The Inclusion of South Africans With Disabilities in Public Space: A Bloemfontein Case Study

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INTRODUCTION

In the recent past, access for people with disabilities to public buildings and facilities in cities has become an important part of the political agenda, and many public authorities internationally are promoting strategies for an "accessible built environment" (Imrie, 1996; Chouinard, 1997). In both Britain and the United States of America disability activists have campaigned for legislation that would make it mandatory for public buildings to be accessible to people with disabilities. In the USA, the American Disability Act (ADA) was passed in 1990, and was seen as a major victory for the activists. In Britain similar legislation was finally passed in November 1995 in the form of the Disability Discrimination Act (DDA), after 13 earlier unsuccessful attempts had been made to introduce such legislation between 1982 and 1995 (Butler and Bowlby 1997: 411). In Australia the Disability Act of 1986 and Disability Discrimination Act of 1992 were aimed at promoting the importance of valued roles and competencies for people with disabilities in the community (Patterson, 2001). However, in South Africa, there are at present no laws specifically for the benefit of people with disabilities, although the rights of this group of the population are entrenched in the South African Constitution, as well as the Bill of Rights.

Because people with disabilities find it difficult to come into their own in a world that focuses mainly on the needs of able-bodied individuals, greater care should be taken to adapt the built environment for this disadvantaged group of society. Individuals with divergent disabilities experience the environment in which we live differently. Birnie and Grant (2001) report that some students with mental health difficulties find unfamiliar environments stressful, while blind and vision-impaired individuals are also known to encounter problems when confronted with unfamiliar environments, resulting in disorientation, panic and fear (Golledge, 1993). Desforges (1999) found that a student with mobility difficulties, doing fieldwork, found the experience uncomfortable and isolating, which

Urban Forum, Vol. 14, No. 4, October-December 2003.

reduced the quality of the experience in such as environment. The day-to-day artifacts which the able-bodied person takes for granted are usually out of reach, or unavailable, to the wheelchair-bound person (Imrie, 1996). From this discourse, it is clear that certain everyday factors that are insignificant to the able-bodied person might spatially displace people with disabilities. Given this fact, this particular group of society might come to be regarded as being "out of place" in such environments, both by other individuals and, very often, also by themselves (Hall, Healy, and Harrison, 2002). There is also some evidence that people with disabilities internalise some of the stereotypical attitudes towards them (Butler and Bowlby, 1997). However, participation in wheelchair sport may give rise to feelings of empowerment, but also to feelings of resistance (Bedini, 2000; Ashton-Shaeffer, Gibson, Holt, and Willming, 2001).

Exclusion can be experienced by an individual in society and is the result of a unique interplay between the dimensions and characteristics of exclusion specific to the circumstances of the individual. In recognising the unique experiences of exclusion, it is possible to appreciate that exclusion cannot necessarily be measured in a composite way, despite the political (and academic) expediency of measures of social exclusion. Exclusion should not, therefore, be seen as a single, additive quality, in which characteristics are necessarily related, the sum of which is greater than each individual part. In addition, many of the characteristics of exclusion are non-quantifiable, for example, powerlessness, self-esteem, isolation and perceptions of choice (Kenyon, Lyons, and Rafferty, 2002).

In studying people with disabilities, in an environment created for able-bodied individuals, the ecological theory has to be taken cognisance of. This theory assumes that there are multidirectional interconnections between individuals and their environment (Howe-Murphy and Charboneau, 1987). Another facet of importance is the mutual influence of the individual on a system and the system on the individual (Germain, 1991). In the case under discussion, the individuals with disabilities and the community, in which they live, including the facilities and services, are related and reciprocally influence each other. Applying the ecological theory provides insight into the individuals' orientation to the environment in which they live and the way they operate within this environment (Devine and McGovern, 2001). As well as the manner in which the environment influences them and the way in which they judge their worth in terms of future possibilities. There are different assumptions that are associated with the ecological theory. One assumption is that problems or limitations within a system should be seen as the result of multiple variables rather than of a single causal factor (Munson, 1991). Another assumption of the ecological theory is that the envi-

ronment should be developed so as to be as unrestrictive as possible and provide maximum support, thereby empowering the individual to attain optimal independence within a specific setting (Germain, 1991).

