

WORKING PAPERS IN

Early Childhood Development

57

Children's right to play

An examination of the importance of play
in the lives of children worldwide

By Stuart Lester and Wendy Russell



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December 2010

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Contents

<i>Acknowledgements</i>	v
<i>Executive summary</i>	vii
<i>Chapter 1: Introduction and contextualisation</i>	1
<i>Chapter 2: Understandings of play</i>	7
<i>Chapter 3: Play as self-protection</i>	15
<i>Chapter 4: Play as participation in everyday life</i>	27
<i>Chapter 5: Providing for conditions for play to take place</i>	41
<i>References</i>	53

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Executive summary

Article 31 of the United Nations Convention on the Rights of the Child (CRC) states that:

1. States Parties recognise 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.
2. States Parties shall respect and promote the right of the child to participate fully in cultural and artistic life and shall encourage the provision of appropriate and equal opportunities for cultural, artistic, recreational and leisure activity.

This Working Paper focuses on play as a discrete element of article 31, differentiated from rest, leisure and recreation as something interwoven into children's daily lives and not controlled by adults (Hodgkin and Newell 2007). This paper draws on contemporary research on the nature and benefits of children's play to show how it is fundamental to the health and well-being of children and therefore why both States Parties and adults generally should recognise, respect and promote play as a right.

Understandings of play

There are many different and often contradictory explanations of the nature and value of play. For example, adults' attitudes towards children's play vary: some ignore it, or dismiss it as a waste of time; some curb play as something dangerous or subversive, while others appropriate it as a learning or socialisation mechanism.

The status of play within the CRC reflects these attitudes, and it has often been overlooked as

a stand-alone right (Child Rights Information Network 2007). Yet Burghardt (2005: p. xii) suggests that 'only when we understand the nature of play will we be able to understand how to better shape the destinies of human societies in a mutually dependent world, the future of our species, and perhaps even the fate of the biosphere itself'.

Much of the debate on children's rights centres on the inherent tension in the CRC between children's right to express their views, and the principle of acting in the child's best interests. Who makes the final decision if a child expresses wishes that are not considered to be in their best interests?

The debates on the evolving capacities of the child (see Lansdown 2005) encapsulate this; they see these capacities as balanced against adult responsibility to take decisions on behalf of the child, with the latter diminishing as the former develops. This perspective views childhood as

the opposite of adulthood, being important only as a preparatory period during which children progress through a universal set of stages to reach adulthood. From this perspective, play becomes a mechanism for development, a way of developing the skills needed for adult life. But studies of animal play, and the growing field of brain sciences, suggest that play's benefits may be more immediate, helping children interact with their current physical and social environments.

What is play and why is it important?

As they play, children rearrange their worlds to make them either less scary or less boring (Sutton-Smith 1999). In a game of chase, children are physically active and maintain the game by negotiating and agreeing to abide by the rules. Yet what they value is the thrill of the chase. The rules provide a frame within which the players know that 'this is play'; this provides a safe place where emotions can be experienced without the consequences they might bring in the 'real' world.

It is understandable to see children's play as a rehearsal for adult life, but there is little empirical evidence to support this (Fagen 1995, Burghardt 2005, Sharpe 2005, Pellis and Pellis 2009). In play, physical movements, voices and language are exaggerated, incomplete or in the wrong order; storylines become unpredictable, random and fantastical; conventional behaviours are inverted or subverted; and the rules of the game are changed to allow play to continue (Sutton-Smith 2003, Burghardt 2005, Pellis and Pellis 2009).

Play is about creating a world in which, for that moment, children are in control and can seek out uncertainty in order to triumph over it – or, if not, no matter, it is only a game. In this way, children develop a repertoire of flexible responses to situations they create and encounter (Spinka et al. 2001, Pellis and Pellis 2009). It is primarily behaviour for its own sake, for the pleasure and joy of being able to do it (Pellis and Pellis 2009). Yet play is more than mere indulgence; it is essential to children's health and well-being.

Play offers opportunities to move beyond existing ways of being, to transform structures and cross borders (Thorne 1993) and it appropriates, inverts and subverts adult cultural expectations of children. While adults may desire children's play to act as a socialisation process, at times it transgresses this, giving rise to adult concerns that play is disruptive, threatening or of no value, which leads to sanctions and prohibitions. Children, however, value these play expressions differently; they are far from unimportant and trivial.

Play and the CRC

The articles of the CRC are often grouped into the 'three Ps': protection, participation and provision. This Working Paper considers these three categories in terms of how they may relate to children's play and what this might mean for adult recognition of play as a right. It suggests that children can create their own self-protection through play, and that play is the principal way in which children participate within their own communities. Given this starting point, adults'

responsibility to provide for play involves ensuring that the conditions are right for play to take place.

Protection rights

Survival is not merely a question of maintaining life; biologically speaking, it refers to the ways an organism can favourably position itself in its environment, to maintain both current and future integrity and to respond to the demands of the environment.

Children's play can be seen as a self-protecting process that offers the possibility to enhance adaptive capabilities and resilience. The experience of play effects changes to the architecture of the brain, particularly in systems to do with emotion, motivation and reward (Burghardt 2005), leading to further playing. Play acts across several adaptive systems to contribute to health, well-being and resilience. These include: pleasure and enjoyment; emotion regulation; stress response systems; attachments; and learning and creativity.

Participation rights

Children's play represents a primary form of participation, being interwoven into everyday life (Meire 2007). The quality of children's environments influences their ability to play. Some children's local environments may be places of fear and violence; local spaces may be inaccessible because of constraints on their independent mobility; they may offer little attraction or mystery and become sites of drudgery and mediocrity; some neighbourhoods may be environmentally toxic; some may be spaces of oppression and imprisonment.

Adults generally define the purpose and use of space and time; children usually find ways to play that appear within the cracks of this adult order. The manifestation of this varies depending on how childhood is valued and understood within different societies. Numerous studies in the minority world (and, increasingly, wealthier areas of the majority world) point to the growing institutionalisation of children's time and space, and an associated reduction in children's independent access to public space (Rissotto and Tonucci 2002, Thomas and Hocking 2003, Kytta 2004, Karsten and Van Vliet 2006, Kinoshita 2008). This is evident in the decline in playing outdoors and an increase in adult supervision, although this is not a uniform pattern (Karsten 2005, Van Gils et al. 2009). In addition, play is valued for its role in learning and development and so is often used in children's settings under the direction of adults (Smith and Barker 2000, Mattsson 2002, Gaskins 2008).

There appears to be less separation of adults and children in the majority world (particularly in less urbanised communities); children play while involved in daily tasks, work and education (Punch 2000, Katz 2004). However, the globalisation of markets has increased industrialisation, leading to larger specialist and mechanised units for production; this removes child workers from their immediate neighbourhoods and reduces the opportunity for interweaving play and work (Chawla 2002a).

Children's ability to find time and space for play is affected by a range of social, cultural, economic and political factors. These include gender, socio-economic status and disability.

Adults need to pay attention to creating the conditions in which play can take place, to address a child's right to provision for play.

Provision rights

Provision implies much more than providing play facilities. It requires wider consideration of children's rights to ensure that the social and physical environment can support children's ability to play. When children's rights to survival, development and well-being are infringed, this has an impact on their capacity to play; equally, children's capacity to play will have an impact on their health, well-being and development (Burghardt 2005, McEwen 2007).

Play can help to mitigate the effects of severe stress that these infringements bring about. Given this, we see just how interconnected play is with all the articles of the CRC (Tugade et al. 2004, Booth-LaForce et al. 2005, Ratner et al. 2006). Yet children's needs for space and time to play are often misunderstood or ignored in broad development policy, plans and practice; this could have high costs for children (Bartlett 1999, Chawla 2002b, Churchman 2003). The association between playfulness, adaptive behaviour and well-being means it can be assumed that an absence of play is harmful (Siviy et al. 2003, Bateson 2005). The persistent absence of play may disrupt emotion-regulation systems, which in turn will diminish children's physical, social and cognitive competence (Pellis and Pellis 2006).

Although it may not be possible to isolate play from other areas of deprivation in children's

lives, their capacity to engage in play is significantly diminished in situations of severe stress, thus diminishing their capacity to build resilience to cope with stress (Burghardt 2005). Severe stresses that children encounter include violence, fear, discrimination, child abuse, excessive academic pressure, exploitative labour, loss of security and family support, displacement, unsafe or toxic environments, food and water shortages. Children may also experience other acute and chronic stressors, for example natural disasters and conflict, environmental degradation, traffic and trends towards over-protection and risk aversion.

Providing for the conditions for play

Given the benefits of play and the consequences of playlessness, it is clear that play is fundamentally linked to children's rights as a whole. Play is not a luxury to be considered after other rights; it is an essential and integral component underpinning the four principles of the CRC (non-discrimination, survival and development, the best interests of the child, and participation).

Adults should be aware of the importance of play, and promote and protect the conditions that support it. Any intervention to promote play must acknowledge its characteristics and allow sufficient flexibility, unpredictability and security for children to play freely. However, children's play belongs to children; adults should not destroy children's own places for play through insensitive planning or the pursuit of other adult agendas, or by creating places and programmes that segregate children and control their play.

Adults need to ensure that children's physical and social environments support their play; otherwise their survival, well-being and development may be compromised. This does not necessarily mean providing specific services; it means avoiding the temptation to dismiss

play as frivolous, restrict it through fear for and of children, or control and appropriate it for more instrumental purposes. The principle is to uphold article 31 of the CRC through supporting the conditions where play can take place.

Chapter 1: Introduction and contextualisation

This Working Paper focuses on children's right to play as a discrete element of article 31 of the United Nations Convention on the Rights of the Child, 1989 (CRC). It aims to provide a basis for exploring meanings of 'the child's right to play' across the world, as well as across the whole CRC, and puts forward arguments for why we should recognise, respect and promote play as a right. This is no small task; attitudes towards children's play range from dismissing it as a waste of time or something trivial, through restricting it as something dangerous or subversive, to appropriating it as a mechanism for learning or socialisation.

Gordon Burghardt (2005: p. xii), an acknowledged authority in the study of animal and human play, illustrates both this confusion and its consequences:

The problem of defining play and its role is one of the greatest challenges facing neuroscience, behavioural biology, psychology, education and the social sciences generally ... only when we understand the nature of play will we be able to understand how to better shape the destinies of human societies in a mutually dependent world, the future of our species, and perhaps even the fate of the biosphere itself.

There are many different and often contradictory explanations of the nature and value of play. Scientific and popular accounts perhaps

say more about adults than children, and reflect the dominant ways in which societies, both locally and globally, view and value the period of childhood and the role of play.

A common feature of adult rationality of play is the drive to imbue childhood with some significance for the future. Yet this future perspective, and its utopian message of hope, needs to be balanced with an appreciation of children's own sense of hope in their current and near future lives; for children, play is at the heart of the everyday things that matter.

Article 31 examined

Article 31 (see page vii, Executive Summary) encompasses a range of concepts that carry different meanings: rest, leisure, play, recreation, cultural life and the arts. These concepts are linked by being seen as separate from the tasks necessitated by daily life – what we might call 'work' (Hodgkin and Newell 2007). Play has some relationship to the other concepts – as respite from the duties and responsibilities imposed upon children (work) – but it also stands apart from them in several ways. Recognising, respecting and promoting play as a right requires an alternative approach.

The separation of play from work is not so clear-cut, since it is not necessarily bound by time and space. Children's play is interwoven into and work, education and other routines of daily life (Punch 2003, Tudge and Otero-Wanga

2009), or takes place in the cracks between or left over from adults' organisation of children's time and space. It might more readily be understood as a disposition, an approach to activity rather than an activity itself. It is something that might occur fleetingly as well as for longer periods of sustained playing.

In their discussion of article 31, Hodgkin and Newell (2007: 469) say play is 'arguably the most interesting in terms of childhood, in that it includes activities of children which are not controlled by adults'. This issue of control, together with its embedded and interstitial nature, introduces one of the many paradoxes regarding the role of adults, and particularly States Parties, in implementing this element of article 31. If play is understood as not controlled by adults, as interwoven into the fabric of daily life, then there is a need to think beyond providing adult-sanctioned, dedicated places and programmes for play. Instead, we must move towards a broader ecological, political, economic and cross-cutting consideration of children's ability to realise their right to play in their daily lives and in their local neighbourhoods, thereby retaining that control.

The right to play

The two elements of article 31 highlight three separate but interrelated roles for States Parties: recognising, respecting and promoting children's right to play.

Recognising the importance of play in children's lives is the building block for respecting and promoting it as a right. This requires a sound

understanding of the nature and benefits of play; the purpose of this paper is to outline these.

Respecting the right to play requires States Parties 'not to deny or limit access to the enjoyment of rights' (CESCR, cited in Carvalho 2008: 555). This definition sits well with the approach that sees play as something belonging to children, rather than requiring direct organisation by adults; it highlights the need for adults to be sensitive to children's propensity to play wherever they find themselves (Eisen 1990, Ward 1990). This requires adults to respect this understanding of play when planning environments specifically aimed at children (such as schools, hospital wards, childcare settings and play provision). It also requires adults to respect children's play when organising the general economy and environment, for example town and traffic planning in urban areas, industry and agriculture, conflict zones, and responses to natural disasters, as recognised by Camfield et al. (2009).

Promoting children's right to play is necessary because its fundamental importance is often overlooked, being understood by adults as 'a luxury rather than a necessity of life' (Hodgkin and Newell 2007: 469). And although children find ways and means of playing, the prioritisation of adult agendas in political and economic processes can often ride roughshod over children's ability to exercise their right to play, both in everyday life and in extreme circumstances.

Promotion may involve ensuring that the conditions are right for children to play. In this

sense, it is not solely the responsibility of States Parties to respect children's right to play; there is a need to promote it to other adults, since the tendency to ignore, obstruct or colonise children's play is common across all adults, from policy-makers to professionals, caregivers and the general public.

"A child has a right to play. Parents have a responsibility to make sure that children are given freedom to play. Parents are supposed to encourage children to play because it helps their growth. Children are not supposed to be overworked with homework or work at home. Children should be left to play."

Jane Nyambura, child participant in the IPA Global Consultations on Children's Right to Play, Nairobi, 2010

The indivisibility of articles

It is a principle of human rights generally that they are interdependent, interrelated and indivisible. Play is a defining feature of childhood (Oke et al. 1999, Geary and Bjorklund 2000, Mayall 2002); as such, it can be expected to have a relationship to all aspects of children's lives included in the CRC. The 54 articles of the CRC are often grouped into three broad categories, known as the 'three Ps': provision (of basic means for survival and development), protection and participation. The United Nations Children's Fund (UNICEF 2008) presents these as follows:

- **Provision (survival and development) rights:** These are rights to the resources, skills and contributions necessary for the survival and full development of the child.

They include rights to adequate food, shelter, clean water, formal education, primary health care, leisure and recreation, cultural activities and information about their rights. These rights require not only the existence of the means to fulfil the rights but also access to them. Specific articles address the needs of child refugees, children with disabilities and children of minority or indigenous groups.

- **Protection rights:** These rights include protection from all forms of child abuse, neglect, exploitation and cruelty, including the right to special protection in times of war and protection from abuse in the criminal justice system.
- **Participation rights:** Children are entitled to the freedom to express opinions and to have a say in matters affecting their social, economic, religious, cultural and political life. Participation rights include the right to express opinions and be heard, the right to information and freedom of association. Engaging these rights as they mature helps children bring about the realization of all their rights and prepares them for an active role in society.

These categories are placed alongside the general principles expressed in articles 2 (non-discrimination), 3 (the best interests of the child as a primary consideration), 6 (the right to life, maximum survival and development) and 12 (respect for the views of the child).

There is an inherent contradiction within the CRC between the child's right to participation and to have a say, and the principle of acting in the best interests of the child. Who makes the final decision if children's expressed wishes are not considered to be in their best long-term interests? Which right is paramount: the right to participate or the right to be protected?

Much of the commentary and debate on children's rights centres on this tension. Views and opinions polarise towards paternalism, which views children as vulnerable, incompetent and in need of adult protection, or towards liberationism, which views children as capable of participating fully in civil life. Debates on the evolving capacities of the child encapsulate these tensions (see Lansdown 2005), seeing these as balanced against adult responsibility to take decisions on behalf of the child, with the latter diminishing as the former develops.

The child–adult dualism conceptualisation sees childhood as a preparatory period during which children progress through a universal and linear set of stages in order to reach the goal of adulthood. Within this conceptualisation, childhood, particularly early childhood, is characterised by vulnerability and dependence (Woodhead 2006) and adulthood by rationality and autonomy. Play is seen as a mechanism for development, a way of developing skills needed later in adult life; Sutton-Smith (1997) terms this the 'progress rhetoric'.

This paper draws on and attempts to synthesise a broad range of academic disciplines to present

an alternative perspective, one made possible through a particular understanding of children and their play (outlined in chapter 2). It recognises children's lives in the here-and-now, as well as in the future. Ethnographic studies recognise children's competence in being children and participating in their indigenous play cultures. Animal play studies and the growing field of brain sciences have challenged the future-focused, deferred-benefits view of play; they suggest that play's benefits may be more immediate, helping children adapt to their current environments.

These perspectives allow us to consider play as a right of children to be children (Van Gils 2007), although of course, present lives will shape future ones too. From this starting point, we use alternative understandings of the 'three Ps' categories to consider play's importance in the lives of children, and adults' roles in supporting children's right to play.

Protection rights

Chapter 3 considers the evidence for play acting across a number of adaptive systems (pleasure and enjoyment, emotion regulation, stress response systems, attachments, learning and creativity) to contribute to well-being and resilience and, as such, being a form of self-protection. Without play, health and development are likely to be impaired; additionally, play can help children cope with infringements of other rights, such as abuse, conflict, displacement and poverty. In this way, play is fundamental to survival, health, well-being and development, rather than being an optional luxury.

Participation rights

Chapter 4 explores play as a means of participating in the cultural and social life of (and perhaps counter to) the dominant adult culture, and also of children's own indigenous play cultures. In this way, play is seen as fundamental to articles 2, 3, 4, 12, 13, 14, 15 and 16 of the CRC, as well as article 31.

Provision rights

The final chapter considers adults' role in ensuring that children can play. While play is a robust phenomenon, it can be compromised by extreme and toxic stress brought about through the actions of adults. In this way, 'provision' implies much more than providing play facilities; it requires wider consideration of children's rights generally, in order to ensure that the social and physical environment can support children's ability to play.

Traditional perspectives have justified play as linked to education and development, seen it as a part of the movement to eliminate child

labour, or promoted its therapeutic value in crisis situations. This paper encompasses these traditional perspectives, but also sets out a broader and more far-reaching understanding of play. The remaining chapters of this paper directly address how children use play as a form of self-enacted realisation of the CRC as a whole, through identifying its relationship to the themes of protection, participation and provision.

This paper draws predominantly on research and theorising from the minority world. Both authors are from the UK and are inevitably acculturated to this perspective; we have drawn on academic sources that are available in English and therefore likely to have this bias. With the support of the advisory and resource groups, we have attempted to counter this by being aware of the bias; drawing on theorising that explicitly recognises the interrelationship of mind, body and environment (physical, social, cultural and political); and seeking out research from majority world countries.

Chapter 2: Understandings of play

This chapter proposes that play is a behaviour that is distinguished by specific features that represent a unique way of being; a way of perceiving, feeling and acting in the world. The act of playing, where children appropriate time and space for their own needs and desires, has value for developing a range of flexible and adaptable responses to the environment.

“I like playing with my brother – pushing him around in the laundry basket, that’s my favourite game, I don’t know what it’s called – just the pushing my brother around in the laundry basket game”

Boy (6 years old) at the Consultation on Children’s Right to Play, Children’s Parliament & IPA Scotland 2010, Aberdeen

Distinctive features of playing

Play is often described as ‘as if’ behaviour, both set apart from reality and also having some relationship to it – a part of, and apart from, the world. It manifests itself in many different ways, including highly active games such as chasing, rough-and-tumble and play fighting; pretend and socio-dramatic play; language play; social play and games with rules; and construction play.

