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# Chapter 3

# Theories of Play

### General theories of play: K. Groos and F. Buytendijk

Philosophers and psychologists have long been interested in animal and human play, but this area became the object of special psychological research only at the end of the nineteenth century with a study by K. Groos. Before Groos, the Italian scholar D.A. Colozza attempted to organize the material on children's play. His book contains an attempt to discern the psychological and educational significance of children's play. The conclusion of the psychological portion of the book contains a taxonomy of play on the basis of the psychological processes that are most obviously involved in various types of play, which, the author believed, were exercised in these games.

Colozza had ideas that anticipated the future theory of Groos, as Grombakh rightly says in his foreword to the Russian edition of Colozza's book *Children's Games, Their Psychological and Educational Significance* [Detskie igry, ikh psikhologicheskoe i pedagogicheskoe znachenie] (1909). Colozza writes:

> For higher animals, including humans, the struggle for existence is initially not that difficult and cruel. Newborn babies get assistance, protection, and care from their mothers, or, in the majority of cases, from both their mothers and fathers. Their lives are, to a significant extent, maintained by the labor and actions of those who brought them into the world; their energies,

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Translated by Lydia Razran Stone.

> which they do not yet have to use for obtaining food, are spent freely, in ways that can hardly be considered work.
>
> We see this to an even greater extent in the lives of human, especially in civilized societies, where families are extremely highly developed. Parents are compelled to expend a great deal of their effort on providing sustenance. It takes a number of years to prepare children not merely to be able to live on their own, but just to prepare them to do work, which at first does not require expenditure of all their energies. Even when a child starts to work, his existence is maintained by his family to a significant extent. Thus, he always has an excess of energy, which he expends on playing, or, as Spencer writes in *Sociology,* "which he devotes to exercise of his idle capacities, in the activity known as play." (1909, p. 31)

At another point, describing the play of domestic kittens, Colozza writes, "Very soon they (the kittens) will show interest in everything that rolls, runs, crawls and flies. This is a preparatory stage for their future hunting for mice and birds" (1909, p. 27). As the foundation of his theory of play, Groos uses precisely this idea about play as anticipation of future serious activities, expressed first by G. Spencer and then by Colozza.

Groos's theory is relatively well known and was widely famous in the first quarter of the twentieth century. Describing it in the most general way, Groos calls it a theory of exercise or self-development. K. Groos defines the main ideas of the "theory of exercise," as follows:

> 1. Each living thing has inherited tendencies that cause its behavior to be purposeful; in the highest animals, in addition to these inborn biological characteristics that they share with animals, there exists an activity drive, which is especially strong during childhood. . . .
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> 2. Higher animals, especially humans, have inborn responses, which, however necessary they are, are not sufficient to permit them to perform the tasks required of them by life;
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> 3. Childhood is a stage in the life of every higher creature, that is, a period of development and growth, when a being cannot sustain its existence by itself so that it must be maintained through its parents' care, which in turn, is maintained by innate tendencies;
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> 4. This period of childhood has the objective of enabling the adaptations that are essential for survival but do not develop directly from innate reactions. It is for this reason that human beings have a particularly long childhood—after all, the more sophisticated the work that must be performed, the longer it takes to prepare for it;
>
> 5. The development of adaptations made possible by childhood may take various routes. An especially important, and the most natural, route for developing them is through the inherited responses associated with the innate

> activity drive. These have inherent motivating force and thus provide a mechanism for acquisition of new behaviors, so that the innate foundation is enhanced with acquired skills—and, in particular, with new habitual responses;
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> 6. This form of adaptation acquisition leads, with the assistance of the human imitation drive, which is also innate, to the development of behaviors intimately related to the habits and capacities of the older generation;
>
> 7. Where a developing individual manifests, reinforces, and develops his tendencies as described here, as a result of his own internal motivations and without any external goal, we are dealing with the initial manifestations of play. (1916, pp. 70–71)

Summarizing his arguments on the significance of play, Groos writes:

> While the development of adaptations for future survival tasks is the main objective of our childhood, the leading role in this goal-directed chain of phenomena belongs to play, so that we are fully justified in saying, to use a somewhat paradoxical phrasing, that we play not because we are children, but we are given our childhood so that we can play. (1916, p. 72)

Although they made the most diverse corrections and addition to Groos's theory of play, on the whole it was accepted by E. Claparede (in his early work), R. Gauppe, W. Stern, K. Bühler, and the Russian psychologists, N.D. Vinogradov, V.P. Vakhterov, and others.

There has virtually never been an author writing about play, who did not attempt to make corrections or additions to Groos's theory. Indeed (if we do not count Freud's theory), the history of attempts to create a general theory of play before publication of F. Buytendijk's book (1933) was the history of corrections and additions to and individual criticism of Groos's theory, associated with their authors' general views on the process of child development.

We will discuss some of these criticisms of Groos's theory in detail.

In an article devoted to Buytendijk's book, E. Claparede (1934) wrote that, in the early twentieth century, psychologists imagined they had the key to the riddle of play, which had been given to them by Groos, while actually he had only made them conscious of the riddle per se. From that time on, the issue of play appeared even more complex than it had before.

One cannot help but agree with this evaluation of the role of Groos's work on play. He, of course, did not solve the riddle of play, which has not been fully solved even today. But Groos's most important contribution was that he understood the problem of play and that his theory of anticipation admitted play into the ranks of the activities that are most essential to overall development in childhood. However we may feel about Groos's theory, no matter how dubious it seems to us now, it propounds the idea of the importance of play for psychological development and we must uphold this idea,

although in a significantly updated form. Of course, Groos's contribution was not merely the postulation that play is an activity typical of childhood, but rather the argument that this activity has a definite, biologically important function. Groos's theory of the significance of play says nothing about the nature of play itself.

V.V. Zenkovskii, in his foreword to the Russian edition of Groos's book *The Mental Life of Children* [Dushevnaia zhizn′ rebenka] wrote:

> As profound and valuable as the biological conception of children's play Groos developed is, it must be acknowledged that, at times, his psychological analysis of it is weak and superficial to a similar extent. Indeed, the central importance of play in the life of the child may be argued only if, aside from general arguments, we can demonstrate the psychological association between play and all the processes occurring in the child's mind, only if we succeed in making the psychology of play the starting point for explaining child psychology. Not only does Groos not do this, but when we read his book, we cannot help but get the impression that he does not even suspect all the difficulties that this problem presents. . . . While he tosses off a number of valuable remarks about the psychology of play, Groos fails to put play at the center of psychological development, as his own theory would demand. (1916, p. VI)

Groos simply establishes that play is imitative in nature, and he sees this as its biological meaning. His evidence for this major thesis amounts merely to drawing an analogy between baby animals' behavior at play and the corresponding form of serious behavior by adult animals. When he sees a kitten playing with a block, he classifies this play as "hunting play" and considers it to be preliminary practice, but only because the kitten's movements are similar to the hunting movements of adult cats chasing mice. He asks himself not what type of behavior this is or what its psychological mechanism is, but what the biological meaning of such "nonserious" behavior is. Is his answer to this question convincing? It would seem not. Proof by analogy in this case cannot stand up to criticism.

However, let us move on to the essence of Groos's basic postulates.

Groos's major presupposition can be considered correct. Indeed, at a given stage of phylogenetic development an animal's species-specific response repertoire, rigidly fixed in various types of inherited forms of behavior, is no longer sufficient to enable adaptation to the increasingly complex and constantly changing conditions of existence. The need arises for individual experience developed over the course of individual life. Groos is also correct that this individual experience, these new adaptations, cannot arise directly from innate reactions. Play, from Groos's point of view, is the activity through which

this essential superstructure is built on top of innate reactions and through which acquired skills form—especially new habitual responses.

However, there are at least two questionable aspects of these ideas. First, although Groos considers that individually acquired responses are based on species-specific, inherited, and fixed responses, he still considers the two forms of adaptation to be opposing phenomena. However, opposition does not reflect their true relationship. A.N. Leontiev correctly remarks that "the formation of individually acquired responses involves the adaptation of species behavior to the changing elements of the environment" (1965, p. 296). Thus, nothing extra is constructed on top of species-specific behavior, rather species-specific behavior itself is altered and becomes more flexible.

Second, it is difficult to imagine that actual adaptations develop through the play of animals—activity not associated with the struggle for survival, and thus occurring under special conditions not at all like those in which, for example, real hunts will occur. The main element is lacking—actual reinforcement—without which, as was already known in Groos's time, no new concrete forms of species-specific behavior can occur or be acquired. Indeed, how could even the slightest change in species-specific behavior occur if the main needs of the young are satisfied by adults and the young never participate in the actual relationships that will characterize their future lives? Of course, no new forms of species-specific behavior could arise during play.

However, let us return to Groos. The logical error in his reasoning comes from the fact that, when we approach play teleologically, attributing to it a particular biological objective, we begin to seek it in the play of animals, without attempting to determine its real nature, without even comparing play behavior with utilitarian behavior, without analyzing the nature of play.

