

Play, Dreams and Imitation

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EXPLANATION OF PLAY

Having attempted to classify and describe games, we shall now endeavour to find an interpretation of them by an examination of their position in the general context of the child's thought. The task is not easy: the many theories of play expounded in the past are clear proof that the phenomenon is difficult to understand. But the reason for the difficulty lies perhaps in the fact that there has been a tendency to consider play as an isolated function (as has been the case with "imagination") and therefore to seek particular solutions to the problem, whereas play is in reality one of the aspects of any activity (like imagination in respect to thought). The prevalence of play among children is therefore to be explained not by specific causes peculiar to the realm of play, but by the fact that the characteristics of all behaviours and all thought are less in equilibrium in the early stage of mental development than in the adult stage, which is, of course, obvious.

§ 1. Criteria of Play

An examination of the main criteria usually adopted to distinguish play from non-ludic activities shows clearly that play is not a behaviour per se, or one particular type of activity among others. It is determined by a certain orientation of the behaviour, or by a general "pole" of the activity, each particular action being characterised by its greater or less proximity to the pole and by the kind of equilibrium between the polarised tendencies. For instance, according to a well-known formula play is an end in itself, whereas work and other non-ludic behaviours involve an aim not contained in the activity as such. If this were so, play would be "disinterested," or as J. M. Baldwin says "autotelic." But this first criterion is at once seen to be lacking in precision. On the one hand, as P. Souriau has already emphasised in his *Esthétique du mouvement*, every game is in a sense profoundly "interested," since the player is certainly concerned with the result of his activity. In the case of practice games the result is materially identical with that of the corresponding "serious" activity. If, then, the distinction is between "autotelism" and "heterotelism," it can only be made in relation to the kind of equilibrium that exists between the specific behaviour and the set of other behaviours. In "heterotelic" activities the direction of the behaviours is outwards, in so far as there is subordination of the schemas to reality, whereas in "autotelic" activities the direction is inwards, in so far as the child, while using the same schemas, enjoys exercising his powers and being aware of himself as the cause of the activity. On the other hand, almost all the activities of the first year of life seem

to be autotelic, and yet they are not always ludic. The true meaning of this first criterion is therefore to be found in the opposition between assimilation of objects to the child's activity and accommodation of the child's activity to objects. When assimilation and accommodation are not differentiated, as at the beginning of the first year, there seems to be autotelism without there being play in the strict sense, but as assimilation gains on accommodation play is divorced from the corresponding non-ludic activities. The too sharp theoretical distinction between autotelism and heterotelism thus becomes rather a difference of degree, with the whole series of transitions it involves between behaviours in which assimilation and accommodation are still in equilibrium and those in which assimilation predominates in varying degrees.

A second criterion frequently used is that of the spontaneity of play, as opposed to the compulsion of work and real adaptation. But are the primitive intellectual investigations of the child, and even those of pure science, not equally "spontaneous"? If what is intended is a more precise distinction between the "superior" games, science and art, and games which are not "superior" but just games, all that can be done is once again to distinguish two poles, the one truly spontaneous, since it is uncontrolled, the other controlled by society or by reality. But viewed in this way, this second criterion amounts to the same as the first: play is assimilation of reality to the ego, as distinct from "serious" thought, in which the assimilating process is in equilibrium with accommodation to other persons and things.

A third criterion often applied is that of pleasure. Play is an activity "for pleasure," while serious activity is directed towards a useful result irrespective of its pleasurable character. This might be expressed as autotelism and heterotelism translated into affective terms. But it confuses the issue even more, for much "work" properly so-called has no other subjective end than satisfaction or pleasure and yet it is not play. Can we agree with Clapartde that play is an immediate realisation of desires or needs while work is a mediate realisation? But it is more than a question of degree of complexity. The action of grasping for the sake of grasping may be a non-ludic exercise although there may be immediate satisfaction, and on the other hand a game may involve all kinds of complicated intermediaries. Freud has expressed the exact shade of difference, in similar terms, in contrasting the "Lustprinzip" and the "Realitätsprinzip": on one side immediate satisfaction by way of non-compliance with the laws of reality, and on the other adaptation to reality in which there is an element of satisfaction, which is, however, subordinated to a kind of compliance, or respect for objective data. But one difficulty still remains. Certain games (which we called symbolic games of liquidation) are symbolic reproductions of painful occurrences with the sole aim of digesting and assimilating them (obs. 86). In such games we have situations analogous to those described, on another plane, by Freud himself as being beyond the pleasure principle: "Jenseits des Lustprinzips." These cases show that

mere assimilation, in the form of repetition of an experienced event, even when such experience was painful, is the primary factor in play and is more widespread than the pursuit of pleasure for its own sake. Once this is understood, the difficulty disappears, for it is clear that although play sometimes takes the form of repetition of painful states of mind, it does so not in order that the pain shall be preserved, but so that it may become bearable, and even pleasurable, through assimilation to the whole activity of the ego. In a word, it is possible to reduce play to pleasure seeking, but with the proviso that the pursuit of pleasure is conceived as subordinated to the assimilation of reality to the ego. Ludic pleasure then becomes the affective expression of this assimilation.

A fourth criterion which is sometimes applied, particularly by American writers, is the relative lack of organisation in play. Play is considered to be devoid of organised structure and contrasted with serious thought, which is always ordered. Here, again, one of Freud's remarks has bearing on the criterion. In his view, symbolic thought (in the Freudian sense of unconscious symbolism) is not "directed," in contrast to logical thought which is systematically directed. But this criterion also can be reduced to that of assimilation. Why is it that a day-dream or a symbolic game is not "directed," unless because reality is being assimilated to the whims of the ego instead of being thought in accordance with rules?

A fifth criterion, which is of interest to us, is freedom from conflicts. Conflicts are foreign to play, or, if they do occur, it is so that the ego may be freed from them by compensation or liquidation, whereas serious activity has to grapple with conflicts which are inescapable. There is no doubt that this criterion is on the whole sound. The conflict between obedience and individual liberty is, for example, the affliction of childhood, and in real life the only solutions to this conflict are submission, revolt, or co-operation which involves some measure of compromise. In play, however, the conflicts are transposed in such a way that the ego is revenged, either by suppression of the problem or by giving it an acceptable solution. But what this criterion does is to stress only one aspect of ludic assimilation in general. It is an important aspect, but nevertheless it is only part of the whole picture. It is because the ego dominates the whole universe in play that it is freed from conflicts, and not the converse, unless when we speak of conflicts we mean any limitation of the ego by reality.