Across these diverse manifestations, play is generally recognisable by its apparent spontaneous, voluntary and unpredictable nature, accompanied by signs of pleasure and enjoyment; children appear to know intuitively that ‘this is play’. Yet the essential nature of children’s play,

and its apparently irrational connections between the real and the unreal, creates conceptual problems for adults. Although we have played as children, we now see the world through our adult filters and impose adult meanings, seeking to explain the irrational in rational terms.

Such meanings are also invested with our desires about the purpose of childhood and who and where children should be. Adult representations of play produce norms of what constitutes ‘play’ and, by definition, what does not. From this perspective, adults make judgments about the quality of play. But perhaps this misses the very essence of play, which is always an expression of children’s subjective experience and thus defies adult representation. Children, as children, have a different, or ‘other’, way of seeing, feeling and acting in the world, which comes alive in their play.

Play appears interwoven into the fabric of everyday life, not a specific constructed activity that stands apart from the real world, planned within specific times, spaces and routines in a child’s day (Sutton-Smith 1997). The ability to move from the adult-organised world to an ‘as if’ position or stance – something Lester and Russell (2008) refer to as a ‘playful disposition’ – is ever-present and emerges when children ‘feel’ that it is possible to play. It marks a state of positive emotional arousal that seeks to engage with the world in a distinctive manner.

Harker (2005: 55) describes how playful performance erupts in an everyday classroom encounter, in which children are working in groups of six at tables, girls on one side and boys on the other:

After a while, the boy sitting diagonally behind me turns around and gently hits the girl sitting next to me on the back. She immediately suspects him (he has a reputation of being the class joker), and tells him not to do it, without saying it so loud that the teacher hears. I keep an eye on him now, and he soon turns around again, gives me a complicit glance and gently hits her again. The girl turns and confronts him, and in his defence he blames the boy sitting next to him. A short argument with his neighbour follows, before he begins to (not so gently) hit his neighbour as punishment for supposedly hitting the girl. All the time this is happening, the girl is watching, and all three are smiling.

A playful disposition may result in structured, ‘framed play’, but more widely represents a stance to the world and ‘can permeate all spheres of life ... playfulness can appear wherever agency and intentionality open space’ (Lindquist 2001: 21). This suggests a subtle distinction between the use of ‘play’ and ‘playful’. Play is the outward expression or actualisation of a playful disposition, and may be recognised by the features described here. Being playful represents a particular approach to life, an urge to be open to and explore possibilities, to perceive and act in a way that denotes a sense

of optimism and belief in one’s own agency (Burghardt 2005).

In supporting children’s right to play, it is important to pay attention not simply to the external expressions of play, but to the conditions in which ‘playfulness’ thrives.

The urge to play represents a transforming rather than conforming stance (Henricks 2006), a belief in being able to change and have control over external conditions. In play, order (as a representation of dominant adult organisation) is opposed, inverted and subverted. Spinka et al. (2001) suggest that play’s evolutionary origins may be found in the deliberate creation of uncertainty and unbalance in order to regain control, as training for the unexpected. Expressed simply, children at play are in control of being out of control (Gordon and Esbjorn-Hargens 2007).

This injection of uncertainty is not only physical but also emotional. Both of these are wonderfully illustrated in Gosso et al.’s (2005) descriptions of the ways in which children in indigenous cultures in Brazil and Africa continually inject emotionally challenging elements into their play. This enables displays of bravery and courage in the face of adversity.

Camaiurá children play “Where is the fire?” They dig two holes in the sand and connect them with a tunnel. One child places his or her head in one of the holes and is completely covered with sand by the other children.

The child breathes through the tunnel as the others provoke him or her with mockery and ask “Where is the fire?” The child underground has to indicate the correct position of the sun at that moment. The game finishes when he or she gives the correct answer (Moisés 2003, cited in Gosso et al. 2005).

A second and interrelated pattern is the creation of a time-space that is not of the real world, even though it may use symbols and materials from the immediate social, physical and cultural environment. For play to happen, the players need to develop shared emotional expressions and language. These enable this separation to take place, establishing ‘frames’ that clearly distinguish what is being engaged in is play and therefore apart from the real world. When children get a sense that their expectations and emotions are shared with others, there is an escalating cycle of synchronised communication and emotion (often expressed through laughter). This comes with an increased sense of attachment, manifested in shared symbolic representation (objects can hold meanings beyond their real use) and associated actions (behaviours defy the limits of the real world), often in highly novel and creative forms (Turner 2007). This also incorporates a playful disposition to the physical world¹ as perception, action and agency function to actualise what the immediate surroundings offer, or afford, for play (Gibson 1986).

Noren-Björn (1982: 188) illustrates wonderfully the process of synchronising emotional expressions, developing shared symbols and the actualisation of affordances:

Some children (four boys ranging in age from 5–10 years old) gathered around a puddle which had formed under the “Shipwreck” equipment. They played with boats there and then one boy of about eight hit on the idea of getting some new-mown grass from a nearby slope. With the help of a younger boy, he drove a big load of grass down to the puddle in a cart, emptied the grass into the water and stirred it around with long sticks. The children called it spinach. Gradually they began to lift up the slippery stuff and watch how the water ran off. Then they loaded the wet grass into the cart and took it over to the sand-pit, where they mixed it with sand and shaped it into a cake which they then proceeded to decorate with gravel and stones in a neat circle, finally adding sticks for candles. The boy who had started the whole thing then instructed the other boys to sing “Happy Birthday” to him.

The exclusivity of play (excluding real world order and limitations) is accompanied by the players’ internal focus on maintaining play, rather than, or as well as, a finished article or some final resolution; it is a triumph of process over product. Play is primarily behaviour for its

¹ We are cautious here to maintain another binary distinction between social and physical; ‘perception–action processes need to be viewed as socially mediated processes, even when what is perceived might be conventionally regarded as a nonsocial feature of the environment. Social influences are at work from the earliest points of ontogenetic development’ (Heft 2007: 92).

own sake, for the pleasure and joy of being able to do it (Pellis and Pellis 2009).

There is a tendency to see play as a liberating process (Harker 2005), but children not only appropriate and transform the material and symbolic cultures of their worlds, but also the power structures. Much of children's play expressions will involve exercising power over less powerful children and the maintenance of cultural, gender and ethnic patterns and practices (Henricks 2006). However, as a time-space that disorders the real world, play may also offer the opportunity to move beyond existing ways of being, to transform structures and cross borders (Thorne 1993).

Alongside this, play will appropriate, invert and subvert adult cultural expectations of children.

While adults may want children's play to act as a socialisation process into cultural belief systems, it will at times transgress these. This gives rise to adult concerns that such play is disruptive, threatening or of no value, leading to sanctions and prohibitions. Children, however, value these play expressions differently; they are far from unimportant and trivial (and, of course, adult disapproval may be a part of that value).

It was Passover week. The pre-school teachers told the Passover story (in a non-violent way, without all the plagues) and distributed *matzoh*² to the kids. One little boy ... picked up his flat crisp *matzoh* and looked at it. He took a small bite, then another, and

another, chomping a fairly straight line across the top. Then he took more bites at a right angle down the edge, then a couple more ... [the child] raised his now L-shaped *matzoh* and gazed at it with pride. What a perfect gun! Then he ran round the room shouting "pow pow pow" while his classmates squealed and pretended to fall down dead and his teachers rushed towards him in horror (Jones 2002: 45).

Much of play's 'ordinary' action can shift and change direction, in many ways, through its unpredictable and dynamic nature. Yet at the same time, through the very process of playing, it can make critical differences to a child's experience of time and space. Noren-Björn (1982: 29) recounts an 'ordinary' playful encounter:

A girl throws a stone in the water. She listens to the plop and watches the rings forming. Another girl comes up and tries to hit a "target" in the water. The girls begin to keep score of how many times they get a hit and to discuss what "counts".

Central to this experience, and one that liberates it from the mundane, is the presence of 'fun and pleasure', even though it may at times be serious (Lindquist 2001). From this perspective, the focus of attention is how play emerges and takes shape in 'shared experiences, everyday routines, fleeting encounters, embodied movements, precognitive triggers, practical skills, affective intensities, enduring urges, unexcep-

² A brittle, flat piece of unleavened bread.

tional interactions and sensuous dispositions’ (Lorimer 2005: 84).

Given the right environmental conditions, children’s play can appear anywhere and everywhere (Ward 1990) and will involve the use of everyday spaces and the unremarkable and mundane materials that they find. Rather than requiring a specific designated location, a play space is created through children’s shifting and dynamic interactions with each other and the materials and symbols present in any space; children’s performance of play both takes and makes place.

Oke et al.’s (1999) study of children’s play in Mumbai notes the ways in which children appropriate space and materials including ‘plastic bags, bottles, rings, wooden planks, broken coconut shells, empty tins and boxes, thread/string, scraps of paper, candy/chocolate wrappers, etc.’ Even though children may be engaged in domestic chores, or contributing to local economic production, they will still find some way of playing (Katz 2004), even in something as apparently mundane as a ‘child helping her mother wash vessels or clothes lingers during the task at hand, playing with the water, splashing it with her hands or feet’ (Oke et al. 1999: 212).

It is important to note that the restructuring of the ‘real’ world through play can create as well as subvert order. Lindquist (2001) notes how the powerless can become powerful within the

play frame; Sutton-Smith (1999) suggests that children can recreate a parallel world alongside the real one, one that is either less mundane or less scary.

Sobel (2002: 39) describes visiting a playhouse under the shade of a tamarind tree in Carriacou, West Indies:

Around the outside, defining the walls, were carefully placed branches of broom, a resinous shrub used for sweeping. There were a flattened cardboard box “mattress”, a three-legged chair, and a box of doll paraphernalia. The feeling was spare and a bit destitute ... But the girls were proud of their space. Valerie swept it clean with a broom and made sure I had somewhere to sit.

Sobel notes that the ‘real’ living conditions of the children were dilapidated and disordered and ‘it felt like the playhouse ... [was] their means of making order in a chaotic world’.

For children whose daily lives are chaotic, unpredictable or violent, play may represent a time-space in which they can establish a sense of order and predictability through repetitive play patterns – a way of coping with environmental disturbance. Over time, these may become stereotypical, limited and limiting, focused on immediate survival but closing down openness to other possibilities. Trying to prevent children from performing adaptive stereotypic acts, without addressing the environmental causes of such behaviour, may actually cause further harm (Burghardt 2005).

The defining and distinctive features of play lie with its novelty, uncertainty, unpredictability, and ‘as if’ nature. Children create time–space in play that is within their control and allows for the subjective expression of their bodies, senses, feelings and actions in different ways. It emerges in the fabric of everyday life, and may appear to be ordinary and seemingly inconsequential. But as we developed this paper, we contended that moments of play have life-enhancing properties that arise from this very ordinariness.

The adaptive value of play

Any analysis of the distinctive features of play inevitably questions why this behaviour is important. This question has led to different and often contradictory answers. The traditional emphasis from play studies is largely on the deferred benefits that the individual might accrue. Since play evidences behaviours that are similar in form and structure to non-play contexts, some people have presumed that play has adaptive value by rehearsing behaviour that is required in the ‘real’ world and, as such, play supports physical, social and cognitive training.

Much of the educational literature on play and learning recognises this view of play (Lester and Russell, 2008), and it increasingly appears in the Early Childhood Education discourse emerging in the majority world (for example, Liu-Yan and Feng-Xiaoxia 2005, Woodhead 2005, Nyota and Mapara 2008). But this perspective may not

be matched by empirical evidence (Fagen 1995, Burghardt 2005, Sharpe 2005, Pellis and Pellis 2009). Play in childhood is qualitatively different from ‘real’ life expressions of apparently similar behaviour: they are initiated by different stimuli, occur in different contexts and are modified in their structures. Play behaviours are deliberately exaggerated, invert and subvert conventional behaviours, vary in sequence, and are unpredictable. Additionally, the disposition or motivation to play is different from other motivational forces. This questions arguments that play is purely a ‘rehearsal’.

More recent studies look at what play may offer during the time of playing. This suggests a switch from seeing play solely as an instrument for non-play skill development to appreciating the intrinsic, or autotelic, value of play.

Evolutionary perspectives suggest that the extended period of juvenility in the human species exists to enable children to ‘best fit’ the environments of their childhood (Bateson and Martin 1999). Rather than simply being of value for becoming a better adult, play exists to enable a child to be a better child in their unique and complex environments, and thus enhance their chances of survival as a child (Prout 2005). Of course, it follows from this that being a better child also establishes strong foundations for becoming a competent adult, but this is not a simple cause/effect relationship. Play enables children to try out their environments and develop a wide repertoire of responses to the situations they create. The key feature is the flexibility of responses, and

while other forms of behaviour may contribute to this, play has distinctive features that make it especially suitable for finding the ‘best way forward’ (Bateson 2005).

The importance of play lies with developing physical and emotional flexibility, by rehearsing the actions and emotional aspects of being surprised, temporarily disorientated or unbalanced (Spinka et al. 2001, Pellis and Pellis 2009). Children modulate novel behaviour patterns and emotions by the frame in which play occurs and by the lack of serious consequences from losing control. Such uncertain experiences develop behavioural improvisation that draws on conventional movements alongside atypical and novel responses, accompanied by widening repertoires for avoiding emotional over-reaction and harmful stress. Play operates as a calibrating or mediating mechanism for emotions, motor systems, stress response and attachment systems (Spinka et al. 2001, Burghardt 2005, Pellis and Pellis 2009).

The features that distinguish play from other behaviours may exist to keep the brain labile; that is, to maintain its potential for plasticity and openness rather than close down potentiality through rigid and stereotypical behaviour patterns (Sutton-Smith 1997). The ability to create a virtual reality offers the chance for excitement and enjoyment through temporary suspension of the limits of the real world. This in itself becomes a self-reinforcing process, one in which motivation and reward work in a continuous cycle to support emotional and bodily engagement with the social and physical envi-

ronment. As Sutton-Smith (1999) comments, play prepares you for more play, and more play offers a greater satisfaction in being alive.

This perspective suggests that some of the immediate benefits of play include:

- providing important physical exercise that develops endurance, control of body movements and perceptual-motor integration;
- testing aspects of the environment to deduce their value;
- establishing social roles and alliances that may contribute to current survival;
- enhancing psychological and physiological well-being and resilience (Burghardt 2005).

The central adaptive value of play appears to rest with calibrating emotional processes to the unexpected events that are introduced during play. The ability to regulate emotional responses to disturbance, and to reduce stress levels, enhances the ability to cope with uncertainty and allows for the development of other skills (motor, cognitive and social) that can be brought to bear on the situation at hand. As Pellis and Pellis (2009) demonstrate from their studies of animal play fighting, play may prepare the ground for producing subtle and nuanced responses to novel and unpredictable environments, which can be carried forward in development, maintaining resilience and the ability to deal with disturbance.

Summary

This chapter establishes some key themes in relation to the nature and importance of play. The very things that distinguish play from other behaviours – its voluntary, pleasurable and ‘as if’ creation of uncertainty – enable children to approach their environments in highly flexible and adaptive ways.

Chapter 3: Play as self-protection

Play is a basic mechanism for maintaining the survival and protection of children. The key focus here is that while playing, children can create their own well-being (Bradshaw et al. 2007), echoing Hart's (1997: 15) assertion that the 'best protection and guarantee for the development of childhood is "self-protection"'.

To develop this discussion, we need to consider briefly the concepts of survival, resilience and well-being. These complex and interrelated themes have multiple interpretations and contestations (Boyden and Mann 2005, Ungar 2008); we discuss them here to provide some initial context to frame more detailed considerations of the importance of play.

An approach to survival

At a biological level, survival refers to maintaining the integrity of an organism in order that it will continue to live. The CRC recognises this as the basic right to life (article 6). However, survival is not merely maintaining life; it also refers to the ways an organism can favourably position itself in its environment in order to maintain both current and future integrity, and be able to respond to the demands of the environment (implied across all articles, but particularly articles 24, 27, 28, 29).

McEwen (2000) refers to this as the process of 'allostasis'³, which means seeking and creating a positive emotional, physiological and psychological state, one that is at ease and enjoys being alive in its immediate environment. This requires the concerted efforts of both biological and cultural systems to achieve the state generally referred to as 'well-being'.

Development, or the process of growth through change, involves the concerted actions of genes, cells, organs, bodies and environment to enable organisms to best fit their local habitats. It occurs through constant adaptations and change that operate on a mind that is embodied and embedded in the world (Thompson and Varela 2001, Edelman 2006).

Children, with supportive environments, are resilient and develop a range of adaptive capacities and strategies to cope with being a child. These strategies reflect biological systems working in conjunction with specific local contexts and call attention to children's current subjective experiences in their environments (Fattore et al. 2007). This focus challenges 'deficit models' of childhood by emphasising agency, available resources and the 'way that successful challenges to adversity can enhance competence and well-being' (Camfield et al. 2009: 75).

³ Rose (2005) uses the term 'homeodynamics', in preference to the biological term 'homeostasis', to emphasise that stability is achieved through constant change and adaptation rather than attempting to stay the same.

Masten's (2001) description of resilience as 'ordinary magic' is particularly relevant here. While many studies of resilience focus on adaptation to severe stress and trauma, the capacity to develop a resilient profile may be established through everyday, ordinary, mundane experiences. Resilience is a 'naturally occurring feature of human adaptive systems' (Lemay and Ghazal 2001: 12). Resilience becomes a variable quality that is a reflection of the ongoing transactions between a child and the favourable features of their surroundings.

Research suggests that the basic foundation for resilience is a sufficient stock of 'good things' in everyday life (Vellacott 2007). The ability to respond to disturbances is robust if basic human adaptive systems are protected and in good working order. However, if these major systems are impaired, there is a reduction of openness and adaptive capability, with a subsequent impact on well-being (Masten 2001).

A central premise here is that children's play is a way of expressing their inner urges in a favourable and supportive environment, or a 'relaxed field' (Burghardt 2005). This becomes a self-protecting process that offers the possibility to enhance adaptive capabilities and resilience. This very ordinariness of resilience provides a considerable challenge for adults, since 'the notion that children's own resourcefulness may promote their mental health is, in many cases, entirely foreign' (Boyden and Mann 2005: 11). This idea is developed further in the following sections.

Play, survival and well-being

The qualities of play outlined in chapter 2 offer a unique form of being (as a playful disposition) and behaving (play) in children's lives. Central to this is play's ability to work with both equilibrium and disequilibrium; children have an appetite to seek out conditions of novelty, arousal and pleasure, and yet they want stability and security (Henricks 2006).

These existential dilemmas are at the heart of play. Play requires players to know that what they are engaging in is not real. Children achieve this by establishing conventions, expectations, rules and so on to keep them safe. These rituals and cultural expressions, by necessity, are often routine, predictable and repetitive; children will initiate play using established conventions. This safe frame allows the graduated introduction of pleasurable and exciting disturbance, disorder, and uncertainty that require some resolution or return to order, often to be followed by further injections of surprise.

Gould (1996) reminds us that humans, as specialists in non-specialisation, have survived not through rigid and narrow ways of behaving, but through adaptive qualities of quirkiness, flexibility, unpredictability and sloppiness. These are the essence of play. They may even be a mirror to the internal workings of the brain; the brain is constantly engaged in a ceaseless chatter with itself, something Sutton-Smith (1997) refers to as 'neural fabulation'. This playful chatter enables the brain to 'coordinate' everything relevant to the 'urgencies of its own experiences' (Sutton-Smith 1997: 60) to ensure the best chance of producing appropriate response circuits.