Groos's most profound error lies in the fact that, without any reservations, he extrapolates the biological objective of play from animals to humans. Groos disagreed with Spencer on many issues. He argued against his theory of "excess force," although in the end he accepted it with certain modifications. He objects to the role of imitation, which Spencer pointed out, believing that one cannot speak of imitation in animals. However, while arguing against Spencer on certain particular points, he remains a Spencerian in his overall approach to the problems of human psychology, in general, and questions of children's play, in particular. The essence of this approach, which may be called *positivist evolutionism*, involves not altering anything fundamental when moving from animals to humans, despite the enormous differences between the conditions of human life and the lives of animals and the development, in addition to natural conditions, of social conditions, the appearance of work, laws, and mechanisms of adaptation, in particular the mechanisms for acquiring individual responses. This naturalistic approach to human (children's) play is mistaken.

Groos, like a number of psychologists who espouse the positions of Spencerian positivism, does not see the fact, which the work of K. Marx made obvious, that when we move on to the discussion of humans, the process of individual development alters fundamentally.

In his theory of play, Groos guessed (as opposed to understood) that play has important significance for development. This guess, as we have already stated, must be supported in any new theory of play, although the understanding of the function of play in development must be revised.

The question posed by Groos may be reformulated as follows: what new things does play add to the species-specific behavior of animals, or what new aspect of species behavior does play create? What is the psychological content of preliminary exercise? It is this question that should be the object of all further research on the play of animals.

After Groos published his work on play, his theory became the dominant one and was acknowledged by all, or almost all, psychologists. This theory embodied the general principals that psychology espoused at that time, which we have termed Spencerian positivism. However, while accepting Groos's theory as a whole, some psychologists made certain additions and corrections to it, adapting it to their own views.

Thus, W. Stern admired Groos's work greatly and included the latter's conception of play in his own personalized system of views. "From the point of view of biological, or rather, teleological, research, play is the essential link in a system of *personality goals*. Here this definition means: play is the instinctive formation of developing inclinations, the unconscious preliminary exercise of future serious functions" (1922, p. 167; emphasis in original). Elsewhere, Stern writes that play is to life as maneuvers are to war. Stern concludes that the necessity of play follows from the fact that the internal inclinations of humans arise prematurely.

According to Stern, various human capacities and skills "are required for work," that is, they become essential to survival at various times. But it turns out that the internal inclinations leading to these skills do not first manifest themselves as psychological drives at the time when they are actually needed, but vastly earlier. This *prematurity*, it turns out, is a general law; no psychological function is free of its operation. With instinctive internal motivation, suddenly humans develop urges to perform actions that are not yet directed at actual survival tasks, but that frequently, as a result of their truly elemental energy, indicate what future purpose they will have. This is play. The wriggling and babbling of the infant is already a manifestation of play and represents the instincts for walking and speaking, which will actually only be required a year later. The rough play of boys and doll play of girls already manifest the instincts for conflict and caretaking, which will be required only decades later,

and so forth. *Each tendency manifested in play represents the dawning of a serious instinct.*

In light of the generality of these premature manifestations of instinct, we are justified in considering them to be aspects of the same internal tendency of humans, that is, in calling them the "play drive" (Schiller's *Spieltreib*) or "play instinct." As is the case with other instincts, the individual here experiences an irresistible internal urge, which he gives in to without asking "why" or "wherefore" (see Stern, 1922, pp. 168–69).

As the preceding statements make clear, while Stern shares Groos's views, he makes some additions to them. There are three such additions: first, the idea of the premature maturation of capacities; second, the acknowledgement of play as a special instinct; and third, the necessity of shaping maturing instincts through intimate contact with impressions from the external world.

As for the first addition, it does not contradict Groos's theory, but only introduces a new explanatory principle. The second addition directly contradicts the opinions of the developer of the theory of anticipation. In his book *The Mental Life of Children*, Groos specially emphasizes:

> In my discussion I never spoke of "the play drive" or "play instinct." Indeed, I do not consider it possible to acknowledge that they exist. For this reason, I emphasized in my *Play of Animals* [Spiele der Tiere] (p. 86) that there was no general, inherent "drive to play" and that play, on the contrary, in itself is only a kind of means for implementing various instincts and drives. Despite this fact, because of a false understanding of this point in my first work, the view is widely held that my theory of exercise is based on postulation of a play instinct. (1916, p. 73)

The third of Stern's additions is the most significant. Stern shows that the child, even when he imitates, does not follow a model passively so that it alone determines the nature of the play. He writes:

> On the contrary, here we have a typical example of convergence of the innate and acquired: while the external factor of the environment exclusively provides the available materials for use in play and the model, that is, what is being imitated (*Imitablia*), only the internal factor of the play instinct determines when and how real imitations (*Imitatio*) are derived from it. Unconscious selection of material for imitation and methods of assimilating and reworking this material depend completely on innate tendencies—on internal developmental conditions and those of differentiation. (1922, p. 172)

Groos, unlike Stern, does not pose the question of the role of external conditions in play because he is the major opponent of Spencer's position on

imitation as the basis for play. Mainly concerned with human children, Stern points out the role of imitation. It would seem reasonable that the external conditions that are the source of imitation models would also be given a decisive role. However, Stern reduces the significance of the external conditions of life to a minimum. It would seem that imitation should facilitate the child's interactions with the conditions of life around him, especially with the mature forms of adult activity in the environment in which the child is growing and developing. In his theory of convergence, Stern eliminates this progressive role of imitation and subordinates it to internal tendencies—instincts. This notion makes Stern's position similar to that of the biogeneticists (C. Hull and others), for whom the content of children's play is determined automatically by the developmental stage they are in, which echo the stages of historical human development.

Thus, the corrections introduced by Stern not only do not advance Groos's theory, but, on the contrary, exacerbate its erroneous aspects associated with failure to understand the major basic difference between the development of children and the development of young animals.

The corrections and additions made to Groos's theory by the Viennese psychologist K. Bühler show a somewhat different tendency.

Bühler accepts Groos's theory of anticipation. Thus, he writes:

> For animals that are extremely amenable to training, animals with "flexible" capacities, nature has provided a period of development, during which their existence is more or less determined by the care and examples of their parents and peers so as to provide preparation for actual, serious life. This time is called youth and it is intimately associated with children's play. Young dogs and cats and human children play, beetles and insects, even the highly organized bees and ants, do not. This cannot be an accident, but rather is based on an internal association: play adds to flexible capacities and together they become the equivalent of an instinct. Play supplies the prolonged exercise needed by still immature, unstable capacities, or, to put it more accurately, it is in itself this exercise. (1924, p. 23)

Although he admires Groos's theory, Bühler considers the appearance of play in phylogeny to be preliminary practice for a stage of training. At the same time, he believes that Groos's theory, which emphasizes the objective aspect of play, does not explain it, so that its subjective side is still unexplained. In elucidating this, in his opinion more important, aspect of play, Bühler uses as a basis his own theory of primary hedonistic reactions.[1]

Accepting Freud's theory in its entirety, and considering his principle of pleasure seeking to be the major principle of life, Bühler at the same time argues with it.[2] He reproaches Freud for the fact that the latter knows only

about pleasure as sensual enjoyment, which cannot be the motive force for development and new achievements. Bühler considers that Freud's explanation of play fails to accord with the facts and reproaches him because in his explanation play is directed at the child's past rather than at his future life. This view is in contrast to that of Groos, who sees great future potential in children's play, unlike Freud, the theorist of reproduction (see K. Bühler, 1933, p. 206).

To explain play, Bühler introduces the concept of functional pleasure. This concept is defined, on the one hand, through distinction from pleasure as sensual enjoyment, and, on the other hand, from happiness, which is associated with admiration of the result of one's activity.

While taking a critical attitude to Spencer's theory of excess force, Bühler writes:

> No, nature followed a direct route here. She needed a mechanism for training and channeling this excess energy, the extravagant profusion of activity body movements that occur, especially in young animals, who must be trained and practice for serious life. For this purpose she made activity itself a pleasure; she created a mechanism through which functioning provides pleasures. Activity per se, the harmonious, smooth, frictionless functioning of the organs of the body, regardless of any result produced by the activity, was turned into a source of happiness. At the same time, a generator of tireless trials and errors was invented. (1924, pp. 504–5)

Bühler believes that functional pleasure can appear during the initial stages of skill acquisition, and, as the biological mechanism underlying it, play becomes a vital factor of the first order. On this basis, he defines play: "An activity that provides functional pleasure and is maintained because of, or for the sake of, such pleasure is called play, regardless of any additional reasons for performing it, or of its results" (1924, p. 508).

Because, according to Bühler, the central aspect of play is functional pleasure, we first have to determine whether there is such a thing. Let us assume, that Bühler is correct and that functional pleasure really exists and is distinct from activity per se. Such functional pleasure would act as a motivator, that is, as something for the sake of which activity is performed, and at the same time as an internal mechanism inducing its repetition. Training presupposes repetition in order to reinforce new forms of behavior (skills) that are necessary for better adaptation to changing conditions of life. Functional pleasure is also a mechanism underlying induction and repetition of certain movements. Such repetition ultimately leads to reinforcement of these repeated forms of behavior.

However, can functional pleasure underlie the selection of particular forms of behavior over others? Let us accept Bühler's second postulate that for a

particular form of behavior to be selected, there must be an excess, an extravagant abundance of action and bodily movements, especially in young animals. What would be selected from this abundance and then reinforced?

