

The spatial experiences of dwarfs within public spaces

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ABSTRACT

Dwarfism is commonly defined as anyone 4ft 10" (147.32 cm) or below and whose short stature involves a medical condition [Adelson, M. B. 2005. *The Lives of Dwarfs*, xv. NJ: Rutgers University Press]. Whilst it recognized that the built environment is unsuitable for dwarfs [see Kruse, R. 2002. "Social Spaces of Little People: The Experiences of the Jamisons." *Social and Cultural Geography* 3 (2): 175–191, Kruse, R. 2010. "Placing Little People: Dwarfism and Geographies of Everyday Life." In *Towards Enabling Geographies*, edited by V. Chouinard, E. Hall, and R. Wilton, 183–198. Surrey: Ashgate; Shakespeare, T., M. Wright, and S. Thompson. 2007. *A Small Matter of Equality: Living with Restricted Growth*. Newcastle: Newcastle University], this paper critically examines how spaces and facilities designed with other users in mind, including disabled people and children, can have unintended consequences for dwarfs. The data used in this paper are taken from semi-structured interviews and photo elicitation exercises conducted with 22 dwarfs living in the UK. Overall this paper shows the spatial experiences of dwarfs, which are a result of the unintended consequences of disabled child spaces and facilities, and suggests how Universal Design may be a more appropriate design concept.

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Introduction

Dwarfism is commonly defined as anyone 4ft 10" (147.32 cm) or below and whose short stature involves a medical condition (Adelson 2005, xv). There are less than 6000 dwarfs living in the UK (Shakespeare et al. 2007). This makes dwarfism quite a rare phenomenon in a country with a population of approximately 60 million. With dwarfism being quite a rare impairment, spaces and facilities are unlikely to be size suitable for them, including disabled spaces and facilities. Adding to this I argue that the needs of children will also be catered for, in certain circumstances, which could have unintended consequences for dwarfs.

Imrie (1996, 1999), focusing on urban spaces, suggests that architectural conceptions of the built environment cater for the able-bodied, average-sized person and thus public spaces are oppressive and exclusionary for people who do not fit these standards. This understanding of how buildings, and the facilities within them, disable people with impairments reflects a social model understanding of disability. Adding to this Kruse (2002, 2010) further suggests that spaces are 'statuarized', in other words geared towards people of average stature, resulting in dwarfs experiencing spaces differently.

Within the UK, the introduction of disability legislation, including the Disability Discrimination Act (DDA) (1995) and Equality Act (2010), means that public spaces and the facilities within them must be accessible for disabled people where reasonable. Examples include induction loops and large print signs for people with sensory impairments to ramps and accessible toilets for people with physical

impairments. This is to provide greater access for disabled people. Despite this these disabled facilities and spaces are not always suitable for a range of disabled people. As Wendell (1996) suggests people who use a wheelchair, due to chronic illness, are not necessarily constantly bound to their wheelchair but can have limited mobility and thus may prefer to carry out some activities standing. This can affect their access and use of disabled spaces and facilities which may only cater for those who have no mobility and thus are confined to a wheelchair.

Chouinard (1999) looks at how disabled spaces, which do not adequately accommodate various impairments, result in disabled people still struggling for better physical access. This shows that the implementation of disabled facilities and spaces are unlikely to be accessible for a number of different impairment groups and thus leaving them in a disabling situation. Disability tends to be understood as a mobility deficiency, which focuses architects' attention on wheelchair users at the expense of other disabled people (Imrie 1996). With a narrow conception of disability, accessibility and the elimination of barriers, through the implementation of disabled spaces and facilities, may not be adequate for dwarfs.

