# Section VI
## Disability and human spaces

# 23 Disability and universal access: observations on housing from the spatial and social periphery

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## Basis for the study

This chapter is based on work undertaken for an international comparative study on 'enabled environments' which included case studies in Pretoria (South Africa) and New Delhi (India).[1] We focus here on four South African case studies. Both the Indian and South African national governments have adopted disability rights measures and made attempts to move away from the medical model of disability to a social model. The challenge facing both countries is to realise those rights through policy and practice. Both countries present an opportunity to study the translation of rights into practice at the micro-level (UN, 1999).

The research set out to understand the processes by which people with disabilities in urban settlements are prevented from fully participating in the socio-economic development of their community and the wider society, and to suggest ways in which greater inclusion could be achieved in the future. By gaining new insights into the nature of the interaction between people with disabilities and their environment, we wished to achieve a greater understanding of the environmental and attitudinal barriers that hinder their entry into education, employment, training, the full use of services and access to appropriate shelter and public buildings.[2] Having identified these barriers, the research explored practical means to overcome them through consultation with people with disabilities, their families, their communities and the service providers.

This chapter focuses on the findings from the broader research project that relate more directly to access to appropriate shelter (and shelter-related benefits), mobility around settlements and access to public facilities in those settlements. The Habitat Agenda, of which both South Africa and India are signatories, requires that governments provide laws and policies that create inclusive environments so that people with disabilities enjoy full access to new public buildings and facilities, public housing and public transport systems.

The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) guidelines argue that there are six key elements to achieving barrier-free environments:
- A complete legal system (from law to standards);
- A full set of instruments (for example, master plan, town plan, detailed plans);

- Administrative effectiveness (from permission to control);
- Professional undertakings (from guidelines to expertise);
- Political transparency (openness of information, public attendance and involvement);
- Democratic control (from awareness to participation)(ESCAP, 1995, p.7).

The current study examined the success of local and national efforts in translating accessibility policies into practice for people living in low-income informal and formal settlements. It considered the six elements of the ESCAP guidelines from the perspective of people with disabilities. The project looked at the extent to which the physical environment in low-income neighbourhoods limits the mobility, and thus, the social integration of people with disabilities and asked what measures could be taken to make this environment a more inclusive one.

The shaping and reshaping of South African urban settlements is the shared responsibility of residents, design professionals, municipal officials, local and national politicians, financiers and developers, yet in South Africa the concept of 'universal access' is rarely discussed. Universal access means that individuals should be able to move from home to community to public buildings without barriers in their way, 'to use space in a continuous process – to be able to move around without restriction' (ESCAP, 1995: 1).[3] Rule 5 of the United Nations Standard Rules[4] also draws on the idea of space as a continuous process and understands the 'physical environment' to include 'housing, buildings, public transport and other means of transportation, streets and other outdoor environments' (UN, 1994).[5] Yet there is little currency to the idea that the removal of physical barriers within the built environment is very much the domain of private and public designers and developers of human settlements. Instead, it is often assumed that it is the responsibility of people with disabilities to adapt to the way the environment is designed.

This chapter is about the nature of the interface between the physical environment and people with disabilities in four, predominantly poor settlements in the Tshwane Municipality in and around Pretoria (now Tshwane). It is overlaid by a description of elements within the socio-legal environment which attempt to moderate the physical and non-physical barriers that disabled people face when trying to access better housing and living environments. Living in shacks in informal settlements, in older township houses, or in recently constructed government subsidised 'RDP housing', presents its own set of challenges of limited space and access to social and economic opportunities, compounded by conditions of relative poverty and spatial marginalisation.

Formal low-income housing neighbourhoods are the settings in which the built environment form has been created and recreated with scant attention to achieving universal access and ease of movement. Successive state manifestations (colonial, apartheid, and democratic) share the burden of this scant attention, with the current challenge being to address widespread poverty, inequality and

large housing backlogs in a context of extreme spatial dislocation and the ongoing prevalence of significant social and physical barriers. It is demonstrated that these urban dysfunctionalities are experienced most acutely and practically by people living both in poverty and with disabilities. As Imrie (1996) has observed, despite the increased awareness resulting from global programmes focusing on disability issues (mirrored in the South African policy discourse), people with disabilities continue to be disproportionately represented amongst the poor, the unemployed and the uneducated. In South Africa, being poor and historically marginalised often means having to live on the distant fringes of cities and towns (see Lemon, 1991), which further exacerbates the difficulty of mobility along with profound feelings of dislocation for other people who live with disabilities.

## Methodology

Adopting the social definition of disability meant that we studied the quality of the linkages between people with disabilities and their physical, social and economic environment. The term 'impairment' is used to refer to an individual's condition, which can include physical, sensory, intellectual or behavioural impairment. The project adopted the World Health Organization (WHO) definition of impairments, which are defined as 'problems in body function or structure such as significant deviation or loss', and activity limitations, which are defined as 'difficulties an individual may have in executing activities' (WHO, 2001, short version, p. 12). The majority of the participants in the research project have either a sight, hearing, physical or intellectual impairment (or illness)(i.e. the impairments causing disability as listed in the Disability Rights Acts in both South Africa and India). However, the emphasis was placed not on identifying people through their type of disability, but on including those people who identify themselves as experiencing the WHO concept of a 'restriction or lack of ability' in doing various activities.

The project, which spanned two years, worked as far as possible with a participatory action research (PAR) approach to explore the nature of the relationships that people with disabilities living in low-income urban settlements maintain with their families, their communities, service providers, employers and their physical environment. A PAR approach is important, as many people with disabilities complain that services and other measures are put in place by well-meaning organisations, without consulting disabled people themselves. A failure to use local knowledge of disability that only people with disabilities themselves can provide, often leads to inappropriate provision and measures (Metts, 2000).

Four settlements were selected around the city of Pretoria (see Figure 23.1). They were selected to represent settlements informal in nature (i.e. temporary building materials, not full property title to the land, not fully serviced) and where poverty was a dominant part of life, but where government interventions through the national housing programme were also evident.

