Now Being Social: the barrier of designing outdoor play spaces for disabled children

Introduction

The provision of outdoor spaces for children, including disabled children, to play in can take many forms in the built environment. Such outdoor spaces include parks, playgrounds, school playgrounds and those associated with specific schools or centres. This paper is driven by a desire to understand better how to inform the provision and design of outdoor spaces for disabled children. To this end it briefly explores the three constructs of play, childhood and disability, drawing upon academic learning, international policy and national policy in England. The length of the paper precludes a full discussion of the three constructs but pointers are made to other literature for readers who want to understand more about play, childhood and disability.

The paper moves on to identify some of the barriers to the inclusion of disabled children in outdoor play spaces. The suggestion is made that one of the main barriers is that many designers, including some landscape architects, do not know how to design such spaces for disabled children, or even for any children. So the discussion moves on to explore what is needed to make a good quality outdoor play space. Finally the paper adds knowledge about what might make an outdoor space a good quality environment for disabled children by drawing upon policy, contract research and guidance in England and evidence from academic literature.

Complexities of play

Play is an important part of children's lives, indeed it has even been described as part of the nature and culture of childhood (James et al. 1998). However, the understanding of play is perhaps not the nature of adulthood. Different academic disciplines provide multiple understandings of what play is, what it can do for both individual children and society and conversely what the lack or deprivation of play can mean for children, families and society. An excellent exploration of these issues and how play can relate to social policy and the public provision for play is provided by Lester and Russell (2008). They acknowledge that the dominant discourse of play has been 'a mechanism for learning and development' (Lester and Russell, 2008, p13.) which embraces the view that play is preparation for adulthood. In recent years this has been expressed in England in social policies such as obesity, academic learning and crime reduction. However Lester and Russell (2008) continue by drawing upon literature from a wide range of disciplines. In doing this they discuss play as a complex, multilayered and diverse phenomenon which cannot be explained by this single discourse. They also affirm the importance of play for a child now, not just as part of the process of becoming an adult.

Children's right to play is recognised at the international level in the United Nations Convention on the Rights of the Child (United Nations, 1989). In recent years this has been supported in England by the introduction of The Play Strategy (DCSF and DCMS, 2009). This national commitment to play was supported by two large funding programmes of £155 million from the BIG Lottery fund and £235 million directly from government between 2008 and 2011. Much of this funding supported the development or refurbishment of outdoor play spaces and adventure playgrounds. With the change of government in May 2010 and sequential financial cuts it is not clear how the right to play will be supported by policy or funding at the national level in coming years.

Understandings of childhood

The contemporary academic understanding of childhood is that it is a social construct, not a biological determination, by which the 'early years of human life' (James and Prout, 1997 p 3) can be understood. This paradigm of childhood is underpinned by an assumption that children are not becoming (adults) but are beings in their own right. Several dimensions contribute to this paradigm including social variables such as class, gender, ethnicity (James and Prout, 1997) and impairment. Within this paradigm Woodhead (1997) discusses the cultural construction of children's needs as used in the language of various policy and other documents. He argues that the word 'needs' might be masking 'uncertainty and even disagreement about what is 'in the best interest of children''' (Woodhead, 1997; p65) and that 'children's needs' is a form of shorthand. This shorthand carries

with it assumptions about the cultural and personal perspectives of the user of the term. This can result in the term being understood in different ways by different readers of or listeners to the term.

Woodhead suggests that against the construct of children's needs is an alternative understanding of children's rights, expressed at the international level in the United Nations Convention on the Rights of the Child (1989). At a national level in England the rights of the child have been expressed in policy through the Every Child Matters (Chief Secretary to the Treasury, 2003) agenda and the introduction of the ten year Children's Plan (DCSF, 2007). These were introduced by the previous government and were suspended by the 2010 coaltion government .

The right of the child to play expressed in Article 31 of the UN Convention of the Rights of the Child states: '*State Parties recognize the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts'* (United Nations, 1989). This statement refers to play and recreational activities as appropriate to age, not ability, which can be understood as reinforcing the biological rather than social model of childhood.