In the first section, I explore how disabled facilities can be both enabling and disabling depending on how they have been constructed and for whom. I argue that disabled spaces and facilities have been designed and implemented with a narrow conception of what disability is and thus do not fully accommodate the needs of dwarfs. In the second section, similarly, I question how spaces and facilities adapted for children can be both enabling and disabling depending on their purpose. In the same way that spaces are designed and constructed for the average sized, able-bodied adult, child spaces and facilities will be designed and constructed for the average sized, able-bodied child. I argue that a dwarf's body size is similar to that of a child's and thus child facilities will affect them in the same way as a child and thus may be problematical as dwarfs have adult needs. In the last section, I suggest how Universal Design could be a more accommodating design solution for a range of users, including dwarfs.

Before moving on I want to justify why I have chosen to use the term dwarf. The correct term to use to refer to someone with dwarfism is often contested and within the study the participant's preferred name for their dwarfism ranged from dwarf, person with restricted growth, person of short stature and little person. The majority of participants preferred the term dwarf. The term dwarf is also the most common term used both medically and socially when referring to someone with dwarfism. Despite this some people contest the use of word dwarf due to its relation to mythology. Similarly, the term little person can be used to refer to a Leprechaun or a child (Adelson 2005). The term little person, which was coined by the association, 'Little People of America' is very popular in North America but less so in other countries, including the UK. Although terms such as little person was preferred by some participants, I felt that it could not only refer to a child, but just someone of short stature and not a person who has any of the medical conditions, including mobility difficulties, known collectively as dwarfism.

Methodology

These data used within this paper are derived from semi-structured interviews carried out with 22 dwarfs living in the UK. Ages ranged from 18 to 68 years. Twenty participants were female, making them the majority. The majority of participants classed themselves as British, two participants were from South East Asia and one from Australasia, but all were living in the UK. There are over 200 different kinds of dwarfism, Achondroplasia being the most common form and which 16 of the participants had.

Data collection was carried out according to the ethical guidelines set out by Newcastle University and I ensured that the research was approved by Newcastle University's Ethics Committee before carrying out any fieldwork, including the recruitment process.

The methods I used were semi-structured interviews and photo elicitation exercises. Every method has its own limitations and thus by incorporating an additional method would help to compensate

for its limitations (Nairn 2002). Semi-structured interviews provide unique access to the lived world of participants and an insight to their experiences (Kvale 2007). Incorporating photo elicitation exercises can provide further information about their experiences in particular spaces. The incorporation of visual methods has been suggested as a way to reveal sociological insights that are not accessible by other means (Banks 2007). In the photo elicitation exercises, I used both photographs and maps to add further understanding as to how dwarfs experience public spaces. Photo elicitation uses photographs to invoke comments, memory and discussion in the course of a semi-structured interview (Banks 2007, 65). I choose six photographs (see Figure 1, for example), all of different spaces, including a shopping centre and high street. The aim was for the participants to point out what spatial barriers they were likely to encounter within each space and how they would respond to them. With telephone interviews the participants were sent copies of the photographs and maps prior to the interview so that we both had copies of images which we could discuss over the phone.

The initial idea, concerning the generation of photographs, was to distribute a disposable camera to each participant and ask them, prior to the interview, to take several photographs of spaces, such as their local high street, which we could then discuss later within the interview. I wanted participants to bring along photographs which were relevant to them and which provoked different feelings and experiences. This idea was later scrapped after speaking to a group of potential participants. They pointed out that because of their dwarfism they already received enough unwanted attention, such as staring, and taking photographs was likely to provoke even more unwanted attention. Everybody takes photographs, especially of interesting landmarks and captivating scenery, but why would they be taking photographs of mundane facilities such as a shopping trolley or cash point? It was thus unethical to put the participants in a position which could potentially provoke more unwanted attention and in turn affect their emotional well-being.



Figure 1. Image used in photo elicitation exercise, courtesy of: Ixia (2009).

Participants were recruited through organizations for dwarfs as well as through the method of snowballing. Interviews were conducted either as face-to-face interviews or as telephone interviews. Telephone interviews can prove to be more practical than face-to-face interviews especially when participants are scattered over a wide area (Trier-Bieniek 2012). Due to the rarity of dwarfism participants tended to be sparsely located across the UK and thus due to logistical reasons telephone interviews proved to be beneficial. All interviews were recorded with the consent of participants and later transcribed.