*Figure 23.1: Map of the Tshwane Metropolitan Area showing the location of the four settlements included in the study.*
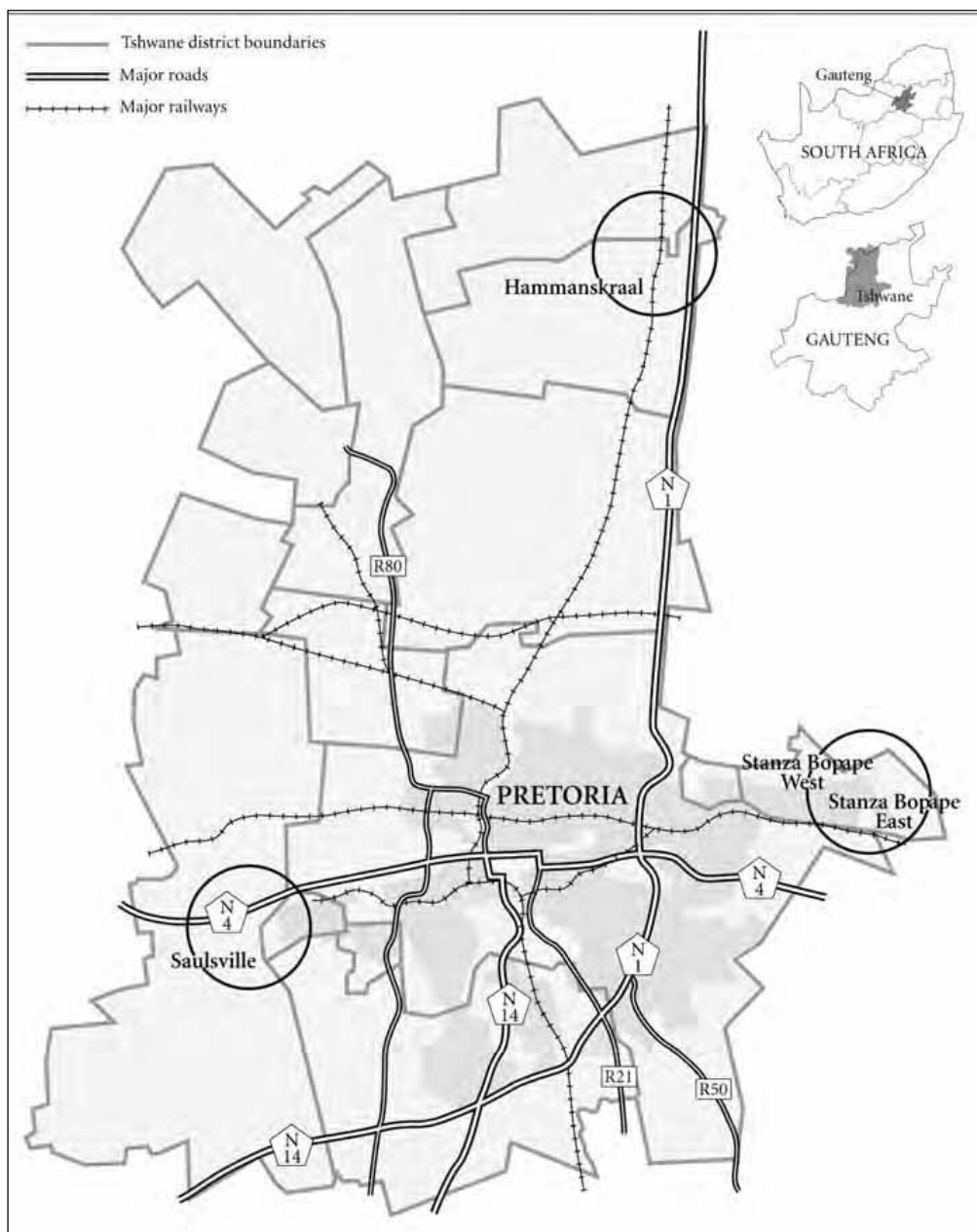
Other important factors in the selection of these settlements were that community-based service providers were active in offering general services to people with disabilities and that researchers had some previous experience with these communities. The four areas selected were Stanza Bopape East and Stanza Bopape West (east of the city beyond the township of Mamelodi), Saulsville (west of the city beyond Atteridgeville) and Hammanskraal (far north of the city).

The last was the most distant settlement and was similarly located to one of the four Indian case studies (named Bhatti Mines) on the distant fringes of Delhi. The other three South African settlements were more typically located on the far sides of older, traditional township areas where informal settlements and new government greenfields projects are common. The settlements are typical of freestanding informal settlements which comprised 12.3 per cent of the national housing stock during the 2001 Census (Stats SA, 2002), and formal government subsidised housing which comprised 10 per cent of housing stock at the time.

*Table 23.1: Case study area characteristics: communities at a glance*

| Area characteristics | Stanza Bopape East & West | Saulsville | Hammanskraal |
|---|---|---|---|
| Distance from central Pretoria (approx) | 30 km (east) | 15 km (west) | 50 km (north) |
| Origin | Land invasion 1990 by township & rural homeless | Land invasion 1990 by township homeless | Land invasion by rural migrants managed by traditional leaders |
| Settlement types | RDP* and informal | RDP and informal | In-situ upgrading and informal |
| Number of households | 14 229 | 7 309 | 1 325 |
| Average household size | 3.66 | 6.16 | 4.99 |
| Households living in shacks (%) | 50 | 60 | 80 |
| Population unemployed (%) | 49 | 41 | 41 |
| Households with monthly income under R12 000 (%) | 42 | 26 | 46.5 |

Source: Municipal Demarcation Board, (2002–2006)

Note:* New formal settlements constructed as part of the original Reconstruction and Development Programme (RDP) and now as part of the subsidy programme of the Department of Housing.

In each community, the project identified key community members who had experience of disability issues as community facilitators for the research. The community facilitators were responsible for identifying potential participants for the study, inviting people to key events, assisting with or carrying out the reconnaissance and main surveys, and serving as information contact points and resource persons for other participants on the study from their own and other communities. They became integral to the research, actively directing the focus and making and maintaining contact with the participants.

In constructing our sample, a key concern as a project that set out to be participatory was to identify a size of sample that was large enough to allow us to highlight patterns of experience and small enough that it was manageable for a single full-time researcher.[6] We decided to work towards a sample of 50 people in each of the four research sites; in the end 186 people participated (see Table 23.2).