If we consider that new forms of behavior are acquired through the mechanism of trial and error, then the very name of this mechanisms presupposes selection: successful actions are selected, repeated, and reinforced, while unsuccessful ones are inhibited, not repeated, and not reinforced. But functional pleasure would provide motivation for all trials, including unsuccessful ones. Thus, functional pleasure, in the best case, would lead to the repetition and thus the reinforcement of any actions or movements. Experimental research on learning conducted by American psychologists, results on the formation of conditioned reflexes by members of the Pavlov school, and finally practical experience in animal training suggest that when new adaptations are developed, selection plays a decisive role and this is associated with reinforcement, that is, with the satisfaction of a need. Thus, reinforcement of a need is decisive for selection of those activities that can lead to its satisfaction. Functional pleasure induces and reinforces movement per se, regardless of its adaptive function. Bühler reproached Freud for being the theoretician of reproduction, but Bühler himself, in introducing the concept of functional pleasures, does not go beyond reproduction, but rather further confirms it.

K. Koffka pointed out the inadequacy of Bühler's theory:

> Bühler proposes a new point of view. He asserts that any activity per se, regardless of its results brings pleasure. I must add that it is successful activity, that is, activity that proceeds correctly in accordance with my desire, brings pleasure regardless of whether the goal achieved is a happy one. We have already encountered examples of this: let me remind you of Sultan and the double stick and his happiness at his first intelligent actions.[3] Bühler considers this "happiness" after performance of a function to be the stimulus for giving oneself over to play. I see this as an important shift, which must be included, of course, in any theory because the shift from pleasure to activity is not so easy to understand. But it is completely clear that pleasure resulting from one's own actions serves as an incentive for new actions. (1934, p. 235)

Koffka's critical remarks are justified, but insufficient. First, he understands the success of the activity in a subjective sense; second, pleasure at the success of one's own actions serves as the incentive not for *new* actions, but for the repetition of old ones.

Thus, Bühler's assumption that functional pleasure is the force producing a stage of training on new adaptations is not justified. Nor is his assumption that play is the general form of training. Training is different from exercise in

that it presupposes the selection and formation of new adaptations, while exercise presupposes the repetition and improvement of those already selected. Because in Bühler's definition play is independent of result and thus is not associated with actual adaptation, it cannot be responsible for the selection of adaptations for further exercise.

Our consideration of Bühler's theory would be incomplete if we did not note the second aspect of play he points out. Aside from functional pleasure, he formulates the principle of form, or the drive for perfection of form as controlling play. In formulating this second principle, K. Bühler refers to the work of C. Bühler, H. Hetzer, and the other psychologists of the Viennese school. This principle is most fully described in the work of C. Bühler.

Noting that K. Bühler adds two postulates (specific functional pleasure and the significance of formal success) to Groos's theory, C. Bühler refines his idea and says that anything that represents mastery and improvement provides pleasure and that functional pleasure should be understood as associated not with repetition per se but with the progressive improvement of an action each time it is repeated. C. Bühler goes on to define play as activity directed at pleasure from improvement (C. Bühler, 1931, p. 56). Given this understanding of play, it is to be expected that C. Bühler considers the pure form of play to be the functional, manipulative play of small children.

What new idea is added by this assumption of an innate drive for improvement with which functional pleasures is supposedly associated? It does not resolve and still further confuses the issue. Having isolated the formal success of exercise from the material results of the activity, K. Bühler, and C. Bühler after him, introducing the concept of the innate drive for perfect form, do not say what criteria of perfection are used by the animal or child when he proceeds from one repetition to another. There are no such criteria and there cannot be any as long there is no model against which to compare the actions. If Groos succumbed to a teleological explanation of play as a whole, K. Bühler and C. Bühler extend this teleologism to its logical conclusions, positing an internal goal for each individual repetition. In trying to add to and correct Groos's theory by analysis of subjective aspects of play, K. Bühler actually merely deepens Groos's teleologism.

K. Bühler's theory leaves no place for the natural science-based explanation of play, for the understanding of play as an activity performed by an animal that ties him to reality, attempts at which, albeit in minimal form, were present in the theories of Spencer and Groos. Teleology ultimately crowds out biology in the explanation of play.

Before the appearance of F. Buytendijk's work (1933), Groos's theory remained the leading one. Buytendijk represented a new, original attempt to create a general theory of play.

Describing the relationship between Buytendijk's theory and that of Groos, E. Claparede (1934) wrote that the conception of play as preparation was vanquished by Buytendijk in his work devoted to the nature and significance of play, which is rich in ideas (richer in ideas than in observations) and illustrated with beautiful photographs of children and animals playing.

First let us note the two main objections Buytendijk made to Groos's theory of imitation. First, Buytendijk asserts there is no proof that an animal that never played has less well-developed instincts. In Buytendijk's opinion, exercise does not have the significance for the development of instinctive activity that has been attributed to it. In his opinion, psychomotor activity does not require practice to be ready to function, just as a flower does not need practice in order to grow.

Thus, the first objection is that instinctive forms of activity, like the neurological mechanisms underlying them, mature independently of exercise. Here, Buytendijk takes the stance of a believer in the theory of maturation under the influence of potential internal forces.

Second, Buytendijk distinguishes between exercise per se and play, noting that such preparatory exercises do exist, but when they manifest themselves it is not as play. To prove this assertion he cites a series of examples.

When a child learns to walk or run, this walking, albeit imperfect, is still real. It would be something else again if a child who was able to walk played at walking. When a young fox or other animal goes out hunting with its parents to practice this skill, its activities are not playful in nature, but differ a great deal from play hunting, stalking, and the like by these same animals. In the first case, the animal kills its prey, in the second, it acts completely harmlessly. Buytendijk's attempt to distinguish practice of a future serious activity from play should be considered a noteworthy contribution.

Buytendijk constructs his theory of play on the basis of principles opposite to the postulates of Groos. While to Groos play explains the meaning of childhood, to Buytendijk, on the contrary, childhood explains play. A creature plays because it is still young.

Buytendijk deduces and associates the characteristics of play, first, with the dynamic characteristics of childhood; second, with the characteristics of the relationship of a particular species of animal with the conditions of its life; and third, with the major vital drives.

Analyzing the features of dynamics characteristic of childhood, Buytendijk, reduces them to four fundamental traits:

1. The lack of purpose of activity (*Unberichtetheit*);

2. Motor impulsivity (*Bewegungstrang*), the postulate that the child or young animal is constantly in motion as the result of spontaneous impulsivity

stemming from internal sources. This impulsivity is the source of the lack of constancy that also characterizes children's behavior;

3. A "pathetic" attitude to reality (*pathische Einstellung*). By *pathetic* Buytendijk means an attitude (the opposite of a gnostic attitude) that can be characterized as a direct affective association with the world around one, which occurs as a reaction to the novel aspects of the world that open up before the young child or animal. Buytendijk associated the pathetic attitude to distractibility, suggestibility, and the tendency to imitation and naivete characteristic of childhood;

4. Finally, the dynamic characteristics of childhood directed to the environment are marked by timidity, anxiety, and shyness (*Schüchternheit*). This is not fear in that, on the contrary, children are fearless, but a special ambivalent attitude involving simultaneous movement toward and away from a thing, that is, approach–avoidance. This ambivalent attitude lasts until an organism becomes integrated with its environment.

All these traits—lack of purpose, motor impulsivity, a pathetic attitude to reality, and timidity—under certain conditions cause the young animal or child to play.

However, these traits per se do not characterize playful behavior. To analyze the conditions under which play develops, Buytendijk analyzed play in animals. Here he started with an analysis of the environment in which an animal lives and to which it must adapt.

According to Buytendijk, higher mammals can be divided into two large groups on the basis of the conditions under which they live: herbivorous and carnivorous. The latter are natural predators. Play is particularly widespread among these carnivores. Herbivorous animals play very little or not at all. The distinguishing trait of the interactions between predators and their environment is their orientation to the patterns of physical objects clearly delineated in their visual fields. The exceptions among the herbivores are the primates, which, in contrast to other herbivores, live in a differentiated and heterogeneous milieu. In common with the predators their means of getting food is to seize objects that they have first identified. Buytendijk calls predators and primates animals that approach objects (*Ding-Annäherngstiere*).

Analysis of the prevalence of play among mammals leads Buytendijk to conclude that the animals that play are precisely those that approach objects. The results of this analysis bring Buytendijk to his first distinction between play and other activities. "Playing always involves playing with something." From this he draws the conclusion that the so-called motor play of animals (Groos) is not really play in the majority of cases. Considering the question of the relationships between play and pleasure, on one hand, and motor impulsivity and

play, on the other, Buytendijk emphasizes: first, that there is no basis for calling all activity that provides pleasure, *play*; and second, that movement is not yet play. Play is always play with something, and not merely pleasure derived from movement. However, he states, only things that also play with the player may be the objects of play. This is why a ball is one of the favorite play objects.

Buytendijk criticizes the idea of play as an expression of instincts and considers that play is not based on specific instincts, but on more general drives. Here Buytendijk was significantly influenced by Freud's general theory of drives. Following Freud he points to the three original drives leading to play:

1. The drive for freedom (*Befreiungstrieb*), which is expressed by a creature's attempts to remove impediments imposed by the environment and restraining freedom. Play satisfied this tendency for individual autonomy, which, in Buytendijk's opinion, occurs even in newborns;

2. The drive for merger, for integration with the environment (*Vereinigungstrieb*). This drive is in direct opposition to the first one.

