Clinics in Developmental Medicine No. 62

Biology of Play

Edited by

BARBARA TIZARD and DAVID HARVEY

1977

Spastics International Medical Publications

LONDON: William Heinemann Medical Books Ltd.

PHILADELPHIA: J. B. Lippincott Co.

NS 2897/74

Contents

	LIST OF CONTRIBUTORS	iii
	INTRODUCTION	v
Chapter 1.	MAN THE PLAYER Martin Bax	1
Chapter 2.	CROSS-CULTURAL STUDIES OF REPRESENTATIONAL PLAY Dina Feitelson	6
Chapter 3.	PLAY IN ANIMALS Lilyan White	15
Chapter 4.	DEVELOPMENTAL TRENDS IN INFANT PLAY Deborah Rosenblatt	33
Chapter 5.	PLAY IN THE HOME AND ITS IMPLICATIONS FOR LEARNING Judy Dunn and Carol Wooding	45
Chapter 6.	PLAY AND LEARNING Kathy Sylva	59
Chapter 7.	PLAY WITH LANGUAGE Catherine Garvey	74
Chapter 8.	MEASUREMENT OF PLAY: CLINICAL APPLICATIONS Alex F. Kalverboer	100
Chapter 9.	SOCIAL AND FANTASY PLAY IN YOUNG CHILDREN Peter K. Smith	123
Chapter 10.	A SURVEY OF CHILDREN'S OUTDOOR ACTIVITIES IN TWO MODERN HOUSING AREAS IN SWEDEN Pia Björklid-Chu	146
Chapter 11.	PLAY IN HOSPITAL Ivonny Lindquist, John Lind and David Harvey	160

Chapter 12.	THE PLAY OF HANDICAPPED CHILDREN Kay Mogford									
Chapter 13.	THE RÔLE OF PLAY IN PSYCHOTHERAPEUTIC WORK WITH CHILDREN AND THEIR FAMILIES Arnon Bentovim									
Chapter 14.	PLAY: THE CHILD'S WAY OF LEARNING? Barbara Tizard									
Subject Index	·	***						***		209
Name Index	***	***								214

Introduction

The present book, Biology of Play, grew out of a conference sponsored by the Spastics Society in June 1975 at Moor Park Hall in the Surrey countryside. It was presided over by a playfully sceptical Dr. Ronnie Mac Keith who, by wisely pleading innocence when faced with the technical solemnities that were invoked in the various papers delivered, improved the clarity of the discussions and of the excellent papers that have emerged in this book. For play is a curious topic. Its place in human growth is a subject worth approaching with the utmost seriousness. Yet its 'data base' is hilariously funny in the same way that children are—to themselves and to witnessing behavioural scientists. To be successful at 'the study of play', one must somehow fuse this seriousness and hilarity into a 'scientific art form' as formally demanding as the performance of a great clown. I once had the privilege of seeing the great Russian clown Popov in Moscow. His elegant rigour was quite as impressive as the hilarity that he contained within it. I hope that the pieces in this volume will, at their best, strike the reader in the same way.

There are matters of particular moment in these pages. In his opening chapter, Martin Bax succeeds in giving a sense of the diversity of play. And if he manages to give the impression that whatever man can do seriously he can do playfully, then I think the volume is off to a good start. For the main characteristic of play—whether of child or adult—is not its content but its mode. Play is an approach to action, not a form of activity. Some contemporary theorists conceive of play as a way of taking action out of its immediate adaptive context, of loosening the efficient bond between means and ends, in order to better promote a sense of the combinatorial richness inherent in action.

The fact that play varies not only in content but also in the importance given to it in various cultures is emphasised in the chapters by Dina Feitelson and Lilyan White. How and whether one 'teaches' children to play effectively is a theme introduced in Dr Feitelson's interesting chapter. It is developed further in the chapters by Rosenblatt and by Dunn and Wooding. I would like to pick out one theme in the latter chapter, for it emerges again in the searching and critical remarks of Barbara Tizard which conclude the volume. The Cambridge investigations by Judy Dunn and her colleagues point to the central rôle of adults in the development of play in children. Mothers, by responding to their children's play, manage gradually to extend the length of the children's attention to their play, even when they are later playing by themselves. This is a finding of capital importance, particularly when examined in the light of the 'progressive' dogma that adults should have a minimum, indeed negligible, rôle in a child's play. But more of this in a moment.

The ensuing chapters deal with the difficult problem of the *effect* of play on the child's behaviour—present and future. There is still very little definitive knowledge on this matter, save by reference to those children whose circumstances have robbed them of the opportunity for play. But then one is never quite sure whether it was the circumstances rather than the shortage of *spielraum* and *spielzeit* which produced the unquestionably baleful effects. Yet evidence is beginning to accumulate—in Sylva's

excellent and original discussion of the 'freeing' effects of prior play on later problem solving in children, and in Garvey's unroariously funny account of the way in which play allows children to explore more widely the limits of the social and linguistic rules to which the adult community will eventually want them to conform.