It was important that our sample included people willing to participate in workshops and site visits, representing amongst them a range of types of disability, all age groups, both genders, those linked and not linked to service providers, employed and unemployed, having different levels of mobility within the plot, the community and the city and beyond, and those who could be reached by the community facilitators.

*Table 23.2: Types of first impairment compared to national average*

| | Project | | | National | |
|---|---|---|---|---|---|
| Classification | N | % | % | % | Classification |
| Blind | 6 | 3.2 | 9.1 | 26 | Sight (Blind and low vision) |
| Low vision | 11 | 5.9 | | | |
| Deaf | 8 | 4.3 | 6.5 | 14 | Hearing (Deaf and hard of hearing) |
| Hard of hearing | 4 | 2.2 | | | |
| Physical/locomotor disability | 70 | 37.6 | 37.6 | 25 | Physical/locomotor |
| Intellectual disability/ mental retardation* | 36 | 19.4 | 40.4 | 21 | Intellectual/emotional |
| Mental illness | 39 | 21.0 | | | |
| Speech problem | 4 | 2.2 | 2.2 | 3.3 | Communication |
| Epilepsy | 8 | 4.3 | 4.3 | n/a | |
| | | | | 11 | Multiple/not specified |
| Total | 186 | 100.0 | 100.0 | 100.0 | |

Source: National percentages from Stats SA, 2002

Note: 'Mental retardation' was a term that the research team felt was not appropriate. However, it continues to be a widely used and understood term and remains here only for the sake of clarity.

There were a series of elements to the study: the reconnaissance survey, which was a short survey used to identify participants through door-to-door visits, community workshops for the identification of themes important to the participants, informal focus groups on issues raised, interviews with service providers, field visits by participants to make observations of certain environments, the sketching of mobility maps, and a detailed household survey.

## General characteristics of the sample

The sample was equally divided across the four research sites – Hammanskraal (25.3%); Saulsville (25.3%); Stanza Bopape East (23.1%); Stanza Bopape West (26.3%).

### Gender

Of the sample, 42 per cent were female and 58 per cent male. The UN estimates that worldwide 51 per cent of people with disabilities are women (DAA, 1995). The 2001 South African census reports 52 per cent of people with disabilities in South Africa are female and 48 per cent are male.

### Age

Of the people with disabilities, 32 per cent were children (18 years and below), 52 per cent of the people with disabilities were adults aged between 19 and 64, and 16 per cent were elderly adults aged 65 plus.

### Household composition

Of households included in the study, 41 per cent were headed by women. Only 3.8 per cent of people with disabilities lived alone; 2.7 per cent of males with disabilities lived in male-only households compared to 7 per cent of females with disabilities living in female-only households

In presenting brief examples of the evidence gathered, the following sections move from experiences of the home environment, into experiences of the broader environment of the settlement and city, and conclude with a discussion of people's experiences of the legislative environment, related to the way in which government housing benefits are accessed, and how built environment regulations support or hinder the achievement of universal access.

## The home environment

Any discussion on physical accessibility around homes should reflect the fact that homes are being built both by designers and constructors of government housing as well as being designed and constructed by the actual owners themselves, usually as informal housing arising out of a situation of poverty. The level of awareness of both these groups around accessibility needs to be considered. In addition, the Department of Housing recently introduced measures to fund the modification of houses to make them more accessible to people with a limited range of disabilities (DOH, 2000). However, the take up is very small at this stage. By September 2003,

only 222 variation subsidies had been approved (DOH, 2003). This is discussed in more detail below in connection with accessing the housing subsidy.

In the workshops, participants in the study outlined a range of issues that related to their homes and the plots on which they lived. The most common issue revolved around inability to use the toilets that had been built on their plots, or lack of access to sanitation. Pit latrines are difficult to use for people with physical or visual impairments, and flush toilets in RDP houses are often inaccessible (Figure 23.2). Others mentioned the need for grab rails to assist mobility, difficulties in making houses secure to keep out intruders (especially for visually impaired people), and problems with incomplete structures and water shortages.

Figure 23.2: Inaccessible toilets in RDP houses



More than half the people in the project sample (51.6%) used a pit latrine as their main form of sanitation. Nationally 30 per cent of the population rely on pit latrines – according to Statistics South Africa (Stats SA, 2002). A further 67 per cent had access to a water tap on the plot, and the remaining 33 per cent used

communal taps or water tanks. New government housing is serviced with toilets, either as a separate structure outside the main house, or built within the house.

*Figure 23.3: RDP and ESCAP toilet plans*

RDP toilet Mamelodi
(precast concrete)

PELIP & UN
suggested standard
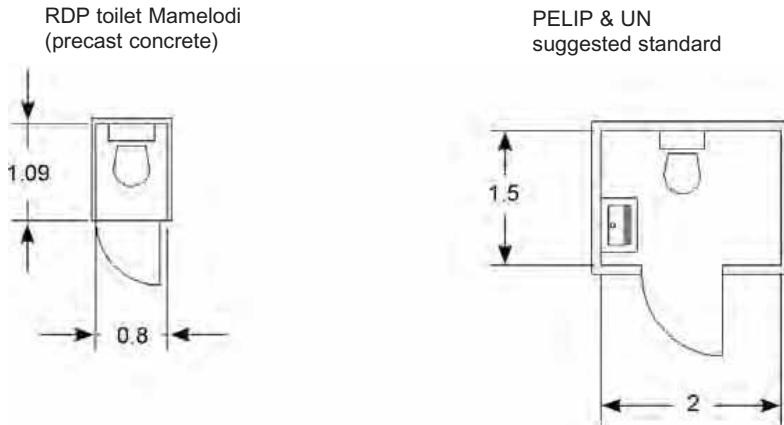


Simply put, the dimensions and layout of typical toilets on plots do not allow people with mobility limitations (including many elderly people) to use them. Figure 23.3 compares a typical RDP toilet with an adequate toilet, according to publications such as ESCAP (1995). The toilet units that have been constructed in Stanza Bopape and Saulsville are made of pre-cast concrete. This makes it more difficult for those households who wish to install grab rails to do so. Sometimes toilets built outside the house are hazardous to use at night because of high levels of crime. At other times, people told us they felt uncomfortable using inside toilets where the extremely small houses allow for little real privacy (Figure 23.4 shows a house plan with an internal toilet).