Finally, there is the interesting criterion suggested by Mrs. Curti: overmotivation.¹ For instance, sweeping a floor is not a game, but the fact of describing a figure as one sweeps gives it a ludic character (*cf.* the child cutting his spinach into little squares as he eats it, or taking "one spoonful for mummy," "one for daddy," etc.). Judged by this criterion, play would begin when incentives not contained in the initial action are included, and additional incentives would be characteristic of all play. But it then becomes a question of determining the nature of these ludic incentives, for it cannot

¹ Curti, M. W. *Child Psychology*. Longmans Green, 1930.

be asserted that every behaviour which has successive polyvalent incentives is thereby play. In each particular case, the incentives depend on the pleasure gained through unrestricted combinations, or through symbolic imagination. But since this is so, we come back once again to the fact that an activity becomes ludic merely through a process used by the ego to integrate a reality which was independent of it and which sometimes required painful accommodation. Overmotivation thus becomes merely another way of expressing the predominance of assimilation.

To sum up, it is clear that all the criteria suggested in order to define play in relationship to non-ludic activity result, not in making a clear distinction between the two, but rather in stressing the fact that the tonality of an activity is ludic in proportion as it has a certain orientation. This amounts to saying that play is distinguishable by a modification, varying in degree, of the conditions of equilibrium between reality and the ego. We can therefore say that if adapted activity and thought constitute an equilibrium between assimilation and accommodation, play begins as soon as there is predominance of assimilation. This criterion seems to be generally applicable, from the merely functional assimilation characteristic of practice games, to the varied forms of assimilation of reality to thought found in symbolic games. Since all thought involves assimilation, and ludic assimilation is only distinctive in that it subordinates accommodation instead of being in equilibrium with it, play is to be conceived as being both related to adapted thought by a continuous sequence of intermediaries, and bound up with thought as a whole, of which it is only one pole, more or less differentiated. This is what we shall now find in an examination of the three main theories of play.

§ 2. The Theory of Pre-exercise

The importance of the ideas which as long ago as 1896 K. Groos opposed to the accepted views on play cannot be exaggerated. In spite of the prophetic visions of the great educationists, play has always been considered, in traditional education, as a kind of mental wastematter, or at least as a pseudo-activity, without functional significance, and even harmful to children, keeping them from their homework. For its part, common-sense, imbued with the adulto-centrism which has been the great obstacle in genetic research, saw in play only a relaxation, or a drain for superfluous energy, without enquiring why children play in one way rather than in another. Groos's great merit is to have understood that a phenomenon which is so general, common to the higher animals and man, cannot be explained outside the laws of psycho-physiological maturation. In other words, K. Groos saw in play a phenomenon of growth, growth of thought and of activity, and he was the first to ask why the various forms of play exist. Moreover, being an aesthetician as well as a psychologist, Groos was interested in play in relation to art, and it was the mechanism of imagination in particular that he sought to explain. K. Groos's doctrine has therefore

two quite distinct aspects: a general theory of play as pre-exercise, and a special theory of symbolic imagination. It is true that the originality of his theory lies precisely in his interpretation of “make-believe” as pre-exercise. This makes it all the more necessary to distinguish the two parts of his thesis, for although we have no difficulty in accepting the essentials of the first as far as practice games are concerned, the second seems to us unsatisfactory when we consider symbolic games.

Play, according to Groos, is “pre-exercise” and not merely exercise, because it contributes to the development of functions whose maturity is reached only at the end of childhood: general functions such as intelligence, etc., to which games of trial and error are related, and special functions or particular instincts. (The spring of activity is for Groos instinctive in character.) But instinct comes into play at its own time and requires preparation beforehand. The preparatory exercise necessary for its maturation, and which therefore must take place before maturation is achieved, is the specific occupation of childhood, and that is play. Groos had previously said in *The Games of Animals* “animals are young so that they may be able to play.” The pleasure which accompanies the stimulation of any instinctive tendency, and the joy inherent in any successful action, the well-known “joy of being the cause,” are the affective concomitants of this pre-exercise. From them consciousness of make-believe will be derived. “The joy of being the cause” involves consciousness of an aim. Far from being purposeless activity, play can only be conceived as the pursuit of specific ends. But the simplest aim is immanent in pre-exercise : the puppy which seizes another by the scruff of the neck is only stimulating his fighting instinct, and the joy of success is a sufficient explanation of his activity, without assuming him to be conscious of make-believe. But from the day when he can bite, and when in his pretended fights he imposes a certain limitation on his instinct, then, according to Groos, there is awareness of make-believe : symbolism is born of this pre-exercise. In short, if all play, objectively speaking, is pseudo-activity, awareness of make-believe is the consciousness of this pseudo-activity, and follows from it sooner or later.

Awareness of make-believe is extended into “imagination,” i.e., “the faculty of considering mere representations as real.” In dreams and delirium, we are deceived by imagination, because we then have “an illusion not imbibed by the ego; in play and art, on the contrary, there is deliberate, conscious illusion.” Konrad Lange’s idea of deliberate illusion is thus used by Groos to describe what he calls a kind of “duplication of consciousness,” imagination representing the ludic aim as real, while the pleasure of being the cause reminds us that it is we who are creating the illusion. This is why play is accompanied by a feeling of freedom and is the herald of art, which is the full flowering of this spontaneous creation.

Leaving aside the reservations that might be made to this comparison between play and art, we shall show that, in spite of the ingenious efforts of K. Groos, symbolic imagination cannot merely be considered as the interiorised interpretation of the

behaviours of pre-exercise, and therefore preparatory exercise and awareness of make-believe cannot be reduced to a simple unit. It is true that, about the beginning of the second year, symbolic imagination is added to the earlier sensory-motor practice games (obs. 65), but it is in the same way as conceptual representation continues the schemas of sensory-motor intelligence, and this in no way implies that the former is mere awareness of the latter. On the contrary, once it is constituted, the ludic symbol orientates play in new directions, further and further removed from simple practice.