Together these two tendencies express the profound ambivalence of play.

3. Finally, there is the drive for repetition (*Wiederholungstreib*), which Buytendijk considers in relation to the *tension–resolution* dynamics that are so essential in play.

According to Buytendijk, play arises out of an interaction between these innate drives and things that are partially familiar as a result of the particular dynamics of the young animal.

As his ideas developed Buytendijk made a number of particular statements that are of interest and should be remembered when considering his theory. The most interesting is his idea that one only plays with objects that "play back." Buytendijk points out that neither familiar nor completely unfamiliar objects are suited for play. The play object must be partially familiar and at the same time have unknown possibilities. In the animal world these possibilities are mainly motor in nature. They are revealed through probing movements, and when the latter lead to success the conditions for play have been created.

The unique relationship between the familiarity and unfamiliarity of the play object creates what Buytendijk calls the image or the image value of the object. He emphasizes that both animals and humans play only with images. The object can be a play object only when it has potential image value. The sphere of play is the sphere of images and the associated sphere of possibilities and fantasies. For this reason, refining his definition of the play object, Buytendijk states that one plays only with objects that play back. The sphere of play is the sphere of objects, of possibilities, of direct affect (*Pathischen*) and neutral cognition, of the partially unfamiliar and the living fantasy. When

it shifts bask from play to reality, the object loses its image value and its symbolic significance.

Of course, the idea that animals have imagination consisting of images is an example of anthropomorphism.

Buytendijk's book, his theory of play, did not go unnoticed. Of all the reviews and reactions to this book, we will consider only two.

Groos, in opposition to whose theory Buytendijk's work is directed, wrote an article about it (Groos, 1934). He felt compelled, first of all, to acknowledge the richness of the material contained in the book. However, he did not agree with several of Buytendijk's main postulates. He did not agree that the major features of play were lack of purposefulness and the urge to move. The concept of lack of purposefulness, in Groos's opinion, could have many meanings and could claim universal importance for understanding the significance of play only if it were amended to "without purpose outside the sphere of play." The urge to move could also be accepted as a general feature if it were supplemented to include the intention to move, and not only movement actually performed.

Groos also disagreed with Buytendijk's reduction of all the specific forms of animal play, which manifest different instincts, to two major drives (freedom and integration). Naturally, Groos did not agree with all the objections to his theory of anticipation and attempted to demonstrate that Buytendijk's arguments were not convincing, using the example of motor play, which, according to Buytendijk, is not a form of preparatory exercise.

Groos agreed, in principle, with the idea that the image potential of an object is an important feature of play and that play is the sphere of potential fantasy, although he objected to the excessive contrast between image and thing.

Claparede (1934) published a rather long article that not only criticizes Buytendijk's theory but develops his own views.

Claparede makes the following major criticisms:

1. The dynamic characteristics of the young animal cannot be the basis for play because: first, they are typical not only of the young of the animals that play but also of the young of animals that do not play; second, because such dynamic characteristics are manifest not only in play but also in forms of behavior that Buytendijk does not classify as play (e.g., jumping, dancing, sports); third, while adults also play, according to the definition, they do not have the same dynamic nature; finally these characteristics are more openly manifest in such activities as amusements, idling (fooling around), silly behavior and the play of very small babies, which according to Buytendijk's definition are not really play;

2. Buytendijk limits his concept of play to an excessive extent. He does not

consider circle games and dancing or the tumbling that children engage in outdoors to be play, although these activities are marked by all the traits of the dynamic nature of the young that he mentions (lack of order, lack of purpose, rhythm, and repetition). However, according to Buytendijk, these are not forms of play because they do not involve actions with any kind of objects;

3. The term "image" is infelicitous for use to designate the fictional or symbolic significance that the player invests in the object with which he is playing.

Claparede considers that the critical part of Buytendijk's work is more valuable than the constructive part and that this part is what makes it clear that we do not yet have a complete theory of play. Buytendijk does not provide a satisfactory answer to the question of the nature of the phenomenon of play because he has selected a false route, the route of describing the external forms of behavior.

According to Claparede, the essence of play is not in the external form of behavior, which may be precisely the same in play and nonplay, but in the internal relationship of the player to reality. Claparede considers the most essential feature of play to be its fictitiousness. Actual behavior is transformed into play under the influence of fiction.

Let us now consider the essence of Buytendijk's theory and separate what is valuable in it from what is dubious.

In analyzing Buytendijk's views, we can clearly see the influence of Freud's drive theory. According to Buytendijk, play is the expression of vital drives under specific conditions characteristic of childhood. Buytendijk underlines this in the subheading of his book, "Human and Animal Play as a Manifestation of Vital Drives." (There is nothing surprising in the fact that Claparede failed to focus on the heart of Buytendijk's theory of play in that Claparede was also influenced by Freud.)

Buytendijk borrows his description of the major drives manifest in play from Freud and extrapolates them to animals. The justification for this would be that, according to Freud, the primitive drives are characteristic even of one-celled organisms. However, this position is not convincing in that drives are characteristic not only of the young but also of adult individuals. And thus, like the dynamic characteristics of the young, they cannot define play or lead to playing.

If we translate Buytendijk's rather vague and mystical language into simple terms, it would seem that play in its original form is nothing other than orienting activity. Buytendijk's postulate that one plays only with things that play back may be understood as: one plays only with objects that not only trigger an orienting reaction but also contain enough potentially new elements to

maintain orienting behavior. What is essential here is Buytendijk's idea that play is most prevalent in animals in whom seizing differentiated objects is the main means of obtaining food. These is the group of animals in whom, as a result of the complexity of their living conditions, orienting activity is especially developed.

Thus, to be consistent, we should acknowledge that the major vital drives that Buytendijk claims underlie play are characteristic not only of carnivorous animals and primates but also of other animals.

In addition, there is no doubt that the dynamic characteristics of a young creature are typical not only of animals that play but also of all others (to just as great an extent for chicks and calves, as kittens, puppies, and tiger cubs). This inevitably leads to the conclusion that it is neither the main vital drives nor the dynamic characteristics of the young that are definitive for play. Both of these can exist and operate together, and yet there still may be no play.

In this case, we can only assume that underlying play is a special "probing" reaction to an object or, as we have noted, an orienting reaction to something new in the environment of the young animal, and, because at first everything is new to a young animal, simply the orienting reflex.

There is every basis to believe that there is an inverse relationship between the degree of fixity and stereotypy of instinctive forms of behavior and the level of development of orienting reactions: the greater the extent to which stereotyped forms of behavior associated with satisfaction of an animal's basic needs are fixed at the moment of birth, the less orienting reactions are manifest. On the contrary, the less that stereotyped forms of instinctive behavior are fixed at the moment of birth, the stronger the manifestations of orienting reactions are.

This relationship would have developed naturally over the course of phylogenic development of animals. It results directly from the degree of complexity and changeability of the conditions to which an animal must adapt. There is a positive correlation between the degree of complexity and changeability of conditions, on the one hand, and the level of development of orienting reactions, on the other. This is why predators and primates are animals with highly developed orienting reactions, and in childhood are also animals that play.

It would be more correct to use the term used by P.Ia. Galperin regarding "orienting activity." He writes:

> The orienting reflex is a system of physiological components of orientation; turning toward a new stimulus and tuning the sensory organs to better perceive it; and, in addition, various autonomic physiological changes, which facilitate this reflex or accompany it. In a word, the orienting reflex is a purely physiological process.

> Orienting-exploratory activity, what Pavlov called the "what is this?" reflex is something else again. This exploratory activity in the environment has already gone beyond the bounds of physiology. In essence, orienting exploratory activity coincides with what we call simply "orienting activity." But the addition of "exploratory" to "orienting" (which did nothing to hinder Pavlov in his experiments) is an impediment to us because orientation is not limited to exploration and cognitive activity, while exploratory behavior may develop into autonomous activity that itself requires orientation.
>
> Even in animals, orientation is not limited to an exploration of the situation, but is followed by an evaluation of the various objects discovered (with regard to their significance to the animal's vital needs), attempts to consider possible movements, mental simulation of actions with respect to the object, and finally, execution of these actions. All this is part of orienting activity, but goes beyond exploration per se. (1976, pp. 90–91)

Thus, Buytendijk's theory of play contains implicit contradictions. As our analysis has shown, the appearance of orienting activity at a particular stage of an animal's development is fully sufficient to explain the occurrence of play and all the associated phenomena that Buytendijk describes in such detail. What for Buytendijk was only one of the conditions for the manifestation of vital drives, in actuality provides a foundation for creating an entire theory of animal play.

It is impossible to agree with Buytendijk that an image or mental representation always provides the basis for play with an object. In actuality, at least in initial forms of play, the object with which an animal plays cannot represent any other object, because the animal has not yet encountered in reality the objects that will serve to satisfy his major needs as an adult. Neither a skein of yarn, nor a ball, nor a rustling and moving crumpled up piece of paper can serve as the representation of a mouse for kittens, simply because they have not yet had anything to do with mice. For a creature starting out in life, everything is new. What is new becomes familiar only as a result of individual experience.