*Figure 23.4: Lack of privacy: toilet in small house*

In the informal settlement case study areas, there were no formal toilet facilities, either private or communal. In these cases, households either construct an informal pit toilet or simply dig holes at random over the plot. This lack of toilet facilities is problematic for people with disabilities.

Elias Mahoro[7] is blind and lives in a one-room wooden shack on a small plot with his girlfriend in the Stanza Bopape area. At the workshop, he spoke with some embarrassment about having to dig a hole on his plot in order to defecate. He mentioned the lack of privacy and also the fact that he was dependent on his girlfriend or someone else guiding him to an appropriate spot. Those with limited mobility due to paralysis, muscular weakness or pain similarly face problems when required to use informal squat toilets (see Figure 23.5).

*Figure 23.5: Drawing by Elias Mahoro showing informal squat toilets – the only option*
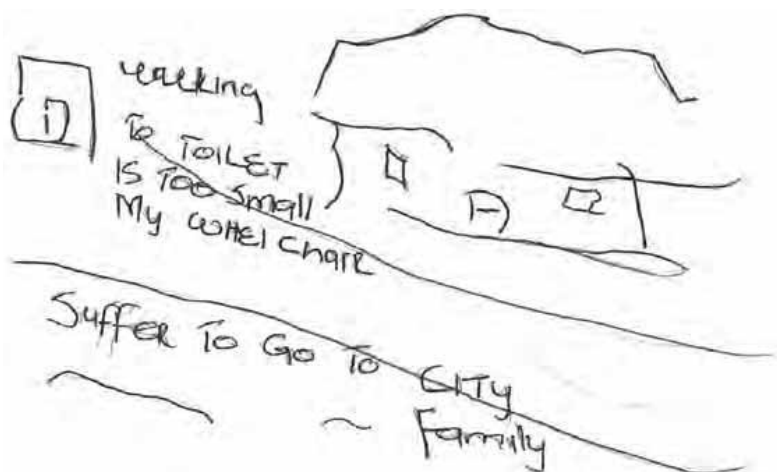


On the issue of accessibility in slums, the UN guidelines offer nothing explicit and simply stress that any improvement, rehabilitation and relocation programmes for slum dwellers must address the needs of people with disabilities and the elderly (ESCAP, 1995, p. 19).

Although access to toilet facilities was the main issue raised in workshops, other issues came to the fore during the household surveys. Few participants had either planned to modify their houses and plots to make them more accessible, or had the resources or the position of influence within the household in which they were living, to achieve those changes. Of note is that, when answering questions about difficulty with tasks around the house, most people referred to their own limitations rather than to limitations in the environment in which they were living.

We interviewed 186 people with disabilities and only 34 (18%) responded to a question relating to the problems they faced trying to carry out everyday chores and activities around the house. Given the sample profile, many more people are

likely to have experienced physical challenges and the low response rate indicates fairly low levels of consciousness of the relationship between impairment and the physical environment. Many of the people who did respond identified more than one problem.

Seven people discussed problems related to objects being too high for them to reach: not being able to hang out the washing because the line is too high; not being able to get to a storage box because it is on the top of the wardrobe and being unable to use a chair to climb up; not being able to reach things on shelves. Eight people referred to problems moving in and out of the house due to narrow doorways and/or steps. There were five respondents who mentioned uneven, stony or steep surfaces that were preventing them from moving around their plot or from getting off the plot. Four people mentioned the fact they were unable to carry heavy things; this is a particular problem for people living on their own with water taps outside the house. Within a traditional gender-based division of labour, men will often take responsibility for maintaining the physical structure of the house. Three male respondents felt the problems they faced were related to this sphere of responsibility. Whilst not being able to climb a ladder, mend a roof or use a hammer may not seem like a problem that one would experience on a regular basis, it was clearly of concern for these men. One respondent mentioned not being able to cook because she only has the use of one hand and another woman referred to not being able to mend clothes due to her impaired vision.

In light of the problems experienced, it is instructive to review the kinds of home modifications that are catered for by government housing subsidies. Disabled people who are eligible to apply for the housing subsidy (i.e. live in a household with a monthly income of R3 500 or less), are also eligible to apply for an increase in the subsidy amount to cover housing modifications that would adapt their home to their specific needs. Depending on the nature and severity of a beneficiary's disability, the following additional provision may be granted:

- R720 to provide 12 square metres of paving and a ramp at the entrance to a home;
- R300 to provide kick plates to doors;
- R1 100 to provide grab rails and lever action taps in bathroom; and
- R700 to provide visual doorbell indicators. (Department of Housing, 2000, pp. 183–184)

More recently, other modifications have been allowed for. However, our study found that *none of* the people living on RDP sites had applied for this subsidy or had heard of it. The problem would seem to be one of poor advertising. Information regarding the housing modification grant could be disseminated along with information regarding the subsidy variation. Applications for the modification grant are submitted at the same time as the application for the housing subsidy. It is important to note that individuals who acquire a disability after moving onto a RDP

plot are still eligible to apply for the modification grant. This should be made clear in order that low-income families avoid spending money unnecessarily – the family of one participant had spent money on building a ramp into their RDP house when they could have applied for a grant.

House and plot modifications which would assist people with partial and total sight impairment (for example, tactile surfaces, the use of colour and lighting) are not catered for adequately in the current subsidy provisions. Low cost, universal-access design solutions, such as not having many level changes between inside and outside spaces, have also not been mainstreamed in design circles.

This briefly describes the home environment. We shall return shortly to individuals' experiences of trying to access the housing subsidy.

### The settlement environment

This section looks at the disabled people's environment beyond their home, and considers how broader settlement design and types of servicing affect the lives of people who participated in the investigation.

