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Article:

Watch this space: Designing for children's play in public open spaces

Abstract

This paper introduces readers to one specific aspect of children's environments in urban areas which is important in contemporary society: play in public open spaces. The focus is on the provision of spaces for play for children aged between about 4 – 11 years old and makes some reference to the USA, but has a specific focus on England. Children's play is important for their development and for society as a whole and the paper includes a short introduction to this, drawing upon literature from a range of disciplines. The paper then moves on to discuss aspects of the history of playgrounds during the 19th and 20th centuries, both in America and England. The paper continues to draw upon a range of literature while discussing play in public open spaces with respect to play value and need; design concepts and themes and design elements. The paper concludes by contemplating whether the design of play in public open spaces will in the future draw more upon the information available in the academic literature, than has happened during the last forty years. The paper is not intended to take the discussion about play into the realm of adult experiences, nor does it dwell on the different types of spaces within the external environment within which children play in for the latter can be found elsewhere (see Woolley, 2007)

Children's Environments and Children's Geographies

During the last forty years there has been increased academic interest in the outdoor environments in which children spend their time. Such interest has been underpinned by the seminal works *The Child in the City* (Ward, 1978), *Children's Experience of Place* (Hart, 1979) and *Childhood's Domain* (Moore, 1986), in the fields of geography and landscape architecture. These works have provided an understanding of what and where children 'do' things in external environments, initiated the concept of the negotiated 'home range', began to understand and articulate that sometimes there are gender differences in the way girls and boys experience the external environment and introduced a set of methods which are now widely accepted and used by social scientists. Other work of this time included a study with children in Detroit and Toronto (Bunge, 1973) which identified ways in which children were oppressed by the built environment. In addition the *Growing Up in Cities* (Lynch, 1977) project initiated by the urban planner Kevin Lynch was groundbreaking for developing an understanding of children's lives and outdoor experiences in a variety of cities in

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk

different parts of this world. The successor Growing up in Cities project led by Louise Chawla (Chawla, 2002) in the 1990s was extended and included children in the cities of Buenos Aires in Argentina, Melbourne in Australia, Northampton in England, Bangalore in India, Trondheim in Norway, Warsaw in Poland, Johannesburg in South Africa and Oakland in California, USA.

Subsequent to these early works others in the fields of geography, psychology, landscape architecture and other disciplines have extended understanding of the use that children make of outdoor spaces and some of the barriers and constraints children experience to the use of those spaces. In recent years the term 'children's geographies' has been coined by geographers but as McKendrick et al. (2000a) have pointed out these experiences of children in different environments are not just of interest to geographers, but are of inter-disciplinary and international interest. Studies of children's geographies have revealed parental concerns about children's outdoor play (Valentine, 1997), the extent to which young people use town centres (Woolley et al, 1999), the importance of a shopping mall to young people and adult attitudes to this (Matthews et al, 2000), the geography of exclusion and disenfranchisement which some rural children experience (Matthews et al, 2000) the use of recreational spaces in rural areas by girls (Tucker and Matthews, 2001) and skateboarders use of urban spaces (Woolley and Johns, 2001). Others, such as Holloway and Valentine (2000) and Christensen and O'Brien (2003) have brought together collections of research about children's geographies, some of which relate to the external environment.

A common issue in many of these pieces of research about children's geographies is the control which adults have over the experiences of children and young people in the external environment. This adult control has been increasingly revealed over a period of years, with adult constructs and fears resulting in restrictions in the extent to which children in western society are allowed to use public open spaces. Nearly twenty years ago these adult fears were identified as both social and physical (Moore, 1989) or as social and neighbourhood fears (McNeish and Roberts, 1995). Under the latter definition social fears include fear of strangers, drugs, bullying and dogs while neighbourhood fears are dominated by the fear of traffic, feeling unsafe and a lack of facilities for children's play experiences. Many of these social fears are far greater than the reality and have been identified as moral panics with fear of abduction and murder by strangers often being fuelled by the media (Valentine, 1996). This is compounded by the possibility that parents underestimate, 'the abilities of

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk   2

children to manage their own personal safety' (Valentine, 1997, p83). Other factors which appear to be influencing children's use of open spaces are not only the preponderance of television and computer games but also an increase in the development and use of 'commercial playgrounds' (McKendrick et al, 2000a) in the form of 'stay and play' centres, child-oriented theme parks and pubs with annexes for soft play.