In South Africa approximately 2,7 million (6,6 %) of the total population are disabled, according to Statistics South Africa (1996: 35). Twenty-one percent of this group are physically disabled, 41 % are visually handicapped, 14,4 % are hearing-impaired and 7,2 % are retarded. This figure is an underestimation as it excludes people who are institutionalised. It also fails to portray people with temporary disabilities. There is thus an estimation that up to twelve percent of the South African population are moderately to severely disabled (Office of the President 1997). Although no legislation has been introduced in South Africa for people with disabilities to date, their rights are entrenched in the South African Constitution and the Bill of Rights as well as accessibility to buildings are ensure with the *National Building Regulations and Standards, Part S (SABS 040 of 1990)*. Therefore, since they are seen as an integral part of society, public spaces should be accessible to the disabled. The purpose of this study was to determine how accessible public space is for this group of the South African population. Bloemfontein was used as a case study because of its central location in South Africa. It is also the capital of the Free State Province, while the city's central location makes it the ideal venue for the hosting of events.

This paper is divided into two sections. In the first section, an evaluation model was developed based on the building regulations for people with disabilities as published in the *National Building Regulations and Standards, Part S (SABS 040 of 1990)*. In the second section, a selection of consumption facilities (recreation, cultural and retail) in Bloemfontein were evaluated against this model.

EVALUATION MODEL

To evaluate accessibility for people with disabilities, especially those who are confined to wheelchairs, it was essential to develop a model with a set of criteria against which to test public buildings and venues. The criteria were obtained from the governmental requirements as published in the *National Building Regulations and Standards, Part S (SABS 040 of 1990)*. These criteria highlight certain accessibility features such as the availability of parking, ramps and lifts as well as accessible corridors and toilets. Each of these accessibility features is discussed in terms of certain properties; for instance, whether or not parking is available for wheelchair-bound people, whether it is of the correct width and whether it is demarcated with the correct access sign. These criteria were given to physically handicapped people of the Jean Webber Home for people with dis-

Table 1

Evaluation Model

Accessibility Features	Properties	Values
Parking	Parking available	5
	Width 3,5 m	3
	Access sign available	2
Ramps	Ramp available	4
	Gradient	2
	Width of ramp	2
	Kerbs and hand rails	1
	Surface of ramp	1
Corridors	Corridor dimensions	6
	Wheelchair turning circle	4
Toilets	Size of toilet	3
	Door opening	2
	Height of toilet	2
	Backrest for toilets	1
	Height and position of handbars	1
	Height of washbasin, mirror and paper holder	1
Lifts	Size of lift	4
	Size of door	3
	Height of control panel	2
	Automatic doors	1

abilities in Bloemfontein, who were asked to evaluate the individual properties according to the degree of importance they attached to them.

The following averages were calculated for each of the 5 property (see Table 1). If parking was available at a building or venue a value of 5 was given, while a value of 3 was allocated if the parking area had the correct width of 3,5m. A value of 2 was given if the area was demarcated with an access sign for people with disabilities. For the availability of ramps, a value of 4 was allocated. A value of 2 was given for a gradient of 1 to 12, and another value of 2 if the width (1,1 m) of these ramps was as prescribed. Kerbs and handrails, as well as the surface of the ramps, were each given a value of 1. The width of between 0,750 and 1,150 m for corridors in buildings was given a value of 6, while if sufficient space was available to allow proper turning circles (1,5 m) for a wheelchair, a value of 4 was allocated.

The accessibility of toilets in buildings is also very important for people with disabilities. The size of the toilet enclosure is of significance. A minimum size of 1,7 m by 1,8 m is prescribed, since this size is big enough to accommodate a wheelchair, hence it is allocated a value of 3. The size of the door opening and the height of the toilet were given a value of 2 each. Whether the toilet had a backrest, the height and position of handbars as well as the height of the washbasin, mirror and paper-holder were allocated a value of 1 each. A lift becomes essential when a building has more than one floor because a flight of stairs makes venues inaccessible for wheelchair-bound people. A value of 4 was given if the lift was the right size, 3 if the door is big enough, 2 if the control panel is at the right height and 1 if the doors opened automatically.

