasing environmental pressure forces the distillation of home life into one or two rooms. Often fear of stairs is a principal reason for moving into sheltered accommodation or a purpose-built retirement home.

Sheltered housing: a micro-approach to third age housing

By contrast with the ideal of the family home, all welfare or social housing in the UK is seen as secondary housing; that is, housing that is for 'special needs' as opposed to primary, mainstream housing. This is a micro-approach to design. Secondary housing is targeted at people who are excluded from the housing market because they do not readily fit the family stereotype or because they cannot afford to buy. In the UK, different special needs groups compete with one another for scarce resources. The Housing Corporation (1995) currently recognises eleven special needs groups, one of which is frail older people. Indeed, older people are by far the largest 'special needs' group. Even so, 89% of older people live in a normal, mainstream family home. Just 7% of UK elders live in sheltered housing and 5% in a residential care or nursing home.

People with special needs are often excluded from the mainstream housing market by virtue of their marginal social position or specific housing requirements. Each of these groups can therefore expect their needs to be met by special, purpose-designed housing. Within each category of building user, there exist numerous small, independent initiatives in designing sensitive buildings that are tailored to the precise requirements of each client group. There is little or no exchange of ideas, particularly among the smaller, independent and charitable housing providers, and so there is no collective, multiplier effect (itself a macro-effect) through which the designers and managers of all types of housing can identify

generic design issues, share innovations and experiences with one another or listen to feedback from residents.

Older people may be a couple and many live alone, but a characteristic of growing older is people's families dissolve as the children grow up and leave home. Housing for older people who cannot, or prefer not to occupy mainstream housing, is therefore treated as a 'special needs' category alongside the many others within welfare provision. It is one of the earliest, largest and most developed 'special needs' housing sectors in the UK, originating in the mediaeval almshouse, the workhouse and Poor Law Commission. Older people's housing is therefore set firmly within a micro-environmental approach to design. This is evident in the current Category 1, 2, 2.5 and 3 classification for local authority 'sheltered housing'. Sheltered housing is the most common form of specialised housing for older people in Britain today. Categories 1 and 2 sheltered housing or 'warden-assisted accommodation' have been provided for rent by local authorities since the mid 1960's, as part of a drive to release family council housing. Many housing associations and registered social landlords provide similar private sector accommodation for rent.

In Category 1 sheltered housing, communal facilities and a warden are optional, and accommodation is in purpose-built bungalows or flats, usually without a lift, see **Figure 2a**. The only concession to the age of the

inhabitant is that the home will contain an intercom or social alarm that can be used to summon assistance in an emergency. Category 2 accommodation is in self-contained apartments under one roof with a social alarm, communal facilities such as a residents' lounge or laundry, a resident or mobile warden and lifts that serve those homes that are located on the upper levels, **see Figure 2b**. It is intended for more dependent older people.

During the 1980's, some local authorities in the UK began to build 'very sheltered housing', also known as Category 2.5 housing or 'extra care housing', for frail elderly and people who need more continuous personal care. This has led to a blurring of the administrative boundary between housing and care. The most common type is in a one bedroom flat in a modern two or three storey block of about 40 - 60 dwellings that have been especially designed for older people with mobility problems, **see Figure 2c**. The flat itself can be adapted for someone in a wheelchair or who uses a walking frame and the common areas will be wide, well lit and easy to negotiate. Flats above the ground floor are accessible by a lift. The common facilities are likely to be more extensive than in ordinary sheltered housing and there may be a day centre attached to the scheme that is also used by older people who live in the locality. A mid day meal may be provided in a residents' dining room and there will be a residents' sitting room. There is usually access on site to services like a hairdresser

and chiropractist. Usually, there is a resident or non-resident manager on the site who is responsible for managing the block of flats, organising social activities and gatherings for the residents and co-ordinating care services. Care staff may be on call for twenty four hours a day.

The amenities in extra care housing are Category 2.5 sheltered housing is generally believed to be more costly than domiciliary services but less expensive than a residential care home (Tinker, 1997, pp. 290-291) which is Category 3 provision within the traditional sheltered housing classification and is for residents who may be either mentally or physically frail or who are deemed to be 'in need of care and protection'.