All themes were colour coded, using different coloured highlighters, and then grouped together. The object of coding the data is to draw out patterns and themes within the data (Basit 2003). I used a thematic analysis approach to draw out relevant themes through reading and rereading each transcript (Fereday and Muir-Cochrane 2006). Thematic analysis is the search for themes that emerge as being important to the research (Fereday and Muir-Cochrane 2006). The main themes were spatial barriers, social restraints, disability perceptions and cultural representations. These themes were used to construct the data chapters, with disabled facilities and spaces, and child facilities being the sub-theme to the spatial barriers data chapter.

The (un)suitability of disabled facilities and spaces

The implementation of disabled facilities and spaces should provide increased access for disabled people. The disability rights movement, which initially suggested that disability was a result of society, can be credited with nearly every change in the treatment towards disabled people including the provision of disabled facilities and spaces (Bickenbach et al. 1999).

Despite disabled people sharing common experiences it still needs to be recognized that the experiences of different impairment groups vary (Shakespeare, Thompson, and Wright 2010). This becomes problematic if planners are to implement a disabled facility or space for only a particular impairment. I argue that because dwarfism is not a common impairment and often its identity as a disability is contested (Shakespeare, Thompson, and Wright 2010) then implementing spaces and facilities suitable for dwarfs will be minimal, if not ignored. Despite this it can be argued that some disabled facilities and spaces can provide better access, as Myraar states:

I think in banks they have a lower desk which is quite good and at the GPs they are lower ... I go to the lower desk and wait for them to come and help. I have tried to go to the upper desk and they can't see me so I always use the lower desk. (Myraar, telephone interview)

In various spaces low counters have been installed, in order to comply with disability legislation including the DDA (1995) and Equality Act (2010) (legislation.gov 2012). The installation of low counters indicates that public spaces can be adjusted to increase access. Although the facilities may have been lowered for wheelchair users, the coincidence in height also allows Myraar better access. Thus if facilities need to be lowered for wheelchair users they will also be suitable for dwarfs.

Another disabled facility which can also be beneficial for dwarfs, provided it is designed appropriately, is a ramp. Only three participants spoke about using a ramp but the ones who did found it to be more adequate than using steps:

If we are going into a building and there is a ramp or steps we'll use the ramp ... Steps do vary in depth. People don't understand, although you will understand, but a step is often the same height as our knee. If an average person went up steps as high as their knees they would you know ... Also the ramp is sometimes a lot longer, if there is only one or two steps then we will use the steps, if they are not very high steps. (Joan and Steve, face-to-face interview)

Despite the fact that ramps are mainly to provide access for wheelchair users they can also be beneficial for dwarfs, due to steps often being too steep to use. This demonstrates that ramps can help them to have better access to buildings as they are easier to use. Although Joan and Steve then go on to say that if the ramp is very long and there are only one or two steps then they will use the steps

instead, but only if they are not very high steps. This shows that they have to assess the best means of access before entering a building. This is because having to walk up a long ramp takes longer, increasing the chance of them encountering mobility difficulties, which they both spoke about. Whilst steps may be too steep and difficult to use due to their body size. Thus they have to take into account two different problems caused by their dwarfism and work out which is less disabling. The use of ramps and steps, depending on their construction, demonstrates a multitude of different ways of accessing or not being able to access a space.