This evaluation model was used to ascertain the extent to which certain buildings and sport facilities in Bloemfontein are accessible for people in wheelchairs, since these persons are most restricted by the built environment. A decision was made to evaluate the venues that are used for rugby, athletics, cricket, tennis, hockey and swimming meetings and matches in the city. Two parks in close proximity to the CBD were also included, namely King's Park and Hamilton Park, which are used for picnics by the residents of the city. Four well-known museums and two theatres were also included in the study. The museums in question are the Anglo-Boer War Museum/Women's Memorial, the Military Museum as well as the National Afrikaans Literature Museum and the National Museum. The first two are located towards the outer boundaries of the city, while the last two are in the frame of the CBD. The Sand Du Plessis Opera House and the André Huguenet Theatre are the two theatres, out of the five in the city that were included in the study. Finally a number of shopping centres were also included, two within the CBD and the remainder in the suburbs of the city.

ACCESSIBILITY OF RECREATION FACILITIES IN BLOEMFONTEIN

All these venues are located in very close proximity to each other just outside the central business district (CBD) of the city. The rugby and athletic stadiums were developed just before 1995 when South Africa hosted the Rugby World Cup. They were developed back-to-back, sharing facilities. These two sport facilities represent the newest developments and in the planning stage the needs of the physically disabled were taken into consideration. These two stadiums scored values of 98 %. They only lost points as a result of the fact that the toilets do not have backrests to support the backs of the disabled. The cricket stadium (Goodyear Park) has ample parking, but unfortunately no special parking provisions were

Table 2

Accessibility of Recreation Facilities

Venues	Parking	Ramps	Corridors	Toilets	Lifts	Total (%)
Sport Venues						
Rugby	10	10	10	9	10	**98 %**
Athletics	10	10	10	9	10	**98 %**
Cricket	5	9	10	8	n.a.	**80 % ***
Swimming	5	6	10	0	n.a.	**53 % ***
Tennis	5	0	10	0	0	**30 %**
Hockey	5	9	0	0	0	**28 %**
Parks						
King's Park	5	7	0	9	n.a.	**53 %**
Hamilton Park	5	0	0	9	n.a.	**40 %**

* Percentages calculated on the basis of s score of 40

made for people with disabilities. This venue also lost points on account of the fact that the ramps do not have handrails and the toilets have no handbars as required, while the paper-holder was also placed too high. Because all the facilities for wheelchair-bound people at the cricket stadium are on one level, points for lifts were not included in the final calculations. The cricket stadium obtained a score of 80 % (see Table 2).

The swimming pool (53 % accessible) is one of the older developments in Bloemfontein. It lost points because no parking provision was made for people with disabilities. The kerb of the pavement was lowered so that people in wheelchairs could enter the facility, but lost points for width, lack of handrails and the surface of the ramp. No toilet facilities are available for the disabled at this stage (see Table 2). Improving the ramps with a better surface and kerbs, and enlarging and redeveloping one of the existing toilets according to the necessary requirements could solve the problem concerning the toilet facilities. With these two changes to the facilities, there would be a marked improvement in the accessibility of the swimming pool. According to the manager, the lack of funds is a prohibiting factor for the upgrading of facilities at the swimming pool.

The tennis and hockey stadiums, with 30 % and 28 % accessibility respectively, obtained the lowest values. Both these venues received low values for parking because no special provision was made for people with disabilities, although ample parking space is available in both cases. In the case of the hockey stadium, ramps had been developed that met almost all requirements except for

handrails. These ramps lead to the front door and foyer of the pavilion. These doors are always locked as the foyer is used for meetings, with the result that people in wheelchairs are not able to reach the hockey field in practice, although ramps are available. The corridors are very narrow, the toilets are inaccessible and because the stadium is on more than one level, a lift is essential for people with disabilities to move freely. For these three variables, the hockey stadium did not score any points at all. As in the case of the hockey stadium, the tennis stadium received a 0-score for ramps, toilets and lifts because all these features are inaccessible for wheelchair-bound individuals. A flight of stairs gives access to the pavilion, while steps lead to the toilets. The toilets would have to be rebuilt to make them accessible to people with disabilities (see Table 2).

In the case of King's Park and Hamilton Park, it seems that both are only nominally accessible to the physically disabled. Both the parks scored high values for the accessibility of their toilets, but these facilities cannot be reached without assistance. In the case of Hamilton Park, the public toilets can only be reached by climbing over a low wall. In the case of King's Park the screen wall at the toilets is built too close to the door, with the result that a wheelchair-bound person will not be able to enter the facility. As in so many of the venues in the case study, ample parking space is available but no allocated parking has been provided for the disabled person.