The playful connections children make with each other and with the environment open up possibilities that would not normally arise in the 'real' world; children can connect things in entirely novel ways and pretend that anything is possible. This external behaviour is matched with an internal connection process; a novelty of wiring potential in brain circuits. There is emerging evidence to support this in animal research. For example, playful rats have significantly elevated levels of brain-derived neurotrophic factor (BDNF), recognised to have a central role in developing and maintaining neural plasticity (Gordon et al. 2003; van Praag et al. 2005).

Play supports novel neural connections and changes the architectural structure of brain regions through its own value and fabrications (pleasurable and 'as if' behaviour); 'the brain not only shapes play ... play also shapes the brain' (Pellis and Pellis 2009: 94).

These changes maintain a disposition to the world (a configuration of mind, body and environment) that seeks out further novelty and arousal, which in turn feedback into mind/body connections.

The following section explores how experiences of play contribute to this chatter, and how internal fabrications reciprocally contribute to maintaining a playful disposition.

A brief note of caution

Looking at the developmental relationships

between mind, body and environment is inevitably complex. It requires an interdisciplinary approach that draws on ideas from neuroscience, biology, psychology, sociology, anthropology and children's geographies. The limitations of this paper mean that a full consideration is impossible; we can only present a summary of some of the key findings from across these disciplinary perspectives. This inevitably introduces the problems of reductionism and essentialism, the very things that we contest through this paper. Our intention is to extend some of the narrow ways of looking at play and offer the possibility of a broader, more synthesised base that considers the unique contexts of children's lives.

The importance of play in enhancing adaptive systems

To consider the importance of play and its relationship to adaptive systems, we separate our findings into a number of headings to present them more easily. But it is apparent that play operates across these systems in a holistic, dynamically coupled and mutually influential manner.

Pleasure and enjoyment

Children and young people from the community of Samulalí #2, in the District of Matagalpa, Nicaragua, prepared a presentation as part of a campaign to promote their right to play. In this, they drew up a list of why play is important to them. Top of the list was 'Because it makes us feel good' (Children and Young People Defending our Right to Play Action Group 2009).

One thing that play scholars acknowledge is that play is a pleasurable experience (Turnbull and Jenvey 2004, Burghardt 2005). This pleasure arises from the ability of children, for the time and space of play, to be in control of being out of control (Gordon and Esbjorn-Hargens 2007). It marks an act of agency, often in concert with other children, to shape their own worlds and destinies.

This agency is expressed in diverse ways: for example the creation of imaginary and material worlds, climbing trees, the pleasure and excitement of chasing and being chased, and hiding from others to avoid getting caught. They represent fleeting moments of exuberant incongruity, a sophisticated form of novelty that gives rise to changing perceptual and conceptual frameworks.

Children enjoyed bending their knees, lifting their bottom up and looking through their legs. This was one of the favorite activities that brought smiles or laughter to the producer of the activity as well as to the partner of the activity (Loizou 2005: 48).

These playful expressions may not always be evidenced by outward signs of pleasure, as dramatic and tense elements are injected into such play forms. But the framing of play with others provides a 'safety net' and escape route if play tips over into being too stressful – 'I'm not playing'. This gives rise to an underlying emotional theme of pleasure and joy in playing.

Research into the effects of pleasure on biological and social systems indicates that it is highly beneficial for human functioning, leading to broadened repertoires of thought and action; being in a positive emotional state increases the ability to maintain attention and to be alert to a wide range of environmental cues (Strauss and Allen 2006, Wadlinger and Isaacowitz 2006, Cohn and Frederickson 2009). Feelings of joy and pleasure are associated with more flexible and open responses to situations and with effective problem-solving, self-control, forward-looking thinking and caution in dangerous situations (Isen and Reeve 2006).

The display of positive emotions is also likely to build enduring resources, in particular through developing strong social relationships (Holder and Coleman 2009). This tends to work in a self-reinforcing cycle: as social interactions increase, so too will the shared experience of happiness. Studies into children's expression of spontaneous laughter suggest that it both broadens interactions and builds increasing social attachments and bonds (Gervais and Wilson 2005, Martin 2007, Cohn and Frederickson 2009). Laughter activates the pleasure regions of the brain and induces positive states in those laughing, and also arouses positive emotions in those watching (Pellis and Pellis 2009).

Research suggests that experience of pleasurable situations may have benefits for dealing with stress and negative experiences (Silk et al. 2007, Cohn and Frederickson 2009). Children who are more prone to seek out and enjoy rewarding experiences may find sources of joy and happi-

ness in otherwise adverse social contexts. This optimism and sense of hope is not an idealistic, utopian vision for the future, but rather a representation of the ways in which children approach their everyday lives.

Play becomes time–space for ‘everyday, momentary forms of hopefulness’ (Kraftl 2008: 88) in which the joy and pleasure of playing – of doing things for the sake of them, rather than performing obligations to adults – enable children to maintain an openness to the world, to create and take advantage of environmental resources to simply ‘go on’ with their lives. Play becomes a ‘wilful belief in acting out one’s own capacity for the future’ (Sutton-Smith 1997: 198).

The opposite of this, expressed through sadness and sorrow, is a disequilibrium in which the ease for action is reduced, leading to depression and psychological discord (Sutton-Smith 1997, Damasio 2003). This suggests that the opposite of play is not work but a lack of play. More broadly, it is a suppression of a playful disposition to life, with the associated reduction in motivation to engage in playful activity, declining possibilities for developing friendships and strong attachments, and difficulties in sustaining positive emotions when experienced (Forbes and Dahl 2005).

“I normally play in the field, or Nyayo stadium. Whenever I am playing, I can’t

concentrate because of thinking about finishing my homework but sometimes I am forced to stop playing so that I may finish my homework to avoid punishment from my teachers.”

*Faith O. Nyasawo, child participant in the IPA
Global Consultations on Children’s Right to Play,
Nairobi, 2010*

Emotion regulation

There is a growing awareness of the central role of emotions in decision-making and actions (Damasio 2003). The contention is that the distinctive features of play support emotional flexibility. Emotional reactions to unexpected and unpredictable events are modulated, or calibrated (Pellis and Pellis 2009) in the relatively safe frame in which play occurs (Spinka et al. 2001).

Sutton-Smith (2003) proposes that play functions as an ‘emotional mediational phenomenon’, a balancing act between largely innate primary emotions (generally agreed to cover anger, fear, disgust, shock, sadness and joy) designed as front line survival mechanisms and the secondary emotions. These secondary or ‘social emotions’ (Damasio 2003) are more sophisticated emotional responses that draw on cortical areas as well as emotional, or subcortical, brain systems. While archaic primary emotions are fixed responses, the cortical and subcortical regions are enormously plastic and undergo massive structural organisation and reorganisation through experience. Flexible and adaptive emotional responses rely on establishing connections between emotion systems

(the subcortical regions) and the ‘cognitive’ or executive brain regions (the frontal cortex).

Play presents a way of keeping alive the primary repertoire within the carefulness dictated by the secondary emotions (Sutton-Smith 2003). It offers the opportunity to express primary emotions as long as they are substantially controlled; primary emotions are ‘parodied’ in play by the ‘as if’ element (‘as if’ the emotions being presented in this play are ‘real’) yet without the real consequences.

For example, in rough and tumble play there is a balancing act between primary and secondary emotions. The secondary emotions keep in check the ‘as if’ primary emotions of fear and anger, through a range of framing actions that give the message this is play rather than aggression. This requires establishing basic routines that are recognised as non-confrontational. Small deviations to these routines enable children to experience moderate novelty, enhancing the experience and also inviting the addition of more novelty through structured flexibility and a moment-by-moment uncertainty. This leads to the fine-tuning of emotional responses (Pellis and Pellis 2006).

As play unfolds, children become aware of the actions, emotions, motivations and desires of others and adjust their own actions in response. This synchrony is the foundation for empathy through shared neural representations, self-awareness, mental flexibility and emotion regulation.

Play may have adaptive value as children regulate their emotions in terms of ‘performance strategy, courage, resilience, imagination, sociability or charisma’ (Sutton-Smith 2003: 15). Play offers the opportunity to develop and try out a range of responses without serious consequences. This process may contribute to shaping neural architecture, enhancing the integration of systems that support emotion and cognition.

Stress response systems

A specific form of emotion regulation can be seen through responses to stress. Many people understand stress as a negative or harmful experience, but not all stress is necessarily damaging; indeed the absence of any form of stress is likely to be significantly more harmful (Greenberg 2004, Yun et al. 2005, Pellis and Pellis 2009).

Research suggests that there are some benefits to the development of emotion-regulation and stress response systems when the stress is of moderate intensity (Pellis and Pellis 2006). In some circumstances, the experience of moderate stress or adversity can strengthen resistance to later stress, or ‘stress inoculation’ (Panksepp 2001, Rutter 2006, Haglund et al. 2007). The degree of control and agency that an organism has over the stressor plays a central role in determining whether the stressful event leads to subsequent vulnerability or resilience (Haglund et al. 2007). Equally, the positive or negative affect associated with the stressor will play a

considerable part in the value attributed to stress (Greenberg 2004).

Under playful conditions of desirable, moderate and temporary stress created by ‘as if’ frames and uncertainty, there may be a brief enhancement of immune systems and emotion-cognitive function (Flinn 2006). The experience of stress under playful conditions, with associated temporary elevations of cortisol⁴ (an important neurochemical involved in responding to stress), leads to neural reorganisation. This enables new connections that will be able to cope with the demands of an unpredictable environment (Flinn 2006) and energise activity (Greenberg 2004). Pellis and Pellis’s (2006) research suggests that animal play-fighting fine-tunes the development of the stress response system in ways that enhance an individual’s ability to respond appropriately to novel challenges.

Through playing, children appreciate that social interaction and engagement with each other and the physical environment may involve some pain and uncertainty, and so ‘dampen their emotional weighting in order for that discomfort to be regarded as “background noise”’ (Pellis and Pellis 2006: 265); if a child hurts themselves or gets hurt by others in play, while the pain is ‘real’ it may matter less than in non-play contexts as, after all, ‘we were just playing’.

This story is from Hitoshi Shimamura, playworker at the adventure playground in Kodomo Yume Park, Kawasaki, Japan (personal communication 2009).

“One time, a 12-year-old boy got a cut on his forehead when he was playing with a 5-inch nail (it is a really popular game here!). I gave him first aid and said, ‘We should phone your parents about the cut, because it is on the forehead. Otherwise, your parents would be worried’. He, however, rejected it. It is quite usual for children to refuse reporting to the parents, because they know the parents would not be happy about it.

I explained that I would report to the parents in a way that would not get him into trouble, but his explanation was ‘I do not want a playworker in Yume Park getting into trouble with my parents’. I thought his reaction was so unusual. I wondered, however, whether he would have the same response if he had been injured doing what he did not really feel like doing ... A child in a positive mind in daily life would not accuse others of his/her own injuries.”

⁴ In basic terms, following an initial reaction to stress through the release of adrenaline and noradrenaline, a stress response becomes activated via the hypothalamo–pituitary–adrenal (HPA) system and the production of cortisol-based neurochemicals. Short bursts of cortisol into the system are beneficial in terms of generating an appropriate adaptive response to stress, but both under and over-production of cortisol may be harmful through depressing neural activity and reducing the system’s potential to cope with adversity.

Play may lead to the enhancement of emotion and stress response systems that avoid overreaction to novelty, and produce a more subtle and graded response rather than impulse-driven over and under-reactions. Play helps children be better equipped, at a neural level, to 'roll with the punches' (Siviy 1998).

Attachment

Attachment is a general descriptive term for the processes that maintain and regulate continuing social relationships (Hofer 2006). Numerous studies on the significance of children's early attachments for healthy brain development have emerged over the past decade (Schoré 2001, Carter et al. 2005, Hofer 2006, Swain et al. 2007). Attachment may be viewed as a mutual emotion-regulation process, or 'affect synchrony' (Schoré 2001, Panksepp 2001). This establishes the foundations for inter-subjectivity and the ability to attune and coordinate emotions with others, which also influences the development of language skills, empathy and emotion regulation (Feldman 2007, Ginsberg 2007).

Positive early attachments allow an internal sense of security and resilience (Schoré 2001) and shared moments of positive affect facilitate the rewarding aspects of social engagement (Marshall and Fox 2006). A child's early attachments provide a strong base for establishing a playful disposition to the world. For example, in cultures where mother-infant dyadic playing occurs, activities such as tickling and playing

'peek-a-boo' type games can develop a positively charged and valued playful inter-subjectivity. This also helps to establish foundations for children's 'eventual enjoyment of unpredictability in games, as well as mischievous pranks and practical jokes' (Panksepp 2001: 155).

Akiko is at the table drawing with Trevor and Adonis. Florence [a caregiver] looks at her eating the crayons and tells her to use her crayon on the paper. Akiko looks at the caregiver and smiles. Then she puts the crayon in her mouth. Florence gets up and walks to Akiko's side and takes the crayon out of her mouth. Then Florence puts the crayon on the table and moves Akiko back to sit on the chair. Akiko looks at the crayon and then at Florence, smiles, picks up the crayon and puts it in her mouth (Loizou 2005: 51).

With the provision of a relaxed field afforded by caregivers, children develop relationships with other adults and children. Play becomes an important medium for establishing peer friendships, learning about social dynamics and the rules of engagement (Fantuzzo et al. 2004, Panksepp 2007). Friendships form one of the most important contexts for supporting mental health and social and psychological development (Guroglu et al. 2008). High quality friendships represent strong attachments, which in turn buffer children from anxiety and stress (Booth-LaForce et al. 2005). Abou-ezzeddine et al.'s (2007) study of children's friendships notes that positive relationships with peers offer important protective effects. In their study of

children's perceptions of poverty across Belarus, Bolivia, India, Kenya and Sierra Leone, Boyden et al. (2003) highlight the role of friendships in helping children to build resilience and cope with poverty.

Time spent 'hanging out' and playing contributes to friendship maintenance by building trust and intimacy (Mathur and Berndt 2006). While families and institutions provide important contexts for socialisation, the child's ability to form and shape their interactions away from adults is of considerable importance (Corsaro 2003, Goodwin 2006). Play culture arises from within children's peer networks and develops unique forms of expression (Mouritsen 1998). When left to their own devices, children have 'serious fun' playing, as they create expressions and meanings that are personally relevant and significant.

In the cultural contexts of children's playing ... the players can experiment with stand-points, redefine their identities and, thereby, take back their power of self-definition (Guss 2005: 240).

In these unique cultural contexts, children's playful expressions continue to refine ways of dealing with uncertainty, both in the content of their play and the ways in which children negotiate their various positions in play (Goodwin 2006). Again, it is suggested that this has important benefits for generating pleasure and positive emotional states, emotion regulation and responding to moderate stress, particularly through the ways in which children have to

contend with the negative, difficult and sometimes painful experiences that are an essential part of children's play cultures.

From the early months of life, play has a central role in developing significant attachments with others and represents a key feature of resilience. The ability to establish friendships interconnects with other adaptive systems in highly complex feedback processes; playing with others is pleasurable, and the mutual sharing of positive affect in play leads to strengthening friendships. These friendships provide protective mechanisms against stress; secure attachments establish the foundations for co-creating situations of graduated uncertainty, to empathise with the emotional expressions of others and work collectively to restore balance.

Playing with others requires constant maintenance, reading and differentiating the intentions of others and adjusting behaviour in response. It is evident that these interrelated components enhance children's repertoire of social, emotional and cognitive abilities (Pellis and Pellis 2009).

Children's friendship with place is indivisible from children's attachments and friendships with other children and adults. Chatterjee's (2005) analysis of the components of child-friendly spaces blends key concepts from environmental psychology and studies of

children's friendships to identify friendship qualities between children and their environment. A 'friendly space' is one that enables child and environment to look after each other, have fun and experience change together. Chapter 4 of this paper explores this particular aspect further.

Creativity and learning

The relationship between play, creativity and learning is less to do with the development of technical and problem-solving skills and more to do with flexibility and the non-serious interpretation of disparate stimuli (Sutton-Smith 1997, Lester and Russell 2008). Farné (2005: 173) suggests that play is the only field of experience in which children have the opportunity to be themselves and act accordingly, to make decisions and deal with uncertainty which may lead to conflict, controversial outcomes, interruptions and sudden shifts in action and emotion.

However, the idea of children playing in an unstructured manner in a structured learning environment causes great concern; it implies a sense of 'emptiness' that needs to be filled. Aedo et al. (2009) discuss the relationship between play and learning in the Chilean pre-school early education system. They note that the desire to focus on the tangible measures of educational success severely compromises a commitment to play and learning. The ability for children to actually play with sensations, thoughts, feelings and actions requires time and space, yet 'unfortunately neither time nor space is a priority in contemporary Chilean society' (Aedo et al. 2009: 84).

The growth in play-based approaches to learning in early education has spread from minority to majority world countries, epitomising the process of 'hegemonic globalisation' (Santos 2004) and the privileging of neo-liberal values and beliefs over local practices and discourse. One example is the top-down reform of kindergarten education in China (Liu-Yan and Feng-Xiaoxia 2005), where play is being introduced to counter didactic teaching models. Another is Nsamenang's (2009: 31) discussion of minority world-informed 'Early Childcare and Education' programmes in majority worlds; these are experienced as didactic and overly rigid in some cultures, and children are 'prodded into learning by intervention' rather than undertaking 'self-generated activities, therein engaging in generous play and self-motivation'.

Pence and Nsamenang (2008) note the continued failure of international advocacy to acknowledge the validity of the centuries-old productive agency of children and youth in sub-Saharan Africa, in which parenting attitudes and family traditions create conditions that foster children's agency in community life, especially in their peer cultures.

"Parents tend to think that when you read a lot without play you will be clever that's not correct because if you learn without play you become dull and bored."

Walter Muoki, child participant in the IPA Global Consultations on Children's Right to Play, Nairobi, 2010

In line with Farné (2005), we maintain that play offers the maintenance and continuation of a

playful disposition, or the ability to continually rearrange disparate thoughts and actions into novel, nonsense combinations, ‘most of which turn out to be useless’ (Bateson 2005: 18). This form of creativity represents the irrational aspects of children’s play, with distortions of reality that find creative expression in children’s cultures: the nonsense rhymes, jokes, riddles, teases, tricks, toilet humour, sexual innuendo, and inversions of everyday order through playful creation of absurdity.

The value of play for learning (understood as change through experience) lies with the central property of emotion calibration. The simple fact of being prepared for uncertainty and the unexpected suggests that children are capable of ‘moving into new environments, new modes of thought and feeling and new adaptive zones’ (Fagen 2005: 25). This is a self-reinforcing process; the enjoyment of playing with uncertainty develops a disposition to seek out new experiences, to think and act differently. The experiences from this will ‘trickle down’ or transfer to more specific cognitive or social functions (Sutton-Smith 1997).

Such playful creations offer the development of alternative realities and incongruities that are

highly pleasurable for children through being non-serious; they are carried out for the fun of it, rather than having another purpose in mind (Martin 2007). The benefits that accrue from this cannot be replicated by other behaviours, and attempts by adults to guide children’s play towards desirable outcomes will inevitably diminish these benefits.

Summary

Play enhances and refines key adaptive systems, although it cannot guarantee this by itself, given the importance of environmental context. Through playing, children situate themselves in a better state of mind–body–environment interaction, certainly more so than if there were no play. The act of playing is both evidence of, and supportive of, a smooth running of adaptive systems working in concert to generate positive emotions. The larger the sphere of influence of the positive emotions, the more likely that the child will be happy and have a strong sense of well-being. The more the child is influenced by negative emotions, the ‘more the paths towards unhappiness are paved’ (Panksepp 2001: 143). Burghardt (2005: 177) tellingly notes that:

Play gets animals doing things, and doing things may cause rapid changes in dendritic spines⁵ as well as activating chemical changes and brain areas. Animals capable of being more active, and more active in diverse ways, are going to have more oppor-

⁵ An extension found on the end of a neuron that forms connections with other neurons in response to multiple levels of interaction between mind, body and environmental experiences.

tunities for these brain changes to take place and lead to even more behavioural change in a positive feedback manner.