Models of disability
The Union of Physically Impaired Against Segregation (UPIAS) in the United Kingdom introduced the basics of the social model of disability in their document the Fundamental principles of disability (UPIAS 1976). This model, developed by activitists, was then supported and further explored and expressed by academics. The social model of disabililty is explained by Oliver (1990) as being built upon the underlying assumption that society disables people by barriers within social structures and institutions, (Oliver, 1985). Others have commented that policies and practices (Barnes, 1991; Zarb, 1995) also contribute to these social barriers. This contrasts with the medical or individual model of disability where impairment is seen as a personal tragedy, a personal problem and in need of individual treatment (Oliver, 1985). The medical model is reinforced by attitudes of individual people and society which can take the form of pitying disabled people and seeing disabled children as 'children in need' (Priestly, 1998. P210).

The right to access the physical environment for all people is expressed at an international level in the United Nations Standard Rules on the Equalisation of Opportunities for Persons with Disabilities (United Nations, 1993). This states that '*for persons with disabilities of any kind, States should introduce programmes of actions to make the physical environment accessible'*. This expresses an understanding of the social model of disability that change is needed in the physical environment to make it more suitable for disabled people. These United Nations rules also confirm that, '*accessibility requirements should be included in the design and construction of the physical environment from the beginning of the design process*' again reflecting the social model of disability. In England the Disability Discrimination Act (DDA) (1995) asserts that it is unlawful to treat disabled people less favourably than non-disabled people. Providers of services and facilities are required to make 'reasonable adjustments' for disabled people to access services. However it has been suggested that the DDA is a grievance led piece of legislation which takes an additive, rather than an inclusive approach.

Theoretical conclusions: now being social
Drawing upon the academic literature it can be seen that there is a series of models and understandings about play, childhood and disability which can be understood thus:

- **now:** play is not (just) about *preparing* to be an adult but has meaning for children *now*;
- **being:** childhood is not (just) about the biological issue of *becoming* an adult but it is also about *being* a person now;
- **social:** being disabled is about being a person and the barriers that restrict full participation in society – the *social* rather than medical model of disability.

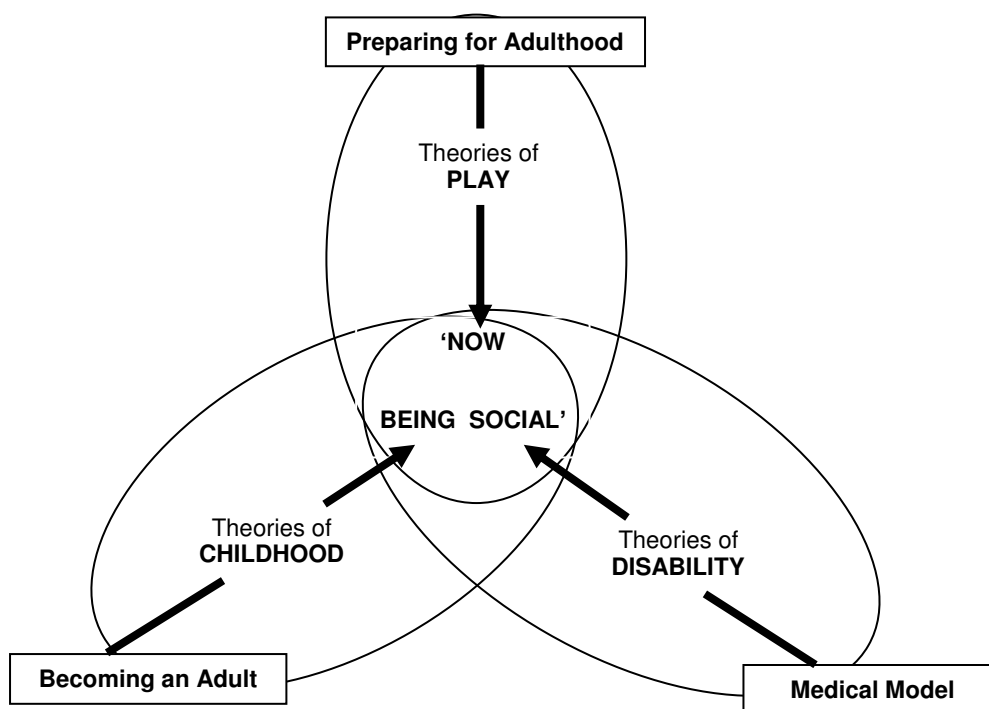A graphic expression of now being social and the theories and models they represent are shown in figure 1.