Similarly, another disabled facility, which was discussed in the majority of interviews, was the disabled toilet including both its advantages and disadvantages compared to using a non-disabled toilet:

Disabled toilets are often, the actual toilet which is porcelain is very often high, but it is high because they are assuming that the disabled person is a wheelchair user and needs it that high to transfer from wheelchair to toilet so often it is too high for us to get on to. (Lydia, face-to-face interview)

The toilets that say they are for disabled people have got really high seats so you have to climb on them. The good thing about them is that you can reach the sink and you can see the mirror and you can lock the door safely. (Jade, face-to-face interview)

The majority of participants mentioned difficulties using a disabled toilet due to it being designed to cater for wheelchair users. A partially accessible disabled toilet I argue leaves dwarfs in a catch-22 situation. They can either struggle to get onto the disabled toilet and then be able to use the lower facilities or they can use a non-disabled toilet and struggle to use the other facilities, such as the sinks which are often too high. Shakespeare (2006) suggests that disabled facilities and spaces can cause conflict between disabilities as providing for one impairment can cause disablement for another. Lowering the disabled toilet to suit dwarfs may be problematical for wheelchair users. Despite having a disability dwarfs are still made to feel out of place within a space designed to provide access for disabled people. Kitchin and Law (2001) argue that the socio-spatial construction of disabled toilets make them unsuitable for a range of disabled people as they are often built with a very narrow view of how they will be used and by whom.

Child facilities and spaces

In this section, I focus on how facilities and spaces constructed for children can have unintended consequences for dwarfs. It is not to suggest that to be a child is to be disabled, as children are not expected to interact within public spaces in the same way as adults. As dwarfs and children are of similar stature the purpose of the child facility or space can have the same effect on them. This of course then depends on why the facility has been put in place and thus may or may not be suitable for dwarfs. If it is thought that the facility may be misused by children then it will probably be put out of reach, causing it also to be out of reach for dwarfs. Placing a facility out of reach, to prevent a child from misusing it, does not disable them but rather protects them or prevents the facility from being misused. A facility which is unsuitable for a child will not affect an adult of average stature as they will be able to use the facility, such as a lock on a door placed out of a child's reach, but will affect a dwarf. On the other hand if a facility is put in place for children to help them then this may also prove beneficial for dwarfs. Jennifer talks about how she is unable to use a facility as she believes it has been purposely put out of place to prevent children from misusing it:

A good example of that [a child barrier] is the meat ticket machine in the supermarket; you know where you get your number. I can only imagine that that is high up to stop every kid wanting to take a ticket. On the other hand my solution to that is to get somebody to get me a ticket. But there are other situations like that. (Jennifer, telephone interview)

It can be contended that the way a child responds and behaves in a particular space is taken into account before the needs of someone with dwarfism. Accommodating for children before dwarfs

may be because there are more children within society and thus adapting for them is more practical and economical. This leaves dwarfs, such as Jennifer, dependent on other people. This demonstrates that child facilities can become another spatial barrier, which Alison and Tracy also talk about:

In the church that I go to we have got a kitchen and obviously things like knives have to be put out of reach [of children] and it is not accessible at all for me. I find that very frustrating and the storage cupboard that we have for the craft things is also really high up so that is frustrating. (Alison, face-to-face interview)

I remember I did a childcare course and where I did some of my training I use to think, how am I supposed to get through that door? I know it's to stop the children getting out but there are supposed to be like equal opportunities and there not sort of thing. (Tracy, telephone interview)

Alison mentioned in her interview that she helps out in her local church, where she leads the children's club. Putting certain facilities out of reach of children may prevent Alison from being able to carry out her duties as expected and be more reliant on the help of others. In the same way, children cannot reach a facility neither Alison nor Tracy can, placing them in the same situation as a child and in a sense this infantilizes them. Although the reasons for implementing the facilities may be valid, such as for safety reasons, it still means that they are made to feel out of place. Similarly, Kayleigh sees particular child facilities as spatial barriers which prevent her from accessing different spaces:

They are a huge barrier [child barriers]. Key pads and lock are always at a bad height. Getting into swimming pools at a hotel and in Australia a lot of playgrounds have locks on them so if I wanted to take my cousins to the playground I find it really difficult ... Sometimes I think it is necessary and sometimes I think it is over kill. (Kayleigh, face-to-face interview)

Kayleigh recognizes a number of child barriers which lead to disabling situations. The fact that Kayleigh describes them as a 'huge' barrier indicates that they are very problematical for her and a barrier which she encounters often. These child barriers that Kayleigh mentions have a lot to do with being able to access spaces for children. Both Alison and Kayleigh give examples of disabling situations because of child facilities and both mention spaces which can be associated with children, such as the playground. It therefore may be that higher incidents of exclusion will be prevalent around spaces for children, which could have an adverse effect on parents who are dwarfs.