The paper will now turn to a short discussion about play before moving onto the main focus of the paper which explores two further ways in which adults control children's experiences of public open spaces. These considerations will be the provision of playgrounds and the increasingly enclosed nature of them and the design of spaces for play in public open spaces.

Children's activities in public open spaces: play – definitions and benefits
Although the United Nations Convention on the Rights of the Child defines children as being anyone under the age of 18 years old the main consideration of this paper will be those who are in the middle years, that is aged about 4 - 11. Often when children are outside the confines of home and school and in public open spaces (for a discussion about public open spaces see Woolley 2003) they undertake a range of activities. Much of this activity is described, by adults, as 'play' and in recent years there has been an increasing dialogue about play, what it is, where it takes place and its different forms.

Play has been defined in many ways by different people. It has been described as 'a continually creative process' (Aaron and Winawer, 1965), 'scientific research conducted by children' (Eibl-Eibesfeldt, 1970); 'an approach to action, not a form of activity' (Moyles, 1989); 'imitation of adult's activities bringing children closer to the adult world' (Noschis, 1992) and as the 'nature of childhood' (Prout and James, 1997). A widely accepted contemporary definition of play within the field of play workers in England is that, 'play is freely chosen, personally directed, intrinsically motivated behaviour that actively engages the child' (NPFA, 2000). The Department for Culture, Media and Sport (DCMS) undertook a review to help direct how lottery money for play in England should be spent and defined play as, 'what children and young people do when they follow their own ideas and interests' (DCMS, 2003). Although these definitions both clearly assert that play is an activity that is child-initiated the DCMS also states that 'adult support, guidance or supervision, may help to achieve the most successful play provision' (DCMS, 2003). This can lead to a debate

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk

about *free* play and *directed* play. Free play is, 'the opportunity to explore and investigate materials and situations for oneself' (Moyles, 1989), while directed play is where an adult tells a child what to do, with the materials that are available. Moyles suggests that there can be a play spiral where free play exploration can feed into directed play and 'back into enriched free play' allowing learning to draw upon wider experiences.

In the same way that there has been a variety of definitions of what play is, there has also been a selection of typologies or categorisations of play. Boundaries between different types of activities, play and who undertakes them have been discussed by Sutton-Smith (1997) who identifies a list of activities as play. These include mind or subjective play, solitary play, playful behaviours, informal social play, vicarious audience play, performance play, celebrations and festivals, contests (games and sports) and risky or deep play. A general typology of children's play has been developed from play workers' experiences and perspectives (Hughes, 1996). This typology has fifteen categories: symbolic play, rough and tumble play, socio-dramatic play, social play, creative play, communication play, dramatic play, deep play, exploratory play, fantasy play, imaginative play, locomotor play, mastery play, object play and role play (NPFA, 2000). In the school setting three main forms of play have been identified: physical, intellectual and social/emotional. These forms are identified as having subdivisions of gross motor, fine motor and psychomotor for physical play; linguistic, scientific, symbolic/mathematical and creative for intellectual play and therapeutic, linguistic, repetitious, empathic, self-concept and gaming as social/emotional play (Moyles, 1989). More recently, a wider range of play has been identified as taking place in primary school playgrounds and this has been categorised as play with high verbal content, play with high imaginative content, play with high physical content and less structured play including walking, talking, sitting and watching (Woolley et al, 2005).