This suggests that playing is more about the development and maintenance of a playful disposition – a motivational, emotional perceptual stance to the environment – than any development of specific skills. Indeed, play may serve to shape and integrate emotional, perceptual and motivational neural structures in a way that offers a better chance of survival. In neural terms, it generates possibilities of feeling, acting and thinking in non-literal and non-linear forms, maintaining plasticity and openness to environmental interaction rather than fixed and stereotypical responses.

The generation of positive affect in play enables children to perceive and respond to a broad range of stimuli and to connect these in novel patterns and forms, creating their virtual reali-

ties or spaces that temporarily suspend (adult) order and structure. Play becomes an urge to turn the world upside down and create new identities and forms of expression, to disorder the structured spaces of their worlds.

Playing becomes a highly attractive form of self-protection for children, and the very 'unwittingness' of this from a child's perspective adds to its value: for children, play is simply about having fun, messing around and being with friends. It also represents 'ordinary magic': for many children, play is just something that happens, but it has the potential for the emergence of magical properties, to support survival and enhance well-being. For this self-protection, or ordinary magic, to be realised requires active participation in everyday life, in environments and communities that support this through offering time and space for play.

Chapter 4: Play as participation in everyday life

This chapter asserts that children's play represents a primary form of engagement in everyday life and, as such, is consistent with the CRC articles of participation. **Children's active and playful participation also represents a measure of children's health, their ability to develop self-protecting mechanisms and the enhancement of adaptive systems that will support a resilient profile.** Again, it is only for the ease of presenting ideas and research materials that we make distinctions between play, protection, participation and provision.

A broad perspective on children's participation focuses on the ways in which children continually engage in and contribute to everyday family and community life (Hart 2008). We explore this element here, with particular emphasis on the ways in which a playful disposition emerges through the fabric of the mundane, routine and often predictable patterns of daily living.

Play, as a process of taking and making place, allows children to perceive the world from different angles. They get a working knowledge of their environments, recognise physical objects and features, know how things might connect in novel and non-stereotypical ways, recognise how others use space and the value of connecting and disconnecting with them, and discover threats and opportunities (Bateson 2005). Play does not take place in a vacuum; it appears in the cultural, social and physical fabric of everyday life (Meire 2007).

The quality of children's environments influences their survival, health and well-being. While a positive sense of place is important for well-being (Chawla 1992), some children's local environments may present a place of fear and violence. For others, local space may be inaccessible due to constraints on their independent mobility, or may present little mystery or attraction and become a site of drudgery and mediocrity. Some neighbourhoods may be environmentally toxic, or represent spaces of oppression and imprisonment. Given that place frames the circumstances of children's experiences, they are 'attached' to it for better or worse (Chawla 1992).

The social production of space

Children's daily lives are complex, unique and inherently spatial (Hart 1997) and understandings of the nature and purpose of childhood shape the ways in which space is constructed for and with children (Holloway and Valentine 2000a). Spatial practices help to establish and determine a sense of continuity and degree of order, through 'commonsense' understandings that are reproduced through expectations of behaviour and being in space (Lefebvre 1991). 'Commonsense' is a reflection of the dominant order (adult defined) of any society and represents a 'plane of organisation' that seeks to situate children in certain ways, providing structure and control to fix children into normal patterns of being and becoming (Deleuze and Guattari 1988). This plane operates by organising major

sites of confinement, and children move from one site to another (home, school, work), each with its own laws and expectations.

There are marked differences between the production of space in minority and majority world countries, although variations across social stratifications (such as class/caste, gender and disability) and within countries should not be overlooked, and there is also a spread of minority world cultural practices into the wealthier areas of majority world countries.

In the minority world, the dominant social construction of childhood as a period of development and preparation for future adulthood permeates ‘commonsense’ spatial production. It situates children in specific institutions and locations, where children’s presence is highly regulated by adult expectations. These expectations not only control the actions of children, but by moral pronouncements of encouraging autonomy and self-regulation enjoins children to regulate their own behaviour. From an early age, children are separated from the ‘real’ world and everyday democratic processes, making it difficult to observe the full range of cultural practices that construct place (Rogoff et al. 2004, Nimmo 2008). This is a reflection of the individualistic nature of family life, which prizes autonomy, privacy and independence, meaning children spend most of their time–space with adult caregivers.

Numerous studies in the minority world point to the increasing institutionalisation of children’s time–space use and associated reduction in

children’s independent access to public space (Rissotto and Tonucci 2002, Thomas and Hocking 2003, Kytta 2004, Karsten and Van Vliet 2006, Kinoshita 2008). This is evidenced through a decline in playing outdoors and an increase in adult supervision, although this is not a uniform pattern (Karsten 2005, Van Gils et al. 2009). In a study of four generations of play in Taishido, Japan, Kinoshita (2008) notes that street play has almost disappeared and children now make formal arrangements for playing with friends, rather than going to favourite places in the knowledge playmates will be there.

Adults in the minority world value play as having important consequences for learning and development and they encourage it by providing time, space, objects and play partners, including adults (Gaskins 2008). Despite recognition of the spontaneity and personal motivation of play, adults largely guide children into desirable forms of play based on wider culturally shared values (Smith and Barker 2000, Mattsson 2002). Traditional ‘free-time’, which children often describe to adults as ‘doing nothing’ as a way of being secretive about what is actually taking place (Ennew 1994), is usurped by the many plans and commitments made on children’s behalf.

In contrast, in much of the majority world, children and adults share the same space, and spatial production is largely constructed around work and, increasingly, education. There is a distinct lack of spatial positioning of children and they are ‘immersed in places thick with meaning that entwine them from their youngest age in the

continuous building and sustaining of their local worlds' (Nieuwenhuys 2003: 100). Play is an integral part of daily patterns and is closely linked with the demands of household tasks and other chores. The temporal demands on children to carry out tasks become extended by combining play with work (Punch 2000, Katz 2004).

Nieuwenhuys' (2003: 105) study of children's lives in a village in South India notes that places for play were interspersed through the very fabric of community space and practices, in 'unremarkable, liminal places such as paths, fallow lands, the beach, the river bank, the wells and the public taps'. Such mundane, everyday spaces become children's places for play in between the performance of daily tasks and routines.

Katz (2004: 95–96) study of children's lives in Howa, Sudan, notes:

Play overlapped with, punctuated and enveloped work in ways that often made the two indistinguishable in children's lives. In other instances, children played at their present and future work in miniature dramatic games like "fields", "store" and "house." Still other times, play activities such as building projects, making miniature charcoal kilns, or going on wild-food expeditions had a work-like aspect or outcome that nevertheless did not detract from their intrinsic pleasures. While work and play were mutually exclusive at times, their easy mesh in the child's lives was striking.

Gaskins' (2000) study of children's daily activities in Yucatec Mayan life in Mexico illustrates how childhood and child development are both understood as something that 'comes out by itself'; parents are not overly concerned with developmental goals or structuring children's lives to hasten achievement of these. When children are not directly involved in work they are largely left to their own devices. **In general, play is of little interest to adults; it is primarily valued for getting children out of the way and as a sign that they are generally healthy.** As such, children find time and space to play within the daily routines and with little adult interference or support (Gaskins 2000). A similar pattern emerges in Gosso et al.'s (2005) study of indigenous forager communities, which notes that children are initiated into their own peer cultures that stand apart from the adult organised world.

'Commonsense' spatial representations reflect the dominant beliefs about children, child development and wider socio-cultural and economic practices. They produce a 'field of promoted action' that regulates how children use time-space, limiting use to socially approved ways. A field of promoted action may also be reinforced by restrictions to other time-spaces, either by design of space or a pervading sense that children are not welcome, 'a field of constrained action' (Kytta 2004). This inevitably influences children's opportunity to find time-space for play, and also the style and content of their playful expressions.

Children's clandestine use of space

Alongside adult ordering and production of space, there is also a 'clandestine' side of socio-spatial life that brings into being alternative imaginations of space – the space that children seek to appropriate for their playful disturbances. These are woven into, informed by, and disrupt dominant social productions of space; fleeting but significant moments that spontaneously rupture order (Lefebvre 1991, Kraftl 2008). These moments offer a 'plane of immanence' where things are uprooted and where lines of flight away from the plane of organisation are plotted (Deleuze and Guattari 1988).

These forms of playful spatial production highlight the ways in which children's presence and value of space may differ markedly from adult designs and expectations (Hart 1979, Rasmussen 2004). Time-spaces of play become sites for situated practices in which the 'imaginary delineation' (De Castro 2004: 475) of new spaces produces new possibilities for socio-spatial constructions, the formation of new identities and relationships. These moments may be fleeting injections of playfulness into the ordinary, or may be longer transformations of space where time-space permits.

De Leon (2007) provides an example of how a customary communication sequence of greeting by two young Tzotzil Mayan siblings ('Are you there?' 'I am here') becomes an opportunity to introduce nonsense ('Are you there, jaguar?' 'Yes, I am here, pig'). This provokes a humorous response from the grandmother and aunts who are weaving nearby, and the play escalates,

further subverting linguistic and 'rational' conventions with louder voices, laughter and more absurd call and responses. It culminates in 'Are you there, rooster?' 'Yes, I am here, machete', which brings about a rebuke from the grandmother to 'be quiet'.

This, along with other examples of the ways in which children invert and subvert communication patterns, suggests that children's participation in everyday practices not only supports growing competence in language use but also offers space for reorganising 'talk for their own purposes in their everyday emerging culture: building alliances, probing rules, challenging roles' (de Leon 2007: 427). Here, children playfully contest and subvert the normal roles and order of both language use and conventional expectations of relationships.

Such processes highlight the role of agency and the ways in which children's cultures emerge through appropriation and resistance. Thompson (2005) found children's play behaviours in English school playgrounds to be largely adult-defined, with prescribed and proscribed use of areas. While children generally follow these rules, there are occasions when the conventions are subverted, both covertly and through more open and playful action. For example, at one school children who were not allowed on the grass 'would take great delight in taunting the supervisors by jumping on and off the edge of the field, or walking with one foot on the grass and one foot on the tarmacadam' (Thompson 2005: 75–76).

While play may appear at times to follow and imitate wider cultural constructions, children will also invest and embellish it with their own meanings. Katz's (2004: 108) observations of Howa children's pretend games notes they offer possibilities for 'ways of imagining things differently' and to 'understand the process and possibilities of change'. The appropriation of space and time through play enables children to de-territorialise dominant spatial productions and establish their own 'child-friendly places', as sites of many possible futures. But when play is over, the space reverts back to its previous condition until such time as further playful intrusions occur.

The relationship between dominant and clandestine production of space also extends into children's virtual worlds and their online identities via new media technologies. In industrialised countries, children spend more time using the variety of media technology than in school or playing with friends. Buckingham (2007: 43) notes 'growing numbers of children have access to globally and locally-produced media material'. A 'commonsense' production of virtual space highlights the value of technology for education and future employability, matched with concerns over children's possible vulnerability by being online and the need to closely regulate children's use of these technologies.

Children are not 'passive dupes' in this production but are 'interpreting and making sense of information technology within "local" cultures

of computing' (Holloway and Valentine 2000b: 769). Several research studies suggest that children's peer networking offers the opportunity for creating virtual spaces in which children can play with their identities and suspend reality (Huffaker and Calvert 2005, Valkenburg et al. 2005). However, this is still connected to their 'offline' everyday worlds: online networks are largely constructed around peer groups; computer networking becomes another way of maintaining everyday friendships (Holloway and Valentine 2002). Studies of children's everyday use of computers suggest that they offer another way in which children produce clandestine spaces by creating and negotiating private space in the home, often under the guise of doing educational work.

Such disruptions and clandestine uses of space represent the formation of children's play cultures that develop and fragment away from adult gaze, and in which children and young people learn how to articulate their individuality while at the same time fitting in with peer group identities (Valentine 2000). Play is important as a situated practice, one in which playful discourses are aligned and disconnected and where children can develop fluid subjectivities that are responsive to the interactions of the players and their play spaces. Playing offers the potential to move beyond fixed and determined identities and patterns. Space becomes the product of children's active participation in establishing transformational relationships with others and the environment (Massey 1999).

Children's clandestine play, appearing in and between the routines of everyday life, creates time-spaces that are essentially free from adult-determined ideas of what children should be doing and how they should be behaving. They represent 'fields of free action' (Kytta 2004) in which children's playful dispositions take what the environment offers for creating disturbance, uncertainty and 'as if' behaviours.

Influences on children's participation and play in everyday life

Children's production of space through participation is an embodied expression of their unique subjectivity; children sharing the same physical space will not share the same perceptions, feelings and experiences. Their subjectivities are also intermeshed with variables including age, family context, class/caste, gender, ethnicity, religion and the characteristics of their local places. Multiple forms of 'difference' work together, and the very act of naming categories of difference potentially obscures as many issues as it reveals, producing 'ideal' categories that become static and reified. Differences defy attempts to classify them; although they are situated in macro-level structures of power, they are embodied and enacted, continuously changing in time and space. This suggests that while difference is significant, it is not unchanging or essential.

Children play with these themes to both reproduce existing dominant spatial productions and

also transform them (Gagen 2000). The everyday playful interactions of children will display multiple expressions of inclusion and exclusion, sharing and selfishness, dominance and subservience, kindness and hostility. Play is imbued with asymmetrical relationships, and the ways in which children continually seek to position themselves in play is a vital part of playing; the contests and arguments often add to the emotional tenor and value. Children develop 'playful' strategies to cope with these, including negotiating and changing rules, playing with language, asserting one's position both verbally and physically, taking affective stances, challenging rule breaking and rearranging the social structure of the group (Goodwin 2006).

However, not all strategies are successful. Ariel (2002: 45–46) gives an example of how children position themselves in play.

Nitzan, Tomer and Gad play with 'Pokémon' in their schoolyard. A fourth boy, Ofer, approaches them:

OFER – Can I play with you?

NITZAN (the playgroup's leader) – No.

OFER – *Why?*

NITZAN – Because you are not our friend.

The children continue playing. Ofer is standing aside, watching them, disappointed and dejected. He is trying to continue being associated with them by making suggestions.

OFER – Ash forgot to take Pikachu with him.

NITZAN – You are not allowed to say anything.

OFER – *Why?*

NITZAN – Because you are not playing with us.

Play can be an arena for negative, difficult and sometimes hurtful lessons and accompanying emotions. Yet this also provides an opportunity for increasing children's appreciation of the conditions for acceptance and a repertoire of responses for coping (Lofdahl and Hagglund 2006). These forms of expression are often problematic for adults, who rush to impose their own order on these situations, denying children the time–space to work things out for themselves (Wohlwend 2004).

Gender

Broader social and cultural variables also influence children's opportunity to create time–spaces for play. One example is the gendered nature of play (Oke et al. 1999, O'Brien et al. 2000, Karsten 2003, Robson 2004, Gosso et al. 2005, Swain 2005, Chatterjee 2006, Morrow 2006). The general trend that emerges from these studies is that boys have greater opportunities to play outside and to range further within their local communities. Girls tend to have restrictions placed on their opportunities to play outside; parents prohibit this, for reasons associated with cultural expectations and safety concerns and, more indirectly, through girls' greater responsibility to perform domestic tasks.

However, this is not a uniform and static pattern. Boys' and girls' freedom to move independently varies according to other variables (Katz and Monk 1993, Skelton 2000) and children develop idiosyncratic strategies to

negotiate access in their everyday practices and routines (Punch 2003, Valentine 2004).

Brown et al. (2008) comment that there may be subtle differences in children's value and use of space, and these may not be detected through focussed research that simply looks at activity use of space. Their research with children in the UK notes that when a wider range of variables is considered (social networks, public transport and semi-privatised space) then a more 'feminine' pattern of independent mobility emerges.

Although research illustrates the ways in which play might reproduce existing spatial and social inequalities, there are times when playful interaction challenges and transforms these normative patterns (Thorne 1993, Kelle 2000, Swain 2005).

Kelle's (2000) study of children's gendered territorial games highlights the ways in which these might arise spontaneously from (generally) boys disturbing girls' space. With these disruptions, boys and girls align themselves by gender as a collective; the tension is not represented by being 'boy' or 'girl', but rather the focus becomes the contested physical space or object:

The structure of the game, by situating the disputed territory in space or objects and not in or at the persons of the female and male players, allows them to be much more uninhibited; after all, the aim is not to hurt and conquer the bodies of the enemies but only to appropriate tables, garbage cans, and so forth or to reappropriate objects that

have been stolen. The games thus organize a kind of physical contact that would not be permissible under other circumstances and would be seen as a serious attack. They shift the borders of the acceptable and of vulnerability. While hitting, kicking, and so on are prohibited under normal circumstances, in play anything goes, as long as it does not really hurt (Kelle 2000: 180).

Socio-economic status

The relationship between children's autonomous movement in public space and family socio-economic and cultural resources is another significant variable influencing children's spatial patterns (Rissotto and Giuliani 2006). Socio-economic status impacts on every aspect of children's spatial positioning; it determines locations of family life and available community resources and, when combined with dominant constructs of childhood, has a considerable influence on children's ability to find their own time–spaces.

A general pattern suggests that there is increasing 'timetabling' of middle-class children's free time (Lareau 2000, Tomanovic 2004, Sutton et al. 2007, Vincent and Ball 2007), while children from lower social-economic backgrounds have less structured free-time and greater opportunities to create time–space for play with peers in their local neighbourhoods (Reay and Lucey 2000, Tomanovic 2004). This pattern is not confined to affluent industrialised countries; there seems to be a similar picture in urbanised areas in the majority world (Bannerjee and Driskell 2002, Gosso et al. 2007, Goncu et al. 2009). Col-

lectively, these studies suggest that children from middle-class communities generally participate in structured and pre-set activities, with few signs of spontaneous play in public spaces.

Cosco and Moore's (2002: 41) observations of children in middle-class areas in Buenos Aires note:

Children live in high-rise apartment buildings with little chance to get outside to play freely. These children's time is over-occupied, as they attend school from 8.00 am to 5.00 pm and then take classes in computer skills, martial arts, English and sports. On the week-end they participate in programmes at private clubs.

Disability

Equally, research suggests that attitudinal and physical barriers severely compromise disabled children's opportunity to appropriate time–space for play. Research in the UK notes that disabled children's everyday lives are subject to constant adult surveillance and attendance, which significantly affects their ability to develop clandestine use of space, both in the organised spatial productions of school and informally (Economic and Social Research Council 2000). Interviews with disabled children indicate that most were aware of the ways in which adults attempted to order their lives, and where possible children resisted adult notions of dependency and care. When asked if adults always did things for her, one child commented, "they're always doing it, it's really annoying. But I try to get my own back on them by doing

things they don't like" (Economic and Social Research Council 2000: 4).

Research by Lewis et al. (2006) found disabled children expressed a desire to locate themselves in the world of children. This embodied presence with other children in everyday spaces allows disabled children to be seen in ways that legitimise and confirm their existence as children. Yet this aspect of children's everyday lives tends to become subsumed by attempts to order and structure their participation in adult-organised spaces.

These brief illustrations highlight how children's relationships with space are products of interactions in which both local and global influences are intimately connected (Katz 2004). While children play with and change local conditions, the very nature of their interactions are framed by the immediate social and cultural contexts, which in turn will be acted on by wider global forces; local and global are 'mutually constituting sets of practices' (Holloway and Valentine 2000b: 767). This implies that local spaces are changing in response to wider economic-political forces, but not in any deterministic and causal manner; children as agents, can resist, contest and reformulate place according to local needs and conditions (Aitken et al. 2006).