Buytendijk's ideas of the boundaries of play seems correct; he excludes from the range of play phenomena simple repetition of movements characteristic of the very earliest period of development in children and some animals. For this reason, a series of repeated movements, which C. Bühler considers to be play because they are presumed to be associated with functional pleasure, are actually not play. Buytendijk's position that one plays only with objects should be understood in the sense that play is behavior and thus involves some interaction with the environment, the objective conditions of existence.

Buytendijk objects to the anticipatory function of play, as postulated by

Groos, and, indeed, exercise is possible only with regard to something that has already occurred in behavior. At the same time he attaches great significance to the facilitation of development through play, and he is right to do so. Play is not exercise but development. It expresses something new, it is the route to establish new forms of behavioral organization, necessary because of the complexity of living conditions. Here the author renews and deepens Groos's idea of the significance of play.

Finally, it must be noted that, after Freud, the tendencies of "psychoanalytic" psychology to attempt to deduce the characteristics of behavior and all higher manifestations from the dynamics of primary biological drives became even more pronounced. K. Bühler and Buytendijk, after him, are typical representatives of such "psychoanalytic" psychology.

It is paradoxical that, accepting the need for everything to undergo development, "psychoanalytic" psychology makes an exception for drives, which do not have any history and remain always the same. According to this logic, no matter how it alters as we go from animals to humans, from primitive forms to the highest achievements of human creative genius, behavior remains a manifestation of primary, unchanging, and ultimately unconscious drives.

Here it is impossible to disagree with the opinion of A.N. Leontiev, who wrote:

> A naturalistic approach not only makes it scientifically impossible to explain the actual specifics of human performance and human consciousness, but also retrospectively reinforces false biological ideas. When we again look at the world of animals after considering human behavior, the characteristics of which, given this approach, become unknowable in principle, we inevitably reinforce the idea of the unknowable principle in biology as well. With respect to the theory of evolution, this type of approach supports, metaphysical, idealistic concepts, postulating either the mysterious "instinctive" behavior of neuronal processes or else a universal striving for a "good gestalt" or deep-seated, eternally operating drives, and so forth. (1965, p. 341)

We have considered Buytendijk's theory in such detail for two reasons. First, his work contains false metaphysical and idealistic ideas that are fantastically interwoven with accurate observations and positions and it seemed important to identify the latter. Second, Buytendijk's theory of play is the most significant general theory of play, the apex of Western European thought about this topic.

It seems that this theory has not been appreciated sufficiently. Buytendijk's idea that one plays only with objects and only with objects that are partially familiar never became the object of research, and the necessary deductions

were never made from it. Of course, Buytendijk himself is at fault here in that he focused on primary drives and the dynamic characteristics of the young animal; however, the task of scientific criticism involves not only negative evaluation but also identification of what should be attended to in further work on a topic.

After Buytendijk there was a crisis in the development of a general theory of play that ultimately led to a denial of the possibility of creating such a theory.

In a critical article, J. Kollarits (1940) suggested that, despite the work of Claparede, Groos, Buytendijk and other authors, there is no general agreement about the nature of play and that this has occurred, first and foremost, because psychologists understand the same term differently. This author looked at the most heterogeneous criteria for play (exercise, pleasure, relaxation, liberation, integration with space, repetition, the dynamics of youth, function, i.e., the major features suggested by Groos, Claparede, and Buytendijk) and showed that first of all these features are not encountered in all instances of play, and second, that they occur in activity that is not play. As a result he concludes that an exact delineation of play is impossible in principle. There simply is no such special activity and what is called play is nothing more than the activities of an adult of the same species and gender, only constrained by the stage of development of a young animal's instincts, psychological structure, and neural muscular, visceral, and especially endocrine anatomy. (The author does not notice that he himself is proposing a theory of play that is close to Stern's, who considers play to be the "dawning of a serious instinct.")

The negative attitude toward play as a special type of activity is even more sharply expressed in an article by H. Schlosberg (1947). The author, a clear adherent of American behaviorism, after criticizing various theories of play, concludes that the category of playful activity is so vague that it is of virtually no use to contemporary psychology.

These are the generally rather discouraging conclusions concerning a half-century of attempts to create a general theory of play. This does not at all mean that play, as a special form of behavior characteristic of childhood, does not exist. It only means that, within the bounds of the biological and psychological frameworks espoused by those who conceived various theories of play, such a theory could not be created.

The general approach that analyzes the features by which play is distinguished from other forms of behavior might be called phenomenological, that is, focusing on the external phenomena sometimes accompanying this type of behavior but not revealing its objective essence. Here we see the major shortcoming of this approach to studying play, which led to the above negative conclusions.

Moreover, these theories identified the course of a child's psychological development, and thus his play, with the development of young animals and their play. And such a general theory of play, one that encompasses the play of young animals and of human children, because of the great qualitative difference in their psychological development could not be developed. This, however, does not mean that two separate theories cannot be developed: a theory of animal play and a theory of human play. Here we should mention some observations on the psychological nature of animal play that were made during the analysis of our material. Perhaps, these hypotheses may be considered by those who are developing such a theory. Moreover, they are also important for our purposes, in that they may help to identify the specific characteristics of children's play.

Play may appropriately be studied by various sciences, including, for example, biology and physiology. It is studied in psychology and especially in the area of developmental psychology. A psychologist investigating the problems in this area will first and foremost be interested in play as an activity in which a special type of psychological regulation and control of behavior is implemented.

There is no doubt that play, as a special form of behavior, occurs only at a definite stage of evolution of the animal world and its appearance is associated with the occurrence of childhood as a special period in individual development. Groos and especially Buytendijk correctly emphasize this evolutionary aspect of the appearance of play.

Let us accept certain of Buytendijk's positions as fundamental. We will accept that only the young of carnivorous mammals (predators) and monkeys play; we will also accept that play is not a physiological function, but a form of behavior, that is, behavior with things, and furthermore with things that have some new element. To establish what biological significance activity with such objects could have for the young of these animal species, we should elucidate the level at which psychological regulation of the behavior of adult individuals takes place.

According to A.N. Leontiev (1965), animals of these species are at various stages of development of a "perceptive psyche," while the higher species are at the stage of animal intellect. Psychological control of behavior at the perceptive psyche stage involves the animal's distinguishing in his environment conditions in which there is an actual object that directly triggers his activity and could potentially satisfy a biological need. At the stage of intellect, the animal additionally distinguishes relations among things that constitute the conditions under which he acts. A preliminary (or "planning") phase is characteristic of the latter behavioral organization.

Such types of activity as going around barriers, guarding one's prey, and

tracking, which includes surmounting barriers and making detours, are directed not at the actual object of the need, but at the conditions in which it exists. These elements of behavior are controlled by a psychological representation of conditions, that is, their images. The main thing here is not the fact that the animal has perceived a barrier standing on his route to achieving his goal, but that he displays orientation to the relationship between the object and other conditions. Orientation leads to movement directed at these conditions, as if the route to the final goal has already been laid out mentally.

As Galperin has rightly noted:

> The significance of Kohler's insight experiments (and of all experiments of this type) is that they pose very simple problems, which, however, cannot be solved by the method of "random trial and error" if the animal is not oriented to the essential relationships in the problem situation. For such problems, a process of orientation is a mandatory condition for successful behavior. After considering these problems, it becomes even clearer that, even in tasks that can be solved by random trial and error, orientation, albeit perhaps minimal orientation, is still necessary to the relationship between the action and a successful result. Orientation of behavior based on a representation of the environment and of the action itself (or at least a route to the ultimate goal) . . . is the essential condition for (constant, rather than isolated and random) success. (1966, p. 245)

This is a substantive psychological description of the functioning of animals at this stage of evolutionary development.

It is essential to emphasize particularly that for an action to succeed it requires not only orientation but also rapid and accurate orientation developed to the point of perfection and virtually automatic in nature. In the struggle for existence, every delay or inaccuracy is "a fate worse than death."

Can it be imagined that this degree of organization can arise in the course of individual adaptation in performing actions directly involved with the struggle for existence? No, such organization cannot be developed this way. It would very rapidly lead to a situation where animals died of hunger or were killed by their enemies.

Thus, there would have to be a special period in the individual life of animals and a special activity within this period devoted to the development and improvement of the necessary organization of all subsequent activity, directly targeted at the struggle for survival and preservation of the species.

J. Bruner (1972) emphasized that the nature of childhood and the way young are reared evolve and are subject to the same laws of natural selection as any other morphological or behavioral form. One of the hypotheses regarding the evolution of primates, according to Bruner, is the assumption that this evolution

is based on the progressive selection of the most well-defined structure for childhood. This assumption is close to the truth and relates not only to the evolution of primates but also to the evolution of all species of animals living in an environment divided up into objects, including some that meet the animal's needs, and requiring adaptive behavior to conditions that are unique for the individual. As Galperin has shown, it is precisely the fact that these conditions are unique and not repeated that gives rise to the objective need for psychological regulation of actions, for regulation based on a mental representation of the situation and conditions of action. Here stereotyping is not possible and what is needed is maximum variability of actions.

The inclusion of childhood as a special period of life in the overall chain of the evolutionary process is an important step on the road to understanding the nature of childhood.