Figure 1: Disabled children's play: transition from 'Preparing Becoming Medical' to 'Now Being Social'

Now being social represents a trilateral model which draws upon these theories and models which have been informed by a combination of policy, academic thinking and the experience of daily life. This can be considered to be in opposition to an approach where play is considered as *preparing* children for adulthood; childhood is considered to be about *becoming* an adult and the *medical* model of disability. Such an approach could be called *Preparing, Becoming, Medical*, as opposed to the *Now Being Social* model being proposed by this paper. It is not clear how much this latter approach is represented in different academic writings, policy agendas, practice and daily life experiences. Some of these issues with respect to the provision of children's outdoor spaces will be the focus of the rest of the paper.

Barriers to designing outdoor play spaces for disabled children
Disabled children, and adults, have been identified as under- represented users of public open spaces and play spaces: a fact that runs counter to the development of sustainable and inclusive communities (Greenhalgh and Worpole, 1995; Swanwick and others, 2002). Various authors have explored the reasons for this, some for different types of open spaces (for a discussion about open spaces see Woolley, 2003).

Some of the reasons for under-representative use of green spaces by disabled people and children have been identified in various pieces of research. These include physical barriers; a lack of information; inadequate facilties such as toilets and cafes; people not wanting to go by themselves or difficulty with getting to a green space (Price and Stoneham, 2001). Dunn and Moore (2005) have discussed that there are social and environmental barriers to the inclusion of disabled children in outdoor play or play spaces. John and Wheway (2004) argue that any strategy which ignores the

social and institutional barriers and concentrates only on technical, or environmental or physical, barriers ignores the real needs of disabled children and their freedom to play. In primary school playgrounds in England barriers to the inclusion of disabled children in play were identified as social, physical and organisational (Woolley, and others, 2005). In Canada physical barriers in primary school playgrounds were identified as being associated with policy omissions (Yantzi and others, 2010).

However, another barrier has been identified as a lack of specific knowledge and understanding of the needs of disabled children by planners and designers of outdoor play spaces (Prellwitz and Tamm, 1999; Dunn and Moore, 2005; Mathers, 2008). This social or institutional barrier probably exists in the context of different types of providers including local authorities, private practices, non-governmental organisations and charities. The fact that providers, planners and designers often do not have appropriate knowledge or experience can result in physical or environmental barriers in the form of poorly designed play spaces from the point of view of disabled children. This social institutional barrier has led to the physical barrier of inadequately designed outdoor play spaces.

It can be considered that there are two main ways in which these barriers can be unlocked. One is by the direct involvement of disabled people and children in the provision, planning and design of these open spaces. This is suggested by various authors as an important approach (e.g. Dunn and Moore (2005) and is the focus of a specific piece of research undertaken over a period of years with people with learning impairments (Mathers, 2008). The approach of engaging with disabled people is not the focus of this paper. However the focus of the paper is what evidence is available to support the increase in knowledge required by providers, planners and designers of outdoor play spaces to meet the needs of disabled children. Woodhead's (1997) discourse about children's needs, mentioned above, would suggest that with respect to the provision, planning and design of play spaces for disabled children different people will have different understandings of what is required. This is accompanied by the fact that society often stereotypes disabled people as wheelchair users (Mathers, 2008). Some have commented that the provision for disabled children should go beyond wheelchair users and take into account sight, speech and hearing impairments. This may result in a need for medical support mechanisms such as administration of medicine, assisted feeding, the transport of bulky equipment such as oxygen cylinders ventilators and suction equipment for children with complex health needs (Hewitt-Taylor, 2009). Other ways to broaden the societal understanding of disability are encompassed in policy. Thus Special Educational Needs, a term developed within an educational and psychological context in England, has a legal definition. This includes seven categories: cognitive and learning; social; emotional and behavioural; communication and interaction; sensory; physical; medical conditions/syndromes and other (Department for Education and Skills, 2001).