Most sheltered housing is designed on the assumption that its occupants are still reasonably fit and active. If its occupants become too infirm to cope with their sheltered environment - if they experience it as architecturally disabling - they are expected to move on to a nursing home or into the geriatric ward of the local hospital. As Robson has recently observed;

"Some commentators in describing the various categories of housing which are available, seem to hold out the expectation that people will actually pass from one category to another. The implied sequence runs as follows: having at some point taken the decision to quit their life time home, people choose to move into something smaller, perhaps a retirement bungalow; later when fully independent living is no longer practicable,

they choose to move into sheltered housing; when even assisted independent living has become impossible, they are persuaded to move into a residential care home; finally, when they are totally dependent on medical care, it is decided that they should move into a nursing home. Such a sequence does not, of course, correspond with reality: each of these moves brings with it disruption and trauma, and for a single individual to pass through all of them would be terrible", (Robson, et al., 1997, p.8, Robson's emphases).

This is one of the most obvious drawbacks of a micro-approach to the design of third age housing. Homes which are closely tailored to a resident's needs at retirement may be unable to respond to their requirements in later life. People who are inconvenienced by their environment are architecturally disabled; they may not be medically disabled at all. Yet they may still have to move. Some older people find the move to a new home environment that provides a more intensive level of personal or medical care distressing or even traumatic, especially if they do not need it.

It is a disturbing fact that many recent surveys of older people reveal a significant proportion who seem to have ended up in what they perceive to be the wrong place. In Butler's study of sheltered (Category 1 and 2) housing (Butler et. al., 1983) and Tinker's study of very sheltered

(Category 2.5) housing, (Tinker, 1995), about a quarter of those questioned would have preferred to stay where they were. Studies of residential care (Category 3) homes have also identified a proportion of older people who do not need to be there, (Peace et. al., 1997). It has even been suggested that only a small segment of the older residents in nursing homes actually need 'round-the-clock' skilled care, which implies that many others could live more independently if they were supported by a package of domiciliary care or home visiting, (Valins et al., 1996). As well as the personal cost that is paid by the victims of these 'mistakes', financial and social costs are also incurred, for traditional skilled nursing home care is particularly expensive to provide. Despite the best of intentions, a micro-approach to the provision of welfare and social housing for older people is failing some of its clients and, some would say, society at large.

However, recent trends in older-people's housing in the UK may well be consolidating or even exacerbating the micro-approach. There has been a sharp decrease in local authority residential provision and an even greater decrease in geriatric medical provision. However, this has been balanced by an increase in the private and charitable sectors. The role of government has changed from that of being a major provider to that of a purchaser and regulator of provision. Within these policy constraints the micro-approach has flourished. This has led to a proliferation of niche-market housing schemes designed for older residents, or perhaps more

accurately, aimed at older customers. The problem of humane provision that ensures continuity of care is resolved by devising more and more special purpose housing, but looked at from a local or regional perspective, provision is partial and piecemeal. Many older people do not experience their housing circumstances as one where they feel that they are 'in control' or able to exercise reasonable choice as to the kind of life they lead. This is another unfortunate by-product of 'thinking-micro'.

Sheltered housing has now been augmented by a growing private sector market in 'retirement housing' for sale or rent. This can be an attractive proposition for older home owners who want to move to somewhere smaller, thus releasing the equity locked up in their property. Building retirement homes releases developers from compliance with normal planning restrictions and so, until recently, it was seen as a way of raising the density of a residential development. Many clients rejected the small apartments that characterised the early retirement market. High management costs also proved off-putting.

A new generation of 'responsible' management companies is now attempting to revive interest in this form of housing by providing small, luxury complexes for older people. These offer bungalows, flats and apartments, usually in an attractive landscaped setting, that offer high levels of amenity and personal security, see **Figure 2d**. A number of

'retirement villages' similar to those that are already well established in the USA are now under construction, that consist only of elders. In the second half of the last century, a trend has emerged for older people to move from their family home to a smaller bungalow on one level at retirement, but they were still living on an ordinary street as part of a mixed, all-age neighbourhood. This self-segregation of more affluent older people is a worrying tendency that could impact adversely on the composition of whole communities in the years to come.