Despite persistent concerns about risk, danger and bullying, the benefits of play for children are well-documented and it is not the purpose of this paper to dwell on them except to say that play provides opportunities for the development of social skills, such as negotiation; language and comprehension; the promotion of physical activity, mobility and improved mental health; social and environmental learning; art and culture; and socialisation and citizenship (see e.g. Taylor, 1998; Rogers and Sawyers, 1988, Cole-Hamilton et al, 2002 and Frost et al., 2004). These benefits are acknowledged as being for both individuals and

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk   4

society with some benefits being realised at the time of play and others at a later time. Conversely, the lack of play can have a negative impact on the development of a child and potentially provide social problems for communities (NPFA, 2000).

Early playgrounds: enclosure of spaces for children's play

It has been suggested that four elements are required for the creation of a child's play environment: a place to play, a time to play, friends to play with and what the child actually does (Senda, 1992) and having introduced the latter of these four elements the paper turns to discuss some aspects of the element described as 'a place to play'.

The seminal work of the Opies, who studied children's games and play in different spaces, enabled them to conclude that, 'where children are, is where they play' (Opie and Opie, 1969,p10). Since this work in the 1960s a variety of other research has identified that children play in a range of different spaces in the built environment, with some of these spaces not only providing social and physical opportunities but also challenges (see e.g. Ward, 1978; Hart, 1979; Moore, 1986; Cunningham and Jones, 1999; McKendrick, 2000b; Christensen and O'Brien, 2003; and Woolley, 2007). Some of these spaces are designed for children to play in and are called 'playgrounds' while others are not specifically designed for children to play in, but are spaces in which children see the possibility or 'affordance' (Gibson, 1979) for play.

The introduction and development of playgrounds in the Western world was initiated in the 19th century. In America in 1821 'outdoor gymnasia' were introduced consisting, in the main, of indoor gymnastic apparatus placed in the outdoor environment (Frost, 2006). This was followed by the development of individual pieces of apparatus or what is now called fixed play equipment (Frost, 1992). In the early 20th century the New York City Board of Education developed a system of summer playgrounds and vacation schools with the main purpose of providing recreation and physical exercise for children. Then the Playground Association of America sought to introduce playgrounds across the whole of America (Gagen, 2004). This was accompanied by an increasing move at the end of the 19th century towards the allocation of land for specific use, described as the 'era of specialisation' of land use (Aaron and Winawer, 1965). The desire to physically contain children in specific spaces, getting them off the street and away from 'bad influences' was a result of social and moral reformers (Hart, 2002). However Hart reports that in this reform

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk

period only 20% of the target age children in the lower east side of Manhattan ever used playgrounds, preferring the spaces of the street where they might be closer to social networks of friends, family and neighbours. The importance of these social networks and the freedom to develop them in the local neighbourhood were clearly understood by the planner Jane Jacobs (1961).

The Recreation Grounds Act of 1859 was the first piece of English legislation to mention children and play and it recommended that identifiable areas should be set aside in urban areas for such activities. Following this act the first 'playground' came into being in England in 1877 with the opening of the Burberry Street Recreation Ground in Birmingham (Heseltine and Holborn, 1987). In locations such as London, Guilds of Play organised games in city parks, while in Manchester voluntary groups organised recreation grounds, which were later adopted by the Parks Committee of the local authority. Between the two world wars the number of children's playgrounds in England increased in parks and recreation grounds. The character of such playgrounds varied. Some London parks had large areas of sand for children to enjoy, an example of which can be seen in Heseltine and Holborn (1987, Fig 143, page 135). Local authorities and voluntary organisations were able to provide playgrounds and playing fields as a result of the early efforts of the National Playing Fields Association and as an outcome of the Physical Training and Recreation Act of 1937 (Heseltine and Holborn, 1987). Play streets were facilitated by the introduction of the Street Playgrounds Act of 1938. After World War II the spaces which children could play on became fewer as bombed sites were redeveloped and vehicular traffic increased on the streets (Miller, 1972; Bengstsson, 1974). Since World War II many playgrounds have been created in parks, recreation grounds, housing areas and open spaces.