Defining terms: 'accessible' and 'inclusive'
In seeking to provide, plan and design to include disabled children a series of terms have been used over a period of years. The terms segregated and then integrated play spaces were used for some years, with the latter of these now being less used than it was (John and Wheway, 2004). This may be an expression of language and understanding moving towards a social model of disability away from the medical model. It has been suggested that this journey is not an overnight awakening but takes time (John and Wheway, 2004).

More recently the terms accessible and inclusive have been used as a means of explaining that attempts have been made to overcome the barriers which might prevent disabled children from using a space for play. However the use of these words is not always associated with an explanation of which barriers are being addressed and how they are being addressed. In addition the words accessible and inclusive are often not explained when they are used and can even be found within the same document without full definition. This can result in an inconsistent understanding of what the terms mean and more importantly what that might mean for the design of any specific play space.

One example of this is found in *Developing Accessible Play Space* which defines accessible as 'being about enabling all children to be with and learn from each other' (Dunn, Moore and Murray, 2003, p10), but elsewhere uses the term inclusion without definition or explanation (Dunn, Moore and Murray, 2003). Others have tried to explain the difference between accessible and inclusive. Thus Heseltine and Holborn (1987) suggest that environmental factors influence 'accessible play' while social factors and social inclusion determine 'inclusive play'. They also assert that the removal of environmental barriers can make play spaces accessible while the removal of social barriers make such a space inclusive (Heseltine and Holborn, 1987). Moore and Cosco (2007) describe the transition from accessible design to inclusive design (or universal design as is more commonly used in the United States of America) by explaining that universal design goes beyond accessible design by providing for all human needs. Some suggest that inclusive play is all children being able to play together (Dunn, Moore and Murray, 2003). Play spaces which encourage disabled and non-disabled children to play together, rather than being segregated by either ability or age are also suggested by CABE Space (2008). The term inclusive is taken further by The Sensory Trust who suggest that an inclusive approach is about provision which caters for, 'all children, young people and families' (Sensory Trust, no date).

Despite these differences in definitions there seems to be some agreement that the term inclusive, when applied to an outdoor play space, can be seen to have three dimensions to it. One is that disabled children should be able to play in a space; the second is that disabled children and non-disabled children can play together in the space; and the third is that families can also be in the space. It is the first two of these issues which will be explored in the remainder of the paper. This exploration is focused solely on the design of the play spaces and not on associated issues such as location of, getting to or getting in to such spaces.

Knowledge about designing outdoor play spaces for the inclusion of disabled children
Underlying concern about the lack of knowledge of how to provide and design play spaces that provide opportunities for disabled children to maximise their play experiences is a challenge that providers and designers lack knowledge of how to design such spaces adequately for *any* children (Hendricks, 2001.). Indeed this is one of the reasons that play spaces in England have not changed much in character for forty or fifty years resulting in what has been called a kit, fence, carpet approach to many playgrounds (Woolley, 2008) which provides for a limited play value (Woolley and Lowe, 2012). However it is evident that there is knowledge available from a range of sources. So reference will now be made to some of those depositories of knowledge which include a key publication in America, academic literature from international journals, government supported publications in England and publications from a specific non-governmental organisation in England.