Children's ability to take time-space for play, and to participate in their everyday worlds, is affected by multiple combinations of dynamically interacting variables. Within and between the 'commonsense' spaces of

adult-organised worlds, children find and make their own order, creating small momentary places that support their being 'other' (Jones 2008). Such moments offer the possibility to transform dominant socio-spatial productions to 're-work' major practices, and 'this is precisely the immanent power of children's play' (Katz 2004: 149).

Children's agency and limited political power

When all is well, children can exercise agency through weaving their clandestine play acts into the fabric of their everyday lives. This is often unknown to adults, and occurs in ways that seem inconsequential to adult eyes. Such acts of participation take place within a broader macro level structure where children have little power to influence events in their lives.

Although article 12 of the CRC has led to a number of initiatives where adults support children's participation in relatively adult-structured democratic processes, less attention has been paid to this autonomous and everyday form of participation. In one sense, this is appropriate because adults have great difficulty in appreciating the 'otherness' of children without needing to change them in to 'same' (De Castro 2004, Dahlberg and Moss 2005). This is particularly true at levels of law and social policy, where fields of promoted action (Kytta 2004) and 'commonsense' spatial productions (Lefebvre 1991), in the form of dedicated and adult-sanctioned spaces and programmes for

play, increasingly represent a triumph of macro-level adult power over the agency of children to participate in their indigenous childhood cultures of play.

Policies directed at children often have the effect of removing them from everyday social life, and increasingly construct them as vulnerable and needy (Moss and Petrie 2002). In addition, insensitive adult involvement in play can tend towards control and direction, particularly if the content of children's play is interpreted literally and gives rise to discomfort or disapproval (Hakkarainen 1999, Lester and Russell 2008).

Environmental conditions necessary for play

This section considers some of the environmental characteristics, both physical and social, that need to be present in order for children to actualise their playful dispositions. Burghardt (2005: 172) identifies four factors underlying play, which he suggests may be necessary, although not sufficient, conditions for play.

1. Sufficient metabolic energy: as a playful species, humans generally have sufficient energy to play, after basic survival needs are met. In extreme circumstances (chronic food shortages or illness for example), this may not be the case, and play is likely to be less evident. This surplus resources theory extends beyond vigorous activity to energy as motivation or arousal: energy is required for a playful disposition as well as its enactment.
2. Buffered from severe stress: play can only take place in what Burghardt terms a

'relaxed field'; that is, when more urgent survival needs have been met. In situations of severe stress, play may become a 'low-priority' option.

3. Need for stimulation: playful species exhibit stimulation-seeking behaviours; ordinarily, children seek out opportunities to engage playfully with their surroundings. Burghardt refers to this need for stimulation as a susceptibility to boredom. In order to accommodate this, the environment should present sufficient cues to stimulate and maintain a level of arousal. Play is facilitated by the presence of environmental features, objects, playmates and other socially supporting elements (although over-stimulation can lead to a decrease in play). It is not possible to devise a universal list of specific material or social content, as children's responses will be idiosyncratic and emerge from their emotional, cognitive, social and perceptual interrelationships with their physical and social environments.
4. A lifestyle that involves complex sequences of behaviour in varying conditions: if we lived in an utterly predictable world, where behavioural sequences and repertoires were rigid and highly specialised, there would probably be no need for play. Equally, play helps children develop adaptive responses to unpredictability and change.

Burghardt's analysis suggests certain conditions need to be in place to support play, including metabolic, neural, behavioural and ecological factors. The secure attachment of an infant with a primary caregiver(s) establishes neural and

behavioural foundations to develop effective stress-response systems to cope with separation and move into new environments and relationships (Panksepp 2007). From this secure base, children can explore and playfully actualise the social and physical affordances of their immediate environments. As Panksepp (2007: 7) comments, ‘it is through these comparatively “simple” genetically provided emotional urges that animals may get woven naturally into their social structures’.

Numerous studies identify children’s place preferences, and these collectively suggest a number of valuable features that support children’s playful participation and engagement in their environments (Hart 1979; Moore 1986; Chawla 1992 and 2002b; Korpela et al. 2002; Kytta 2004; Gosso et al. 2005; Chatterjee 2006, Derr 2006). Again, it should be recognised that these features are not fixed properties; they are subject to constant negotiation and contests with others in their everyday practices and experiences, the outcomes of which will influence their future relationship with place. These characteristics apply mainly to outdoor environments; while children can and do play indoors, the focus here is on children’s local neighbourhoods.

Given the significance of children’s play for developing resilience and well-being (established in chapter 3), local communities should pay attention to the ways in which children can participate in play and appreciate the environmental conditions that maintain such participation. This may

often mean protecting children’s spaces from adult encroachment. At other times, when environmental conditions severely impact on children’s ability to fully participate, communities may need to act more directly to restore favourable environmental conditions for children’s playful expressions. This suggests that an understanding of the environmental features that support play should be of prime consideration in any intervention in local communities.

Independent mobility

The first consideration for children’s playful engagement with the environment is the ability to move freely through local neighbourhoods. Independent mobility in local spaces enables children to gain a sense of where things are and how to access or avoid them. This knowledge can be passed on and shared with others and the environment becomes culturally ‘mapped’ for its value and potential threats (Rissotto and Giuliani 2006). Playing or hanging out with friends are often unremarkable in adult constructions of children’s space and time use, but of great importance to children (Mitchell et al. 2007).

Cosco and Moore’s (2002) study in Boca-Baraccas, Buenos Aires, notes that children are introduced to their local environments in the company of older siblings, and so acquire an intimate knowledge of what the environment offers. While the environmental quality is materially poor, it is culturally rich:

From an early age, children ... spend much time outdoors interacting with their peers, neighbourhood adults, and the physical surroundings that embody the history, culture and ethos of the place ... We saw the neighbourhood as a vessel that supported the subtle process of childhood culture, driven by children's intrinsic motivation to play (Cosco and Moore 2002: 53).

Places that allow for multiple activities have great value for children and are more likely to become favourite places, hence the popularity of 'street' or liminal space, contested areas that have the potential for temporary ownership and for children's disturbance (Moore 1989, Gosso et al. 2005, Derr 2006). This is evident in Chatterjee's (2006) study of children's play in Nizammudin Basti, a low-income settlement in New Delhi. She describes the opportunities for play afforded by street space, local graveyards, and more formal 'playspace'. The open space in front of the local school had 'abundant loose parts and unconventional play materials – a broken car, an upturned broken three-wheeler shell, graves, remnants of demolished structures, and lots of debris' (Chatterjee 2006: 184). These informal and 'unclaimed' open spaces allowed children to territorialise space temporarily, to play and create their own secret spaces more easily than in formal adult-designed open spaces.

Places with natural elements

A significant feature of research into children's place preferences is the value given to playing

in natural spaces (Chawla 2002b, Moore and Cooper Marcus 2008). When natural space is accessible for play, children will appropriate this, and children indicate that these are among their favourite play sites (Chawla 2002b). For many children in large cities, contact with 'natural space' may be restricted, and children's main priority for place selection is more akin to whether the space supports their play rather than a consideration of whether the space is natural or manufactured. Children value spaces that are free from danger and adult sanctions, and where they get a sense that they belong (Blinkert 2004). However, the qualities offered by rich natural space, in particular mystery and complexity (Kaplan and Kaplan 2005) and the general lack of adult inscription on natural spaces is likely to mean that they are preferred spaces for children's 'clandestine' use (Lester and Maudsley 2007). Natural space is likely to offer the best kinds of environmental conditions for maintaining children's attention and fascination.

"I have the woods; it's better than a park."

Boy (10 years old), at the Consultation on Children's Right to Play, Children's Parliament & IPA Scotland 2010, Bo'ness

Contact with nature may help in the restoration of psychological well-being and improve mental health (Korpela et al. 2002, Douglas 2005, Faber Taylor and Kuo 2006, Milligan and Bingley 2007). Also, a number of studies suggest that playing in natural space as a child helps to establish environmental knowledge, awareness, and the foundations of adult sensibilities

and respect for nature and the environment (Bixler et al. 2002, Wells and Evans 2003, Wells and Lekies 2006). From this perspective, children's playful participation in natural spaces may become a key factor in supporting sustainability. However this is not a direct linear cause/effect process and there are many physical and cultural variables that will intervene to determine children's perception and use of natural space (Milligan and Bingley 2007).

Spaces for children to create their own places

The desire for children to create places of their own appears to be an almost universal phenomenon, but will have different cultural and environmental expressions (Sobel 2002, Gosso et al. 2005, Derr 2006, Roe 2006). This also applies to creating small worlds (including forts and dens), which again seems to be found across cultures. Katz (2004) remarks on Howa (Sudan) children's games of 'field', in which children construct elaborate miniature replicas of local environments and farming practices. Research in Denmark illustrates how children symbolically appropriate a piece of ground to create their own special place and attribute meaning to this space through playing games and building their own worlds (Rasmussen 2004).

Research on children's special spaces identifies several attributes that children prize highly: they are co-constructed by children themselves; they are safe, imbued with a feeling of calmness and a chance to escape; they are secretive and children can hide and not be seen, while at the same time see others; they are unmanaged and

often have an untidy appearance; they are often on the boundary, or 'in-between' spaces; they involve the actual or imaginal adaptation of space (Sobel 2002, Kylin 2003, Roe 2006).

Helen's den was located approximately 20 metres from the front door to the school. A thick evergreen hedge created the boundary between one of the main roads through the village of Denbury and a residential neighbourhood. The hedge abutted a fieldstone wall, and at the juncture was a concealed entryway into the hollow hedge centre.

Helen described how she would sometimes stretch a piece of material over the hedge to keep out the rain, making it much cosier.

And though she allowed other neighbourhood children to join her on occasions, she confessed 'Sometimes I like to stay behind after school and go there myself for a bit and not be seen' (Sobel 2002: 26).

Children and young people consistently respond that they value their favourite places as places to 'pour out troubles, reflect on personal matters, to clear one's mind and feel free and relaxed' (Korpela et al. 2002: 388). Special places tend to be away from adult gaze, suggesting they are prime clandestine spaces for 'doing nothing', a state that requires freedom, time and space to do it in; a space that is felt to be safe and private. This contrasts with times when children are doing something, generally with adult approval and where the individual whims of children are largely negated through adult constructs and rules of engagement (Aitken 2001).

Children's play is supported by environments (physical, social and cultural) that offer children the opportunity to actualise independently the available affordances in their immediate neighbourhood. The environment has to provide something that the child perceives to be of value for their play, and the act of perception will be a reflection of the feelings that children have about themselves and their relationship with their places.

When playful urges are actualised in a supportive environment, children will develop a friendship with the place. The place affirms a child's value, and child-environment interactions are mutually supportive and caring and can provide a place that is a buffer from stresses and pressures in their lives. This stimulates the desire to further explore the possibilities of this relationship.

Chapter 5: Providing for conditions for play to take place

The previous chapters have considered the ways in which play supports children's protection and participation rights; this chapter develops these ideas to consider the third 'P' of the CRC – provision.

When all is well, play is 'something that children engage in without adult interference' (Hyder 2005: 37). If this is the case, we may ask why it needs to be 'provided'. The answer is that, while play is a robust phenomenon and children will actively seek out opportunities to play wherever they are, it can be compromised if conditions are not supportive, with potentially deleterious consequences. When children's rights to survival, development and well-being are infringed, this has an impact on their capacity to play (Burghardt 2005, McEwen 2007); equally, children's capacity to play will have an impact on their health, well-being and development, as we have shown in chapters 3 and 4. In addition, play can help to mitigate the effects of severe stress brought about by these infringements (Tugade et al. 2004, Booth-LaForce et al. 2005, Ratner et al. 2006). Given this, we can see just how interconnected play is with all the articles of the CRC.

Chawla (2002a: 92) describes the impact of the continuous rise in global consumption on the local agricultural or mineral extraction practices of poor rural families. As these become more industrialised in response to demand,

and as children become increasingly involved in order to contribute to household economies, they 'lose the freedom to play as they work, as they could often do during traditional activities like herding, foraging or trapping'.

Children's time-space needs for play are often misunderstood or ignored in broad development policy, plans and practice, with possible high costs for children (Bartlett 1999, Chawla 2002b, Churchman 2003). Decisions about environmental issues are often taken by people far removed from the local context, and prime consideration given to economic, rather than cultural, value.

At a more local level, those responsible for making decisions that affect children's lives will bring their particular understandings of play and its value to bear. This might be an instrumental view such as using play as a mechanism for education, social development or crime reduction. It might encourage active play as a tool to combat childhood obesity, as described in Lester and Russell's (2008) review of social policy in the UK. Elsewhere, play may be understood as a waste of time, undesirable mischief, or inappropriate behaviour (especially for girls), as outlined in Chatterjee's (2002) discussion of attitudes in South Asia.

Playlessness

Given the association between playfulness, adaptive behaviour and well-being, it may be assumed that the absence of play will have a harmful effect (Siviy et al. 2003, Bateson 2005). There are many times when children will not be able to play, for example through engagement in work or education, but children have a strong play ‘rebound’ when opportunities for play surface, either in-between or after other demands of their everyday lives (Panksepp 2001, Bjorklund and Pellegrini 2002). However, persistent absence of play may disrupt emotion regulation systems, which in turn will diminish children’s physical, social and cognitive competence (Pellis and Pellis 2006).

There is limited research that establishes a direct link between depriving juveniles of play and any consequences of this; there are considerable issues in depriving an animal of any single variable, even under laboratory conditions. And the factors that contribute to a suppression of a playful disposition for children are highly complex, so it is impossible to infer direct causality because of the presence of so many uncontrolled and confounding variables (Hubbs-Tait et al. 2006). Much of the research on play deprivation comes from studies of rats, a particularly playful and adaptive species. Findings point to disastrous effects in terms of inability to regulate emotions, interact socially with others or to mate successfully (Pellis and Pellis 2006 and 2007). In addition, further effects are evident in adolescence and adulthood. Spinka et al. (2001: 155) conclude that findings from animal research indicate that ‘play deprivation

results in increased fear and uncertainty in novel environments, and more escalated aggressive behaviour towards other animals in serious conflicts’.

Brown’s (1998) studies of criminally violent young men consistently found childhood and adult play deficits as a common feature across other variables; similarly, his studies of gifted and creative people found high levels of playfulness. Brown is careful to state that no absolute causal conclusions regarding playlessness can be inferred. However, he does conclude that we may pay a high price for neglecting the importance of play and its role in ‘the development of empathy, social altruism, and the possession of a repertoire of social behaviors enabling the player to handle stress, particularly humiliation and powerlessness’ (Brown 1998: 250).

Although it may not be possible to isolate play from other areas of deprivation in children’s lives, Burghardt’s (2005) analysis clarifies its relationship to stress: in situations of severe stress, children’s capacity to engage in play is significantly diminished, thus diminishing their capacity to build resilience to cope with the stress.

The influence of stress on adaptive systems

Not all stress is harmful. The significance of playing with uncertainty shows how small amounts of beneficial stress, where the player has a sense of control, can help to prime stress response systems and build resilience. The US National Scientific Council on the Developing Child (2005) refer to this as ‘positive stress’, iden-

tifying two further kinds: the ‘tolerable stress’ of a one-off traumatic event that occurs in an otherwise supportive context, and ‘toxic stress’ where children are subjected to strong, frequent and persistent stressors over which they have no control. This severe stress, in conditions where there are few other mitigating resources, is likely to impair brain development and functioning and lead to a progressive failure of those systems that mediate healthy adaptive responses (McEwen 2000).

It is in exactly these conditions that play can have a key role, helping to build the adaptive systems that protect against these effects. The current tendency of some cultures to overprotect children (Furedi 2001, Gill 2007a) tends to reduce the beneficial stress, for example, restricting independent mobility for fear of traffic or attack, or designing ‘safe’ play equipment that is symmetrical and predictable. It is ironic that it does this while not addressing toxic stresses, for example, chronic poverty, poor housing or high levels of traffic and neurotoxicants such as lead.

Children’s environments consist of highly complex familial, institutional, cultural and physical factors. Although each factor may exert a unique impact, they tend to be correlated and work together (Hubbs-Tait et al. 2006). This makes it difficult to structure discussions about these factors, as environmental stressors can take a number of forms that can be experienced across a range of variables that defy clear categorisation.

Environmental stressors

One starting point is to consider the stressors experienced by some children living in cities. It is estimated that more than half the world’s children will soon live in cities, and trends towards decentralisation mean that city authorities will increasingly need to pay attention to the quality of these children’s lives (UNICEF Innocenti Research Centre 2004).

The World Bank (2009) sees the (irregular) growth of urbanisation as having potential benefits for economic development in poor countries. Yet the reality of migration and settlement in urban areas suggests great inequality in accessing these potential benefits. An increasing number of children live in conditions of environmental degradation, including poor sanitation, water supplies, housing and pollution, with intensifying disparities between rich and poor (Chawla 2002a, Bartlett 2002). In these environments, the self-protective factors associated with play outlined in chapter 3 are likely to be compromised or negated by the health consequences of playing in such environments.

Urban living, as with other categories, is not a homogeneous experience. It will vary across other modes of stratification such as poverty, class/caste, gender, disability, ethnicity and the broader constructs of childhood within each culture. And some of the stress factors described in this section are not exclusive to urban areas; children in other circumstances may experience chronic stress from violence, fear, discrimination, child abuse, excessive academic pressure, exploitative labour, loss of security and family

support, displacement, unsafe or toxic environments, and food and water shortages. The issues described in the following paragraphs are intended as illustrative rather than comprehensive.

Traffic

Traffic is the major cause of child accidents and deaths worldwide, and set to rise by 67% by 2020 (Peden et al. 2008). In fast-developing cities in the majority world, traffic has increased apace on poorly maintained roads. Children still use these roads as places to play, but they have few pavements or safe places to cross. As with many preventable accidents outside the home, accident incidence is higher for poorer children and for boys (Bartlett 2002).

Environmental hazards

In many poor urban areas, the presence of inadequate sanitation and waste disposal leads to a high level of biological pathogens in water where children play, causing debilitating and sometimes fatal disease. They still play here as there is often little room indoors to play. Playing indoors can also be hazardous; children experience high levels of respiratory problems due to lack of ventilation, or smoke or kerosene from cooking and heaters, as well as fire accidents (Bartlett 2002). In addition, emissions from traffic, industry and agriculture contain neuro-toxicants (such as lead, mercury and cadmium) which can have a negative impact on social and cognitive development, including play behaviours (Hubbs-Tait et al. 2006).

Over-protection and risk aversion

There are equally worrying trends in wealthier

areas (urban and rural) of over-protection and risk aversion. Fear of traffic accidents leads adults to restrict children from playing outside (Grayling et al. 2002); Hillman (2006) suggests that removing children rather than cars from the road is indicative of the relative value placed on both.

Shier (2008) compares the play of children in Matagalpa, Nicaragua, and in the UK, and highlights the difference not only between rural and urban opportunities for play, but also in attitudes towards safety while playing out. Matagalpan children have a high level of independent mobility and develop strong self-reliance in attitudes towards safety when swimming in lakes or climbing trees. Each culture has its constraints on children's play. The constraining factors in Matagalpa are working long hours in the coffee plantations and homesteads; adult attitudes that see play as a waste of time; small homes and early nightfall curtailing play after about 6 o'clock in the evening; and a gender dimension that sees boys given much more time and licence to play than girls.

In the UK, as in many minority world countries, the culture of fear and risk aversion severely restricts children's independent mobility and is leading to increasing institutionalisation and surveillance of children's lives (Thomas and Hocking 2003, Veitch et al. 2006). Chawla (2002a) notes that the impact of 'new deprivations' of uncertainty about the future, weakening social support networks in communities and families, and less open community space for both adults and children, affect children of all classes globally.