Embryology took that step long ago. In Russian science, this was achieved by A.N. Severtsev. I.I. Shmalgauzen, further developing the ideas of Severtsev wrote, "The progressive increase in organizational complexity of the animal is accompanied by increased complexity of the processes of individual development that result in such organization" (1969, p. 353). Generalizing the material available in embryology, Shmalgauzen emphasizes:

> Ontogeny is not merely extended through the addition of stages, but is totally restructured through the process of evolution. It has its own history, which is linked to the history of the adult organism and partially determines it.
>
> Phylogeny cannot be viewed as the history of only the adult organism and cannot be opposed to ontogeny. Phylogeny is also the historical series of known (selected) ontogenies. (1969, pp. 351–52)

These important positions pertain not only to the embryonic development of morphological forms but also to the postembryonic development of the forms of behavior. Describing the organization of animal behavior, to use Leontiev's terminology, at the stage of development of the perceptive psyche, we spoke of the mandatory presence of orienting activity in such behavior. Orienting activity may occur in various forms and may either precede the behavior or accompany it.

The appearance of orienting activity in itself does not lead to the appearance of new forms of behavior.

Galperin, who developed the theory of orienting activity in the work cited above, writes:

> The involvement of orienting activity in an animal's adaptation to the particulars of his environment does not necessarily entail the appearance of new forms of behavior. On the contrary, first and foremost, what it does is enable vastly more flexible, and thus, broader use of the existing motor

> inventory. And this is extremely important: orientation, in the form of mental representation, makes it possible not to create new forms of behavior to deal with extremely variable particular situations, but rather to use general behavioral patterns, each time adapting them to the particular situation. And this also means that the occurrence of psychological regulation is confirmed not by the appearance of special, new forms of behavior, but rather by the special flexibility, variability, and heterogeneity of their use. (1976, p. 117)

We have already indicated that orienting activity and its use to regulate behavior must develop before an animal begins attempting to survive on its own, that is, in childhood. Play is the activity in which, based on orienting activity, the regulation of behavior forms. Let us stress that play is not a particular form of behavior—feeding, defensive, or sexual—but the rapid and exact psychological control of any of these. It is precisely for this reason that, in play, we find all the possible forms of behavior, as if jumbled together in a single heap, and it is precisely for this reason that play activities appear to be unconsummated.[4]

Studies of animal behavior under natural conditions, which have been very popular in recent times, as well as special experimental studies, have led to the identification of new types of behavior. Of greatest interest to us is the identification of special exploratory behavior. R. Hinde, summarizing the available material, considered it desirable to distinguish the orienting reaction, which is associated with motionlessness, from active exploration in which the animal moves relative to the object or area being explored. Hinde describes exploratory behavior as behavior that familiarizes the animal with his surroundings or the source of stimulation. At the same time, he affirms the need to distinguish between exploratory behavior and play. “Although some forms of play behavior also facilitate familiarization with an object, exploration and play should not be considered identical. If an object is unfamiliar, then exploratory behavior may precede play and later attenuate, as familiarity progresses” (1975, p. 377).

The distinction between exploratory and play behavior is important because the first very frequently turns into the second. Thus, there is every justification for distinguishing among the orienting reaction, exploratory behavior, and play. It may be hypothesized that these forms appeared in this sequence during the course of evolution as well as in the ontogeny of young animals.

This hypothesis has been confirmed by data on the ontogeny of forms of behavior in higher mammals. On the basis of a review of a great deal of material, K.E. Fabri (1976) associated play, as a special type of behavior by young animals, with the period immediately preceding sexual maturity.

In the most preliminary form, we may describe the play of young animals

as an activity in which the animal, manipulating an object (thing), creates with its movements unrepeatable and unforeseen variations in its position and continually acts on the object, while attending to these rapidly changing features. The major features of play, given this definition, are the rapidly changing position of an object after each manipulation and the equally rapid adaptation of actions and their regulation, based on orientation to the features of each new position.

The central core of such activity is orientation to rapidly and continuously changing situations and the associated regulation of motor acts to conform to this situation. The specific features of movements in play are their lack of consummation, the absence of any final culminating action. The kitten scratches, but does not tear the object apart, the puppy bites at, but not through the object. This gives the false impression to some psychologists that there is an element of pretense or fantasy in the playing of animals.

Fragmentary observation of the play of animals provides some basis for hypotheses on how an individual animal develops play behaviors. They develop out of activity marked by a maximally complex orientation component and no consummation component; inhibition of the culminating phase of the activity combined with maximally complex, instantaneous, and accurate orientation. When such complexity, immediacy, and accuracy are included in "serious" actions concerned with the struggle for survival, they create the illusion of complete lack of psychological regulation. For this reason, the play of young animals is exercise, not exercise of an individual motor program or individual instinct or form of behavior, but exercise of the skill of rapid and accurate control of motor behavior in any form based on a mental representation of the particular features, position, and relations of an object, that is, exercise of orienting activity.

The development of an orientation phase in the behavior of higher animals must have had a concomitant in the structure of their nervous systems and in the sequence of development of portions of this system. We have not specially analyzed differences in the maturation sequence of different portions of the nervous system between "nonplaying" and "playing" animals. However, there are direct indications of a significant restructuring of the maturation of nervous system components between animals and humans. In a comparative study of early ontogeny, N.N. Shchelovanov established that:

> [D]uring the development of movement in the infant, starting at the moment of birth, we can observe features that sharply distinguish the human baby from baby animals and that have great significance for child-rearing. Thus, we have established that, in the human infant, the relative times of development of the perceptual and motor organs are different from those of animals.

> As early as the second month of its life, the human infant's cerebral cortex begins to function, as demonstrated by the fact that conditioned reflexes can be acquired based on input from any of the perceptual organs, including the visual and auditory organs. At the same time, the movements of a two-month-old infant are extremely undeveloped. The developmental sequence of movement and the perceptual organs differ in the majority of animals. Their motor patterns are either already organized by the time they are born or else they develop before any conditioned reflexes can be acquired based on input from the higher perceptual organs or afferent sensory systems, that is, the eyes or the ears. Thus, in the human infant, first the afferent sensory systems—the visual and auditory—develop, including the associated cortical portions, and only then does the motor system start to develop. In the majority of animals, the reverse sequence holds. (1935, p. 64)

Thus, in the young of higher animals the motor system is almost completely developed at the moment of birth, while at the same time the higher afferent sensory systems are still not fully formed. The higher afferent sensory systems are what enable orienting activity, the formation of mental images of an object and its features and relations, and regulatory behavior. And thus there is sufficient basis to assume that in the young animal, psychological regulation in the form of orienting behavior is not fully developed. This discrepancy in the development of motor systems and their psychological control has developed in the course of biological evolution.

The childhood of animals of these species occurs under conditions in which the adults ensure the satisfaction of the major needs and the young, because of physical immaturity and the incomplete formation of psychological behavioral regulation, do not perform any actions to obtain food.

This provides the basis for the occurrence of a special type of activity that gives rise to processes, which in turn provide the basic components for the psychological regulation of behavior. This activity is animal play. Unfamiliar features of objects, as Buytendijk asserts, are essential because, on the one hand, they maintain the orienting activity, and on the other hand, they change continuously during manipulation, demanding psychological regulation of behavior. The development of orienting processes in response to corresponding changes in the environment and the origination of a special activity that is not directly associated with satisfaction of basic needs is the most important fact in the evolution of forms of behavior. In the higher animals, childhood, from this point of view, is the period during which psychological regulation develops, and, in turn, leads to elimination of the discrepancy between the completed development of the major motor systems and the incomplete development of the higher afferent sensory systems. The activity within which the

development and improvement of psychological regulation occurs is play, as a specialization of orienting activity.

All these statements, derived from accumulated but not systematic results and observations, must be confirmed through special investigations in the comparative psychology of play.

As we have already stated, referring to results obtained by Shchelovanov, the sequence of development of motor and higher sensory systems in humans is totally different from that of animals. This provides a basis for hypothesizing that the reasons and mechanisms resulting in the appearance of play in the child will also be substantially different.

It must be emphasized that when we deduced these postulates, we started from a theoretical idea of the regulatory function of psychological processes over behavior and the fact that this function develops after birth in higher animals.

In the theories of play that we have presented and analyzed, the problem of psychological development, that is, of the development of the orienting function of the mind, is not posed at all. Perhaps this is precisely why it has not been possible to develop a general theory of play.

We are far from believing that we have succeeded in constructing a finished theory of animal play. However, we hope that the ideas we have expressed will encourage psychologists studying animal play to adopt a new approach. We agree with Hinde that the "discovery of the principles underlying play behavior will undoubtedly in itself reward the researchers for all their work, not to mention the fact that it will cast light on the nature of the regulation of other forms of activity" (1975, p. 386).

## The theory and problems of studying children's play

Representatives of almost all schools of Western psychology (with the exception of behaviorism) have attempted to explain children's play in one way or another, naturally, embodying their own theoretical concepts while doing so (Freud's psychoanalysis, Koffka's structural theory, K. Lewin's dynamic theory of personality, Piaget's theory of egocentricism). While all adherents of these various schools did not attempt to create an integrated theory of play, they still attempted to interpret its major symptoms in one way or another.

Before the publication of Groos's work by the end of the nineteenth century, psychologists focused on the working of the child's imagination or fantasy when they described children's play.