A helpful explanation of the qualities and characteristics of outdoor play environments which provide for a wide range of play opportunities is provided by Jansson (2010). She draws upon the theories of affordance (Gibson, 1979); children's actualisation of affordances (Heft, 1989); and the relationship between affordance and mobility (Kytta, 2004) together with the sub-categories of experience, control of experience, graduated challenge, choice, exercise of fantasy and separation from adults (Wardle, 1990). Reference is also made to the characteristics of variety and complexity (Coffin and Williams, 1989; Moore et al. 1992). The seven 'Cs' of character, context, connectivity, change, chance, clarity and challenge suggested by Herrington and Lesmeister (2006) are also brought to this discussion. All of these suggest to providers and designers of outdoor play spaces theories and characteristics for what could be called a good quality outdoor play space or environment.

First published in 1987 and last revised nearly twenty years ago *Play for All* (Moore et al. 1992) was a national programme in America which brought together a wide range of contributors to produce guidelines for children's play environments. This was a national programme with an additional focus on, 'the needs of children with disabilities, and their integration into the community of all children' (Moore et al, 1992 xiii). The publication provides a wealth of information, albeit within the context of legislation and the cultural context of one nation. This document is a good starting point

for any consideration for designing outdoor play spaces for disabled children but there is more, and more recent, literature which adds to the knowledge base of this area of landscape architecture.

In recent years two guidance documents specifically exploring issues of accessibility were published by the government in England. *Developing Accessible Play Space* is a good practice guide in response to the fact that there had 'been little recognition that disabled children are entitled to the same play opportunities as other children' (Dunn, Moore and Murray, 2003, p3). This publication provides helpful guidance on some of the processes of how to develop outdoor play opportunities for disabled children. It has a focus on involving communities, disabled children and their families in the development of such spaces and draws upon workshops which were undertaken with disabled children (Dunn and Moore, 2005). *Inclusion by Design* (Goodridge and Douche, 2008) provides guidance to creating accessible play and childcare environments. This not only addresses indoor play provision for disabled children but also outdoor provision, though the latter in a somewhat limited way. It does however refer to the six principles of inclusive design, originally laid down by the Disability Rights Commission. These principles are: ease of use; freedom of choice and access to mainstream activities; diversity and difference; legibility and predictability; quality and safety and are discussed in this document. However neither of these publications explores how disabled children might want to play in the outdoor environment and what that means for the design and character of that environment. In the main they take a social model of disability approach trying to unpick some of the institutional barriers which need to be addressed but without addressing the specific issue of what to consider in the design of a specific outdoor play space.

Learning through Landscapes identify some detailed design elements which would benefit people with mobility impairments, visual impairments, hearing impairments and children who have brittle bones or who bruise easily (Stoneham, 1996). Elsewhere they also discuss design elements that should be considered to provide inclusive play for children with mobility impairments, sensory impairments, learning difficulties and mental health problems. They also suggest that an inclusive approach should support the presence of family groups, parents and siblings clearly reflecting the third (Sensory Trust, no date).

Some academic literature takes an overall approach to what might be required in an inclusive design approach. Thus it has been suggested that three components of access, activity and variability should be addressed for a play environment to be inclusive (Winter, Bell and Dempsey, 1994). It can be seen that some of these components are similar to those mentioned above as making a good quality play environment. Of these components access is considered to be about getting into a play environment. Activity is understood as someone's 'ability to take part in an experience once access is gained' (p28) enabling an individual to engage in activities with others. Variability is suggested as the ability of everyone to be able to choose from a range of options and find something they can do. This is considered to be critical if a disabled child is to have the free choice which some definitions and understandings of play support (see Woolley and Lowe, 2012).