A micro-approach that embodies a stereotype of ageing

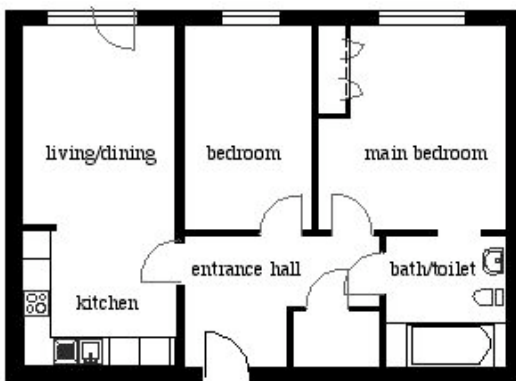
Sheltered and retirement housing are a micro-environmental solution to the inability of the ordinary family home to promote successful ageing. However, the forms of housing that are currently offered to older people may not be the most appropriate way of meeting their 'special needs'. The self-segregation that invariably results from living as part of an age-specific community is obvious, but some older people are happy to give up living as part of a mixed community in return for more opportunities for companionship and greater security. What is far from obvious is that they will also be changing their way of life.



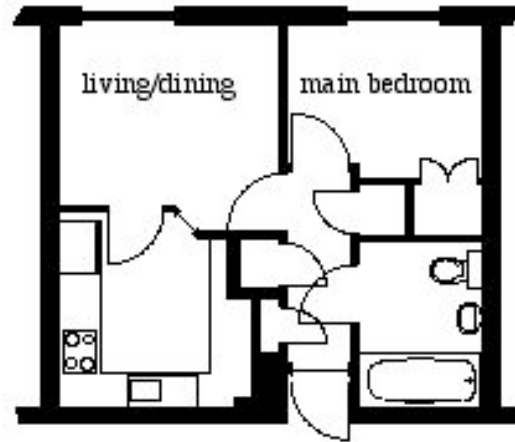
2a. Category 1. Sheltered bungalow



2b. Category 2. Sheltered flat/bedsit



2c. Extra-care assisted living flat



2d. Private retirement flat

Figure 2 . Examples of Third Age Housing

As the examples in **Figure 2** illustrate, third age housing in all sectors is very different in its plan form and internal layout from ordinary family homes. Sheltered and retirement homes in all price brackets and forms of

tenure are small and the layouts are stereotyped. The plan combines living with dining, and the living room is also connected directly to the kitchen. The living room is so small that it cannot take the furniture arrangements found in normal family homes. Older people are therefore obliged to dispose of their family furniture and buy new, smaller items that fit into the space. There is no space to entertain or for overnight guests, so offering hospitality becomes more difficult. In many ways, the homes offered to older people do not comply with everyone's conception of a normal family home. This is nothing less than an invidious but pernicious form of stigmatisation.

Some older people are all too aware of the way in which the design of their home diminishes and demeans them. The commonly held perception is that older people need less space. After all, they usually move from a large family house with an upstairs and a downstairs, to a small bungalow or a retirement flat where all the rooms are on one level. However, this view is strongly challenged by some older people. As one informant in a recently-completed study of home life (Hanson, 2000) explained, "*In other words you're put into a section where you're over sixty and the housing that you are offered is small. Now if you're going to be put in a little cell or a tiny flat for the rest of your life, in my mind that is going to bring stress and trauma to a lot of people.*".

Another informant spoke bitterly of the assumptions that she believes lie behind the whole concept of sheltered and retirement housing; *“I wonder why it is that they [the designers of housing for older people] think because you are older you only need enough space to stand up, lie down and sit to eat. That's the impression it gives me. As long as you can sit down somewhere, you can lie down somewhere else and sit down to eat, you don't need anything else. And therefore the space is very confined, very small. The ceilings are low, the rooms are small, the kitchen, you couldn't swing a cat around it. Because you don't cook any more, do you? And you never entertain. So what do you want a kitchen for? You know, that's the thinking behind it.”* People with disabilities have expressed similar views. All too often people are resigned to the fact that a reduction in space is inevitable but it is not always desirable.

Adequate space is a prerequisite to an older person's being able to provide a focus and a centre for family life. Of course, people who are relatively affluent can buy a more spacious home that suits their aspirations. However, space standards in ordinary family homes in social housing recognise the importance of these activities by allowing for a 'spare' room in calculating occupancy rates. Older people's purpose-built and sheltered housing does not, on the whole, acknowledge the importance of these activities. Yet older people themselves do and several of our informants expressed the view that the 'right' amount of space for older people was a

home that has two public rooms and two bedrooms. The minimum is, perhaps, a home with three rooms that can be used interchangeably in the way that some of our respondents have illustrated, to allow for flexibility and choice in later life.