By 1901, Sully had already identified the two features of the form of play called "role playing," which has the primary role in the preschool years. The

first is the child's transformation of himself and objects around him and his journey into an imagined world. The second is his deep engrossment in creating and living in this fantasy.

Sully, however, only posed the questions but did not give any sort of exhaustive answer regarding the nature of these "enchanting thoughts" that the child implements through play and of all the transformations of reality that he makes. Thus, he writes:

> I, at least, think that children's play, about which so much has been written with such confidence, is only very imperfectly understood. Is it a serious business or rather half-conscious play acting, or both of these in turn? I believe that it would be arrogant to try to answer these questions off the top of one's head. (1901, p. 19)

These two features of children's play—the working of fantasy and the profound involvement in creation—have been emphasized and identified by many psychologists and the theoreticians studying play have focused on their explanation. Thus, W. Stern wrote, "After all, the phase of development with which we are dealing is called "the play phase," and here fantasy attains a level of development that far surpasses that of representation and thinking" (1922, p. 148). He continues, "When you see how completely a child is engrossed in the content of the story he is being told, with what seriousness he acts in his games, and with what despair he reacts to these games being disrupted, it is impossible not to acknowledge that there exists here a complete *or almost complete illusion of reality*" (1922, p. 151; emphasis in original).

Stern sees the explanation for this retreat to an imagined world and the associated illusion of reality to be the fact that:

> [T]he small child, who in his helplessness meets impediments everywhere and who depends so much on adults in his actual activity, may, of course, experience a dim awareness of this subordinate position and attempt to free himself by escaping to a world of fantasy, where he himself rules and gives orders and is even the creator and builder. But the stronger the illusion with which he immerses himself in the bright existence he himself has created, the stronger the feeling of liberation and the greater the happiness.
>
> Moreover, the reality that surrounds the child is limited. The rooms of the apartment the family occupies, the family members and servants, a daily walk and toys—these are his entire world. The wider world only casts its shadow from afar on his life. But perceiving this shadow in the shining world of his fantasy and his play, he expands the scope of his life. In doing so he introduces into his toy kingdom not only the objects of the external world, the horse and carriage, the railroad, ships, and so on, but also—and this is vastly more important—people, whose roles he plays himself. This assumption of

> the role of other people, although it makes extremely heavy demands on the consciousness of illusion, may sometimes achieve remarkable intensity. (1922, pp. 152–53)

These statements by Stern contain a unique conception of why play occurs and of the mechanisms through which it is realized. The limitations of the world in which the child lives and the feeling of subordination he experiences are the source of his tendency to retreat from this world, the reason for the occurrence of play, for the fantasy and associated experience of illusion, and for the mechanism by which it is realized. Stern bypasses his own stated ideas that the child, in his play, enters the reality of adults and the objects associated with adult activity. But, it is precisely this world of adults that attracts the child.

Thus, two alternative explanations for play have been given—it is either a reaction to the limitations of the world in which the child lives or a reproduction of the activity of adults to which the child feels attracted.

Some writers on this subject, for example, K. Bühler, have objected to the exaggeration of the illusory nature of play.

Play as a manifestation of a vital and carefree fantasy that reaches its highest level of development in early childhood is an idea typical of functional psychology, or the psychology of abilities. If we accept these views, then we will be committed to saying that the complex ability of imagination, which these authors themselves consider to be exclusively human, arises and develops earlier than other more elementary abilities. Because they have had to explain the phenomenon of play somehow and had no other explanation, they have simply failed to notice that this contradicts their own views. The psychology of abilities could not have given any other explanation. Of all the abilities that were known to psychologists at the end of the nineteenth and beginning of the twentieth centuries, of course, the closest thing they had to an explanation for the phenomenon of play was fantasy or imagination.

The view according to which imagination reaches a high level of development in children was criticized by L.S. Vygotsky:

> To this day, some hold the opinion that children's fantasy is richer than that of adults. Childhood is considered the time when fantasy is most highly developed, and, according to this opinion, as the child develops the power of his fantasy declines. This view came about because many observations of the working of fantasy appear to support it.
>
> Children may make anything out of anything, as Goethe said, and this lack of discrimination and capriciousness of children's fantasy, which is constrained in the adult, is frequently taken for freedom or richness of the child's fantasy.

> All this taken together has served to justify the assertion that the child's fantasy works with greater richness and variety than the adult's. However, this opinion is not confirmed when the issue is examined scientifically. . . .
>
> In the child, imagination is not richer but poorer than the imagination of an adult; during the process of development, the imagination develops along with everything else, reaching maturity only in adulthood. (1967, pp. 27–28)

The theories of play that we considered in the previous section generally attempted to understand play on the basis of the characteristics of young animals. In the same way, the theories of children's play have explained the major phenomena of play behavior, and thus of play as a form of child behavior, were explained by the heightened development of imagination during childhood and its characteristics—liveliness, freedom from care, and susceptibility to illusion. The position of the child in society within the system of his interactions with the adults surrounding him remained completely unanalyzed. Stern was one of the first to point out the "limited nature" of the world in which the child lives as the reason that play occurs, and play, as a sort of escape from this limited world.

The psychoanalytic theories of Freud had a major influence on the understanding of the nature of child's play. We have already spoken of the effect they had on K. Bühler, who accepted the economic viewpoint of the pleasure principle expounded by Freud and on Buytendijk who used Freud's views of primary drives as the basis of his theoretical constructions. To one or another extent, the psychoanalytic theory influenced a number of psychologists (Piaget, Koffka, and K. Lewin) and at the present time has become rather widespread, up to and including the use of play as a diagnostic method and means of therapy (play therapy).

Freud himself did not explicitly present his theory of play anywhere and the creation of such a theory was never one of his goals. He touched on issues of play in connection with his attempt to penetrate "the reverse side of the pleasure principle" (1925).

As is well known, Freud felt the need "to penetrate the reverse side of the pleasure principle" in connection with his analysis of traumatic neuroses. Having established that in traumatic neuroses, the nature of dreams, which typically express the tendency of wish fulfillment, are disrupted and deviate from their typical purposes. Freud writes, "I propose to leave the dark and gloomy topic of traumatic neuroses and address the study of the operation of the psychological system in its earliest normal forms of activity. Here I am referring to children's play" (1925, p. 43).

Commenting critically on various theories of play, which "attempt to discern the motives in children's play, without focusing on the economic point of

view, that is, the tendency to obtain pleasure," Freud made an attempt to explain the first independently created game of a one-and-one-half-year-old child, whom he had observed for a rather long period of time. Freud wrote:

> This charming child developed the disturbing habit of throwing all the small objects that he got hold of far away into the corner of the room, under the bed, and so on, so that finding and gathering up his toys began to be a lot of work. While he did this he pronounced with an expression of interest and satisfaction a prolonged "o-o-o-o-o!" which, his mother and this observer agreed, was not just an exclamation, but meant "away" (*fort*). I finally noticed that this was a game and that the child played with all his toys solely by throwing them away. Once I observed something that confirmed my hypothesis. This child had a wooden spool wound around with string. It never occurred to him, for example, to pull it along the floor behind him, that is, to play with it as if it were a wagon, but, holding on to the string, he threw it very skillfully, over the railing of his crib, so that the spool disappeared behind it, and all the while he pronounced his meaningful "o-o-o-o!" but then he drew it out from behind the bed and greeted its appearance with a happy "here" (*da*). This was a complete game of disappearance and appearance, one in which only the first act was typically observed, and which was repeated over and over without stopping, as a game, although the second action clearly brought greater pleasure.
>
> The interpretation of this game is not difficult. It is connected to the culturally derived work the child must accomplish on himself in limiting his drives (i.e., denying himself their satisfaction), which could be seen in the fact that this child no longer opposed to his mother's leaving a room. He got revenge for this restraint by himself causing the disappearance and appearance of the objects under his control, as if on a stage. It makes no difference to the affective value of this game, of course, whether the child himself thought it up, or whether someone showed it to him. Our interest should be focused on another aspect. His mother's leaving him could not have been pleasant or even a matter of indifference to the child. How can repetition of the child's painful experience in the form of a game be interpreted as being in conformance with the pleasure principle? Perhaps, the answer is that disappearance must play the role of a pledge of a happy return, and the objective of the game is the latter. This would be contradicted by the observation that showed that the first act, disappearance per se, was valued for itself as a game, and was performed even much more frequently than the whole (two-part) game, with its happy conclusion.
>
> Analysis of this single case does not provide an accurate answer to the question. Objective contemplation creates the impression that the child made this emotional experience the object of his game for other motives. In the