The advent of adventure playgrounds in England was inspired by the Emdrup playground in Denmark. The Emdrup waste material playground was opened in 1943, during the German occupation, in a new housing estate outside Copenhagen and with a leader who was an ex-seaman who had trained as a nursery teacher (Lady Allen of Hurtwood, 1968). Most of the adventure playgrounds of England were initiated and run by local parents and people from the neighbourhood within which the playground was situated. The physical nature of adventure playgrounds, with malleable materials which children could handle in their own way was complemented with the social structure of a leader and a supporting committee. Successful adventure playgrounds had understanding leaders and supporting committees

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk

who could find the right balance of supporting the leader without directing them too specifically. Some adventure playgrounds still exist in England, although the numbers are lower than at the height of their popularity. London Play (website) state that more than 80 Adventure Playgrounds currently exist in London.

In 1959 the first 'play park' was opened in England in a public park in London by the London County Council's Parks Department, following on from and inspired by the success of such spaces in Stockholm. Play parks were divided into smaller spaces, with low wooden fences and thus provided areas for different activities such as drawing and table games such as chess and draughts. An adventure area provided opportunities for building, swinging from trees and 'rough' activities, while a third area provided space for team games and sports and a fourth space for smaller children to enjoy themselves (Lady Allen of Hurtwood, 1968). Over time these play parks, which had play leaders, became similar in nature to adventure playgrounds.

Playgrounds: contemporary spaces for children's play in England

Over thirty years ago playgrounds were described as consisting of heavy fixed equipment, tarmac surfacing and an occasional sandpit (Holme and Massie, 1970), while twenty years ago they were described in America as containing, 'vast expanses of hot, hard asphalt, (and) poorly maintained old metal equipment . . .' (Moore 1989). There has also been a discussion about the nature of spaces for play, not from a design point of view as Hart and Moore have done, but from a societal viewpoint, during the last ten years in various countries. Thus Mckendrick (1999) has questioned the fact that within society there is an attitude that children should play in playgrounds and not elsewhere. He also states that adults have provided 'standardized playscapes in similar settings' and that this has been without the involvement of children and an expression of the wider culture of childhood current in some countries (McKendrick, 1999). This attitude towards children's use of public open spaces is considered to be, in part, enforced by planners and built environment designers who it is perceived believe that all of children's, 'environmental needs can be accommodated in the playground' (Cunningham and Jones, 1999). Others have described playgrounds as being places that, 'offer standardized, controlled and uniform spaces, governed by regulations, monitored by adult eyes and cameras, where children can play and be safe' (Maxey, 1999).

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk

In America playgrounds were considered to be at a crossroads some twenty years ago (Moore, 1989). At this time Moore considered that playgrounds in public open spaces might go in one of two different directions. One of these directions was, 'a negative path toward an increasingly conservative, highly prescriptive view of children's play, reinforced by tendencies already abroad in our society'. The other direction was towards playgrounds which, 'serve an important social, cultural and educational role for children', considered to be especially important for children in (dense) urban areas where opportunities for playing in non specific play spaces are likely to be limited. Interestingly in 2002 playgrounds in New York were still considered to, 'fail to satisfy the complexity of children's developmental needs' (Hart, 2002).

These adult controls of spaces specifically designed for children – playgrounds -are underpinned by a particular attitude to childhood. This has resulted in playgrounds which for many years, across the breadth of England are of the same character wherever one is in the country. These spaces, in the main, consist of a selection of play equipment, a flat surface increasingly covered in expensive rubber 'safer surfacing', and enclosed by fencing allegedly to keep dogs out – but increasingly to keep children in. These spaces can be termed 'KFC' playgrounds comprising of a Kit of play equipment, being enclosed by Fence and Carpeted in rubber surfacing: 'Kit, Fence and Carpet' playgrounds. A typical example is shown in figure 1. In many instances playgrounds across the country have been built in this way, having the same treatment and with no consideration for real landscape design or local character. However, despite the poor design of such spaces Moore (1989) has stated that such playgrounds in America were popular, particularly in urban areas because of the restricted opportunities for play in the external environment. More recent research in England confirmed that such spaces are often frequently used by children, although they too would like more interesting things to play on (Dunnett et al, 2002).