ACCESSIBILITY OF CULTURAL VENUES IN BLOEMFONTEIN

Of the ten museums in Bloemfontein, four were included in the survey. The Military Museum (Fort Bloemfontein) is one of the older buildings in the city, while the National Museum was included for its importance to educational institutions in the city and province. The Anglo-Boer War Museum/Women's Memorial was included because of its importance in housing artefacts dating from the Anglo-Boer War and its significance for local and international tourists. Finally, the National Afrikaans Literature Museum was included as the only one of its kind in South Africa.

When the accessibility of the museums in Bloemfontein is evaluated, it should be noted that these are all older developments. The Military Museum was built in 1848 and converted into a museum in 1978. The National Museum and Anglo-Boer War Museum/Women's Memorial was built in 1915 and 1931 respectively. In the case of all these museums, accessibility to the toilets is a problem. These facilities can only be reached by stairs or alternatively, they have openings that are too narrow with the result that they are not negotiable with a wheelchair (see Table 3). The only exception is the Anglo-Boer War Museum, where a toilet for

Table 3

Accessibility of Cultural Venues

Museums	Parking	Ramps	Corridors	Toilets	Lifts	Total (%)
Museums						
Anglo-Boer War Museum/Women's memorial	5	9	10	10	0	**68 %**
Military Museum Fort Bloemfontein	5	7	10	0	n.a.	**43 % ***
National Museum	0	10	10	0	0	**40 %**
National Afrikaans Literature Museum	0	0	10	0	0	**20 %**
Theatres						
Sand du Plessis Opera House	5	9	10	10	10	**88 %**
André Huguenet Theatre	5	8	10	10	10	**86 %**

* Percentages calculated on the basis of a score of 40

people with disabilities has been incorporated in the newly developed restaurant. In the case of the Military and War Museums, ample parking space is available, but no attempts have been made to set aside parking for people with disabilities. The National Museum is located in the CBD of Bloemfontein, while the only available parking is in the streets surrounding the building. The only prohibiting factor in the case of these museums is a lack of funds to upgrade facilities in order to make them more accessible for wheelchair-bound people.

The National Afrikaans Literature Museum is housed in an old government building, dating from 1875, that was redeveloped between 1908 and 1911 after a fire had destroyed a large part of the building. At this stage the museum is not accessible for wheelchair-bound people (see Table 3). However, the Free State Provincial Government has made R10 million available from 2002, to be allocated over a period of three years, for the restoration and redevelopment of the museum. The money will also be spent on making the building more accessible to people with disabilities by means of the building of ramps and toilets, as well as a lift that will be added to the museum.

The planning and development of the two theatres started in 1980 and both these venues are accessible for physically disabled people. The corridors, toilets

and lifts comply with the need for independence of wheelchair–bound people. The only problem encountered is that the ramp of the André Huguenet Theatre, giving entrance to the foyer, is very long, while the gradient is too steep to make unassisted access possible for the physically disabled. An access problem found at both these buildings is that, although ample parking is available, no provision has been made for reserved parking for disabled people.

Public buildings, as in the case of museums in Bloemfontein, and for that matter in South Africa, are not "friendly" towards handicapped people. These institutions are mostly housed in older buildings that were developed in an era when the needs of this group of the population did not receive a high priority. Unless the local, the provincial and the central government make funding available for the redevelopment of these buildings, they will remain inaccessible to the disabled.

ACCESSIBILITY OF SHOPPING CENTRES IN BLOEMFONTEIN

Seven of Bloemfontein's shopping malls/centres were included in the study. Two of these developments are located within the CBD of Bloemfontein while the rest are located in the suburbs of the city. The Southern Centre, Mimosa Mall and Noordstad Centre are all a 100 % accessible for wheelchair-bound people (see Table 4). Although a development such as the Southern Centre scored 100 % for accessibility, some oversights are notable. The kerb is not low enough to allow unassisted movement for wheelchair-bound people along the shortest route between the allocated parking area for the disabled and the main entrance to the centre. However, ramps in other areas of this development meet demands of the building codes.