Let us first consider the notion of pre-exercise, and ask ourselves whether it is indispensable in comparison with that of exercise and nothing more. In the first place, it is descriptive rather than explanatory. Wundt has already objected strongly to the finalism which in Groos's work sometimes takes the place of causal explanation, It is true that Groos refers to instincts, and if these exist, it is natural that they should be activated prior to their maturation, in which case the initial exercise could be called "pre-exercise" in contrast to the final activations. But without wishing to discuss here the role of training in the "instincts" of animals (see the work of Kuo on the predatory instinct in cats), we do not believe that the problem of the existence of instincts in man has been solved, apart from the two definite cases where the instinctive tendency corresponds to differentiated organs and therefore to innate techniques forming specific reflex systems (sexual and nutritive instincts). As for children's games, leaving aside the much more complex question of symbolic games and games with rules, can all practice games be considered to be "pre-exercise" of particular instincts or general functions? It would be an exaggeration to make such a statement, and we fail to see what the idea of "pre-exercise" adds to that of mere "exercise." What is exercised in play is any new acquirement, or anything in process of being acquired, and although this exercise, by developing the mechanism involved, obviously contributes to its consolidation, we should be guilty of unjustified finalism in explaining ludic exercise as preparation for future stages in which the mechanism being exercised will be integrated. For instance, when at about the age of one the child discovers free fall, he amuses himself by throwing everything to the ground. In this way he exercises his new power, which will one day be integrated in his knowledge of the laws of the physical world, but there is certainly no pre-exercise of his future understanding of physics. By the same reasoning, we are prepared to see in games of this kind exercise of existing intelligence, but not pre-exercise of future intelligence, unless the term pre-exercise be used in a purely temporal and not in a teleological sense.

Freed from its finalism, the idea of pre-exercise becomes that of functional assimilation.² Just as any organ assimilates (and therefore develops) by functioning, so any behaviour or mental mechanism is consolidated by active repetition. Baldwin's "circular reaction" has no other meaning, and all the child's early activity obeys the

² It is in this sense that Carr considered play to be a stimulus to growth.

same principle. But although sensory-motor assimilation, *i.e.*, active repetition of behaviours and incorporation of external objects into this activity, thus constitutes one of the essential poles of psychic development, there is during the process of any adaptation, a second pole determined by the accommodation of schemas to the specific character of these same objects. Play begins when this accommodation becomes of secondary importance because it is subordinated more or less completely by assimilation. The attempt at accommodation is then replaced by action for its own sake, the “pleasure of being the cause” so well described by K. Groos. We must repeat, however, that this preponderant, ludic assimilation can only be exercise, and not pre-exercise.

A much more complex question arises with the appearance of make-believe and symbolic play. We agree with Groos that there is a relationship between symbolic and practice play, since we shall find in symbolism a product of the same assimilating process that explains exercise as such. In both our theses then, there is correspondence between symbol and exercise, but for Groos symbolic make-believe is only the interior interpretation of the objective fact of pre-exercise, while for us symbolic play is mental assimilation, as practice play is sensory-motor assimilation, without the content of all symbolic play necessarily being practice play.

The main question, therefore, is this: does exercise as such lead *ipso facto* to symbolic make-believe? For us, a negative answer seems imperative, and this for two reasons. In the first place, the young child during its whole first year, as well as all the animal species which play (except the chimpanzees), seems to know nothing of make-believe, although he is able to play practice games. It is a definite anthropomorphic abuse on the part of Groos to assume that the puppy which bites another puppy in play is conscious of make-believe, when the mechanism of opposite tendencies (liking and pleasure inhibiting combativeness) is an adequate explanation of this “self-restraint” without there being any question of representation. In the second place it is impossible to prove that all the symbolic games of children prepare them for a specific activity, or even for general activity. Once the symbol is constituted, it goes far beyond practice, and even if we confine ourselves to saying that it trains thought as a whole we then have to explain why there is any need for symbols and make-believe, and not just exercise of conceptual thought as such. Why, indeed, does the child play at being a shopkeeper, a driver, a doctor? If it is suggested that such games are pre-exercise, by analogy with the games of little goats capering or kittens running after a ball of wool, we then ask why L. (obs. 80) played at being a church, imitating the rigidity of the steeple and the sound of the bells, and why J. (obs. 86) lay motionless like the dead duck she had seen on a table. Far from being preparatory exercises, most of the games we have given as examples either reproduce what has struck the child, evoke what has pleased him or enable him to be more fully part of his environment. In a word they form a vast network of devices which allow

the ego to assimilate the whole of reality, *i.e.*, to integrate it in order to re-live it, to dominate it or to compensate for it. Even games with dolls, which might lend themselves to a special interpretation, are much less pre-exercise of the maternal instinct than an infinitely varied symbolic system which provides the child with all the means of assimilation it needs in order to rethink past experiences.

In his commentary on K. Groos, Claparède, who was clearly aware of this fundamental difficulty, tries to compromise in this way: “In saying that the child exercises activities which will be useful to him in the future, we mean exercise of mental activities, psychic functions such as observation, manipulation, association with companions, etc.”³ This is clear, but why then have recourse to symbolism? In order to think of a church steeple or a dead duck, or to re-live a scene which took place because one wouldn’t eat one’s soup, would it not suffice to use interior speech, *i.e.*, verbal and conceptual thought? Why imitate the church steeple, lie motionless to mime a duck, make one’s doll drink imaginary soup, scolding or encouraging it the while? The answer is obvious: the child’s interior thought is not as yet sufficiently precise and mobile, his logico-verbal thought is still too inadequate and too vague, while the symbol concretises and animates everything. But this means that the symbol is not to be explained by pre-exercise, it is the very structure of the child’s thought.