Formal low-income housing under the current government housing programme is designed to be adapted by people once they occupy that housing. Although the architects and draughtspeople responsible for the design of the housing could make it easier and less costly to modify such housing, there is a great deal that households could do to adapt their housing to their own needs (Napier, 1998). In this sense, attaining freedom from barriers is a relatively surmountable task at the house and plot level, although unnecessary costs do arise because of lack of foresight and awareness on the part of the original designers. It is at the level of settlements that engineers, architects and planners leave a direct legacy which is much more difficult and costly to modify in order to remove physical barriers that obstruct individuals and the community. The creation of formal human settlements represents large infrastructural investment, as does the upgrading of informal settlements. Despite policy (but not legislated) which calls for barrier-free design (ODP, 1997) and many instruments which should guide design at the settlement level (e.g. *Guidelines for Human Settlement Planning and Design* (CSIR, 2000); *National Building Regulations*, Section S (SABS, 1990) and its associated Code 0246 (SABS, 1993)), it is exceedingly rare to see barrier-free design principles applied in South African low income settlements.

When asked about the public realm, there were three areas of concern that were raised by the research participants: roads and pavements, access to public buildings, and access to public and privately owned transport.

## Roads and pavements

The workshop participants discussed both formally designed environments and informally designed environments. People with locomotor and visual impairments raised the problem of uneven, muddy, rocky and unsurfaced roads, particularly in informal settlements (Figure 23.6). Participants pointed to the difficulties they experienced crossing busy roads, no matter what their disability. The lack of pavements meant that people with locomotor, visual and hearing disabilities were in danger from drivers. High kerbs in more formal areas meant people with locomotor and visual impairment struggled to move on and off roads.

*Figure 23.6: Poor roads are a barrier*



Whilst one might expect there to be muddy, uneven roads running through informal settlements, what was clear from the workshop findings was that even in new formal developments, insufficient attention is given to integrating barrier-free design features. For example, Mandela Village in Hammanskraal was upgraded in 1995. Yet, despite the development being so recent, the high kerbs (built to prevent flooding during the rain) have no kerb ramps built into them. Workshop participants further mentioned the fact that the roadsides are often uneven or there may be rubbish blocking their route. For someone with limited mobility, veering out into the busy road to avoid an uneven surface or obstacle is particularly dangerous and those with visual or hearing disabilities may be unaware of oncoming traffic. UN guidelines

stress that 'pedestrian walkways should be as far as possible from vehicular traffic' (ESCAP, 1995: 64). At a national level, the *Guidelines for Human Settlement Planning and Design* (CSIR, 2000) similarly stress the need for planning to take into account pedestrian movement through a settlement.

Amos Baloyi is a 32-year-old wheelchair user who lives with his two adult brothers and two teenage cousins. He previously lived with his uncle in a formal area, but the family decided to move to an informal settlement to relieve overcrowding and in the hope of qualifying for a government housing subsidy. Their three-room shack is now located in an informal settlement in the Saulsville area. Whilst living at his uncle's house, the surfaced roads and more spacious plot meant that he was more able to move around independently both on the plot and in the wider community. In the informal settlement, the muddy, uneven paths that run between the plots mean that he is unable to leave the plot without assistance. This has severely reduced his independence and the scope of his social life (Figure 23.7).

*Figure 23.7: Drawing by Amos Baloyi showing how muddy uneven paths prevent independent movement*
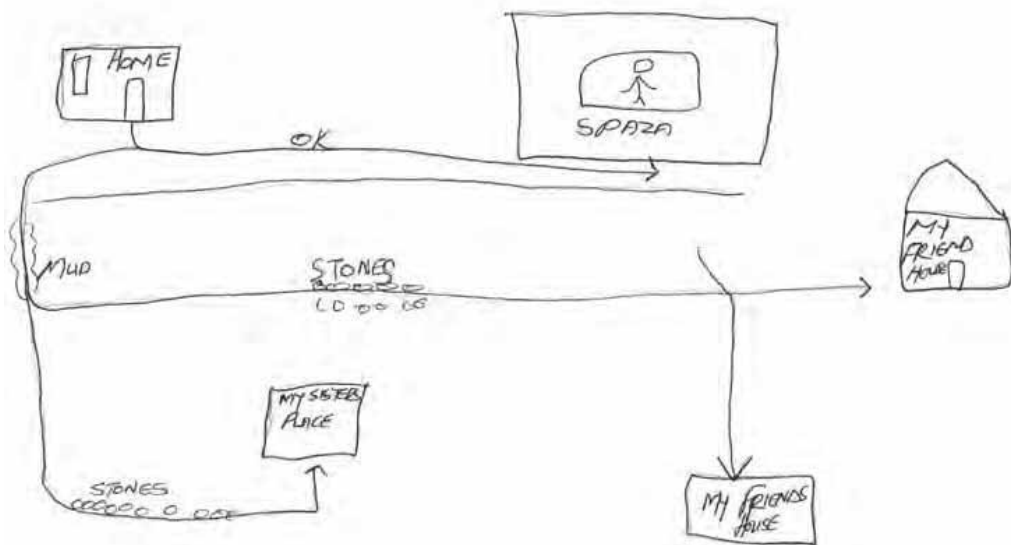


Road and pavement design can be altered given the necessary design expertise and without great cost. City-centre areas tend to be designed for greater accessibility (although many of the subtleties and now common in many other countries are ignored). Outlying townships are rarely designed for ease of movement and safety however, reflecting the unequal allocation of resources of the city government to the centre and the peripheries.

*Public and commercial buildings*

Public and commercial buildings also provide an opportunity to create conditions for universal access. Participants highlighted problems with accessing public toilets in many public buildings, with no provision for places to sit, even at pension offices which were specifically meant to cater to the elderly. The access to many buildings only by stairs (e.g. banks, schools, clinics, railway stations) adversely affected people with locomotor disabilities, and public phones and automatic teller machines were placed too high for wheelchair users.

In commercial premises such as shops, the degree to which property owners catered to the needs of people with disabilities depended very much on the attitude of the owners and managers of the shops, instead of being dependent in any way on formal regulations which might ensure some level of universal access. Research participants visited various public buildings as part of the study.

Peter visited his local general store to assess accessibility. He found that it was difficult to turn corners due to stock being kept in the aisles, and the shop owner agreed to move the stock. Products on the top shelves were difficult to reach and he could not reach products that were at the bottom of the freezer.