So why have playgrounds, in the main, not changed very much in their design and character? Experience of the author's industrial partner in a Knowledge Transfer Partnership has revealed that there is a range of issues from practice which are constraining the design of play spaces. These issues include concerns about maintaining differently designed spaces; limitations of capital and, especially, revenue funding; attitudes of parents, insurance companies and providers and sometimes politicians; and vandalism – or fear of vandalism. There is little research currently supporting this knowledge from

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk

practice. One area which is supported in this way is that of the interpretation of relevant European Standards, other standards and legislation (Frost, 2005), while another is that of fear. These fears, underpinned to a large extent by an increasingly risk averse society (Gill, 2007) include parental fears about safety of children (McNeish and Roberts, 1995; Jutras, 2003), fear of litigation from the provider's point of view (Moorcock, 1998), and fear of accidents and risk (Ball, 2004). The latter is of concern because increasingly there are assertions that, 'risk-taking is an essential feature of play provision' (Play Safety Forum, 2002) and that there is a need to, 'manage the balance between the need to offer risk and the need to keep children safe from harm, (NPFA, 2000) in play provision. Yet practice does not, in general in England, seem to take this challenge of risk in play spaces on board (see e.g. NPFA, 2000; McKendrick et al, 2000).

There have been other suggestions as to why the design of playgrounds has not changed much for so many years. It has been suggested that: there is little professional competence in the design of play areas; designing for children has little prestige; society does not prioritise good quality space for children as a public service; children have no political power; adults are too busy dealing with their own needs (Hendricks, 2002). Another author has suggested that the design approach of some providers, 'has in turn largely been driven by the concerns of providers to minimise three elements: capital cost, the risk of liability and the costs of ongoing management and maintenance' (Gill, 2006).

Public open spaces for play: play value and needs

Over the years there have been several attempts to identify children's needs in external spaces and the value of playgrounds. One attempt to define criteria for identifying the value of play experiences was produced by Hill (1980) who suggested that such a system should start by defining what type of an adult is required at the end of the childhood play experiences. Hill suggested that, wherever one was in the world, a value system for play should include:

- 'physical fitness;
- intelligence;
- creativity and imagination;
- emotional stability and initiative;
- social assurance and co-operation;

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk

- self confidence and competence;
- individuality;
- a sense of responsibility and integrity;
- a non-sexist outlook; and
- a sense of humour'. (Hill, 1980)

These criteria were developed from evidence gathered by a series of both researchers and practitioners, some of whom continue to be involved in the field of children's external environments.

Another checklist for assessing play value, identified that, 'a play area should cater for:
- space for children to meet and socialise
- opportunities for climbing and balancing
- a chance for children to test themselves and each other
- somewhere to explore and take risks
- a place for solidarity
- excitement, movement and colour
- equipment or landscaping that permits fantasy or imaginative play
- a space in which to be noisy, boisterous and energetic
- items to play with, rather than on
- different textures, materials heights, levels planes'

(Coffin and Williams, 1989).

Moore has suggested that five elements of children's development should be provided for and that a well-designed, well managed play environment should provide all children with the opportunities for:
- fine and gross motor skill development;
- decision making;
- learning;
- dramatic play;
- social development.

To accompany this Moore (Moore et al., 1992) suggested that playing should be fun.

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk

Public open spaces for play: concepts and themes

There is now a range of research and thinking which can be drawn upon in order to direct the approach which is taken to the design and implementation of public open spaces for play. Some of this literature will now be referred to in order to provide an understanding as to why a different approach to the design of playgrounds, rather than the KFC approach, could provide better play opportunities than they do.