Furthermore, while verbal and conceptual thought is collective thought and therefore inadequate to express individual experience, ludic symbolism, on the contrary, is created by the child for his own use, and the egocentrism of the signifier is thus exactly suited to the nature of what is signified. Far from being used as pre-exercise, the symbol is essentially the expression of the child’s present reality. True pre-exercise, in the field of initiation to adult life, is to be found not in imaginative play, but in questions, spontaneous remarks, drawings of things observed, in a word in all “serious” activity in the making, which gives rise to exercises comparable to sensory-motor practice.

Is it true, as some parts of Groos’s theory would have us believe, that symbolic games at least train imagination as such? Since symbolism does not contribute to the training of thought as a whole, being orientated in the opposite direction to logical and conceptual thought, is it a preparation for imaginative aptitudes? No doubt it is, provided that we make certain distinctions. Imagination is not a faculty, despite Groos. It is one of the two poles of all thought, that of free combination and mutual assimilation of schemas. In this sense, symbolic assimilation is a source of creative imagination, *i.e.*, of spontaneous constructive activity, as distinct from accommodation to reality and from both logical and experimental verification. It was in this sense that Baldwin had previously seen in play the beginning of deduction, *i.e.*, free construction of thought. But we must again emphasise that symbolic play will only achieve its final form of creative imagination provided that it is as it were

³ Claparède, *Psychologie de l'enfant*, 8th ed., p. 436.

reintegrated in thought as a whole. Since it is the outcome of assimilation, symbolism first expands this assimilation in an egocentric direction, and then, with the double progress of interiorisation of the symbol towards representational construction, and expansion of thought towards conceptualisation, symbolic assimilation is reintegrated in thought in the form of creative imagination.

To sum up, after discovering that elementary games are for exercise, K. Groos failed to find the explanation for symbolic fiction because he attempted to explain it by the content of the tendencies exercised. In his opinion the child makes do with make-believe fights or imaginary characters because he cannot really fight or nurse real babies. Like Groos, Freud also failed to understand the cause of the unconscious symbols which he himself discovered, and for the same reason, that he sought to explain them by their content. For Freud, there is symbolism because the content of the symbols has been repressed, while for Groos there is symbolic fiction because the content of the ludic symbols is still beyond the child's reach. But in both cases the formation of the symbol is not due to its content, but to the very structure of the child's thought. Wherever there is symbolism, in dreams, in the images of the half-sleeping state or in children's play, it is because thought, in its states of low psychological tension or in its elementary stages, proceeds by egocentric assimilation, and not by logical concepts.

§ 3. The Recapitulation Theory

While Groos's interpretation of make-believe in play reminds us in some respects of Freud's interpretation of dream symbolism, both explaining the symbol by the forbidden character of its content, Stanley Hall's famous theory is in line with that of C. G. Jung in that both these authors have recourse to heredity. This curious parallelism makes it necessary for us to say something about the theory of recapitulation, although nowadays this conception of the ludic function is considered antiquated. Just as Jung's hypothesis of heredity of unconscious archetypes led him into a very wide investigation into the generality of the elementary symbols of humanity, so the somewhat strange ideas of Stanley Hall led his disciples and his adversaries to discover important statistical facts as to the spread and evolution of children's games. It not infrequently happens that a false theory does valuable service to science through the work of verification it involves.

The three essential points in Stanley Hall's thesis are well-known: games follow one another at relatively constant age stages, determined by the content of the ludic activities: the content corresponds to ancestral activities which have followed one another in the same order in the course of human evolution: the function of children's play is to liberate the species from these residues, at the same time hastening its development towards higher stages (hence the famous comparison between play and the tadpole's tail).

We shall not stop to enquire whether play really does “purge” the individual of his troublesome or useless tendencies. Do tin soldiers rid the child of his bellicosity, or do they “pre-exercise” him to become a good soldier? Other writers have maintained that such games compensate, or free the ego, etc. It seems to us that such questions have no significance, or rather that any explanation might be the right one in any particular case. If symbolic play is a form of thought which assimilates reality to the ego, it may fulfil any of the possible functions, just as the interior thought of the adult may purge, liquidate, or compensate as easily as it may prepare, develop or do anything else.

For us the interesting question in Stanley Hall’s theory is the first one, that of regular age stages related to the content of play. On this point the facts are in direct contradiction to the theory. This does not mean that there is no regular succession in the evolution of games with age (we recognised this fact in Chaps. IV and V), but a distinction must be made between the content of play and its structure. The content consists of the particular ludic interests linked with this or that object (dolls, animals, buildings, machines, etc.), while the structure is the form of mental organisation: exercises, symbols, rules and their various varieties. In Stanley Hall’s view it is the content which is inherited, and which gives rise to laws of succession analogous to embryological laws. On this point, all the statistics of Hall’s school have led nowhere. It is now generally agreed, mainly as a result of the work of Lehmann and Witty,⁴ that the content of games varies with the child’s natural and social environment. The invention of cars, for instance, has upset the order of the stages, and even very young children who have had some experience of cars now play at pretending to change gear and start a car, games which obviously do not correspond to any biogenetic heredity. In 1929 Miss Whitley repeated Burke’s well-known investigation into children’s collections (1900), using children with the same American background and of the same age. The difference was remarkable. As far as the content is concerned, therefore, all the indications are that play is rather a matter of participation in the environment than of hereditary resurrection.

As to the structure, it would not be impossible to find in the development of children’s games a sequence analogous to that of the behaviours of the race,⁵ but it was not with this aspect of the question that Hall’s school was concerned. Practice play appears long before symbolic play, just as in animals sensory-motor intelligence comes much earlier than representation, which is the prerogative of the higher apes, and even then only exists to a very rudimentary degree. Games with rules follow symbolic play just as articulate speech (necessary for the transmission of codes and therefore for their construction) follows the stage of imaged representation.

⁴ Lehmann and Witty. *The Psychology of Play Activities*. Barnes, 1927.

⁵ Cf. C. Gattegno. *Etude sur le Jeu*. Bulletin de l’Institut d’Egypte, Cairo, 1945. [Tr. Note.]