There are several reports on the disappearance of children playing in the streets and the decrease in children playing out generally (Gill, 2007b, Kinoshita 2008, Van Gils et al. 2009). Singer et al. (2009), in their survey of mothers across 16 countries in Africa, Asia, Europe, North America and South America, report a perceived reduction in children's spontaneous play over the last two decades; mothers across all countries cited fears for children playing out, including worrying about them getting dirty and coming into contact with germs, and fear of crime and traffic. Fear of violence and street crime, or of discrimination and harassment, is global (Bartlett 2002, Chawla 2002b).

Evans et al. (2009) cite fear of gangsters as a contributing factor to rising levels of obesity in South African townships, as children's lives become increasingly indoor and sedentary. Policy responses to obesity have tended to treat it as an individual matter, focusing on diet and encouraging children to take more exercise, often through structured, adult-led activity programmes. An alternative approach is to see it as an environmental issue: if a policy intervention focuses more on traffic speed and street design, children will be supported in playing out more (Brunton et al. 2005, Whewey 2007).

The holistic benefits of play across physical activity and health, well-being and attachments to people and place are likely to be more effective and self-reinforcing than through structured activity programmes (Burdette and Whitaker 2005). Play offers a dynamic range of movements, and intermittent challenges with irregular

and unpredictable patterns increase heart rate variability and variation in dynamic blood flow (Yun et al. 2005). Equally, Fjortoft's (2004) study of children's play illustrates the benefits of improved physical fitness, coordination, balance and agility from playing and moving in landscapes that offer challenge and unpredictability.

This discussion on playlessness and the environmental stressors that can affect children's ability to play highlights the need for adults to ensure that the conditions for play are met. In this final section, we consider how to approach this.

Implementing article 31

"It's good to have them (adults) around but they might spoil the game."

"It's not good if you're doing secret stuff."

Boys (9 and 10 years old), Consultation on Children's Right to Play, Children's Parliament & IPA Scotland 2010, Kelso

The quotation from Burghardt (2005) at the start of this paper suggests an understanding of play is essential. It is therefore fitting that it should be brought to the fore as an article within CRC. However, we must exercise caution and not make it too much an object of adult gaze. Children's play belongs to children; adults should tread lightly when considering their responsibilities in this regard, being careful not to colonise or destroy children's own places for play through insensitive planning or the pursuit of other adult agendas, or through creating places and programmes that segregate children and control their play.

The intention of this paper is to encourage an understanding of how and where children play. Responsible adults can acknowledge the existence and value of such play patterns and then take action to protect or reinstate children's right to participate in their indigenous play cultures within their local environment. Where this right is infringed, **the ultimate aim should be for all adults to work together to build physical and social environments that will support the conditions for play.**

Adults should be aware of the importance of play and take action to promote and protect the conditions that support it. The guiding principle is that any intervention to promote play acknowledges its characteristics and allows sufficient flexibility, unpredictability and security for children to play freely. Drawing on Kytta's (2004) concepts of fields of action, adults should base their intervention on the creation of a field of promoted action, with the intention of supporting children to create their own fields of free action.

Resilient communities will provide both the resources and the means to access those resources. Ungar's (2008) international research into resilience provides useful tools for imagining how adults might support conditions for play.

Navigation and negotiation as situated agency
Ungar's (2008: 225) definition of resilience high-

lights the importance of children's own agency and the support of communities:

In the context of exposure to significant adversity, whether psychological, environmental or both, resilience is both the capacity of individuals to navigate their way to health-sustaining resources, including opportunities to experience feelings of well-being, and a condition of the individual's family, community and culture to provide these health resources and experiences in culturally meaningful ways. Resilience is therefore both a process of the child's navigation towards, and the capacity of individuals to negotiate for, health resources on their own terms.

The term 'navigation' implies both the personal agency of the child and the presumption that there is something to navigate towards, that is, there are human and physical affordances in the environment that children can actualise. An appreciation of play as a disposition implies that children will seek out, or navigate to, stimuli in their environments that are personally relevant to them; playing offers child-initiated experiences that support well-being and enhance resilience. This ability to navigate 'to play' will be culturally and spatially embedded; it involves finding (negotiating) time-space in the everyday routines and practices within children's communities. The environmental conditions that support play were discussed in chapter 4.

'Negotiation' is less about explicit consultation regarding the provision of specific features,

spaces or programmes, although these may be important; it is more about the ways in which parents, caregivers and local communities negotiate time and space for children to play through the production and reproduction of local cultural practices. This resonates with the attributes of positively valued community elements identified in Chawla (2002b: 33), which include 'positive self-image, friendly adults, available playmates, accessible and engaging public spaces where interesting activities could be found and places that children could claim as their own for socialising and play'. **Being able to play will not alleviate poverty and hardships, but it may help to act as a buffer against associated stress** (Tugade et al. 2004, Booth-LaForce et al. 2005, Ratner et al. 2006).

Drawing these two concepts together, adults need to work at all levels, from local practices to international law, to ensure that:

- play is recognised as fundamental to children's survival, well-being, health and development;
- all children have time, space and licence to play;
- toxic stressors are identified and action taken to reduce these, and also to enable children to develop resilience to them through play;
- proactive and collaborative action is taken at policy-making and community levels to develop and maintain local environments that support play.

Such actions are inevitably multi-layered and long term, and have implications for general national and international development as well as actions aimed specifically at children. They require actions at policy, planning and attitudinal levels. The remainder of this chapter discusses ways to address three (overlapping) aspects: policy, environmental design and play provision.

Policy

At international level, we might take a policy guide from the CRC. Yet article 31 has often been overlooked as a stand-alone right (Child Rights Information Network 2007); it has been called the forgotten right (Hodgkin and Newell 2007) and the most neglected of all articles (IPA 2008). There are several reasons for this 'neglect', many to do with culturally-situated understandings of play and its value in the lives of children and communities.

The right to play was recognised in the CRC's forerunner, the 1959 Declaration of the Rights of the Child (principle 7). Here, play and recreation were explicitly 'directed to the same purposes as education'. This direct link remains today, evidenced through the CRC guidelines on reporting to the Committee on the Rights of the Child, which combine articles 28, 29 and 31. Reports to the CRC contain a much heavier focus on education than on play in these sections of the reports (for example, UNICEF and Oficina del Alto Comisionado de las Naciones Unidas para los Derechos Humanos 2006).

Doek (2008: 6), a Chair of the UN Committee on the Rights of the Child from 2001–2007, comments that ‘attention given to the implementation of [article 31] in the reports States Parties submitted to the CRC Committee is very limited and often completely lacking’. He suggests that the Committee should request specific information on how States Parties have implemented article 31, through the ‘List of Issues’ procedure. Doek acknowledges the impossibility of prescribing a set of actions for implementing article 31 that could apply to all States Parties, but he suggests they draw up a clear implementation plan that would involve working with all stakeholders (including children) and cross-departmentally at national and local level.

The Committee also recognises the importance of paying attention to the implementation of article 31 in its General Comment 7 (Implementing Child Rights in Early Childhood):

In view of the insufficient attention given by States parties and others concerned to the implementation of the provisions of article 31 of the Convention ... the Committee reiterates that these are key rights that enable every young child to fully develop his/her personality, talents and mental and physical abilities to their fullest potential. Recognizing that these rights are often endangered by all manner of external constraints hindering children to meet, play and recreate in stimulating and secure environments that are child appropriate, the Committee appeals to all States parties, non-governmental organizations and

private actors to identify and remove potential obstacles to the enjoyment of these rights by the youngest children, including through poverty reduction strategies. (United Nations 2006).

Some countries are beginning to develop national and local play policies or strategies. Wales is a pioneer in this regard, and it is salient that the policy evolved by the newly devolved Welsh Assembly Government takes the decision to adopt a rights-based approach to policy-making for children (Greenaway 2008). We recommend that any policy is predicated on the understanding that play provision is only one element of supporting children’s play; a holistic approach requires a commitment to analyse all legislation for its potential impact on children’s ability to play freely in their neighbourhoods.

The UNICEF Innocenti Research Centre’s Child Friendly Cities Initiative, launched in 1996, has seen a growing number of municipalities commit to becoming ‘child friendly’, and a strong network of information sharing. There is a clear recognition within the principles and criteria for CFCs of the importance of being able to play and meet with friends, and also a more integrated approach to urban design, rather than a focus on discrete and dedicated children’s spaces. The seminal work by Bartlett et al. (1999) illustrates how urban authorities can implement children’s rights, highlighting the need for city authorities to pay attention to removing obstacles to play for all children, particularly younger children, girls and disabled children.

Environmental design

In considering the changes to children's spatial environments, Blinkert (2004: 100) notes that there is generally a loss of 'action spaces'. These are territories outside the home that have four attributes: accessibility, safety, flexibility and opportunities for interaction with other children. In urban design, these characteristics can be nurtured through attention to traffic flow and speeds, as well as recognition of the importance of less 'order' in design – more spaces that children can appropriate for their play.

Chatterjee (2005) states that child-friendliness is of less interest to policy-makers than the impact that environments have on health, well-being and education. She makes a plea to integrate spatial research with this instrumental policy focus through variables that policy-makers can control and change, identifying 'safe access to a range of environmental resources for exploration and use; guidelines for adequate, safe and healthy settings for play, living and learning' (Chatterjee 2005: 19).

Chatterjee also suggests a number of urban design guidelines that can accommodate children's play, as well as other aspects of community life, recognising the multi-dimensional use of core areas (Chatterjee 2002). These include environmental diversity (in amenities, play areas, textures and landscaping, traffic-free areas, elements of predictability and unpredictability); identity (elements that have cultural value, history, meaning); legibility (children are able to navigate through their environments); character (through gradual appropriation and

use of space, design features, architecture); flexibility (multiple use and the territorialisation of spaces); scale; visual richness; and safety and defensibility.

Play provision

We have no business making policies and spending money on facilities for children until we have an understanding about what parts of the environment children actually use, and why (Moore 1986: XVI).

As we have argued, for adults to think exclusively in terms of 'providing play' in the name of implementing article 31 of the CRC is only one small part of the picture; it may even restrict children's capacity to engage in playful behaviours. Factor (2004) talks of children's 'play-lines'; these are the shared cultural history of the micro-details of children's landscapes, such as the manhole cover in a playground used for games of marbles, or the downpipe in a school playground used by generations of children as a counting spot for many games (Armitage 2005). These play-lines are often invisible to adults and may be destroyed in attempts to (re-)design play spaces for children. Kinoshita (2008) observes that in implementing plans for protection against natural disasters, the Japanese city of Taishido removed narrow alleys and dead-ends, destroying many of the children's favourite play places.

If dedicated play spaces can be invested with meaning and become children's places (Rasmussen 2004), they can be important sites for

children to create their own time–space for play, away from a wider environment that is toxic, chaotic or hostile. Play provision may make a considerable contribution to enable children to ‘reconnect’ with the community (Hyder 2005). At times, and in certain situations, this may require a direct intervention to provide play activities; examples include Cunninghame et al.’s (2001) report of the establishment of specific play centres during the Balkan conflict, or Loughry et al.’s (2006) research into structured activities in the Palestinian territories.

Other forms of community support may be seen in a number of participation projects, working with children to improve local environmental conditions for play. Swart-Kruger’s (2002) research with children in a squatter community in Johannesburg provides evidence of this. In the original settlement, the most popular site for children was a park with large grassy mounds and play equipment. When the community was suddenly forced to relocate, the thing that children missed the most was the playground. Following a period of participative community action by adults and children, supported by the Growing Up in Cities programme, a new play and study centre was opened. This process reassured the children that they were worthy of consideration and had some place in the settlement.

Adults need to give careful attention to the design and maintenance of discrete play areas for children. Recent work by the Child Friendly Cities Initiative and elsewhere has heralded a move away from uniform, fenced, static and

sterile places. The new places recognise the nature of play and use design principles that accommodate a variety of space and landscapes, natural features, different heights, a range of flexible and variable materials, access to the elements. They contain a collection of loose parts with which children can experiment freely, creating an environment that gives children the feeling that the world is full of things to explore and where space and resources can be adapted to what is needed at the time. Children can have a significant influence on the play space and engage all five senses.

It is not sufficient to allocate an area, install equipment, and then do nothing. Chatterjee (2009) illustrates how obligatory play provision for poor children by governments in majority world regions causes more harm than any high-risk environment that may be naturally available in the everyday environment of children living in slums.

The only play injury I had witnessed during my observation sessions in Nizamuddin Basti in 2005 involved a rickety slide on a barren piece of land in front of the local government primary school. This was an attempt to provide a playground for poor children by Delhi Development Authority. I witnessed a boy getting stuck mid-way in his descent. His foot got wedged between the tin-clad slab of the slide and the round metal pipe that served as a handrail, three inches above the slab ... I had often wondered about injuries in this community. I had seen children walking barefoot through

rubble, sand and filth. I have seen small children, probably less than five, walking down the streets behind carts loaded with protruding sharp objects. I have seen older siblings revolving furiously while holding smaller children, at full speed, on not very smooth grounds, till I felt giddy watching ... But the only injury I witnessed showed up the attitude of the state while making obligatory provisions for poor children without any respect for children's well being.

Cuninghame et al. (2001) stress the importance of making a safe space available for young children in emergency situations, especially efforts to include disabled children and those from minority groups. These spaces can become sites of relative order within a chaotic environment, where time and space are available for playing. Bartlett (2008) notes that non-governmental organisations increasingly recognise the need for safe play areas immediately following natural disasters: usual places for play become contaminated or hazardous, and caregivers are often increasingly fearful for their children as well as having to focus more intensely on the day-to-day task of living. Although these areas fulfil a useful function in the immediate aftermath, longer term reconstruction also needs attention.

In her discussion of urban environments, Bartlett (2002) advocates adventure playgrounds as a form of provision. Originating from Denmark in the 1930s and now available in many cities around the world, these are places where children can build and adapt outdoor play areas, and often engage in playing with a range

of materials, elements and concepts. They are staffed by playworkers, whose ethos is to support children in making their own places for play (Hughes 2001).

These stories from Hitoshi Shimamura, a playworker at the adventure playground on Kodomo Yume Park in Kawasaki, Japan, highlight how the playground is viewed as a special place set apart from other aspects of children's lives:

"There are some regular junior high-school students. One is a 15-year-old girl who started to come recently. After a few weeks, she started talking about her experience on the playground: 'I have never played like this until this age'. She was skipping her cramming school and staying until the closing time of 21.00 pm. She said that her schedule in her early childhood was filled with so many lessons after school.

A mother visiting the playground said, 'I escape from my neighbourhood to this playground. It is suffocating around my house. My neighbours criticise me for letting my child play in the street, saying "This is dangerous for the child to play in!" The street itself does not have a frequent traffic, but playing there seems to annoy those people' (Shimamura, personal communication 2009)."

The histories of play and play provision in the UK (for example Cranwell 2003) and in the US (Hart 2002, Chudacoff 2007, Frost 2007) are stories of attempts to appropriate children's play

as a means of solving social problems such as delinquency, poor health, socialisation or child safety. Adult-centred playground design has tended to be based on erroneous and instrumental understandings of both children and play, as Frost (2007: 13) says:

The fundamental missing element is finding ways to counter the popular, misguided sentiments that children's free, spontaneous play is frivolous and unimportant and that structured, relatively sterile, uninspiring, standards-based interference by adults can serve the inherent outdoor play needs of children.

Much public policy in the UK aimed at children employs an instrumental understanding of play (Lester and Russell 2008), whereas playworkers' own code of practice (Playwork Principles Scrutiny Group 2005) stresses its intrinsic and self-organised nature. Playworkers sometimes face difficulties understanding their role as adults in play spaces, as a burgeoning literature in the UK shows (Hughes 2001, Brown 2003, Brown and Taylor 2008). However, the role is an important one in mediating between adults' tendency to constrain or direct children's play and the need for some compensatory spaces in environments that are not supportive of play.

Concluding comments

This working paper outlines the benefits of play and the consequences of playlessness. Through this, we can begin to appreciate how play is fundamentally linked to children's rights as a whole. Play is not an extra luxury to be considered

after other rights; it is an essential and integral component underpinning the four principles of the CRC (non-discrimination, survival and development, the best interest of the child and participation). Van Gils (2007: 372) states:

From the viewpoint of the child, the right to play is not an additional right, limited to a very small part of art. 31. It reflects fully the right to be a child, here and now. In the whole CRC there is no article that stresses as explicitly the right to be a child in the present, without delaying his *raison d'être* to the future. So while stressing the importance of the right to play, people are supporting the right to be a child.

Play has an essential role in building children's resilience across adaptive systems – pleasure, emotion regulation, stress response systems, peer and place attachments, learning and creativity. These benefits arise from play's unpredictability, spontaneity, nonsense and irrationality, and also from children's sense of control. Adults need to ensure that the physical and social environments in which children live are supportive of their play; otherwise their survival, well-being and development may be compromised. This does not necessarily mean providing specific services, although there may be circumstances where this is appropriate. But it does mean avoiding the temptation to dismiss play as frivolous, restrict it through fear for and of children, or control and appropriate it for more instrumental purposes. The principle is one of upholding article 31 of the CRC through supporting the conditions where play can take place.

References

- Abou-ezzeddine, T., Schwartz, D., Chang, L., Lee-Shin, Y., Farver, J. and Xu, Y. (2007). Positive peer relations and risk of victimization in Chinese and South Korean children's peer groups, *Social Development* 16(1): 106–127.
- Aedo, V., Cerda, L., Dintrans, P., Pizzaro, M., Redon, S. and Romo, V. (2009). Play and learning in Chile. In: Pramling-Samuelsson, I. and Fleer, M. (Eds) *Play and Learning in Early Childhood Settings*. Dordrecht: Springer.
- Aitken, S. (2001). *Geographies of Young People*. London: Routledge.
- Aitken, S., Estrada, S.L., Jennings, J. and Aguirre, L.M. (2006). Reproducing life and labour: global processes and working children in Tijuana, Mexico. *Childhood* 13 (3): 365–387.
- Ariel, S. (2002). *Children's Imaginative Play. A Visit to Wonderland*. Westport: Praeger.
- Armitage, M. (2005). The influence of school architecture and design on the outdoor play experience within the primary school. *Paedagogica Historica* 41(4&5): 535–553.
- Bannerjee, K. and Driskell, D. (2002). Tales from truth town. In: Chawla, L. (Ed) *Growing Up in an Urbanising World*. London: UNESCO and Earthscan.
- Bartlett, S. (1999). Children's experience of the physical environment in poor urban settlements and the implications for policy, planning and practice. *Environment and Urbanization* 11(2): 63–73.
- Bartlett, S. (2002). Urban children and the physical environment. *Children and the City Conference, 11–13 December 2002*. Amman, Jordan: Arab Urban Development Institute.
- Bartlett, S. (2008). *Climate change and urban children: Impacts and implications for adaptation in low- and middle-income countries*. London: IIED.
- Bartlett, S., Hart, R., Satterthwaite, D., de la Barra, X. and Missair, A. (1999). *Cities for Children: Children's Rights, Poverty and Urban Management*. London: Earthscan.
- Bateson, P. and Martin, P. (1999). *Design for a Life*. London: Jonathon Cape.
- Bateson, P. (2005). The role of play in the evolution of great apes and humans. In: Pellegrini, A.D. and Smith, P.K. (Eds) *The Nature of Play: Great Apes and Humans*. London: Guildford Press.
- Bixler, R., Floyd, M. and Hammitt, W. (2002). Environmental socialization: quantitative tests of the childhood play hypothesis. *Environment and Behaviour* 34(6): 795–818.
- Bjorklund, D. and Pellegrini, A. (2002). *The Origins of Human Nature*. Washington, DC: American Psychological Association.
- Blinkert, B. (2004). Quality of the city for children: chaos and order. *Children, Youth and Environments* 14(2): 99–112.
- Booth-LaForce, C., Rubin, K., Rose-Krasnor, L. and Burgess, K. (2005). Attachment and friendship predictors of psychosocial functioning in middle childhood and the mediating roles of social support and self-worth. In: Kerns, K.A. and Richardson, R.A. (Eds) *Attachment in Middle Childhood*. New York: The Guilford Press.