Although there are some child facilities, which have been purposely put out of reach from children, there are some which have been lowered for the benefit of children. These facilities can also be used by dwarfs in order for them to overcome certain spatial barriers. These facilities, in some circumstances, can be more beneficial than disabled facilities and spaces in helping them to have increased access within public spaces:

I had a surprise one day went I went into the toilets in British Home Stores [British department store] and they had a low toilet there obviously for children and I thought it was a good idea and children would have a job reaching the taps and we encourage children to wash their hands. (Ivy, telephone interview)

... In the Trafford centre and the toilets now not only do they have disabled toilets but they usually have the kid's area for young people and children. I would quite happily go and use the young people's sections because the sinks are lowered. Most of the time if you use the sink in the ladies toilets you get wet armpits because you having to wash your hands above your shoulders and you get all the water running up your arms or the hand dryer is so far up you having to dry your hands above your head and you get all water trickling down you. It is whatever suitable at the time.

Erin: Do you think things lowered for kids are better than disabled adjustments?

Lydia: Yes, they are more suitable for us as they are just the same as the rest but lower. (face-to-face interview)

As pointed out, in the previous section, a disabled toilet can be both enabling and disabling for dwarfs due to how it was designed and constructed and for whom. This is because a disabled toilet is designed for a wheelchair user who needs the actual toilet to be higher in order to be able to transfer from his or her wheelchair, but the other facilities need to be lower. Children's toilets, however, are implemented for somebody who is small in stature, and thus are more suitable for dwarfs as the only adjustment made to all the facilities are a reduction in their height. This would

link to Oliver (2004) who suggests that implementing facilities to benefit a particular group within society can also benefit others. Although Ivy points out that the child toilets were a 'surprise' to her. This indicates that they may not be a common feature within public spaces and therefore something she cannot use often. Unlike with a disabled toilet there is no legislation making it compulsory for the facility to be installed. This may mean they are only implemented for economic reasons and thus implemented where there are likely to be a high volume of children, such as large shopping centres.

Disability access vs. Universal Design

Pritchard (2013) examines how body sizes which exceed the norm are not accommodated for within the built environment and calls for more research to focus upon how spaces can become enabling for various body sizes through the adoption of Universal Design. One of Universal Design's main principles is to provide access for disabled people (Imrie 2004). How Universal Design differs from current disability access is that it recognizes a broader range of users, as opposed to disabled and non-disabled, the former usually considered to be a wheelchair user when implementing facilities for people with physical impairments. Universal Design is based upon the principal that there is only one population, comprising individuals representing diverse characteristics and abilities (Iwarsson and Stahl 2003). Therefore, it is likely that Universal Design would accommodate for people made up of different abilities and body shapes and sizes. This would mean less of a need for separate disabled facilities, as spaces and facilities would be created for a range of users as opposed to the narrow range currently provided for. It would also mean that different body sizes would be provided for increasing the number of accessible spaces and facilities.