The amount of space that people have at their disposal not only affects older people's quality of life; it also impinges on the adaptability of the home to respond to people's changing requirements, as they grow older. The key service spaces such as kitchens and bathrooms are, on average, very small in those housing stereotypes that are preferred by older people, particularly in purpose built and sheltered low rise flats. Those very sheltered and retirement homes that are believed to be particularly well-suited to older people, in reality may be less able to respond to their increasing need for care and support in later life than a well designed, suitable family home.

From 'special needs' to 'lifestyle choices'

Consistently, research has shown that most older people prefer to live independently in their own homes; that is, within ordinary, mainstream housing; for as long as is humanly possible, (Tinker, 1994, pp. 57-82). Current Government policy encourages people to remain in their own home, supported where necessary by domiciliary services that complement the care provided by family and friends. Whether one looks at

it emotionally or financially, the family home is biggest single investment that many people make in their lives. Even for those living in rented or social housing, the home may be a focus for their hopes, dreams, achievements and memories. Most people's homes connect them into a social network of neighbours, relatives and friends. It is this that many older people value most and are most fearful of losing. Above all, a home of one's own is the symbol of full adult status and of the ability to lead an independent life, necessary attributes of being part of mainstream society.

Most older people also want a home which is comfortable to live in and convenient for people to visit. Conversely, they want the houses of their relatives, friends and neighbours to be easily 'visitable'. However, ordinary, mainstream houses in the UK are ill suited to growing older as most were not designed with accessibility in mind. They were not designed to cope with increasing frailty. Ordinary homes may be too big, too inconvenient, too expensive to run or in the wrong place. Older houses are not regularly replaced and often there is little or no scope for upgrading them to improve their accessibility. Many new houses are designed as 'little boxes', built on two storeys and to space standards that do not accommodate older people's lifestyles. Yet what would suit most older people best, if they are not to suffer architectural discrimination, is conveniently designed ordinary housing, not special housing.

As we grow older, most of us would prefer to remain first-class citizens in ordinary, mainstream housing rather than be relegated to becoming second-class citizens for whom special housing arrangements must be made. Where we do consider an alternative to mainstream housing, then we should probably prefer this to spring from a positive lifestyle choice 'to live this way', rather than for the decision to be forced upon us because our present home circumstances are (or are deemed to be) insufficiently supportive and enabling. Yet it is a sad fact that in later life some people still feel so constrained by their home environment (of whatever kind) that they experience its influence as almost wholly negative and disabling; compelled to regret 'that it should come to this'. Yet it is the poor design of the home that disables many older people, not a medical disability. This is a problem that needs to be addressed by everyone in society.

The way to achieve change for the better has to be paradigmatic; that is, to substitute a macro-approach to design for the current micro-approach. In practical terms, this would substitute a generic approach located within mainstream housing and based on universal design for the concept of special needs housing. Admittedly this requires an unprecedented shift away from our current preoccupation with dismembering the housing stock into innumerable special needs groupings, but it is one which captures the spirit of the age. Moreover, there are good practical reasons why such a paradigmatic shift might be engineered by a consideration of

older people's living arrangements within an ageing society for, as the demographic changes which we already know are inevitable begin to come about, older people will become the majority in mainstream adult society and will not appear to be 'special' at all. If anything, it will be the able-bodied, young, strong and independent adult male, the yardstick against which all previous design solutions have been measured, who will be in relatively short supply. If there is any constituency of building users that is able to effect the shift from special needs to lifestyle choices it should, by rights, be the voice of older people. Set within the context of an ageing society, a macro-environmental approach may even be politically and economically inevitable.

Lifetime Homes in the UK: a macro-environmental approach to housing.

So far as new homes are concerned, in the UK the design standard for a macro-approach has already been set by the Lifetime Homes movement, an assertively inclusive approach that was launched by the Joseph Rowntree Trust in 1989. It takes as its starting point the view that most of the difficulties which are currently experienced in ordinary mainstream family housing could be eliminated by simple design modifications that ensure that no one is the victim of architectural discrimination. The concept of 'general needs housing' is applied to the vast majority of

ordinary houses, flats, and bungalows, with the intention that the home is designed to meet the changing needs which occur during ordinary life, such as raising children, coping with an accident, having grandparents or a disabled guest to stay or simply growing older (Brewerton and Darton, 1997, p.4). The intention is not to imply that we have to stay put in one home for life, but that we can choose to if we wish to, because our home is sufficiently adaptable to cope with most of the exigencies of everyday life.