Building upon years of research and experience, Moore et al. (1992) discuss a series of design criteria for play sites in the external environment. The list of criteria is too long to fully discuss here but a number of issues will be highlighted. Because Moore is a landscape architect the theory of what play opportunities should be provided is accompanied by suggestions as to how such opportunities can be provided in open spaces.

Following a discussion about nine types of *accessibility*, whether this be for the children or the people who might need to maintain the space, Moore discusses the importance of providing opportunities for '*safe challenge*'. Drawing upon various pieces of research he states that, 'play areas should provide highly challenging settings with many different events for the physical development of the upper body, balance and co-ordination without exposing children to unnecessary hazards'. He provides examples of how such safe challenges can be provided and these include turning bars, swinging ropes climbing surfaces, narrow rails, horizontal ladders and tunnels. It is suggested that *diversity and clarity* are required in play settings in order to meet children's wide-ranging and ever changing needs in a manner that provides new experiences on different visits, while still providing comfort in the way that a 'familiar friend' can. Accompanying this diversity and clarity it is suggested that *graduated challenges* should be provided so that children of 'different ages, abilities and development stages' can experiment with risk taking. *Flexibility* of physical elements within the play space is also deemed to enhance the play experience for children and these elements might include all sorts of natural elements: sand, mud, water and sticks provide opportunities for manipulation of the elements; add-ons such as sheets which can become a tent or spaceship; buckets and pulleys; mobile equipment and modular systems which can be moved around. *Sensory experiences* for sight, touch and smell are also considered, with reference to them providing cues in the space for children of all abilities. The importance of opportunities for *different social experiences* is highlighted as requiring a variety of spaces from small spaces where one child can be solitary or be

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk

with a few others, to spaces that children can get into but adults cannot, spaces with child sized tables and chairs, to larger spaces for a group or a class to play or have lessons in. In addition this variety of spaces can be added to by the opportunity to experience *different spatial settings* of being open or enclosed, high or low, in light or in shade.

A further series of criteria, based upon a range of research in this field have been developed by Hart (1993). These outline the need to address: access and movement; opportunities for challenge and risk taking; minimal unexpected hazards; provision for a wide range of interests and abilities; a supply of moveable parts; provision for a variety of sensory experiences; clear divisions within a space; clear signage and easy to read signs; all of this underpinned with the space being attractive and secure for both children and adults.

The need for more complex spaces for play has also been suggested by Stine (1997). Stine has identified that children's playgrounds should provide for a series of dichotomous relationships including being accessible and inaccessible; active and passive; challenge/risk and repetition/security; hard and soft; natural and people built; open and closed; permanence and change; private and public; simple and complex.

An 'a la carte' menu for the design of playgrounds, drawing upon a variety of research and literature has been brought together by Frost (Frost et al, 2004). This menu includes a sense of place/uniqueness, gardening, natural areas, sand and water play, stimulus shelters, organised games, variety and complexity, enhanced movement, playgrounds layout, educational resources, surfacing and accessibility.

Public open spaces for play: design elements

From the research already referred to and other evidence it is possible to develop an understanding of the design elements which support play within public open spaces. The paper will now briefly focus on some of these design elements, which have, in the main, been overlooked in the design of many English playgrounds while the KFC approach to playgrounds has dominated. These design elements include contact with nature; landform; moving parts; play equipment; the elements of fire, earth, air and water, and elements outside the control of the designer- the weather. A typical example of such a play space is shown in figure 2.

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk

Contact with nature

There is increasing evidence that contact with 'nature' is not only desirable but may even be a human need (Kaplan, 1995) with a growing body of qualitative research revealing that this includes children as well as adults (Hart, 1979; Moore; 1986; Sobel; 1993; Bardill, 1997; Titman, 1994; Wells, 2000). A range of research which 'has explored the possible impacts of green spaces on healthy child development' (Taylor and Kuo, 2006) has revealed that play in green spaces can provide opportunities for the many benefits that play can offer. For thirty years such research has continued to reveal that contact with 'nature' can help to improve children's self esteem (Kaplan, 1977, Kaplan, 1984), self-confidence (Kaplan and Talbot, 1983), concentration (Grahn et al., 1997) and help reduce Attention Deficit Disorder (Taylor et al 2001).