Universal Design consists of seven design principles (Iwarsson and Stahl 2003). Principle seven of Universal Design takes into account body size and how spaces need to be designed and constructed for a range body sizes:

Design Principle Seven – Size and Space: for approach and use. Appropriate size and space is designed for approach, reach, manipulation, and use, regardless of the users body size, posture or mobility. (Centre for Universal Design 1997 in Steinfeld and Maisel 2012, 12)

Design Principle Seven is of most significance as it would increase the number of spaces and facilities suitable for dwarfs. Universal Design could accommodate for dwarfs, such through the implementation of multilevel or adjustable facilities without disabling other users, such as the very tall. Examples include 'hi-low' water fountains which are made up of two spouts, at different levels, using the same plumping function (Steinfeld and Maisel 2012). These types of facilities would mean that dwarfs would be less reliant on current disabled facilities which are mostly geared towards wheelchair users which can in some cases present their own disabling design features, such as higher toilets. They may also present themselves in a wider range of spaces including child-friendly places which would benefit parents with dwarfism.

Discussion

Dwarfs would encounter fewer disabling situations, within public spaces, if they were accessible for a more diverse range of users. I have shown that disabled facilities and spaces can be enabling and disabling for dwarfs, depending on how the facility or space has been constructed and for whom. Chouinard (1999) suggests that it is important to take into account that disability is not a homogenous group and that the different needs of disabled people need to be accounted for. I have shown in this paper that only certain impairments are facilitated for within public spaces, through the implementation of spaces and facilities suitable for their needs. The needs of dwarfs are often met through the coincidence of some of their needs matching that of a wheelchair user, such as low facilities. As Hahn (1986) states planners need to be aware of the many people with impairments

who do not necessarily use a wheelchair. It can still be argued that planners are still not aware of the various impairments that exist which do not require the use of a wheelchair, in this case dwarfs. This is not to ignore that these facilities are beneficial, but to increase their efficiency more impairments need to be accommodated for.

In relation to child facilities and spaces they can both limit and increase access for dwarfs, depending on the purpose of the facility or space. This is down to similarities in body size between a child and a dwarf. In a number of cases participants found that when a child facility was enabling it proved to be more beneficial than a disabled facility, yet the participants of the research were often surprised when they found an enabling child facility indicating that their presence in the built environment is scarce. As both child facilities and disabled facilities can have unintended consequences for dwarfs, it shows that their needs within the built environment are still absent. It is only through coincidence that facilities benefit them and can be challenged that it is because there are fewer dwarfs within society than children and therefore it may be seen as more economical to facilitate for them.

As alternative spaces are not necessarily accessible for dwarfs, a more encompassing design practice may be more beneficial. Disability is not a homogenous group and creating accessible spaces for one group of users is not going to cater for all disabled people. Thus a design concept, such as Universal Design which takes into account users of various shapes and sizes and abilities may be more beneficial. There is scope for further research which draws upon how spaces can be made enabling for dwarfs, including through the design concept: Universal Design. As non-disabled and disabled spaces can be disabling for dwarfs, further research could focus on how these spaces can become more enabling through multiple level facilities.

Drawing from this paper further research could focus on how parents with dwarfism experience public spaces, in particular how facilities for children affect their role as parents. This would change the research direction slightly and could reveal how child facilities affect dwarfs looking after their children. How do they cope with using public changing facilities or accessing playgrounds which often require access through a child proof gate? A lot of the participants had children and therefore are more likely to use child facilities, including playgrounds, which may be inaccessible for them.

Concluding remarks

In this paper, I have shown that specially adapted spaces and facilities can be both enabling and disabling for dwarfs but this is dependent on how they have been constructed and for whom. Imrie (2012) contends that an accessible space is no guarantee of access. Particular perceptions of disability have led to the creation of disabled spaces and facilities which fail to benefit a wide range of disabled people, in this case dwarfs. Hahn (1986, 273) states that 'the built environment can be adapted to accommodate a broad range of human abilities and disabilities, but often it isn't due to a lack of imagination by planners'. In order to maximize the benefits of the built environment, it needs to be inclusive and usable for a larger range of users. This indicates that dwarfs could be accommodated for through providing multiple or adjustable facilities, but may be overlooked by planners or deemed uneconomical due to the rarity of dwarfism in comparison to other users, that is, wheelchair users.

Disclosure statement

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