If we admit that there is a certain parallelism between children's behaviours and primitive behaviours, or those of phylogenetic development, problems of interpretation arise which raise new difficulties for Stanley Hall's theory. Either there is heredity, which is restricted to very general functions, or else there is detailed similarity, in which case there is no question of heredity but merely of resemblances due to the fact that the same causes produce the same results. For instance, even if the capacity for constructing symbols is the result of hereditary mechanisms, it does not follow that some symbols have been inherited from the "primitives." As we know that no speech has ever become hereditary (whereas the ability to acquire articulate speech is certainly inherited), we are compelled to seek a more simple explanation than that of acquired characteristics for any similarities there may be between primitive man and the child. There is no need to seek very far, since the so-called "primitives," and even the true Paleolithic or tertiary primitives, were themselves children before becoming adults. In order to explain symbolism, let us confine ourselves then to the field of the child's psychology, and we shall be more likely to discover the general phenomena than by resorting to heredity, tither of content or structures.

It is none the less true that certain games with rules may have their origin in the distant past. Attempts have been made to show that games such as spillikins, and even marbles, derive from magic and divinatory practices, but in this case it is a question of social transmission and not of heredity. Moreover, nothing in adult origins of what has become ludic for the child explains the present function of these games, any more than the origin of a word explains linguistically its later position in the system of the language at any given moment.

§ 4. F. J. J. Buytendijk's theory of "infantile dynamics"

In addition to the classic explanations of K. Groos and S. Hall there are many other interpretations of play, but it would be useless to discuss them in detail since they are rather functional descriptions than causal explanations. In this field, all the authors are right since, as we have constantly seen, play can serve all purposes. Carr sees in play a "catharsis" which not only eliminates dangerous tendencies but makes them acceptable through canalisation and sublimation. The compensating function of play was stressed by Carr, and more recently by Reaney (1916) and Robinson (1920-23). For K. Lange, the main aim of play is to complete the ego (Ergänzungstheorie, 1901). For W. S. Taylor and Mrs. Curti (1930) it is "free satisfaction." Delacroix, in his *Psychologie de l'Art*, supports a similar view and contrasts the primitive practice play which precedes the separation of play from work, with free creative play in which "the personality of the child is expressed as he feels inclined (p. 7). Claparède, in his *Psychology of the Child*, suggests an eclectic and flexible definition, that of "derivation through make-believe": "The function of play is to allow the child to

express his ego, to display his personality, to pursue momentarily the line of his greatest interest in cases when he cannot do so through serious activities.”

All these writers agree in stating, in various ways, that play is essentially the assimilation of reality to the ego. “In play,” says Claparide (*Arch. Psychol.*, Vol. XXIV, p. 363), “the ego aspires to its full expansion, and reality is only taken into account in so far as it provides the pretext. In non-ludic activity, reality is considered for its own sake.” We are, however, still left with the causal problem of understanding the reason for this structure of play, and more especially symbolic fiction.

One of the few writers who has attempted to solve the structural problem is F. J. J. Buytendijk,⁶ in a book in which he seeks to reduce play not to a single function but to the general characteristics of “infantile dynamics.” To Groos’s formula that the higher animals have a childhood in order to be able to play, Buytendijk replies that the child plays because he is a child, *i.e.*, because the essential characteristics of his “dynamics” prevent him from doing anything else but play. To the hypothesis of pre-exercise it can be objected that animals such as birds, which do not play, have instincts as perfect as those of other animals, that the part played in development by exercise is much less important than that of internal maturation, and that true pre-exercise is not play but “serious” training (this last point being completely in agreement with what we said earlier).

What, then, is the nature of “infantile dynamics”? Buytendijk ascribes to them four main characteristics capable of explaining play: sensory-motor or mental lack of coherence, impulsiveness, a “pathic” attitude as opposed to a “gnostic” attitude (*i.e.*, a need for sympathetic understanding rather than for objective knowledge), and a certain “shyness with respect to things” which keeps the child from using them, leaving him vacillating between attraction and withdrawal. From these dynamics which govern the relationship between the child and his environment, play emerges as a privileged interaction between the child, or player, and his active partner, the external object which he views as a plaything. From this point of view play is essentially ambivalent. It is a liberation by virtue of the incoherence, the impulsiveness and one of the two aspects of the shyness with respect to reality, but it is at the same time communion with the environment by virtue of the pathic attitude and the other aspect of the “shy” attitude. In its organisation, play is essentially rhythmic, from the early motor manifestations up to the dualism of tension-relaxation which Buytendijk considers to be the essential structure of play as well as the manifestation of its ambivalence. Finally, and most important, there is the role of the image, which Buytendijk understands in a very wide sense, since for him animals and man play only with images: the image is the actual expression of the child’s “pathic” attitude to reality, it is essentially fiction, spontaneous combination and symbol.

⁶ *Wesen und Sinn des Spiels*, Berlin (K. Wolff), 1934.

As far as “infantile dynamics” are concerned we cannot but agree in the main with these theses, especially as Buytendijk’s view, although it is expressed quite differently and with more insistence on the motor and affective aspects of the child’s mind, seems to tally more than is at first apparent with our analysis of children’s thought. The lack of coherence and the impulsiveness are obvious. As to the “pathic attitude” which creates an intuitive communion with the physical and social environment, and is a source of “images” which animate reality, as well as of imitation and suggestibility, it seems to us, in spite of the terms used, to correspond approximately to what we called the child’s egocentrism, *i.e.*, the confusion of his own point of view with that of others. In particular, the relationship which is assumed between the pathic attitude and the “image” seems to us to be very characteristic of the intuitive and pre-operational thought peculiar to the egocentric mentality, which is proof against any objective or gnostic discipline.