Landform

Changes in landform provide children with opportunities for, 'climbing, clambering and sliding……mounds make good wind shields and barriers, serve as banks for rolling down and …can be slid down and climbed up' (Lady Allen of Hurtwood, 1968), all of which provide many benefits for children's development. The use of landform can feed in to a variety of design opportunities within a site such as the provision of the contrasts of open and enclosed spaces and high and low levels (Moore et al, 1992).

Moving parts

The assertion that, 'children of all ages, all over the world, are happiest when they can move things around to their own liking', made by Lady Allen of Hurtwood (1968) has been repeatedly confirmed by various authors. The use of what has become known as 'loose parts' (Nicholson, 1971) may involve imaginative play such as the child who fiddles with things picked up from the ground (Moore and Wong, 1997). It may also involve the use of larger pieces such as sections of logs, or sand, or mud or water. The theory of loose parts suggests that the level of creativity, inventiveness and discovery in play relate to the number and type of variables in any space (Nicholson, 1971). Thus it clearly follows that playgrounds which have loose parts in them will provide more opportunities for creative and imaginative play than those without loose parts.

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk   13

Play equipment

Over thirty years ago Bengtsson (1974) declared that 'too much money and uninformed thought is often spent on fixed play apparatus', and that such equipment, 'however ingenious it may be, it alone does not make a playground'. Yet fixed equipment can have benefits for and support play. Traditional types of play equipment have been identified as supporting physical and social development to some extent but not cognitive and emotional development (Metin, 2003). A fuller exploration of the benefits of play equipment and playgrounds has been provided as a result of years of research (Frost et al. 2004). For example swinging benefits physical, social and emotional cognitive and sensory development, while climbing on fixed equipment has been identified to aid developmental progression including hand and feet patterns and visual focus.

Earth elements: earth, air, fire and water

Contact and playing with the elements of earth, air, fire and water is a great attraction for children but can also bring a degree of risk with it (Hendricks, 2002). The experience of playing with these elements and learning to deal with the more risky aspects of some of them should be seen as part of the process of growing up. If a child does not learn that fire is hot then it will not have the level of respect for it which it deserves. Yet fire tends to be ignored with respect to children's play, except perhaps within the context of scouting or camping. It has been suggested that, 'somewhere children should learn about fire' (Bengtsson, 1974) and that the ideal place for such learning is an adventure playground. Others consider that fire cannot exist in unsupervised spaces for young children (Hendricks, 2002) but that it is possible to provide a feature such as a circle of stones where fire can be made under supervision at an event such as a holiday scheme or an organised bar-be-que. Water is loved for play by children because it moves and they can move it. It has been described as, 'one of the joys of childhood; its endless possibilities for play should be fully exploited' (Lady Allen of Hurtwood, 1968, p37). It also accompanies sand very well – the two materials combining to make something special.

Elements outside the control of a designer or manager of playgrounds

The weather is obviously something which is outside the control of any landscape architect but it is worthy of mention here because of the constraining attitude that some people have to weather. In addition exposure to weather can immediately provide children with exposure to two of the earth elements mentioned above – water and air. However, playing

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk

out in different weathers means that children learn about the elements such as wind and rain – or air and water - and these can be linked in with an educational theme of plant growth, among other topics. Perhaps the most exciting of weathers is that of snow. The city becomes a quieter, calmer place, less dominated by cars and other vehicles. An increased level of walking becomes the norm and travelling on sledges becomes acceptable. Snow allows a child to, 'become lord of the city', (Lederman, 1968) but the ability to, 'collect from immobilised vehicles, this gift of snow from the skies is sadly short-lived. What the child needs is something more permanent – if less abundant – than snow: something quite unlike snow,'. Or as Lederman (1968) continues, 'something intended for the child and discovered by him as his own,…… something which the child adapts in its own way to its imaginative life; something elementary, which is placed where there is room for it, to attract the child from darkness and danger into light and greater safety' (Ledermann, 1968: p 39-40). So perhaps one of the indicators of a well designed and managed playground is whether it provides something with malleable characteristics of snow but 'something more permanent'.