During a visit to Saulsville railway station it was found that ticket counters were too high for wheelchair users, toilets were inaccessible, staircases limited access to platforms (Figure 23.10), and the gap between platform and carriage made it difficult to board trains. In contrast, the Saulsville police station, although not yet fully accessible, had been adapted with ramps, accessible toilets and lower counters as a result of the direct lobbying of one of the project's community facilitators a number of years before the research project took place.

*Figure 23.8: Saulsville railway station: no access*

*Public and private transport*

After releasing some of the research findings in a public forum targeted at decision-makers and including community-facilitator representation, the comment was made that attention to the 'micro-architecture' of public spaces and buildings was all very well, but if a person could not get from their homes to such facilities in the first place, because of inappropriate public or private transport, then changes in these other environments would be of little value. Although this investigation did not focus on transport issues (in that another DFID funded project was already treating this in detail), some of the greatest barriers reported by participants were in the area of public and private transport.

For people with disabilities living in the four communities studied, the main form of transport was taxis or the public bus system. Overtrading on some taxi routes had led to violent conflicts between drivers' groups, and taxi drivers continued to have a reputation for being aggressive. Public buses are subsidised and mainly run between centres of employment and peri-urban residential areas. Access to road transport was an issue that was raised in all workshops held. The main concerns expressed by participants can be summarised as:

- Inability to afford regular taxi use;
- Negative attitudes of taxi drivers to disabled people;
- Long distances between bus/taxi stands and home or destination;
- Difficulty in getting on and off transport.

Illustrating the combination of these factors is the story of Emily Radebe who is 78 and lives with her 34-year-old daughter and three grandchildren (ages 1, 9 and 14 years) in a one-room shack in an informal settlement in the Hammanskraal area. One place that Emily does like to go is the luncheon club for pensioners that is held at the local community centre every week. Getting from her house to the main road is difficult because of steep, rocky and muddy conditions. Once she gets to the main road to hail a taxi, she faces other problems. The taxis are not designed to be accessible to disabled people and she finds it difficult to get in and out of the taxi and find space to put her walking frame. The drivers are sometimes impatient. A further barrier for Emily is limited finances. Some weeks there simply is not enough money to cover the R10 return fare. Once Emily gets to the community centre, she faces another barrier. Although she can get into the centre itself, the toilet at the centre has a set of stairs at the entrance, making it difficult for her to use. It is clear that Emily faces financial, social and physical barriers when she tries to make a simple trip to her local community centre.

Participants also reported that many drivers do not stop to pick up people with disabilities. After discussion with a taxi owners association, it became clear that the drivers' negative attitude towards disabled people might be attributable to various reasons. For instance, it takes a long time to pick up a person with a disability – particularly those with a locomotor disability – as they are slow to get into the

taxi, and folding up a wheelchair is time consuming. This additional time makes it difficult for drivers to reach their expected targets for the day.

Public transport is little better. At the time of the study, there was only one accessible commuter bus in Gauteng Province.[8] PUTCO (Public Transport Company) recently invested its own money in developing an accessible bus as a part of its social responsibility policy. The bus has a wheelchair lift and space for four passengers in wheelchairs. Drivers were well trained in accommodating the needs of people with disabilities. However, the coverage by such transport is woefully limited, and efforts should be made to move quickly beyond pilot projects based mainly on goodwill towards policy and legislative imperatives.

The built environment is designed and created by different actors, from the self-made shacks built by squatters to city-wide transport systems shaped by national and municipal policies. People should be able to move continuously and without difficulty through the built environment. However, it is clear that there are a host of existing barriers, both physical and attitudinal, to this notional freedom of movement.

## The institutional and legislative environment

Behind the physical picture that has been sketched above is the policy environment which seeks to develop funding and institutional instruments to improve the built environment. National legislation, housing subsidy provisions and public statements indicate a willingness to create a barrier-free environment. Are the existing regulations and institutions sufficient to create these conditions? This section reports on findings from the study in relation to this question.

### Accessing housing benefits

The government housing benefit that is available to people with disabilities includes a housing subsidy, which allows the construction of a typical $30m^2$ concrete block house and an additional amount to fund certain modifications to the house, according to the needs of the person with the disability who is applying for the subsidy or is part of the household applying. The uptake of this form of subsidy has been slow. This investigation found convincing evidence that, apart from the physical barriers of reaching municipal and provincial offices to apply for or follow up progress on applications for housing subsidies, there were a range of other less visible barriers to entry.

As none of the participants in the current study lived in households with a monthly income of more than R3 500, all would have been eligible for the housing subsidy. In summary, 39 per cent of our sample lived in households that had already been allocated a formal plot. Of this group, 65 per cent lived in households that moved onto 'site and service' plots (i.e. without the initial provision of a formal house),

whilst 35 per cent had moved onto a plot with some form of formal shelter provided. Of the total sample, 24 per cent lived in settlements that had been upgraded, with services being installed. Most of this group came from the Hammanskraal research area, where the development of Mandela Village was an atypical case of in-situ upgrading. Of the total sample, 37 per cent lived in unrecognised, informal settlements, in households that were waiting to be invited to apply for the subsidy, in the process of applying, or waiting to be allocated a site.

Moving from the settlement type to the house type, Table 23.3 outlines the frequencies of different types of shelter occupied by people with disabilities in the sample.

*Table 23.3: Dwelling types occupied by sample*

| Type of dwelling | Frequency | % |
|---|---|---|
| Backyard shack | 16 | 8.6 |
| Backyard room | 3 | 1.6 |
| Main shack | 128 | 68.8 |
| Main house – formal complete | 11 | 5.9 |
| Main house – roof house* | 1 | 0.5 |
| Self-built house | 27 | 14.5 |
| Total | 186 | 100.0 |

Note: – 'Roof houses' in Mamelodi are special variations of the RDP starter house. A corrugated iron roof on an iron frame is constructed with only the toilet being enclosed. Residents are expected to add the main walls, windows and doors.

Rather than dealing with random individual applications, participants in informal settlements were asked to wait until their ward representative was advised by the local councillor that they could put in a group application for all the residents in the ward. Residents may live in the informal settlement for a number of years before being invited to apply. Some of the research participants complained of waiting five years or more before being invited to apply. From the time of application, residents may have to wait for up to another five years.