Does play have a therapeutic effect? Can it reduce the impact of misery or help the mentally disturbed child to recover his balance? On the former question the evidence seems to be positive: the opportunity for play can indeed provide a countervailing force against the isolation of hospital and handicap. However, the effect of 'play therapy' is still not established, though that may be as much a function of defining the problem of mental disturbance as of finding out whether such disturbance has been alleviated by play or by any other therapeutic procedure. One cannot help feel that the *general* findings of this symposium will eventually help with the definition of the more *clinical* questions which emerge.

Barbara Tizard provides a bitter-sweet conclusion to the book. Is play, as conceived 'officially' in the ideology of nursery schools and play groups, the child's way of learning? What I found gripping-politically and substantively-was her discussion of 'acceptable' play and how its very definition reflects a broader ideology of the adult-child relationship; indeed, how a society or profession defines the relation between those with power and those without. The approach of adults to children is often in the spirit of compensating for ills that exist (or are singled out to exist with a vengeance) in the broader society. Dr. Tizard is among those who feel that much of the ideology of nursery education derives from the recurrent Romantic view of society as the oppressor of human spontaneity. In the light of this concept, the nurture of young children must be guided by a wish to spare them from premature oppression. Keep adults off the child's back. Let the child have materials such as sand, paint and water which do not constrain the limits of his play. Do not impose games with rules and rôles which prescribe limits to action. Yet, interestingly enough, one after another of the chapters in this book contain findings which gravely question these 'established' views. We have already noted that the work of the Cambridge group points to the centrality of adults in helping children to extend their range of attention in play. There is work to support the claim that challengingly structured materials can be used in problem solving. And there is ample material in the chapters by Garvey and by Smith to show the stimulus to variation and invention that is provided by social rôles and social rules imposed in play.

So, in the end, this volume is highly serious in its implications for practice. It foretells future trends, as do such recent tours of the literature as the Penguin anthology on play and Catherine Garvey's new book*. There is little question that play is an important vehicle of development. But what kind of play, and in what settings? This volume goes a long way toward opening discussion in just that spirit.

Department of Experimental Psychology University of Oxford

Jerome Bruner

*Bruner, J. S., Sylva, K., Jolly, A. (Eds.) (1976) Play: Its Role in Evolution and Development. Harmondsworth: Penguin Books.

Garvey, C. (1977) Play. London: Open Books. Cambridge, Mass: Harvard University Press.

Man the Player

MARTIN BAX

The word 'play' in relation to children is used to describe a wide range of activities (Tizard et al. 1976). In the adult world the concept of play has been expanded to cover almost any human activity, so that Berne (1966) describes alcoholism and frigidity as 'games' in his absurd but amusing work, Games People Play. Whilst most of these ideas are perhaps irrelevant to our present theme of play in children, it seems worth looking at some of the writing about adult play before moving on to consider the relevance of these ideas to play in children.

In order to limit my discussion, I thought I would link it to the work of the distinguished English poet, George MacBeth, and his verse lecture Lusus (1972). In the opening three sections of the poem, MacBeth explains that the poem lecture is 'on the subject, or rather the concept, of playing'. The poet does not want to explain 'why' people play—and as answers to 'why' questions he quotes 'for exercise', 'for fresh air' or 'to meet people'—but wants to discuss the whole concept of play. Next, he draws our attention to four texts which he regards as important. These are Aristotle's Nicomachaean Ethics, Auden's Diary of an Airman, Wittgenstein's Tractactus and Philosophical Investigations, and Borges' story, Tlon Ukbar and Orbis Tertius. I shall leave the reader to put his own gloss on Auden and Wittgenstein, but draw your attention to Borges' story which is a parabolic account of the Western world in mid-century. Aristotle would require a little more attention.

Aristotle had the important view that there was something more to life than work. 'Nowadays', he says, 'most people practise music for pleasure but the ancients gave it a place in education because nature requires us not only to be able to work well but also to idle well.' This idleness is the principle of the universe for Aristotle (Aristotle's Politics, 1337b). Aristotle limited the use of the actual word 'play' to childish activities, but Plato regarded 'sports' at least as something of importance.

One of the problems in looking at these Greek texts is that of translation, and Huizinga, in translating them, does not hesitate to use the word 'play' in a context where Jowett, for instance when translating Plato, uses another word. Jowett's translation reads: 'Man (says Plato) is made to be the plaything of the gods and that, truly considered, is the best of him'. Man should 'pass life in the noblest of pastimes'. 'War will never give us either amusement or instruction in any degree worth speaking of', and we should live therefore in sports. 'We ought to live sacrificing and singing and dancing and then man will be able to propitiate the gods'.