The sixteen key recommendations of the Lifetime Homes standard include four that ensure good access to the home;

- a wide parking bay,
- a short, level approach from the parking space to the front door,
- level or gently sloping entrances with level thresholds, and
- a covered, illuminated main entrance.

Where the home is reached by a lift, this should be wheelchair accessible.

Four more criteria relate to moving about easily indoors on the level;

- wide doors and hallways,
- space to turn a wheelchair in all ground floor rooms,
- a downstairs main / sitting / living / family room, and
- a space downstairs that can be used as a bed space.

Two criteria aim to reduce difficulties in moving between levels in a conventional two (or more) storey home;

- room on the stairs for the installation of a stair lift and
- provision for a through-the-floor lift in a suitable place.

Four criteria are designed to ensure that personal hygiene is safe and that toileting and bathing is easier;

- a wheelchair accessible downstairs toilet that could take a shower,
- bathrooms and toilets that can take handrails etc.,
- easier side transfer to the bath and WC , and
- space in the bathroom for a hoist.

The final two criteria acknowledge that the environmental controls in most ordinary houses need to be accessible and easy to operate;

- sills no higher than 750-800 mm and windows that are easy to operate, and
- user-friendly height and tactility for switches, socket outlets, controls.

These principles are generic. They have already become standard practice in social housing in the UK. However, there is a danger that if the Lifetime Homes label is only adopted by housing associations and charities it will be contaminated by the ‘special needs’ concept and so avoided by the private house builders.

It is therefore important to recognise that Lifetime Homes are not special needs houses but ordinary accessible homes that suit most people, though they do offer the choice for people with quite severe mobility problems to live within mainstream housing if they so wish. For certain individuals, a Lifetime Home may require further adaptations that are tailored to their specific requirements. The principle employed is one of universal design, not of accessibility at all costs. For most people though, a Lifetime Home is not a home that people stay in for life, but a home that anyone can move to without having to worry about whether it will meet their requirements.

The Lifetime Homes standards are a requirement for most providers of social housing but a more radical, macro-community approach has been adopted by the Habinteg Housing Association, which builds mixed developments of 75% family Lifetime Homes and 25% wheelchair dwellings. Having consulted their clients who asserted that they did not want to be located together in 'a cripples' corner', Habinteg scatters the wheelchair homes throughout their developments so that residents with mobility problems are fully integrated within their local community. Residents seem to appreciate the anonymity of just being neighbours in an environment which does not draw attention to any difficulties or personal problems which they may have themselves, or that a family member may be experiencing. Embracing a Lifetime Homes philosophy implies that

people with very different needs can be housed together in the same development. It therefore makes the very idea of ‘special needs’ obsolete.

Lifetime Homes are ordinary homes in another important way, in that they are based on the standard two (or more) storey family house that everyone in the UK has grown up with. Homes built this way look normal, and a casual passer-by on the street will almost certainly fail to spot that the house has a wider door and more generous interior design than the average older family home. The house plans are indistinguishable from those of ordinary homes, see **Figure 3**.

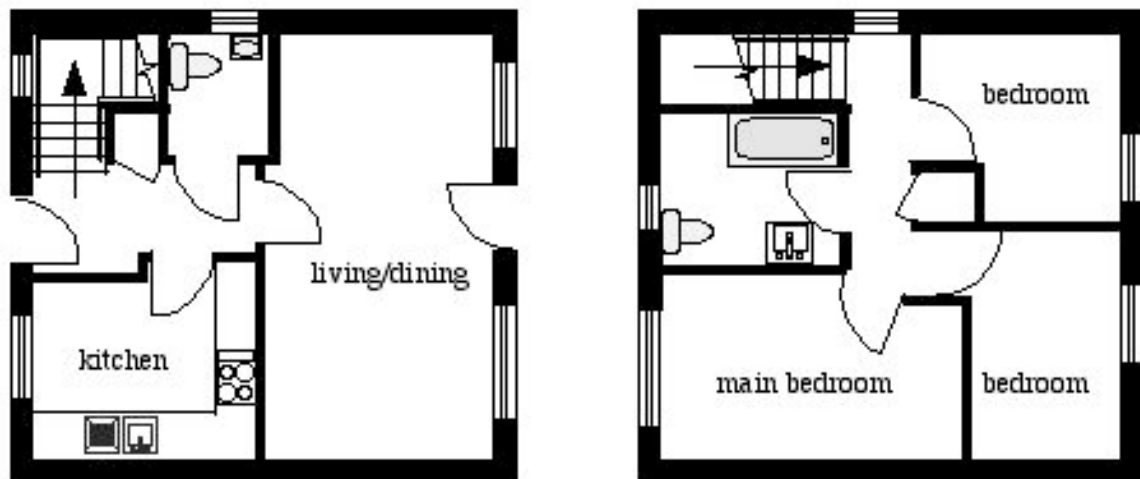


Figure 3 A two-storey family home built to Lifetime Home standards

Adopting the Lifetime Homes standard could substantially enhance the capacity of ordinary, mainstream homes to accommodate the majority of