But given that this is so with regard to the general mentality of the child, in our opinion Buytendijk has not made clear the details of the ludic mechanisms involved in the transition from these dynamics to play. The chief merit of his thesis lies in his statement that play essentially derives from the child’s mental structure, and can only be explained by that structure. We go so far as to agree with Buytendijk that all the characteristics of these “dynamics” are to be found in play, but the great difficulty is to know where to stop. By explaining too much, Buytendijk is in danger of failing to understand the origin of play itself, as a particular case of infantile dynamics. Play is but a part of the whole infantile dynamics, and although we agree that it derives from them, the question to be answered is in what conditions it does so, and why it does not always do so. In his analysis of Buytendijk’s work, Claparède rightly stressed this point: all the manifestations of infantile dynamics are not play. On the plane of thought, especially, what we called the child’s animism or magic, artificialism, etc., are typical products of this egocentric or “pathic” mentality, but they are not play. The logical incoherence and imaged character of all the young child’s intuitive thought is the result of this same mental structure, but it is not play. How is play, as a particular function, dissociated from this general structure? Why is it that the “image,” whose scope is much wider than that of play, becomes in certain cases a make-believe or ludic symbol? In our view, we are still in the dark as to the crux of the problem, perhaps because Buytendijk failed to see clearly that a “pathic” mentality, as distinct from one that is “gnostic,” is essentially egocentric, although it co-operates with the environment, and that egocentrism implies an assimilation of reality to the ego capable of being detached in varying degrees from the process of adaptation and directed towards makebelieve and symbolic imagery.

§ 5. An attempt to interpret play through the structure of the child's thought

A baby sucks his thumb sometimes as early as the second month, grasps objects at about four or five months, shakes them, swings them, rubs them, and finally learns to throw them and retrieve them. Such behaviours involve two poles: a pole of accommodation, since there must be adjustment of movements and perceptions to the objects, but also a pole of assimilation of things to the child's own activity, since he has no interest in the things as such, but only in so far as he finds them useful for a behaviour learnt earlier or for one he is in process of acquiring. This assimilation of reality to sensory-motor schemas has two complementary aspects. On the one hand it is active repetition and consolidation (hence the "circular reaction" described by Baldwin), and in this sense it is essentially functional or reproductive assimilation, *i.e.*, growth through functioning. On the other hand, it is mental digestion, *i.e.*, perception or conception of the object in so far as it is incorporated into real or possible action. Each object is assimilated as something "to be sucked," "to be grasped," "to be shaken," etc., and is at first that and nothing more (and if it is "to be looked at" it is still being assimilated to the various focusings and movements of the eyes and acquires the "shapes" which perceptive assimilation gives it). It is obvious that in the actual activity these two functions of assimilation become one, for it is by repeating his behaviours through reproductive assimilation that the child assimilates objects to actions and that these thus become schemas. These schemas constitute the functional equivalent of concepts and of the logical relationships of later development. At all stages of the development of intelligence we find both accommodation and assimilation, but they are increasingly differentiated, and consequently more and more complementary in their increasing equilibrium. In scientific thinking, for instance, accommodation to reality is nothing but experiment, while assimilation is deduction, or incorporation of objects into logical or mathematical schemas. But there are two important differences between this rational assimilation and the initial sensory-motor assimilation. In the first place, rational assimilation is not centred in the individual, the mental activity in this case being only an assimilation of things one to another,⁷ while the initial assimilation is centred in the individual, and is therefore non-operational, *i.e.*, it is egocentric or distorting. In the second place, and this second difference explains the first, rational assimilation is complementary to accommodation to things, and therefore in almost permanent equilibrium with experience, while sensory-motor assimilation is as yet undifferentiated from accommodation and gives rise to a fresh "displacement of equilibrium" with every new differentiation. Phenomenism and egocentrism are the two undissociated aspects of elementary consciousness as distinct from experimental objectivity and rational deduction.

⁷ It is, of course, real activity, and the assimilation of things one to another therefore amounts to assimilating them to "operations," *i.e.*, to active schemas constructed by the mind.

This being so, children's play is merely the expression of one of the phases of this progressive differentiation: it occurs when assimilation is dissociated from accommodation but is not yet reintegrated in the forms of permanent equilibrium in which, at the level of operational and rational thought, the two will be complementary. In this sense, play constitutes the extreme pole of assimilation of reality to the ego, while at the same time it has something of the creative imagination which will be the motor of all future thought and even of reason.

Play begins, then, with the first dissociation between assimilation and accommodation. After learning to grasp, swing, throw, etc., which involve both an effort of accommodation to new situations, and an effort of repetition, reproduction and generalisation, which are the elements of assimilation, the child sooner or later (often even during the learning period) grasps for the pleasure of grasping, swings for the sake of swinging, etc. In a word, he repeats his behaviour not in any further effort to learn or to investigate, but for the mere joy of mastering it and of showing off to himself his own power of subduing reality. Assimilation is dissociated from accommodation by subordinating it and tending to function by itself, and from then on practice play occurs. Since it requires neither thought nor social life, practice play can be explained as the direct result of the primacy of assimilation. The "functional pleasure" and pleasure of being the cause, which accompany this type of play, raise no particular problem, since the first comes from the *sui generis* character of this assimilation for the sake of assimilation, with no need for new accommodation, and the second from the fact that when the child has overcome the difficulties inherent in the corresponding "serious" action, the assimilation is more concentrated on his own activity.

The appearance of symbolism, on the other hand, is the crucial point in all the interpretations of the ludic function. Why is it that play becomes symbolic, instead of continuing to be mere sensorymotor exercise or intellectual experiment, and why should the enjoyment of movement, or activity for the fun of activity, which constitute a kind of practical make-believe, be completed at a given moment by imaginative make-believe? The reason is that among the attributes of assimilation for assimilation's sake is that of distortion, and therefore to the extent to which it is dissociated from immediate accommodation it is a source of symbolic make-believe. This explains why there is symbolism as soon as we leave the sensory-motor level for that of representational thought.

Although the distinction between practice play and symbolic play is greater than is generally thought (even Buytendijk supports Groos's ideas on this point), since their respective origins are to be found on two quite different levels of behaviour, there is still an undeniable relationship between them: *symbolic play is to practice play as representational intelligence is to sensory-motor intelligence*. And to this correspondence at two different levels must be added one at the same level: *symbolic*

play is to representational intelligence what practice play is to sensorymotor intelligence, i.e., a deviation in the direction of pure assimilation.