In the application process, evidence was gathered of discrimination in the subsidy application that related specifically to the participants' disabled status. A number of single adult men mentioned the difficulty they faced in accessing the housing subsidy. The Housing Code states that someone is eligible for the housing subsidy, if 'he or she is married or co-habiting' or if 'he or she is single and has dependants'. As most one-parent households in South Africa are headed by women, there is a

popular understanding that in order to be allocated a house, a man must have a female partner or dependents. This is in fact not the case, and the Housing Code waives these conditions for people who have a disability.[9] However, this waiver has not been widely publicised and many officials and residents are unaware of it. In fact, none of the 186 participants, nor the social workers who specialise in disability issues, were aware that there was a waiver on the standard qualification criteria nor that there was an additional variation subsidy that would allow people to improve accessibility in and around their houses.

In general, discussion in the workshops picked up on the fact that many men with disabilities are unmarried, and there was a suggestion that it was more difficult for them to find partners. The groups also discussed the fact that as a disabled person, a man had less likelihood of finding employment and therefore had only the disability grant as income. The grant of R620 a month (at the time of the study) was insufficient to allow a man to save enough for '*lobola*' (bride price), and to cover the cost of maintaining a family.

Although no female participants brought up the issue of applying for their own plot or house, this should not be taken as an indication that independent home ownership was not equally important for women with disabilities. It may be that women are confident that once they start a family, they will be able to apply for a plot. However, this obviously means that those women who discover they are infertile or fail to find a partner will be forced to continue to live as adult dependants. As 57.4 per cent of the women in our study aged 18 years and above lived with their children, it may be a problem that fewer women have had to confront. Of all the adult women living in government-subsidised housing, 36 per cent were household heads, which suggests that over a third of adult women with disabilities have not experienced difficulties accessing the housing subsidy under the criteria of a 'single person with co-dependants', regardless of their disabled status.

The situation is very different for adult men with disabilities. No male with a disability aged over 18 years who lived with his own children lived in a household of more than five. In contrast, men without children lived in households with up to 10 members. In stark contrast to over 50 per cent of adult women with disabilities living with their own children, only 5.7 per cent of all adult men with disabilities aged 18 and over lived with their children. For the men in the workshops who raised this issue, their experiences of being unsuccessful in applying for a housing subsidy meant that they were forced to continue living as an adult dependant within an extended family, or remain in a shack. The problems that participants mentioned in relation to living as a dependant included overcrowding, lack of privacy, misuse of the disability grant by other members of the household, and a lack of independence.

Some single men with disabilities reported having responded to the problem of not being able to apply for a disability grant by entering into 'false' relationships, either

by entering into an 'arrangement' with a female friend or by setting up a relationship that they finish once the subsidy has been approved. For example, a friend of Johannes Dambuza, who is sight impaired, set up a relationship for him in order to meet the selection criteria to qualify for the housing subsidy. Once he had secured the tenure, he ended the relationship, as it was not a genuine one. Morris Baloyi also has a sight impairment and currently lives in an informal settlement in the Stanza Bopape area. He has encountered problems in securing a permanent site, because as a single man without children, he does not fulfil the requirements commonly believed to be stipulated in the criteria. He has been involved in numerous relationships with the intention of enjoying the benefit of owning a house/site, but each time the site is allocated, the relationship has ended. From these examples, it would appear that the criteria or, in this case, mistaken perceptions about the criteria that apply to people with disabilities, have serious social impacts as people manoeuvre to qualify for benefits that, ironically, they do already qualify for. Several test cases were taken on as part of the PAR process, and participants emerged from the project with a better grasp of the potential benefits available to them. The education of service providers (government and non-government) would be a more wide-ranging exercise.

A representative of Gauteng Provincial Government admitted that there had been little action taken in the past to raise awareness of the disability variation or the criteria which apply. The Gauteng Provincial Government is beginning to tackle the problem. In order to increase the number of applications for the variation subsidy, the government has set up a sub-directorate to assess the effectiveness of the municipal governments' current handling of the disability variation in the subsidy application procedure. A task team has been formed to ensure that the information on the subsidy is widely disseminated. However, an interview with a training officer linked to the task force in August 2002 revealed that, so far, training has only been offered to housing officials at the municipal level.

Whilst this awareness raising is welcome, it is a vertical, top-down model of dissemination and as such fails to address the issue of awareness at the community level. This study has shown that, for the individual person with a disability, the housing subsidy application process is experienced as a complex and somewhat fraught relationship between applicant, councillor and ward representative. The applicant is essentially passive in the process, waiting to be invited to put in an application. For the participants in the study, their understanding of the housing subsidy is shaped by the incomplete knowledge of the ward representative, whose understanding of the subsidy in turn comes from the councillor and his representatives.

There is a clear need for widespread awareness-raising amongst officials and politicians responsible for allocating subsidies and other benefits, both to address their knowledge of the regulations which they are charged to implement, and to address attitudinal barriers that they place in the way of people who approach

government in good faith. At the same time, to increase informed demand for the subsidy and variations, a targeted communications campaign is essential. If people with disabilities, and the wide range of lobby groups that represent specific interest groups, are to mobilise to access the benefits that have been designed to meet real needs, then a more active pursuance of the rights of disabled people in the housing arena is warranted. The degree to which people became networked and begin to achieve greater access to services through this limited research project is evidence that higher levels of organisation, coupled with sound information about benefits, is a potentially empowering combination.

## Building regulations and guidelines

Given the evidence about the barriers that exist to accessing both benefits and moving through the physical environment, one might think that the regulatory environment is non-existent when it comes to universal access. However, a great deal of work has been done around the regulatory environment. The *National Building Regulations* of 1986, Section S, refers specifically to the design of more accessible buildings (SABS, 1990). There is a more detailed, associated Code of Practice (SABS, 1993). However, the regulations provide themselves with what appears to be a 'let-out clause', as they state that 'economic considerations may make it difficult to provide facilities in all buildings'. Furthermore, the guidance in Section S of the building regulations does not apply to dwellings and therefore there is no requirement that designers and builders involved in constructing dwellings take note of Section S. Similarly, the status of the Code of Practice is ambiguous, it not being clear whether it is afforded the same force in law as the original *National Building Regulations*.