risks which ordinary people face in their lives that expose them to architectural disability. The costs associated with its introduction are arguably small in relation to both the capital building costs and the lifetime costs of the home, (Cobbold, 1997). Residents should find that the houses which incorporate these principles are more flexible and spacious than a normal family house. Many of the problems that confront older people should be easier to address in a Lifetime Home than in an old-fashioned family house.

Building regulation as a tool to implement a macro-environmental approach to design

A quiet revolution has recently taken place in UK housing, in that with effect from October 1999, all new homes including those built by private house builders are required to comply with new access criteria (known as Part M of the Building Regulations). These take the first small step to enforce aspects of the Lifetime Homes concept for all new dwellings in the UK. The main elements of Part M which apply to ordinary family houses are that:

- The approach to the house should be wide enough for wheelchair uses, even when there is a parked car;
- The approach should not be too steep. Ideally it should be level;

- An accessible threshold at entrance level should be provided (but an upstand of up to 15 mm is permitted if this cannot be avoided);
- Doorways and corridors should be wide enough to allow wheelchair users to manoeuvre into and out of rooms;
- Changes of level within the entrance level should allow ease of access to ambulant disabled people;
- Switches and sockets should be at a convenient height for all; and finally,
- All homes should have an entrance level WC that is useable by someone in a wheelchair.

Critics would argue that Part M does not aim to ensure that all housing is 'livable' but only that it is 'visitable' by someone with reduced mobility. This is a serious dilution of the intentions behind the Lifetime Homes concept.

The access requirements contained in Part M seem to have been set deliberately low, so that only minor design changes are needed for private homes in the speculative house building sector to comply. Many existing houses are able to meet most of the new requirements. However, Part M will ensure that at least some of the Lifetime Homes criteria are incorporated into the next generation of newly built private homes. Above all, it represents a change of attitude on the part of legislators from a

hands-off, micro-environmental approach to a more inclusive, macro-environmental approach to housing design.

Optimists therefore take the view that extension of Part M of the Building Regulations to include people's homes will enhance accessibility and so reduce environmental pressure. However, a more general acceptance of the Lifetime Homes criteria as the benchmark for good design would undoubtedly have an even more pervasive influence in reducing environmental pressure within people's homes. This is a far-reaching proposition, which requires a radical rethink of current housing policy and provision. Given the current climate of scepticism in the UK construction industry, it is unlikely to be achieved without further regulation that builds on the foundation already laid down in Part M.

Practically speaking, even if the regulations were to be extended to embrace the Lifetime Homes criteria, a situation where there is no further need for any specialised housing cannot be achieved within most people's lifetimes if the approach is implemented only in the case of newly built homes. As Meikle and Connaughton (1994) have pointed out, the UK's housing stock is itself ageing and the long term trend is that the existing stock of homes is not being replaced within its designed life. Homes that were built well before 1999 are likely to constitute a substantial part of the total stock for very many years to come. It could be achieved more quickly

if existing houses were also to be upgraded wherever it was feasible, to do so. This would both increase the numbers (and hence consumer choice) of existing houses that would suit most people's needs and it would also identify those homes which could not be so adapted. The magnitude of the task is considerable and the investment required is substantial, but it could well prove more cost-effective in the long term than the partial, piecemeal and temporary arrangements for maintaining the housing stock.

From a purely financial point of view, adopting a macro-approach to the provision of new homes makes sound business sense, as it will undoubtedly lower the demand for subsidies later on to adapt today's new housing to the various problems which its occupants are at risk of encountering in the future. More older people should be able to remain for longer within the mainstream and to spend less time in care. A groundswell of opinion is emerging that sees no good reason why tomorrow's public purse should pay for today's design defects. However, there is a serious penalty in limiting a macro approach to newly built homes as these account for just a fraction of the total housing stock.