Public open spaces for play: what of the future in England?
It can be argued that although academic interest adds to scholarly knowledge this is only of relevance for children's lives if the lessons learned from such knowledge are transferred into policy and acted upon in practice for the betterment of children's lives. There exist in England a series of policies which if fully implemented could influence the manner in which children use and play in public open spaces (Woolley, 2006). But what can be done to move the style of 'playgrounds' away from a KFC approach to something which is more challenging, creative, innovative and informed by the knowledge which exists about design themes, concepts and elements within the academic world? If such a change could be brought about the result might be public open spaces – and specifically 'playgrounds - which allow for, 'moving children, rather than moving equipment' (Aaron, 1965) or what Gill (2006) calls 'playful spaces'. Or this might result in a very radical approach that parks – one of the major public open spaces in our urban environments – 'do not need playgrounds because they have enough landscape elements themselves for children's play thus allowing for playgrounds to be developed in, other smaller spaces throughout the community, which are currently deprived of play potential' (Aaron, 1965).

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk

There appears to be a series of barriers which are preventing this transition away from the type of playgrounds which have been provided for so long. Some of these barriers are currently under investigation in the above mentioned Knowledge Transfer Partnership project. However there is no doubt that one of the barriers at a national level has been related to policy and this is where a change has started to take place. This shift in policy is accompanied by a significant opportunity in England to develop new play opportunities for children and young people due to the £155 million allocated for this purpose by the BIG Lottery Fund. This ring fencing of lottery money comes after years of campaigning, research and policy development which has been led, at the national level, by the National Children's Bureau and the Children's Play Council. This has resulted in the gathering together of various pieces of literature to make them more accessible to both policy makers and practitioners (see e.g. Cole-Hamilton et al, 2002; Children's Play Council, 2002; DCMS, 2003). The main driver for decisions on how this lottery money should be spent are outlined in *Getting Serious About Play* (DCMS, 2002), which defines play and play provision before going on to discuss a range of issues related to the value of play and provision of play opportunities. Not all of this money will be spent on the provision of play spaces in public open spaces, some of it will provide for internal activities and some for staff to support play activities. Play England, which is supported by the Big Lottery Fund, are producing a document called *Design for Play*, which it is hoped will help take the design for play in public open spaces for children in a different direction. In addition a guide for practitioners is being developed to complement the Play Safety Forum's statement about safety and play (Play Safety Forum, 2000). More recently the government has announced a 10 year Children's Plan (DCSF, 2007) which includes commitments to publish a (national) play strategy in 2008, create 30 new adventure playgrounds in deprived areas and offer capital funding to local authorities to allow up to 3,500 playgrounds to be renewed or rebuilt in an inclusive manner.

While these policy developments have been taking place at the national level there has been an increasing number of conferences in England about play in natural environments and the development of knowledge transfer activities with play equipment companies to try to assist in the culture change which is needed in the design of play spaces. Organisations such as London Play, Devon Play and Groundwork are promoting a different style of play spaces and ROSPA are keen to see challenging play spaces provided. CABE Space and Play England have also provided support to local authorities in the development of play

Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk

strategies, and proposals to the BIG lottery play fund. So there is a possibility that design for play in public open spaces in England might change. The final conclusion might be 'watch this space' and let's see what does happen during the next ten years.

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Author: Helen Woolley, The Department of Landscape, The University of Sheffield. h.woolley@sheffield.ac.uk