Section S of the *National Building Regulations,* fails to consider the obstacles and inconvenience caused by reflective and otherwise misleading surfaces, or the use of tonal colour and contrast, which affect people with sight impairments and people with intellectual disabilities. In fact, many of the more recent innovations which address a wider set of types of disability are ignored.

The South African Human Rights Commission's (SAHRC, 2002, p. 28) review of built environment legislation and disability also highlighted the point that there is currently insufficient enforcement of Section S by building control officers, which has resulted in the majority of public buildings in South Africa being inaccessible.

The *Guidelines for Human Settlement Planning and Design* (CSIR, 2000) stresses the importance of designing settlements with the pedestrian in mind. However, consideration of the disabled pedestrian is limited to references to ramps and access for paraplegics (CSIR, 2000, Ch.5.3), consideration of wheelchair users (CSIR, 2000, Ch.5.4), and 'sloped openings in kerbs' (CSIR, 2000, Ch.8). Wheelchair users are not the only disabled people whose needs must be integrated into planning. In a country where the most common disability is sight impairment, there should be a greater consideration of people with sight and hearing impairments, and forms of

locomotor disability that result in the use of assistive devices other than wheelchairs (Gibberd, 2001).

The Less Formal Township Establishment Act of 1991 was brought in to facilitate the rapid construction of low-income settlements in order to encourage development and stimulate the economy. The Act allows the local authority to give permission to the developer to bypass legislation relating to town planning and building and thus provides a means of bypassing any legislation relating to barrier-free environments for people with disabilities (Gibberd, 2001).

## Conclusion and challenges facing South Africa

It is clear from the issues outlined above that planning legislation and guidelines in South Africa fail to fully integrate the needs of people with disabilities through barrier-free design requirements. National design guidelines need to be rewritten so that they include correct, up-to-date technical information, consider the comprehensive needs of all people with disabilities, and take into account the affordability of the measures suggested with an emphasis on low-cost and 'no-cost' interventions. In order to achieve barrier-free environments, guidelines relating to access should be integrated into general guidelines under appropriate headings, rather than being set apart. The legal requirement to comply with accessibility guidelines needs to be made much clearer. The SAHRC report (2002) recommends that legislation must be regularly updated, strictly monitored and imposed, and the repercussions of non-compliance made much clearer.

At the same time, people with disabilities and organisations which represent disability rights can take a greater role in improving mobility, by becoming more aware of the physical adjustments that can be made in the home and settlement environment. Although awareness of the physical environment as barrier can and should be heightened, the fundamental issues of affordability and empowerment, especially of people living in poverty and with disabilities, remain key challenges.

Until the changes outlined above take place, housing settlements that fail to include barrier-free design elements will continue to be developed and disabled people living on low incomes will continue to find themselves unable to move about the communities, towns and the cities in which they live. The earlier discussion about seemingly progressive housing benefits and building regulations, when juxtaposed with the realities of the disabled people living in low-income settlements in our sample, illustrates that in a country where the rights to freedom of movement and non-discrimination are constitutionally enshrined, there remains an immense gap between intention and reality.

The emphasis in the housing field has been on mass delivery to cater for the needs of a very broadly defined notion of demand for housing (see Smit, 1999; Bond, 2000). This is partly justifiable given the magnitude of the housing backlogs that existed in

1994, but has meant that the more specific needs of certain sectors of society have been passed over in the drive towards large numbers of houses. Where provision has been made, we have seen that attitudinal barriers have often frustrated progressive legislation.

In a country where over 16 per cent of the housing stock is informal (Stats SA, 2002) and another 10 per cent is new formal government subsidised housing,[10] it is clear from this investigation that people with disabilities living in these situations continue to confront many physical barriers to full participation in society.

Policies and guidelines exist, but need updating and enforcement. The institutional wherewithal is often not present to deliver on policies, and attitudinal barriers exacerbate the difficulty of accessing benefits. Key to improving the situation is the need to continue to raise awareness of accessibility issues amongst low-income disabled people in order that the fight for these changes can be located where it can be meaningfully articulated.

## Notes

1   The project was funded by the Department for International Development (DFID) of the British Government, managed by Dr Justine Coulson through the University of Newcastle upon Tyne, and with case studies co-ordinated by Concerned Action Now, an NGO based in Delhi that specialises in research and advocacy on disability, and the Council for Scientific and Industrial Research (CSIR), a parastatal based in Tshwane.

2   People with disabilities all over the world identify the attitudinal behaviour of the nondisabled as a massive problem they face throughout their lives. This negative social process is often described as 'disabilism' and occurs as a combined and cumulative effect of prejudice, humiliation and discrimination.

3   This document is also available online at: http://www.unescap.org/esid/psis/disability/decade/publications/z15009gl/z1500901.htm

4   These refer to the *Standard Rules on the Equalization of Opportunities for Persons with Disabilities*. Four of the eight standard rules were addressed in this project, namely: accessibility; education; employment; income maintenance and social security.

5   This is Rule 5, Part (a)1 downloaded from http://www.unescap.org/esid/psis/disability/decade/st-rule2.asp#tar.

6   In the South African case, the full time researcher was Gertrude Matsebe.

7   All names have been changed to protect confidentiality.

8   The Johannesburg Metropolitan Area has purchased 15 access buses (double deckers) to integrate both people with disabilities and able-bodied people. Although they started operating late in 2002, they operate from the city centre to the surrounding suburbs and therefore do not go to the townships where the majority of  people with disabilities live. These buses were also used in 2003 to help with transport on the International Day for People with Disabilities in areas around Gauteng (including Tshwane).

9   'In situations where the subsidy is being awarded to a household where a member of that household is disabled, a number of exceptions apply: 1. Disabled subsidy applicants need neither be married or cohabiting, nor have financial dependants.' (DOH, 2000, p. 178).

10  This information is based on DoH 2001 delivery figures (http://housing.gov.za). Barriers are also likely to be significant in traditional rural housing stock, accounting for another 15 per cent of housing stock, and an unknown percentage of old township stock.

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