Because of the many design problems which beset older housing, it would be difficult, though not impossible, to shift to a macro-approach in the case of existing homes. In the UK there are currently about 20.4 million existing dwellings that would all need retro-fitting to meet the Lifetime

Homes standard, (DOE, EHCS, 1998, p.13). About 69% are owner-occupied, 17% are local authority dwellings, 9% are homes in the private rented sector and 5% are owned by the housing associations and registered social landlords. Many of these dwellings are old; 45% are more than fifty years old and a quarter of these were built before 1919 (DOE, EHCS, 1998, p.9). Few homes were built with accessibility in mind.

Although Part M paid most attention to access, the main problem with the existing housing stock that prevents homes from either complying with Part M or from attaining the Lifetime Homes standard is not one of access but the size of the bathroom and the lack of an adequate downstairs cloakroom. In the UK bathrooms (and cloakrooms) tend to be built to a standard design that has been honed to a minimal size that precludes their being used by someone in a wheelchair. The option of converting the bath to a shower may be viable in some cases, but it may not suit all situations. The decision to retain a bath or install a shower is a dilemma that many older people already face when making their family home more suitable to someone who is growing older. Depending on the design, a shower may take up less space and it may be easier to get into and out of, especially for someone who is less agile or who uses a wheelchair or frame. However, the decision is often motivated by factors other than accessibility. Some people have a definite preference for bathing or showering. Others find that bathing (or showering) is incompatible with a medical condition. The

costs of conversion can be prohibitive and the process of obtaining a grant to pay for the conversion is complex and protracted. In some parts of the UK people prefer a separate bathroom and toilet whilst in other regions a bathroom that includes a toilet and a bidet is preferred. These preferences are an important expression of people's culture. Although more modern homes may have a downstairs cloakroom, most are so small that it is not possible to effect a side transfer onto the WC. Part M even allows for the house to satisfy the regulations with the toilet door left open, a situation that is less than satisfactory in ensuring people's dignity and privacy.

The UK's Audit Commission (1998) that monitors government expenditure has recommended that building to Lifetime Homes standards represents long term 'best value' in terms of housing standards and quality. Building to Lifetime Homes standards and retrofitting existing houses to comply with as many of the requirements as possible should substantially reduce the environmental pressure currently experienced by older people. In time, more older people would remain independent for longer and fewer older people would need to enter residential care because of their reduced mobility or after suffering a fall or other accidental injury at home. Fewer new homes should require alteration to accommodate older or disabled occupants. More people in new homes should be able to achieve a higher proportion of daily living skills and to retain their competence for longer.

The house will not evict you: reducing stigma and widening choice.

Lifetime Homes is a macro-approach to the built environment because it starts from the assumption that accessibility is a right for everyone. Macro-environmental design aims to extend the parameters of normal provision until no one is excluded. So far as housing is concerned, this means that no one should be excluded from living in the home of their choice because of its inappropriate location or design. The ultimate goal of a macro-approach is the elimination of all architectural barriers, so as to produce a more enabling environment for everyone.

Sheltered and Retirement Housing	Lifetime Homes
micro	macro
Living in a purpose-built home	Living independently in one's own home
Tailors the design so that it is 'just right' for each client group	Extends the parameters of design so no one is excluded
A sensitive design that only 'works' for some people	A more enabling environment for everyone
Segregative	Inclusive

Table 2. From Sheltered Housing to Lifetime Homes

The most important problem facing the Lifetime Homes movement in the UK is therefore that it will reinforce the division that is currently enshrined in the distinction between all mainstream and all special needs housing. The most important challenge is that Lifetime Homes represent just one piece in the wider jigsaw of housing, support and care. It will need to be matched by changes in tenure from the current division between owners and renters to more flexible forms of tenure. Living in a Lifetime Home has a limited capacity to improve older people's home lives unless appropriate levels of health and personal care are simultaneously provided. Without access to suitable transport, the home could become a prison. Above all, a macro-environmental approach includes as well as subsumes the micro. People should still have the right to choose their preferred housing and lifestyle, including the option to move to a more sheltered environment or a retirement community. An inclusive and emancipatory architecture is just the first step in tackling the challenge of the ageing society. However it may prove to be the essential ingredient in ensuring that support and care can be delivered to everyone who needs it and that the benefits of the new information, assistive and communications technologies can benefit people of all ages by helping them to live independently at home and within mainstream society.

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