The Fleurdal Mall only lost points with regard to the accessibility of the toilets, with a lack of appropriate handbars in the toilets and the excessive height of the washbasin. The two older centres in the central business district, namely Middestad Centre and Sanlam Plaza, obtained values of 85 % and 80 % respectively for accessibility (see Table 4). Both these centres could improve their accessibility by providing improved parking for wheelchair-bound people. Sanlam Plaza also has a problem with the ramps developed in the centre. The gradients are too steep and long, and also have a very slippery surface. Both these centres have lifts, but the controls are placed very high and because of this, it is difficult for people in wheelchairs to operate the lifts.

The centre with the lowest value for accessibility is the Waterfront, which is one of the newer developments in Bloemfontein. The first phase of this development was only started during 1998. The third phase was completed during 2002

Table 4

Accessibility of Shopping Centres

Shopping Malls	Parking	Ramps	Corridors	Toilets	Lifts	Total (%)
Southern Centre	10	10	10	10	n.a.	**100 % ***
Mimosa Mall	10	10	10	10	10	**100 %**
Noordstad Centre	10	10	10	10	n.a.	**100 %***
Fleurdal Mall	10	10	10	7	n.a.	**93 %***
Middestad Centre	7	n.a.	10	9	8	**85 %***
Sanlam Plaza	5	7	10	10	8	**80 %**
Waterfront	10	7	6	8	n.a.	**78 %**

* Percentages calculated on the basis of a score of 40

and further development is a possibility. The Waterfront was developed around a man-made water feature (Loch Logan), and is comprised of a large number of restaurants, coffee shops, pubs, other entertainment attractions and shops. This development lost points in respect of the ramps that are available, the lack of handrails, as well as kerbs and uneven surfaces. The corridors and walkways, especially those next to the water are made of strips of wood and are too narrow to be manoeuvrable for a wheelchair-bound person. In addition, no points were allocated for lifts, because only certain sections of this development can be reached with lifts (see Table 4).

It has to be remembered that these malls and centres are all privately owned and do have the financial backing at their disposal to adapt to the needs of their clientele, including the physically disabled person. Secondly all these developments are relatively new, or recently redeveloped, and for that reason were (or, in some case, should have been) more aware of the needs of all sectors of the population.

CONCLUSION

Although South Africa does not have laws protecting the disabled population, such as the American Disability Act of the USA or the Disability Discrimination Act of Britain, the country has an exceptionally liberal Constitution and Bill of Rights that protect the rights of individuals. In 1990 the *National Building Regulations and Standards, Part S* (*SABS 040*) was published. Twelve years hence, however we are still confronted with areas in our cities that are not accessible to the physically handicapped person.

From the Bloemfontein case study it was clear that only 3 out of 8 of the recreational facilities included in the study were access friendly to the physically handicapped person. The cultural venues, especially the museums are all housed in older building dating from 1848 to 1931 are the least accessible, only the two theatres dating from the 1980's allow access for wheelchair-bound people. All the shopping centres are to a large extent accessible. It is, however, a pity that the most resent development have so many oversights in accessibility. According to the municipality all changes to older buildings in the city will have to include accessibility for the handicapped person.

In the Bloemfontein case study, it was found that it is mainly the older buildings and developments that are inaccessible to the wheelchair-bound person. It was found that the local or provincial governments owned the buildings that are the least accessible. In many cases, these developments can be made more accessible for the physically disabled with the aid of small financial inputs, especially with regard to the development of parking areas and ramps. To improve accessibility at most of these venues, parking areas for wheelchair-bound people could be developed at minimal cost. This would involve the enlargement of parking-bays from the standard 2,4 to 3,5 m. New lines would have to be painted and signs would have to be erected to indicate that the parking is reserved for the disabled. The redevelopment of other facilities for people with disabilities, such as lifts, corridors and toilets could be more costly, because of structural changes that would have to be made to buildings.

Notwithstanding the South African Constitution, the Bill of Rights and the *Code of Practice: Accessibility to Disabled Persons of 1993*, this country's public spaces are still not entirely accessible for people with disabilities. With regard to the Bloemfontein case study, it seems that in many cases the built environment in South Africa is still being created to serve only the needs of the able-bodied person, through the omission of seemingly insignificant aspects such as erecting a sign that indicates reserved parking for the wheelchair-bound person.

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