It is this view—that the most serious of human activities exist within play—which MacBeth has picked up again in his own poem. In section 10 of the poem MacBeth

first draws attention to Huizinga, who must be described as the 'philosopher' of play, and anyone interested in the subject should study his famous book *Homo Ludens* (1947).

Huizinga believes that play is a very serious activity, but MacBeth points to the paradox here. If to be serious involves to be totally committed, then to play entails to be holding something back. But if play entails being serious, as Huizinga says it does, then to be playing entails being totally committed, or else our idea of being serious (or else our idea of playing) was wrong to begin with. It must have been. But which?

Huizinga was very serious about play, and the characteristics he describes in play have been used by various authors since in slightly varied forms. These are for him the most important qualities:

1. Voluntary

'First and foremost then all play is a voluntary activity. Play to order is no longer play, it could at best be but a forcible imitation of it' (Huizinga 1947). Huizinga goes on to stress the relationship between this voluntariness and freedom. He says that children and animals play because they enjoy playing, and therein lies their freedom. For the adult, play is something that could be left alone; it is superfluous. And yet it can only achieve a significance when it becomes a rite or a ceremony. He has a lot more to say about rites and ceremonies as 'play' later on in his book.

2. Distinctness

Play is distinct from ordinary life, or 'real life'. Play is 'as every child knows, only pretending or only for fun'. But it is not true to say therefore that it is not serious. Play may have a very serious quality, and indeed any recent onlooker of the Olympic Games must be aware of how important this play seemed to the life of the whole world.

3. Disinterestedness

The disinterestedness of play is similar to what other authors refer to when they say that play is not 'goal-directed', but 'disinterestedness' is probably a better word in the sense that play is unconnected with the immediate satisfaction of wants or appetites or any obvious bodily function or biological need. Huizinga says that play has its place in a sphere superior to the strictly biological processes of nutrition, reproduction or self-preservation. He thinks that sexual display or anything outside the purely physiological, such as the singing, cooing and strutting of birds, can be regarded as play, but that the physiological act itself is functional and therefore is not disinterested.

4. Order

There are certain rules which exist, within the 'game', and one cannot but help be aware of this when listening to children playing: 'You can't go there, it's not in the game', they say. Huizinga says, 'play demands order, absolute and supreme. The least deviation from it "spoils the game", robs it of its character and makes it worthless'. Nevertheless, we can note that some of the tension in play which Huizinga also draws attention to may rise from anxieties about the extent to which

other people involved will maintain the rules, and so, in a way, these rules test the qualities of one's friends. The feelings of joy and tension which Huizinga mentions are very important in his concept of play, and they certainly occur again and again in MacBeth's poem: 'a play of forces, the fountain playing, the ball in play, play up, sword play, playtime; playmates; playboy; play suit'.

We can perhaps produce a summary therefore of what play is. It is a voluntary activity or occupation executed within certain fixed limits of time and place according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy and the consciousness that it is different from ordinary life.

It is interesting that the Indo-European languages lack a general word for play, and the words in other languages are of some interest. The Chinese have no single word for these activities that we group under the heading of play function. The most important word is 'wan', in which ideas of children's play predominate, but its meaning extends also to the following: 'to be busy, to enjoy something, to trifle, to romp, to jest, crack jokes, to make mock of'. It also means 'to finger, to feel, to examine, to sniff at, to twiddle little ornaments, and, finally, to enjoy the moonlight'. It is not a word which is used for games of skill, contest, gambling or theatrical performances. Anything to do with contest is expressed by the word 'cheng'.

Another interesting example which Huizinga quotes is the Blackfoot language of the Alonquin group. Here the verbal stem 'koani' apparently serves all children's play, but organised games with rules (including games of chance) have another word. As a final example (again I quote from Huizinga), the Japanese word for play is 'assebu'. This serves much more like our own word 'play', but has various extensions which are not uninteresting. For example, it is the word used for those 'Japanese aesthetic tea parties where ceramics are passed admiringly from hand to hand amid utterances of approbation'. I shall leave Huizinga here, but emphasise the importance of his book by quoting some of the chapter heading, e.g. 'Play and Law', 'Play and War', 'Play Forms in Philosophy', 'Play Forms in Art', 'Western Civilization', 'Sub-Specie Ludi'.

These somewhat comic considerations of the use of the word 'play' in other tongues reminds us, however, of less desirable extensions of the concept of play in our own Western civilization. The torturer plays with his victim, and the victor with the subject people. The particular example MacBeth takes is the Spanish invasion of Mexico. Drawing on his knowledge of Prescott, he ends this section with '. . . . at last somebody wins. No, nobody wins: the casualties are too high. There is much cheating. It goes on and on. At last, somebody says: Shall we pack it in for the night? So they pack it in for the night. Next morning they resume play'.