The range of academic literature adding to this body of knowledge is not large and appears to be mainly drawn from the fields of education, particularly early years education, and occupational therapy. This research is often structured by the medical model of disability, possibly as a result of the understandings of disability at the time the work was undertaken, or the professional context within which it was set. Such research often focuses on children with a particular impairment, such as language impairment, physical impairments or autism. This type of research is often undertaken with small numbers of children but, despite this, can still provide insights into the type of qualities an external environment might include in order to support disabled children's play. In exploring this literature criticism can be made that a medical model of disability is being taken. This is not the intention. The intention is that each insight will provide additional knowledge to help build up a better understanding of what might be required in outdoor play spaces for disabled children to have equal opportunities to non-disabled children. This is seen as one way of seeking to overcome Woodhead's (1997) concerns, mentioned earlier in the paper, that different people understand needs in different ways.

Children with physical impairments may have restricted mobility, children with cognitive impairments may have difficulty understanding the complexity of play and children with socio-emotional impairments may have difficulty initiating or sustaining social interaction (Hestenes and Carroll, 2000). Others have suggested that children with autism have difficulties with social interaction and both verbal and non-verbal communication (Newsom, 1998). This can result in lower levels of social interaction in their play than children who are not autistic (Koegel and others, 2001).

Other research has revealed that fixed play equipment can provide children with high physical competence more opportunities to interact with peers than children with lower physical competence. The lack of alternative play opportunities on the playground with the higher reliance on fixed play equipment may have limited the children with lower physical competence in their social play (Barbour, 1999). Specifically there were 'fewer activity options, fewer routes through which children could travel and was less accessible for children with limited motor skills' (Barbour, 1999 p80). This reinforces the assertion of Herrington and Studmann (1998) that fixed play equipment addresses the physical development of children, whereas holistic play design must encompass children's social, emotional and cognitive development.

For children with autism spectrum disorders (ASD), Yuill et al (2007) showed that group play and social initiations were greater in playgrounds with various characteristics. These included an appropriate level of physical challenge; props to support imaginative play; a layout with structured movement; and observation points where children could play without the need to interact. This variability allowed children with ASD to choose activities that appealed to them and were likely to minimise distress and maximise enjoyment. Others have shown that children without language impairments spent eighty percent of their recess time in social interactions while children with language impairments spent just over fifty percent of their time interacting with their peers. Analysis of the behaviour of these children revealed that they did not spend more time isolated from their peers by preference, but because they were fearful of interacting with other children. It was considered that such behaviour was a result of increased stress and anxiety (Fujiki and others, 2001).

Conclusions: theories, barriers, knowledge and the 'Big Society' agenda
The aim of this paper has not been to find one perfect solution of how to design to facilitate disabled children's play in outdoor play spaces. The aim has been to bring together an improved understanding and knowledge base for those who provide and design such outdoor play spaces. In order to do this there has been a brief discussion of the constructs of play, childhood and disability with a conclusion that these are about play for now, not just part of the process of becoming an adult; being a child, not just the biological determination of becoming an adult, and disability as a social not a medical model. This leads to the trilateral model of Now Being Social

The paper has identified that there is a body of knowledge which can assist providers and designers to better understand how to make good outdoor play spaces which disabled children can more fully use and enjoy. This knowledge is embedded in documents from policy, charity, research experience from the United States of America and other academic sources. Some of this knowledge discusses societal and structural barriers which prevent the provision of appropriate outdoor play spaces. One of these barriers is the lack of involving disabled children and adults in the design process. Another barrier is the fact that the knowledge which does exist does not appear to be used by providers and designers. This poses the question how can providers and designers access this knowledge? Ways to overcome this might include Continuing Professional Development for landscape architects. In addition those who commission, fund and manage such spaces, whether in local authorities, private practices or community focused organisations need to understand more. As the coalition government's Big Society agenda unfolds across England it is being expressed in policies such as the Localism Act and the Draft National Planning Policy Framework. This policy agenda aims to allow people to make more local decisions about various aspects of life. This might result in knowledge held by disabled children parents and communities

being shared with policy makers, funders, providers and designers of outdoor play spaces for disabled children. Improved access to the knowledge held in both the literature and within communities should result in greater opportunities to move towards Now Being Social as an approach to designing outdoor play spaces for disabled children.

Acknowledgement

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