- Boyden, J., Eyber, C., Feeny, T. and Scott, C. (2003). *Children and Poverty: Experiences and Perceptions from Belarus, Bolivia, India, Kenya & Sierra Leone*. Richmond: Christian Children's Fund.
- Boyden, J. and Mann, G. (2005). Children's risk, resilience and coping in extreme situations. In: Ungar, M. (Ed) *Handbook for Working with Children and Youth: Pathways to Resilience Across Cultures and Contexts*. London: Sage.
- Bradshaw, J., Hoelscher, P. and Richardson, D. (2007). An index of child well-being in the European Union. *Social Indicators Research* 80: 133–177.
- Brown, B., Mackett, R., Gong, Y., Kitazawa, K. and Paskins, J. (2008). Gender differences in children's pathways to independent mobility. *Children's Geographies* 6(4): 385–401.
- Brown, F. (Ed) (2003). *Playwork Theory and Practice*. Buckingham: Open University Press.
- Brown, F. and Taylor, C. (Eds) (2008). *Foundations of Playwork*. Maidenhead: Open University Press.
- Brown, S. (1998). Play as an organizing principle: clinical evidence and personal observations. In: Bekoff, M. and Byers, J. (Eds) *Animal Play: Evolutionary, Comparative and Ecological Perspectives*. Cambridge: Cambridge University Press.
- Brunton, G., Thomas, J., Harden, H., Rees, R., Kavanagh, J., Oliver, S., Shepherd, J. and Oakley, A. (2005). Promoting physical activity of children outside of physical education classes: A systematic review integrating intervention studies and qualitative studies. *Health Education Journal* 64(4): 323–338.
- Buckingham, D. (2007). Childhood in an age of global media. *Children's Geographies* 5(1–2): 43–54.
- Burdette, H. and Whitaker, R. (2005). Resurrecting free play in young children: looking beyond fitness and fatness to attention, affiliation, and affect. *Archives of Pediatrics & Adolescent Medicine* 159: 46–50.
- Burghardt, G.M. (2005). *The Genesis of Animal Play: Testing the Limits*. Cambridge, MA: MIT Press.
- Camfield, L., Streuli, N. and Woodhead, M. (2009). What's the use of 'well-being' in contexts of child poverty? Approaches to research, monitoring and children's participation. *International Journal of Children's Rights* 17: 65–109.
- Carter, C., Ahnert, L., Grossman, K., Hrdy, S., Lamb, M., Porges, S. and Sachsre, N. (Eds) (2005). *Attachment and Bonding: A New Synthesis*. Cambridge, MA: MIT Press.
- Carvalho, E. (2008). Measuring children's rights: an alternative approach. *International Journal of Children's Rights* 16: 545–563.
- Chatterjee, S. (2002). *Progressive Realization of the Rights of All Children in Creation of Child Friendly Cities: A Case for Planning and Urban Design to Realize Adequate Housing and Integrated Recreation Space for Poor Children in South Asia*. Habitat International Coalition Housing and Land Rights Network.
- Chatterjee, S. (2005). Children's friendship with place: a conceptual inquiry. *Children, Youth and Environments* 15(1): 1–26.
- Chatterjee, S. (2006). *Children's Friendship with Place: An Exploration of Environmental Child Friendliness of Children's Environments in Cities*. PhD Dissertation, Raleigh: North Carolina State University.
- Chatterjee, S. (2009). Extracts from PhD field notes. Personal communication, 23rd June.
- Chawla, L. (1992). Childhood place attachments. In: Altman, I. and Low, S. (Eds) *Place Attachment*. New York: Plenum Press.

- Chawla, L. (2002a). The effects of political and economic transformations on children: the environment. In: Kaufman, N.H. and Rizzini, I. (Eds) *Globalization and Children: Exploring Potentials for Enhancing Opportunities in the Lives of Children and Youth*. New York: Kluwer Academic Publishers.
- Chawla, L. (Ed) (2002b). *Growing Up in an Urbanising World*. London: UNESCO and Earthscan.
- Child Rights Information Network (2007). *The Right to Play*, available from <http://crin.org/resources/infoDetail.asp?ID=15338&flag=report> [accessed 7th December 2010].
- Children and Young People Defending our Right to Play Action Group (2009). *Niñas, Niños y Adolescentes Defendiendo nuestro Derecho a Jugar*. Samulali: CESESMA.
- Chudacoff, H. (2007). *Children at Play: An American History*. New York: New York University Press.
- Churchman, A. (2003). Is there a place for children in the city? *Journal of Urban Design*, 8(2): 99–111.
- Cohn, M. and Frederickson, B. (2009). Positive emotions. In: Snyder, C. and Lopez, S. (Eds) *Oxford Handbook of Positive Psychology*. New York: Oxford University Press.
- Corsaro, W.A. (2003). *We're Friends Right? Inside Kids' Cultures*. Washington DC: Joseph Henry Press.
- Cosco, N. and Moore, R. (2002). Our neighbourhood is like that! In: Chawla, L. (Ed) *Growing Up in an Urbanising World*. London: UNESCO and Earthscan.
- Cranwell, K. (2003). Towards playwork: an historical introduction to children's out-of-school organisations in London (1860–1940). In: Brown, F. (Ed) *Playwork Theory and Practice*. Maidenhead: Open University Press.
- Cunningham, C., Hyder, T. and Kesler, D. (2001). *ECD Guidelines for Emergencies: The Balkans*. Save the Children.
- Dahlberg, G. and Moss, P. (2005). *Ethics and Politics in Early Childhood Education*. Abingdon: RoutledgeFalmer.
- Damasio, A. (2003). *Looking for Spinoza*. London: Heinemann.
- De Castro, L. (2004). Otherness in me, otherness in others. *Childhood* 11(4): 469–493.
- De Leon, L. (2007). Parallelism, metalinguistic play, and the interactive emergence of Zinacantec Mayan siblings' culture. *Research on Language and Social Interaction* 40(4): 405–436.
- Deleuze, G. and Guattari, F. (1988). *A Thousand Plateaus: Capitalism and Schizophrenia II*. London: Athlone.
- Derr, T. (2006). "Sometimes birds sound like fish": perspectives on children's place experiences. In: Spencer, C. and Blades, M. (Eds) *Children and Their Environments*. Cambridge: Cambridge University Press.
- Doek, J. (2008). Children and the right to play. *IPA 17th triennial conference "Play in a Changing World"*. Hong Kong, January 2008.
- Douglas, I. (2005). *Urban Greenspace and Mental Health*. Review paper prepared for UK MAB Urban Forum.
- Edelman, G. (2006). *Second Nature: Brain Science and Human Knowledge*. New Haven: Yale University Press.
- Eisen, G. (1990). *Children's Play in the Holocaust*. Amherst: University of Massachusetts Press.
- Ennew, J. (1994). Time for children or time for adults. In: Qvortrup, J., Bardy, M., Sgritta, G. and Wintersberger H. (Eds) *Childhood Matters: Social Theory, Practice and Politics*. Aldershot: Avebury.
- Economic and Social Research Council (2000). Lives of disabled children. *Children 5–16 Research Briefing* 8. ESRC.
- Evans, W.D., Blitstein, J., Lynch, C., de Villiers, A., Draper, C., Steyn, N. and Lambert, E.V. (2009). Childhood obesity prevention in South Africa: media, social influences, and social marketing opportunities. *Social Marketing Quarterly* 15(1): 22–48.

- Faber Taylor, A. and Kuo, F. (2006). Is contact with nature important for healthy child development? State of the evidence. In: Spencer, C. and Blades, M. (Eds) *Children and Their Environments*. Cambridge: Cambridge University Press.
- Factor, J. (2004). Tree stumps, manhole covers and rubbish tins: the invisible play-lines of a primary school playground. *Childhood* 22(2): 142–154.
- Fagen, R. (1995). Animal play, games of angels, biology and brain. In: Pellegrini, A.D. (Ed) *The Future of Play Theory*. Albany: New York University Press.
- Fagen, R. (2005). Play, five gates of evolution, and paths to art. In: McMahon, F., Lytle, D. and Sutton-Smith, B. (Eds) *Play: An Interdisciplinary Synthesis. Play and Culture Studies Vol. 6*. Lanham: University Press of America.
- Fantuzzo, J., Sekino, Y. and Cohen, H. (2004). An examination of the contributions of interactive peer play to salient classroom competencies for urban head start children. *Psychology in the Schools* 41(3): 323–336.
- Farné, R. (2005). *Pedagogy of play*. Topoi 24: 169–181.
- Fattore, T., Mason, J. and Watson, E. (2007). Children's conceptualisations of their well-being. *Social Indicators Research* 80: 5–29.
- Feldman, R. (2007). Parent–infant synchrony and the construction of shared timing; physiological precursors, developmental outcomes, and risk conditions. *Journal of Child Psychology and Psychiatry* 48(3/4): 329–354.
- Fjortoft, I. (2004). Landscape and play: the effects of natural environments on children's play and motor development. *Children, Youth and Environments* 14(2): 21–44.
- Flinn, M. (2006). Evolution and ontogeny of stress response to social challenges in the human child. *Developmental Review* 26: 138–174.
- Forbes, E. and Dahl, R. (2005). Neural systems of positive affect: relevance to understanding child and adolescent depression. *Development and Psychopathology* 17: 827–850.
- Frost, J. (2007). A brief history of American playgrounds. *Play Rights Magazine* issue 2/07.
- Furedi, F. (2001). *Paranoid Parenting: Abandon your Anxieties and be a Good Parent*. London: Penguin.
- Gagen, E. (2000). Playing the part: performing gender in America's playgrounds. In: Holloway, S. and Valentine, G. (Eds) *Children's Geographies. Playing, Living and Learning*. London: Routledge.
- Gaskins, S. (2000). Children's daily activities in a Mayan village: a culturally grounded description. *Cross-Cultural Research* 34: 375–389.
- Gaskins, S. (2008). The cultural meaning of play and learning in children's museums. *Hand to Hand* 22(4): 8–11.
- Geary, D.C. and Bjorklund, D.F. (2000). Evolutionary developmental psychology. *Child Development* 71(1): 57–65.
- Gervais, M. and Wilson, D. (2005). The evolution and functions of laughter and humour: a synthetic approach. *The Quarterly Review of Biology* 80(4): 395–429.
- Gibson, J.J. (1986). *The Ecological Approach to Visual Perception*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Gill, T. (2007a). *No Fear: Growing Up in a Risk-averse Society*. London: Calouste-Gulbenkian Foundation.
- Gill, T. (2007b). *Can I Play Out? Lessons from London Play's Home Zones Project*. London: London Play.

- Ginsberg, K. (2007). The importance of play in promoting healthy child development and maintaining strong parent bonds. *American Academy of Pediatrics* 119(1): 182–191.
- Goncu, A., Ozer, S. and Ahioglu, N. (2009). Childhood in Turkey. Social class and gender differences in schooling, labour and play. In: Fleer, M.H., Hedegaard, M. and Tudge, J. (Eds) *Childhood Studies and the Impact of Globalisation: Policies and Practices at Global and Local Levels*. Abingdon: Routledge.
- Goodwin, M. (2006). *The Hidden Life of Girls: Games of Stance, Status, and Exclusion*. Oxford: Blackwell.
- Gordon, G. and Esbjorn-Hargens, S. (2007). Are we having fun yet? An exploration of the transformative power of play. *Journal of Humanistic Psychology* 47: 198–222.
- Gordon, N., Burke, S., Akil, H., Watson, S. and Panksepp, J. (2003). Socially-induced brain ‘fertilisation’: play promotes brain derived neurotrophic factor transcription in the amygdala and dorsolateral frontal cortex in juvenile rats. *Neuroscience Letters* 341(1): 17–20.
- Gosso, Y., Otta, E., Morais, M., Ribiero, F. and Bussah, V. (2005). Play in hunter-gatherer society. In: Pellegrini, A.D. and Smith, P.K. (Eds) *The Nature of Play: Great Apes and Humans*. London: Guilford Press.
- Gosso, Y., Morais, M. and Otta, E. (2007). Pretend play of Brazilian children: a window into different cultural worlds. *Journal of Cross-Cultural Psychology* 38(5): 539–558.
- Gould, S. (1996). *Full House: The Spread of Excellence from Plato to Darwin*. New York: Harmony Books.
- Grayling, T., Hallam, K., Graham, D., Anderson, R. and Glaister, S. (2002). *Streets Ahead: Safe and Liveable Streets for Children*. London: Institute for Public Policy Research.
- Greenaway, M. (2008). Play in Wales. In: Brown, F. and Taylor, C. (Eds) *Foundations of Playwork*. Maidenhead: Open University Press.
- Greenberg, N. (2004). The beast at play: the neuroethology of creativity. In: Clements, R. and Fiorentino, L. (Eds) *The Child’s Right to Play: A Global Approach*. Westport: Praeger.
- Guroglu, B., Haselager, G., van Lieshout, C., Takashima, A., Rijpkema, M. and Fernandez, G. (2008). Why are friends special? Implementing a social interaction simulation task to probe the neural correlates of friendship. *Neuroimage* 39(2): 903–910.
- Guss, F. (2005). Reconceptualising play: aesthetic self-definitions. *Contemporary Issues in Early Childhood* 6(3): 233–243.
- Haglund, M., Nestadt, P., Cooper, N., Southwick, S. and Charney, D. (2007). Psychobiological mechanisms of resilience: relevance to prevention of treatment of stress-related psychopathology. *Development and Psychopathology* 19: 889–920.
- Hakarainen, P. (1999). Play and motivation. In: Engeström, Y., Miettinen, R. and Punamäki, R-L. (Eds) *Perspectives in Activity Theory*. Cambridge: Cambridge University Press.
- Harker, C. (2005). Playing and affective time-spaces. *Children’s Geographies* 3(1): 47–62.
- Hart, R. (1979). *Children’s Experience of Place*. New York: Irvington.
- Hart, R. (1997). *Children’s Participation*. New York: Earthscan.
- Hart, R. (2002). Containing children: some lessons on planning for play from New York City *Environment and Urbanization* 14(2): 135–148.

- Hart, R. (2008). Stepping back from 'the ladder': reflections on a model of participatory work with children, pp. 19–31. In: Reid, A.B. *Participation and Learning: Perspectives on Education and the Environment, Health and Sustainability*. Springer.
- Heft, H. (2007). The social constitution of perceiver-environment reciprocity. *Ecological Psychology* 19(2): 85–105.
- Henricks, T. (2006). *Play Reconsidered: Sociological Perspectives on Human Expression*. Urbana and Chicago: University of Illinois Press.
- Hodgkin, R. and Newell, P. (2007). *Implementation Handbook for the Convention on the Rights of the Child, 3rd edition*. Geneva: UNICEF.
- Hillman, M. (2006). Children's rights and adults' wrongs. *Children's Geographies* 4(1): 61–67.
- Hofer, M. (2006). Psychobiological roots of early attachment. *Current Directions in Psychological Science* 15(2): 84–88.
- Holder, M. and Coleman, B. (2009). The contribution of social relationships to children's happiness. *Journal of Happiness Studies* 10: 329–349.
- Holloway, S. and Valentine, G. (2000a). *Children's Geographies. Playing, Living and Learning*. London: Routledge.
- Holloway, S. and Valentine, G. (Eds) (2000b). Spatiality and the new social studies of childhood. *Sociology* 34(4): 763–783.
- Holloway, S. and Valentine, G. (2002). Cyberkids? Exploring children's identities and social networks in on-line and off-line worlds. *Annals of the Association of American Geographers* 92(2): 302–319.
- Hubbs-Tait, L., Nation, J., Krebs, N. and Bellinger, D. (2006). Neurotoxicants, micronutrients, and social environments: individual and combined effects on children's development. *Psychological Science in the Public Interest* 6(1): 57–121.
- Huffaker, D. and Calvert, S. (2005). Gender, identity, and language use in teenage blogs. *Journal of Computer-Mediated Communication* 10(2): article 1. Available at: <http://jcmc.indiana.edu/vol10/issue2/huffaker.html>
- Hughes, B. (2001). *Evolutionary Playwork and Reflective Analytical Practice*. London: Routledge.
- Hyder, T. (2005). *War, Conflict and Play*. Maidenhead: Open University Press.
- International Play Association (IPA) (2008). *Request to the UN Committee on Children's Rights for a General Comment on article 31 of the UNCRC*.
- Isen, A. and Reeve, J. (2006). The influence of positive affect on intrinsic and extrinsic motivation: facilitating enjoyment of play, responsible work behaviour and self-control. *Motivation and Emotion* 29(4): 297–325.
- Jones, G. (2002). *Killing Monsters – Why Children need Superheroes, and Make-believe Violence*. New York: Basic Books.
- Jones, O. (2008). 'True geography [...] quickly forgotten, giving away to an adult-imagined universe'. Approaching the otherness of childhood. *Children's Geographies* 6(2): 195–212.
- Kaplan, R. and Kaplan, S. (2005). Preference, restoration, and meaningful action in the context of nearby nature. In: Barlett, P. (Ed) *Urban Place: Reconnecting with the Natural World*. Cambridge: MIT Press.
- Karsten, L. (2003). Children's use of public space. The gendered world of the playground. *Childhood* 10(4): 457–473.
- Karsten, L. (2005). It all used to be better? Different generations on continuity and change in urban children's daily use of space. *Children's Geographies* 3(3): 275–290.

- Karsten, L. and van Vliet, W. (2006). Increasing children's freedom of movement: introduction. *Children, Youth and Environments* 16(1): 69–73.
- Katz, C. (2004). *Growing up Global: Economic Restructuring and Children's Everyday Lives*. Minneapolis: University of Minnesota Press.
- Katz, C. and Monk, J. (Eds) (1993). *Full Circles: Geographies of Women over the Life Course*. London: Routledge.
- Kelle, H. (2000). Gender and territoriality in games played by nine-to-twelve-year-old schoolchildren. *Journal of Contemporary Ethnography* 29(2): 164–197.
- Kinoshita, I. (2008). Children's use of space of the fourth generation (today) with reviewing the three generation's play maps (1982). *IPA 17th triennial conference "Play in a Changing World"*. Hong Kong, January 2008.
- Korpela, K., Kytta, M. and Hartig, T. (2002). Restorative experience, self-regulation and children's special place preferences. *Journal of Environmental Psychology* 22: 387–398.
- Kraftl, P. (2008). Young people, hope and childhood-hope. *Space and Culture* 11(2): 81–92.
- Kylin, M. (2003). Children's dens. *Children, Youth and Environments* 13(1).
- Kytta, M. (2004). Affordances of children's environments in the context of cities, small towns, suburbs and rural villages in Finland and Belarus. *Journal of Environmental Psychology* 22: 109–123.
- Lansdown, G. (2005). *The Evolving Capacities of the Child*. Florence: UNICEF Innocenti Research Centre.
- Lareau, A. (2000). Social class and the daily lives of children. A study from the United States. *Childhood* 7(2): 155–171.
- Lefebvre, H. (1991). *The Production of Space*. London: Blackwell.
- Lemay, R. and Ghazal, H. (2001). Resilience and positive psychology: finding hope. *Child and Family* 5(1): 10–21.
- Lester, S. and Maudsley, M. (2007). *Play Naturally*. London: National Children's Bureau.
- Lester, S. and Russell, W. (2008). *Play for a Change: Play, Policy and Practice – a Review of Contemporary Perspectives*. London: National Children's Bureau.
- Lewis, A., Parsons, S. and Robertson, C. (2006). *My School, My Family, My Life: Telling it Like it is*. Birmingham: University of Birmingham School of Education and the Disability Rights Commission.
- Lindquist, G. (2001). Elusive play and its relation to power. *Focaal – European Journal of Anthropology* 37: 13–23.
- Liu-Yan and Feng-Xiaoxia (2005). Kindergarten educational reform during the past two decades in mainland China: achievements and problems. *International Journal of Early Years Education* 13(2): 93–99.
- Lofdahl, A. and Hagglund, S. (2006). Power and participation: social representations among children in pre-school. *Social Psychology of Education* 9: 179–194.
- Loizou, E. (2005). Infant humour: the theory of the absurd and empowerment theory. *International Journal of Early Years Education* 13: 43–53.
- Lorimer, H. (2005). Cultural geography: the busyness of being 'more-than representational'. *Progress in Human Geography* 29(1): 83–94.
- Loughry, M., Ager, A., Fouri, E., Khamis, V., Afana, A. and Quota, S. (2006). The impact of structured activities among Palestinian children in a time of conflict. *Journal of Child Psychology and Psychiatry* 47(12): 1211–1218.