After this playful reminder of what games can be about, MacBeth ends his poem by mentioning Pope's Essay on Man. This rather ambitious comparison of his own poem with that of Pope—'Should one have done it more like that?'—is MacBeth's way of drawing attention to the fact that he thinks that in writing about play he has been paying attention to a very important aspect of 'the proper study of mankind'.

The word 'play' occurs in Pope's poem once only. This is how Pope uses it:

Behold the child, by nature's kindly law, Pleased with the rattle, tickled with a straw: Some livelier play-thing gives his youth delight, A little louder, but as empty quite: Scarves, garters, gold, amuse his riper stage, And beads and pray'r-books are the toys of age: Pleased with this bauble still, of that before; 'Till tir'd he sleeps, and life's poor play is o'er. (Lines 275-281, Essay on Man)

Play in Children

Where do these literary considerations leave psychologists, paediatricians, teachers, and others concerned with the very much humbler task of looking at the way children play? First, it is surely fair to take warning from this enormous range of thought of the limits of our own disciplines and bear in mind that there are others who have thought in very different ways about problems to which we are now turning our attention. Next, one should view with considerable alarm the use of words like 'play' to describe such a whole range of human activities as is done in the adult world and wonder whether one should not be very much more restrictive in the use of the word with children. Thirdly, one can think therefore that when one does describe a play-like activity of children, one should be very precisely concerned to say what activity one is describing and leave it to others to decide whether it fits into their category of what they describe as play.

In other sections of this book various definitions and types of play are discussed. Garvey's paper (Chapter 7), for example, describes speech and language used as play, whereas Smith and Connolly (1972) discuss a range of activities which are very different. Various psychologists have attempted descriptions of play. For example, Piaget (1962) listed the main criteria usually adopted to distinguish play from non-ludic activities. They are: (1) it is an end in itself; (2) it is spontaneous; (3) it is an activity for pleasure; (4) it has a relative lack of organisation; (5) it is characterised by freedom from conflicts; and (6) it is over-motivated. This contrasts with Klinger's (1969) description of play which is much more negative and limiting. It is interesting to note the disagreement between Piaget's account and Huizinga's, the contradiction, of course, being between Piaget's fifth characteristic and Huizinga's insistence on rule in play. Perhaps we are looking at a semantic rather than a real difficulty.

In looking at play in children perhaps one of the most important things to do is to exclude many categories of activities in young children from the concept of play. Corinne Hutt (1971) has already done this in looking at 'exploration and play' in children. Many of the activities of the very young child are often described as 'play'. For example, the hand regard which one can see around three months, or the grabbing and handling of the toes which one sees when the infant first finds these. Any activity with objects such as bobbing and pushing them up and down in water

and the casting of toys around nine to ten months is also familiarly referred to as 'play' by adults who look after such children, and indeed by many professionals. This type of activity is, however, very different from the types of activities one sees some six months later, when symbolic 'play' with miniature toys can be observed, and when types of play involving the use of equipment such as climbing frames, toy trikes, motor cars and so on, begin to be observed. It would seem to me best, in a technical sense, to exclude practically all infant behaviours from play, as we are quite unable to say whether they fit into the various definitions of play we suggest. Few, for example, would consider hand regard as a goal-less activity, but then of course the theme of this book is indeed that play has a goal.

That brings us back to some of the philosophical problems which have troubled this paper and which have been explored in the works I have alluded to. They will echo uneasily in the mind as one observes the developing complexity of the growing child's play.

Acknowledgement

Some of the material in this paper was originally presented by Dr. Catherine Garvey at Moor Park, 1975.

REFERENCES

- Berne, E. (1966) Games People Play. London: André Deutsch.
- Huizinga, N. (1947) Homo Ludens. Trans. R. F. C. Howe. London: Routledge and Kegan Paul.
- Hutt, C. (1971) 'Exploration and play in children.' in Herron, R. E., Sutton-Smith, B. (Eds.) Child's Play. New York: Wiley.
- MacBeth, G. (1972) Lusus. London: Fuller d'Arch Smith.
- Piaget, J. (1962) Play, Dreams and Imitation in Childhood. New York: Norton.
- Smith, P. K., Connolly, K. (1972) 'Patterns of play and social interaction in preschool children.' in Blurton-Jones, N. (Ed.) Ethological Studies of Child Behaviour. Cambridge: Cambridge University Press
- Tizard, B., Philps, J., Plewis, I. (1976) 'Play in pre-school centres—I. Play measures and their relation to age, sex and I.Q.' Journal of Child Psychology and Psychiatry, 17, 251.