Representative thought, as distinct from sensory-motor activity, begins as soon as the “signifier” is differentiated from the “signified” in the system of significations which constitutes the whole intelligence and indeed the whole consciousness. In the process of adaptation through sensory-motor schemas there are already “signifiers.” They are the “indices” which enable the child to recognise objects and relationships, to assimilate consciously and even to imitate. But the index is only one aspect of the object or of the situation, and is therefore not a “signifier” which is differentiated from the “signified.” Language, on the other hand, provides the prototype of a system of distinct signifiers, since in verbal behaviour the signifier is the collective “signs” or words, while the signified is the meaning of the words, *i.e.*, the concepts which at this new level take the place of the preverbal sensory-motor schemas. Verbal, properly conceptual intelligence occupies this privileged position in representational thought by virtue of the fact that verbal signs are social, and that through their use the system of concepts attains sooner or later (later than is usually supposed) a high degree of socialisation. But between the index and the sign, or between the sensory-motor schema and the logical concept, the symbolic image and imaged or pre-conceptual representation have their place. As we have seen, the image is interiorised imitation, *i.e.*, the positive of accommodation, which is the negative of the imitated object. The image is therefore a schema which has already been accommodated and is now used in present assimilations, which are also interiorised, as “signifier” for these “signified.” The image is therefore a differentiated signifier, more so than the index since it is detached from the perceived object, but less so than the sign, since it is still imitation of the object, and therefore is a “motivated” sign, as distinct from verbal signs which are “arbitrary.” Moreover, the image is a signifier which is within the scope of individual thought, while the pure sign is always social. For this reason there is in all verbal and conceptual thought a stratum of imaged representation which enables the individual to assimilate for himself the general idea common to all, and for this reason also, the nearer we get to early childhood the more important is the role of imaged representation and intuitive thought. Each image has a corresponding object (*i.e.*, the concept of this object) which, even in the adult, serves as a representative or example of the general class of which it is a part, and which in the child is a partial substitute for the general class which is not yet constructed.

This then being the mechanism of adapted thought, which is the equilibrium between assimilation and accommodation, we can understand the role of the symbol in play, where accommodation is subordinated to assimilation. The ludic symbol also is an image, and therefore imitation, and therefore accommodation. But the relationship between assimilation and accommodation in play differs from that in cognitive or adapted representation precisely because play is the predominance of assimilation and

no longer an equilibrium between the two functions. (1) In the case of the adapted image there is exact imitation, or at least imitation which aims at exactness, *i.e.*, a one-one correspondence with the object signified. For instance, the representation of a triangle can be obtained by a real imitation (a drawing, or an indication of the figure by movement of a finger), or by a purely mental imitation (an interior image or “intuition” of a triangle), but there is then correspondence between the parts of the drawing, those of the image and those of the object represented. But when in play one thing is symbolised by another, *e.g.*, a cat walking on a wall by a shell moved with the hand along a cardboard box, there is a whole series of signifiers, related one to another, but further and further removed from the real situation. First there is the shell representing the cat and the box representing the wall; then there is imitation through gesture, *i.e.*, the movement of the hand representing the cat walking; finally there is presumably the mental image of the cat on the wall, an image which may be vague and undifferentiated since it is supported by motor imitation and the symbol-object. (2) The representation of a triangle is adequate and exact in so far as the triangle raises a problem, *i.e.*, gives rise to a need for adaptation to reality, with accommodation to the object and assimilation of the object to a system of relationships not centred in the ego, while the evocation of the cat on the wall has no other purpose than temporary satisfaction of the ego: it is a “pathic” and not a “gnostic” attitude, to use Buytendijk’s terms, but it is at the same time egocentric and not objective. We have here the explanation of the difference seen in (1). (3) In cognitive representation the mental or material image represents a particular object whose concept (the particular class) serves as a single representative or example of the general class of which it is a part. For instance, the triangle which is drawn represents all triangles, or at least all triangles of that class. But in play, the symbol-object is not only the representative of the signified, but also its substitute (the shell becomes for the moment a cat), whether the signified is general (any cat) or particular (a definite cat). In cognitive representation, therefore, there is adaptation to the signified (*i.e.*, equilibrium between assimilation and accommodation), while the signifier consists of images, which are exactly accommodated or imitated, and whose corresponding object is only one representative of a general class. In the symbolic representation of play, on the contrary, the signified is merely assimilated to the ego, *i.e.*, it is evoked for temporary interest or for immediate satisfaction, and the signifier is then less exact mental imitation than imitation by means of material pictures in which the objects are themselves assimilated to the signified as substitutes, by reason of resemblances which may be extremely vague and subjective. In a word, while in cognitive representation there is a permanent equilibrium between assimilation and accommodation, in ludic symbolism there is a predominance of assimilation in the relationship between the child and the signified, and even in the construction of the signifier.

This being so, the connection between symbolic assimilation, which is the source of make-believe play, and functional assimilation, which is the source of practice play, is at once obvious. Both symbol and concept already exist, in a sense, in sensory-motor assimilation. When the baby who has learnt to swing an object swings other objects, this generalised schema is the functional equivalent of the concept, because each particular case belongs to the general class of things “to be swung” of which it has become a representative or example. The same applies in the case of things “to be sucked,” etc. But when the baby wants to go on sucking after his meal is over, and finds compensation in sucking his thumb, the thumb is more than a representative example. It becomes a substitute, and could even be considered a symbol if it were possible for the baby to evoke his mother’s breast at the same time. But in spite of the Freudians, for whom such symbols exist as early as the age of two months, and in spite of K. Groos, who sees make-believe in all practice play, in our opinion there cannot be symbolism, consciousness of make-believe, before there is representation, which begins and gradually develops at the beginning of the second year, when sensory-motor assimilation becomes mental assimilation through differentiation between signifier and signified. When J. pretended to be asleep, holding a corner of the sheet and bending her head, the sensory-motor schema thus set in motion resulted in more than mere exercise, since it served to evoke a past situation, and the corner of the sheet became a conscious substitute for the absent pillow. With the projection of such “symbolic schemas” on to other objects, the way is clear for the assimilation of any one object to another, since any object can be a make-believe substitute for any other.