- Marshall, P. and Fox, N. (2006). Biological approaches to the study of social engagement. In: Marshall, P. and Fox, N. (Eds) *The Development of Social Engagement*. New York: Oxford University Press.
- Martin, R. (2007). *The Psychology of Humour: An Integrative Approach*. Burlington, MA: Elsevier Academic Press.
- Massey, D. (1999). Space-time, 'science' and the relationship between physical geography and human geography. *Transactions of the Institute of British Geographers* 24: 261–76.
- Masten, A. (2001). Ordinary magic: resilience processes in development. *American Psychologist* 56(3): 227–238.
- Mathur, R. and Berndt, T. (2006). Relations of friends' activities to friendship quality. *Journal of Early Adolescence* 26(3): 365–388.
- Mattsson, K. (2002). Children's (in)dependent mobility and parents chauffeuring in the town and countryside. *Tijdschrift voor Economische en Sociale Geografie* 93(4): 443–453.
- Mayall, B. (2002). *Towards a Sociology of Childhood: Thinking from Children's Lives*. Buckingham: Open University Press.
- McEwen, B. (2000). The neurobiology of stress: from serendipity to clinical relevance. *Brain Research* 886(1–2): 172–189.
- McEwen, B. (2007). Physiology and neurobiology of stress and adaptation: central role of the brain. *Physiological Review* 87: 873–904.
- Meire, J. (2007). Qualitative research on children's play: a review of recent literature. In: Jambour, T. and Van Gils, J. (Eds) *Several Perspective on Children's Play: Scientific Reflections for Practitioners*. Antwerp: Garant.
- Milligan, C. and Bingley, A. (2007). Restorative places or scary spaces? The impact of woodland on the mental well-being of young adults. *Health and Place* 13: 799–811.
- Mitchell, H., Kearns, R. and Collins, D. (2007). Nuances of neighbourhood: children's perceptions of the space between home and school in Auckland, New Zealand. *Geoforum* 38: 614–627.
- Moore, R. (1986). *Childhood's Domain*. London: Croom Helm.
- Moore, R. (1989). Before and after asphalt: diversity as an ecological measure of quality in children's outdoor environments. In: Block, M.N. and Pellegrini, A.D. (Eds) *The Ecological Context of Children's Play*. Norwood, NJ: Ablex Publishers.
- Moore, R. and Cooper Marcus, C. (2008). Healthy planet, healthy children: designing nature into the daily spaces of childhood. In: Kellert, S., Heerwagen, J. and Mador, M. (Eds) *Biophilic Design: the Theory, Science, Practice of Bringing Buildings to Life*. Hoboken: Wiley.
- Morrow, V. (2006). Understanding gender differences in context: implications for young children's everyday lives. *Children and Society* 20(2): 92–104.
- Moss, P. and Petrie, P. (2002). *From Children's Services to Children's Spaces: Public Policy, Children and Childhood*. London: RoutledgeFalmer.
- Mouritsen, F. (1998). *Child Culture – Play Culture. Working Paper 2: Child and Youth Culture*. Department of Contemporary Cultural Studies, Odense University.
- National Scientific Council on the Developing Child (2005). *Excessive Stress Disrupts the Architecture of the Developing Brain. Working Paper 3*. Cambridge, Ma: National Scientific Council on the Developing Child.

- Nieuwenhuys, O. (2003). Growing up between places of work and non-place of childhood: the uneasy relationship. In: Olwig, K. and Gullov, E. (Eds) *Children's Places: Cross-cultural Perspectives*. London: Routledge.
- Nimmo, J. (2008). Young children's access to real life: an examination of the growing boundaries between children in child care and adults in the community. *Contemporary Issues in Early Childhood* 9(1): 3–13.
- Noren-Björn, E. (1982). *The Impossible Playground*. New York: Leisure Press.
- Nsamenang, A. (2009). Cultures in early childhood care and education. In: Fler, M.H., Hedegaard, M. and Tudge, J. (Eds) *Childhood Studies and the Impact of Globalisation: Policies and Practice at Global and Local Levels*. Abingdon: Routledge.
- Nyota, S. and Mapara, J. (2008). Shona traditional game and play: songs as indigenous ways of knowing. *Journal of Pan African Studies* 2(4): 189–202.
- O'Brien, M., Jones, D. and Rustin, M. (2000). Children's independent spatial mobility in the public realm. *Childhood* 7(3): 257–277.
- Oke, M., Khattar, A., Pant, P. and Saraswathi, T.S. (1999). A profile of children's play in urban India. *Childhood* 6(2): 207–219.
- Panksepp, J. (2001). The long term psychobiological consequences of infant emotions: prescriptions for the twenty-first century. *Infant Mental Health Journal* 22(1–2): 132–173.
- Panksepp, J. (2007). Can play diminish ADHD and facilitate the construction of the social brain? *Journal of the Canadian Academy of Child and Adolescent Psychiatry* 16(2): 57–66.
- Peden, M., Oyegbite, K., Ozanne-Smith, J., Hyder, A.A., Branche, C., Fazlur Rahman, A.K.M., Rivara, F. and Bartolomeos, K. (Eds) (2008). *World Report on Child Injury Prevention*. Geneva: World Health Organization and UNICEF.
- Pellis, S. and Pellis, V. (2006). Play and the development of social engagement. In: Marshall, P. and Fox N. (Eds) *The Development of Social Engagement*. New York: Oxford University Press.
- Pellis, S. and Pellis, V. (2007). Rough-and-tumble play and the development of the social brain. *Current Directions in Psychological Science* 16(2): 95–98.
- Pellis, S. and Pellis, V. (2009). *The Playful Brain: Venturing to the Limits of Neuroscience*. Oxford: Oneworld Publications.
- Pence, A.R. and Nsamenang, B. (2008). *A Case for Early Childhood Development in sub-Saharan Africa*. The Hague: Bernard van Leer Foundation.
- Playwork Principles Scrutiny Group (2005). *The Playwork Principles*. Cardiff: Play Wales.
- Prout, A. (2005). *The Future of Childhood*. London: RoutledgeFalmer.
- Punch, S. (2000). Children's strategies for creating playspaces: negotiating independence in rural Bolivia. In: Holloway, S. and Valentine, G. (Eds) *Children's Geographies. Playing, Living and Learning*. London: Routledge.
- Punch, S. (2003). Childhoods in the majority world: miniature adults or tribal children? *Sociology* 37(2): 277–295.
- Rasmussen, K. (2004). Places for children – children's places. *Childhood* 11(2): 155–173.

- Ratner, H., Chiodo, L., Covington, C., Sokol, R., Ager, J. and Delaney-Black, V. (2006). Violence exposure, IQ, academic performance, and children's perception of safety: evidence of protective effects. *Merrill-Palmer Quarterly* 52 (2): 264–287.
- Reay, D. and Lucey, H. (2000). 'I don't really like it here but I don't want to be anywhere else': children and inner city council estates. *Antipode* 32(4): 410–428.
- Rissotto, A. and Tonucci, F. (2002). Freedom of movement and environmental knowledge in elementary school children. *Journal of Environmental Psychology* 22: 65–77.
- Rissotto, A. and Giuliani, V. (2006). Learning neighbourhood environments: the loss of experience in a modern world. In: Spencer, C. and Blades, M. (Eds) *Children and Their Environments*. Cambridge: Cambridge University Press.
- Robson, E. (2004). Children at work in rural Northern Nigeria: patterns of age, space and gender. *Journal of Rural Studies* 20: 193–210.
- Roe, M. (2006). 'Making a wish': children and the local landscape. *Local Environment* 11(2): 163–181.
- Rogoff, B., Paradise, R., Arauz, R., Correa-Chavez, M. and Angellilo, C. (2004). First hand learning through intent participation. *Análise Psicológica* 1(12): 11–31.
- Rose, S. (2005). *The 21st-Century Brain: Explaining, Mending and Manipulating the Mind*. London: Jonathan Cape.
- Rutter, M. (2006). Implications of resilience concepts for scientific understanding. *Annals of the New York Academy of Science* 1094: 1–12.
- Santos, B. de S. (2004). Interview with Boaventura de Sousa Santos. *Globalisation, Societies and Education* 2(2): 147–60.
- Schore, A. (2001). Minds in the making: attachment, the self-organising brain and developmentally orientated psychoanalytic psychotherapy. *British Journal of Psychotherapy* 17(3): 299–328.
- Sharpe, L. (2005). Play fighting does not affect subsequent success in wild meerkats. *Animal Behaviour* 69: 1023–1028.
- Shier, H. (2008). The right to play in Nicaragua. *Playwords* 37: 12–15.
- Silk, J., Adriance, E., Shaw, D., Forbes, E., Whalen, D., Ryan, N. and Dahl, R. (2007). Resilience among children at risk for depression: mediation and moderation across social and neurobiological contexts. *Development and Psychopathology* 19(3): 841–865.
- Singer, D.G., Singer, J.L., D'Agostino, H. and DeLong, R. (2009). Children's pastimes and play in sixteen nations: is free-play declining? *American Journal of Play* Winter 2009: 283–312.
- Siviy, S. (1998). Neurobiological substrates of play behaviour. In: Bekoff, M. and Byers, J. (Eds) *Animal Play: Evolutionary, Comparative and Ecological Perspectives*. Cambridge: Cambridge University Press.
- Siviy, S., Love, N., DeCicco, B., Giordano, S. and Seifert, T. (2003). The relative playfulness of juvenile Lewis and Fischer-344 rats. *Physiology and Behaviour* 80: 385–394.
- Skelton, T. (2000). 'Nothing to do, nowhere to go?': teenage girls and 'public' space in the Rhondda Valleys, South Wales. In: Holloway, S. and Valentine, G. (Eds) *Children's Geographies. Playing, Living and Learning*. London: Routledge.

- Smith, F. and Barker, J. (2000). Contested spaces. Children's experiences of out of school care in England and Wales. *Childhood* 7(3): 315–333.
- Sobel, D. (2002). *Children's Special Places*. Detroit: Wayne State University Press.
- Spinka, M., Newberry, R. and Bekoff, M. (2001). Mammalian play: training for the unexpected. *The Quarterly Review of Biology* 76(2): 141–168.
- Strauss, G. and Allen, P. (2006). The experience of emotion is associated with the automatic processing of positive emotional words. *Journal of Positive Psychology* 1(3): 150–159.
- Sutton, L., Smith, N., Dearden, C. and Middleton, S. (2007). *A Child's Eye View of Social Difference*. York: Joseph Rowntree Foundation.
- Sutton-Smith, B. (1997). *The Ambiguity of Play*. Cambridge, Ma: Harvard University Press.
- Sutton-Smith, B. (1999). Evolving a consilience of play definitions: playfully. In: Reifel, S. (Ed) *Play Contexts Revisited. Play and Culture Studies, Vol. 2*. Stamford: Ablex.
- Sutton-Smith, B. (2003). Play as a parody of emotional vulnerability. In: Roopnarine, J.L. (Ed) *Play and Educational Theory and Practice. Play and Culture Studies Vol. 5*. Westport, Connecticut: Praeger.
- Swain, J. (2005). Sharing the same world: boys' relations with girls during their last year of primary school. *Gender and Education* 17(1): 75–91.
- Swain, J., Lorberbaum, J., Kose, S. and Strathearn, L. (2007). Brain basis of early parent–infant interactions: psychology, physiology, and in vivo functional neuroimaging studies. *Journal of Child Psychology and Psychiatry* 48(3/4): 262–287.
- Swart-Kruger, J. (2002). Children in a South African squatter camp gain and lose a voice. In: Chawla, L. (Ed) *Growing Up in an Urbanising World*. London: UNESCO and Earthscan.
- Thomas, G. and Hocking, G. (2003). *Other People's Children*. London: Demos.
- Thompson, E. and Varela, F. (2001). Radical embodiment: neural dynamics and consciousness. *Trends in Cognitive Sciences* 5(10): 418–425.
- Thompson, S. (2005). Territorialising' the primary school playground: deconstructing the geography of play time. *Children's Geographies* 3(1): 63–78.
- Thorne, B. (1993). *Gender Play*. Buckingham: Open University Press.
- Tomanovic, S. (2004). Family habitus as the cultural context for childhood. *Childhood* 11(3): 339–360.
- Tudge, J. and Otero-Wanga, D. (2009). A cultural-ecological perspective on early childhood among the Luo of Kisumu, Kenya. In: Fleer, M.H., Hedegaard, M. and Tudge, J. (Eds) *Childhood Studies and the Impact of Globalisation: Policies and Practices at Global and Local Levels (World Yearbook of Education 2009)*. New York: Routledge.
- Tugade, M., Frederickson, B. and Barrett, L. (2004). Psychological resilience and positive emotional granularity: examining the benefits of positive emotions on coping and health. *Journal of Personality* 72(6): 1161–1190.
- Turnbull, J. and Jenvey, B. (2004). Criteria used by adults and children to categorize subtypes of play. *Early Child Development and Care* 176(5): 539–551.
- Turner, J. (2007). *Human Emotions: A Sociological Theory*. London: Routledge.

- United Nations (2006). *General Comment on Implementing Rights in Early Childhood CRC/C/GC/7/Rev 1*. Geneva: UN Committee on the Rights of the Child.
- Ungar, M. (2008). Resilience across cultures. *British Journal of Social Work* 38: 218–235.
- Unicef Innocenti Research Centre (2004). *The Child Friendly Cities Initiative* [online] Florence: Italy. Available at: www.childfriendlycities.org/about/index.html
- UNICEF (United Nations Children's Fund) (2008). *Rights under the Convention of the Rights of the Child* [online]. Available at: www.unicef.org/crc/index_30177.html
- UNICEF and Oficina del Alto Comisionado de las Naciones Unidas para los Derechos Humanos (OACNUDH) (2006). *Compilación de Observaciones Finales del Comité de los Derechos del Niño sobre países de América Latina y el Caribe (1993-2006)*. Santiago, Chile: OHCHR.
- Valentine, G. (2000). Exploring children and young people's narratives of identity. *Geoforum* 31: 257–267.
- Valentine, G. (2004). *Public Space and the Culture of Childhood*. Aldershot: Ashgate.
- Valkenburg, P., Schouten, A. and Peter, J. (2005). *Adolescent's identity experiments on the Internet*. *New Media and Society* 7(3): 383–402.
- Van Gils, J. (2007). The child's right to play: the right to be a child. In: Ang, A., Delens-Ravier, I., Delplace, M., Herman, C., Reynaert, D., Staelens, V., Steel, R. and Verheyde, M. (Eds) *The UN Children's Rights Convention: Theory Meets Practice: Proceedings of the International Interdisciplinary Conference on Children's Rights*. 18–19 May 2006, Ghent, Belgium. Mortsel: Intersentia.
- Van Gils, J., Seghers, J., Boen, F., Scheerder, J., Servaas, W., Meire, J., Vanderstede, W. and Vaningelgem, F. (2009). *Buiten Spelen!, Onderzoek met betrekking tot de relatie tussen (on)beschikbaarheid van speelbare ruimte, de mate van buitenspelen en de gevolgen daarvan op de fysieke, sociale, psychische en emotionele ontwikkeling van de Vlaamse kinderen en jongeren*. Meise: Onderzoekscentrum Kind en Samenleving.
- Van Praag, H., Shubert, T., Zhao, C., and Gage, F. (2005). Exercise enhances learning and hippocampal neurogenesis in aged mice. *Journal of Neuroscience* 25(38): 8680–8685.
- Veitch, J., Bagley, S., Ball, K. and Salmon, J. (2006). Where do children usually play? A qualitative study of parents' perceptions of influences on children's active free-play. *Health and Place* 12: 383–393.
- Vellacott, J. (2007). Resilience: a psychoanalytical exploration. *British Journal of Psychotherapy* 23(2): 163–170.
- Vincent, C. and Ball, S. (2007). Making up the middle-class child: families, activities and class dispositions. *Sociology* 41(6): 1061–1077.
- Wadlinger, H. and Isaacowitz, D. (2006). Positive mood broadens visual attention to positive stimuli. *Motivation and Emotion* 30(1): 87–99.
- Ward, C. (1990). *The Child in the City*. London: Bedford Square Press.
- Wells, N. and Evans, G. (2003). Nearby nature: a buffer of life stress among rural children. *Environment and Behaviour* 35(3): 311–330.
- Wells, N. and Lekies, K. (2006). Nature and the life course: pathways from childhood nature experiences to adult environmentalism. *Children, Youth and Environments* 16(1): 1–24.
- Wheway, R. (2007). *Couch prisoners? Spaces and Places* 25: 26–27.

- Wohlwend, K. (2004). Chasing friendships: acceptance, rejection and recess play. *Childhood Education Winter* 2004/2005: 77–82.
- Woodhead, M. (2005). Early childhood development: a question of rights. *International Journal of Early Childhood* 37(3): 79–98.
- Woodhead, M. (2006). *Changing Perspectives on Early Childhood: Theory, Research and Policy*. Paris: UNESCO.
- World Bank (2009). *Reshaping Economic Geography: World Development Report 2009*. Washington, DC: The World Bank.
- Yun, A., Bazar, K., Gerber, A., Lee, P. and Daniel, S. (2005). The dynamic range of biological functions and variations of many environmental cues may be declining in the modern age: implications for diseases and therapeutics. *Medical Hypotheses* 65: 173–178.

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About the Bernard van Leer Foundation

The Bernard van Leer Foundation funds and shares knowledge about work in early childhood development. The Foundation was established in 1949 and is based in the Netherlands. Our income is derived from the sale of Royal Packaging Industries Van Leer N.V., bequeathed to the Foundation by Dutch industrialist and philanthropist Bernard van Leer (1883 to 1958).

Our mission is to improve opportunities for children up to age 8 who are growing up in socially and economically difficult circumstances. We see this both as a valuable end in itself and as a long-term means to promoting more cohesive, considerate and creative societies with equal opportunities and rights for all.

We work primarily by supporting programmes implemented by local partners. These include public, private and community-based organisations. Working through partnerships is intended to build local capacity, promote innovation and flexibility, and help to ensure that the work we fund is culturally and contextually appropriate.

We also aim to leverage our impact by working with influential allies to advocate for young children. Our free publications share lessons we have learned from our own grantmaking activities and feature agenda-setting contributions from outside experts. Through

our publications and advocacy, we aim to inform and influence policy and practice not only in the countries where we operate, but globally.

In our current strategic plan, we are pursuing three programme goals: reducing violence in young children's lives, taking quality early education to scale, and improving young children's physical environments. We are pursuing these goals in eight countries – Brazil, India, Israel, Tanzania, the Netherlands, Turkey, Peru and Uganda – as well as undertaking a regional approach within the European Union.

In addition, until 2012 we will continue to work in Mexico, the Caribbean and South Africa on strengthening the care environment, transitions from home to school and respect for diversity.

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The findings, interpretations, conclusions and opinions expressed in this series are those of the authors and do not necessarily reflect the views or policies of the Bernard van Leer Foundation.

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