The causality of symbolic play now becomes clear, since it derives essentially from the structure of the child’s thought. Symbolic play represents in thought the pole of assimilation, and freely assimilates reality to the ego. As we said earlier, it is therefore to practice play what adapted thought is to sensory-motor intelligence, and it is to adapted thought what practice play is to sensory-motor intelligence, *i.e.*, the assimilating pole. But why is there assimilation of reality to the ego instead of immediate assimilation of the universe to experimental and logical thought? It is simply because in early childhood this thought has not yet been constructed, and during its development it is inadequate to supply the needs of daily life. Moreover, the most adapted and most logical thought of which the young child is capable is still pre-logical and egocentric, its structure being intermediate between the symbolic thought of play and adult thought.⁸

To sum up what has already been said, symbolic play is merely egocentric thought in its pure state. The essential condition for objectivity of thought is that assimilation of reality to the system of adapted notions shall be in permanent equilibrium with

⁸ See our article, 1923. *La pensée symbolique et la pensée de l’enfant*, *Arch. de Psych.*, Vol. XVIII, p. 173.

accommodation of these same notions to things and to the thought of others. It is obvious that it is only by the constitution of systems of logical operations (reversibility of transformations of thought), of moral operations (preservation of values) and spatio-temporal operations (reversible organisation of elementary physical notions), that such an equilibrium can be achieved, for it is only through operational reversibility that thought becomes capable of preserving its notions despite the fluctuations of reality and incessant contact with the unexpected. The reversible operation is at the same time an expression of the modifications of reality and the regulated transformations of thought, and is therefore both accommodation and assimilation. As elementary operations only begin to be “grouped” towards the end of early childhood it is natural that in the preceding stages the child’s mind should be in a constant state of flux between three states: temporary equilibrium (liable to continual “displacements”) between assimilation and accommodation, intermittent accommodation displacing the previous equilibrium, and assimilation of reality to the ego, *i.e.*, to that aspect of thought which is still centred on itself because correlative accommodation is lacking. It follows that for the child assimilation of reality to the ego is a vital condition for continuity and development, precisely because of the lack of equilibrium in his thought, and symbolic play satisfies this condition both as regards signifier and signified. From the point of view of the signified, play enables the child to relive his past experiences and makes for the satisfaction of the ego rather than for its subordination to reality. From the point of view of the signifier, symbolism provides the child with the live, dynamic, individual language indispensable for the expression of his subjective feelings, for which collective language alone is inadequate. The symbol-object, being a real substitute for the signified, makes it actually present in a way that the verbal sign can never achieve. Since the child’s whole thought is still egocentric and intuitive even in its states of maximal adaptation, and is thus linked at every intermediate stage with symbolic play, this form of play can be considered to be one of the poles of thought as a whole : the pole at which assimilation is dissociated from accommodation, or in other words, from egocentric thought in its pure state.

Symbolic play, then, is only one form of thought, linked to all the others by its mechanism, but having as its sole aim satisfaction of the ego, *i.e.*, individual truth as opposed to collective and impersonal truth, but we are still faced by the question of why the use of the symbol as opposed to the verbal concept results in make-believe and not in belief. The natural attitude of the mind is belief, and doubt or hypothesis are complex, derived behaviours whose development can be traced between the ages of seven and eleven up to the level of formal operations, at which there is a real distinction between thought and spontaneous acceptance. But although none of the conditions for this hypothetical-deductive thought obtain in the play of very young children, they make statements for the sake of stating, without believing in the game

they are playing. It is a commonplace that children make the distinction between pretence and reality very early. How, then, is pretence to be explained, and why is it that ludic symbolism is divorced from belief, in contrast to the symbolism of dreams and delirium and the religious symbolism of primitive tribes? It is a complicated question, for as Janet has shown, there are various types of belief. At the level of early childhood there are two contrasting types, the one connected with social, and more particularly adult behaviours, the other with spontaneous and egocentric individual behaviours. The first is Janet's "promise-belief" an acceptance of others and of the adult, and therefore adherence to the reality which is generally approved. The second is Janet's "assertive belief," which precedes the distinction between what is certain and what is doubtful, and is linked with any impact of reality on the mind. At a later stage there is "reflective belief," associated with the mechanism of intellectual and affective operations, as for example, belief as a result of a deduction, or a deliberate, considered decision. When the child plays, he certainly does not believe, in the sense of socialised belief, in the content of his symbolism, but precisely because symbolism is egocentric thought we have no reason to suppose that he does not believe *in his own way* anything he chooses. From this point of view the "deliberate illusion" which Lange and Groos see in play is merely the child's refusal to allow the world of adults or of ordinary reality to interfere with play, so as to enjoy a private reality of his own. But this reality is believed in spontaneously, without effort, merely because it is the universe of the ego, and the function of play is to protect this universe against forced accommodation to ordinary reality. There is no question, therefore, in the early stages of symbolic play, of consciousness of make-believe like that of drama or poetry.⁹ The two- to four-year-old child does not consider whether his ludic symbols are real or not. He is aware in a sense that they are not so for others, and makes no serious effort to persuade the adult that they are. But for him it is a question which does not arise, because symbolic play is direct satisfaction of the ego and has its own kind of belief, which is a subjective reality. Moreover, as the symbol-object is a substitute for the reality it signifies, there develops, during the first stages, a kind of co-operation between the two, analogous to that between the image and the object it represents.

The question then is whether collective symbolic games result in the strengthening or weakening of belief, and the answer depends on age. In the case of very young children, collective play either has no effect on the egocentric symbolism or, when there is imitation, it enhances it. In the case of older children, in whose play the symbols are replaced by rules, it is obvious that the effect of social life is to weaken ludic belief, at least in its specifically symbolic form.

Games with rules remain to be considered in the light of what has been said above. We have seen that they mark the decline of children's games and the transition to

⁹ It is only after the age of seven that play really becomes make-believe in contrast to "reflective belief."

adult play, which ceases to be a vital function of the mind when the individual is socialised. In games with rules there is a subtle equilibrium between assimilation to the ego -the principle of all play- and social life. There is still sensory-motor or intellectual satisfaction, and there is also the chance of individual victory over others, but these satisfactions are as it were made “legitimate” by the rules of the game, through which competition is controlled by a collective discipline, with a code of honour and fair play. This third and last type of play is therefore not inconsistent with the idea of assimilation of reality to the ego, while at the same time it reconciles this ludic assimilation with the demands of social reciprocity.