> actual experience he was passive and the experience made a strong impression on him, and now in his game he puts himself in the active role, repeating the same experience as a game despite the fact that it originally caused him unhappiness. The motivation here could be attributed to the desire for self-mastery (*Bemächtigungstrieb*), regardless of whether a memory is pleasant in itself. However, one might attempt another interpretation as well. Throwing an object away, so that it disappears may be the fulfillment of an impulse, repressed in real life, to take revenge on the mother for the fact that she left him, and could have the meaning of stubborn defiance. "Very well, leave me alone, I have no need for you, and am discarding you myself." . . .
>
> Further observation of children at play fails to resolve our indecision between the two possible interpretations. One can frequently see that children repeat in play everything in life that makes a strong impression on them, that they make use of such play to regulate their impressions, and, so to speak, become the masters of the situation. However, on the other hand, it is relatively clear that all their play takes place under the influence of the desire, which is dominant at this age, to become adults and do everything that adults do. It can also be observed that the unpleasant nature of an experience does not always make it unacceptable as a subject for play. If the doctor examines a child's throat or performs a minor procedure, then this frightening event, probably, will become the subject of the child's next game. However, here one cannot help but notice that the pleasure the child gets comes from another source. When the child moves from the passivity of the actual experience to the activity of his game, he transfers the unpleasantness that has been visited on him, that he himself experienced, to whomever he is playing with and thus takes revenge on whomever the latter represents to him.
>
> But, in any event, it follows from this that it is superfluous to postulate a special imitation drive as the motive for play. Remember that artistic play and imitation by adults, unlike the child's behavior is focused on the audience, and, for example, in tragedy, may produce the most painful impression on them and still give them great pleasure. We thus arrive at the conviction that while the pleasure principle rules, still there are means and paths to making something that was unpleasant the object of recall and psychological reworking. (1925, pp. 44–47)

Subsequently analyzing the relationship between "the repressed" and pleasure, Freud writes:

> A new and surprising fact that we want to describe now is that "obsessive reproduction" also repeats experiences from the past that contain no potential for pleasure and could not have entailed the satisfaction of even previously suppressed drives.
>
> The early blossoming of infant sexuality is, because of the incompatibility

> of the desires that were dominant at the time and reality, as well as the child's inadequate level of development, doomed to perish. It perishes in the most painful conditions and is accompanied by profoundly painful emotions. Loss of love and failure leaves a narcissistic scar in the form of long-term disruption of the feeling of self-worth, which in my experience and according to Martsinavskii's studies, is the most vital element in the feeling of inferiority frequently encountered in neurotics.
>
> "Sexual exploration," which was limited by the child's physiological development failed to lead to any sort of satisfying result and is the source of later complaints that "I can't do anything" or "nothing ever goes right for me." The tender bond, mainly with the parent of the opposite sex, led to disappointment, to a fruitless anticipation of satisfaction and to jealousy on the birth of a new baby, which unambiguously indicates the infidelity of the beloved father or mother. While the child's own attempts to produce a child, have been a shameful failure. The diminished caresses, now given instead to the younger sibling, increasing demands for more grownup behavior, stern words and sometimes even punishments, all this ultimately fully reveals the magnitude of the injury done to the child. There are certain definite types of such emotional experiences, which regularly crop up again after the end of the epoch of infantile love. . . .
>
> On the basis of these observations of the work of transference and the fate of individual people, we find in ourselves the courage to acknowledge that there truly is a tendency in psychological life to obsessive reproduction, and we will now be inclined to attribute both the dreams of traumatic neurotics and children's play to this tendency. (1925, pp. 52–53, 55)

Freud wanted to analyze the play of the young child and to demonstrate the innate nature of the tendency to obsessive reproduction of traumatic situations, which he found in the dreams of adults with traumatic neuroses, and to use this to supplement the pleasure principle, putatively underlying the dynamics of psychological life, with one additional principle, the desire to return to one's previous initial position, the death wish.

Thus, two basic, initial, original drives—the death wish with its associated tendency to "obsessive reproduction" and the life drive for self-preservation, power, and self-assertion—are, according to Freud the basic dynamic forces of psychological life, which remain unaltered from infancy to adulthood.

We will stress just two aspects of Freud's general theory, which are important for understanding his theory of children's play. Freud's is one of the most complete theories postulating the innate nature and thus the biological predetermination of the main drives that underlie the existence of every living thing—from the protozoa to the human being. In the world of animals these innate drives manifest themselves directly. This is definitely not the case in human

society. Society imposes "bans" on these innate drives with their demands for immediate fulfillment. All sorts of "roundabout routes" thus develop in the form of various substitutions that allow the original drives to be fulfilled. Because bans on direct satisfaction of drives make themselves felt very early, virtually at the moment of birth, all the psychological mechanisms that serve to get around the "barriers" are also "given" from the very start. Thus, the dynamics of psychological life do not undergo development. Primitive children's play and the highest manifestations of the human soul—culture and art—are only ways to get around the "barriers" that human society erects against innate drives. They are merely a by-product of the struggle between innate drives and society. Thus, society and the human being, in Freud's theory, are antagonists from the very start.

Our purpose here would not be served by a detailed critical analysis of Freud's general theory. This theory has been analyzed and criticized more than once both in Soviet and Western literature.[5] We will dwell only on what interests us here—his theory of play.

Let us consider, first of all, the play of the very young child, because, in his analysis of such play, Freud comes to an important and broad generalization of the nature of play in general.

In his analysis of the play of the small boy throwing things down and playing "disappearance-reappearance" with the spool, Freud postulates that this game symbolizes the situation of the separation from his mother, which has traumatized the child, through the constant symbolic repetition of this situation. Thus, even early forms of play such as the one described are symbolic from his point of view. The essence of such symbolic play is not that one object substitutes for another but that it symbolizes the meaning of an entire traumatic situation. Here the nature of the object that makes it possible for the action to take place is of no consequence. What is important is not what object is used but that it now disappears, now reappears. Anything that can be thrown and can disappear could symbolize the innate situation. Of course, this symbolization is unconscious.

To continue the thinking that is implicitly present in Freud's analysis of this primitive game, we might assert that objects in themselves, like the roles that the older child assumes on his own, are of no importance—as long as they provide the opportunity for extremely subjective symbolic reproduction of the meaning of the situation. From this point of view, it makes no difference whether the child is playing doctor or fireman, millionaire, or salesclerk—the only important thing is what traumatic situation he is symbolizing. The most diverse subject matter and plots of games may symbolize one and the same unbearable emotions, repressed desires, or drives to the child.

However, the facts suggest something different. First of all the existence of the capacity for symbolization at such an early age seems doubtful. Symbolization presupposes the generalization of situations, even if they are extremely emotional generalizations, some generalization is mandatory. Observations show that at such an early age, there are individual affective reactions, for example, crying when the mother leaves the room; however, generalized affective emotions occur significantly later.

Freud's interpretation of the child's play described above must be considered completely unproven. Similar manipulations of objects are observed at this and even earlier ages in almost all children, regardless of whether they live in families and are attached to their mothers, or in institutions where, naturally they would not be so attached to their caretakers. They are encountered in families where mothers never leave their babies, not even for a short period of time, and where mothers work and another adult cares for the child.

When describing this game, Freud does not say whether it occurs only when the mother is away from home or also in her presence. Was some other adult close to the child present during the game? Did the child cry every time his mother left and was he always cheered by her reappearance? Finally we do not know how long it took before the child grew tired of this game.

Such games may easily be explained in a satisfactory way without resorting to such "heavy" arguments. Depending on the specific conditions under which they occur, this is either a game that invites an adult to interact with the child (by throwing down the object, the child induces an adult to fetch it back for him and to interact with the child), or in other cases, such as the game with the spool attached to a thread, it is a typical "novelty" game, that is, a game involving a self-maintaining orienting reaction. In principle, this game is based on the same mechanism as any other repeated manipulations—knocking, examination, and so forth. The fact that pulling the spool out and its reappearance was met with a happy exclamation, as Freud wrote, shows that this positive emotion is associated in this child with "novelty." Finally, this may be an exercise in mastering the action of throwing. In any case, according to data from a study by R.Ia. Abramovich (1946), these manipulations appear regularly at a certain stage in the development of actions with objects. Absolutely no evidence exists for analogies with the comings and goings of the mother, or, through this, with traumatic neuroses.

Of course, the point is not the description of this specific game, which Freud happened to observe. We might assume that if he had observed some other game, then he would have come up with a completely analogous interpretation. Such an interpretation is organically linked to Freud's unique understanding of the child's life during childhood. It does not surprise us that

Freud postulates that the identical tendency of obsessive repetition underlies both the child's game and the dreams of those suffering from traumatic neuroses. This is not simply an analogy. Freud sees an essential similarity here. This similarity is based on the fact that from birth the child is subject to all sorts of traumatic events (the birth trauma, the trauma of weaning, the trauma of the infidelity of a beloved mother or father, the trauma of the birth of a sibling, the trauma of diminished caresses, the trauma of strictness and punishment, etc.).

All these traumas occur regardless of the specific forms of social relationship between the child and the adults around him. The primary principle here is the barriers that adults place on the gratifying of early forms of childhood sexuality. Thus, in Freud's opinion, all traumas ultimately are the trauma inflicted on childhood sexuality.

The period of childhood is also a period of continuous traumatization of the child. And while in the traumatized neurotic the conditions of the original trauma are repeated obsessively in dreams, in the child this tendency to obsessive repetition leads to play. Continuing Freud's reasoning, one could argue that childhood is the period of play because it is the period of continuous trauma, and play is the only means of mastering (by means of repetition) the unbearable emotions that these traumas entail. From Freud's point of view, every person, to a greater or lesser extent, is already a potential neurotic from childhood. In light of these assumptions, play is a natural therapeutic agent against the potential neuroses that plague childhood. By reproducing unbearable emotional experiences in play, the child masters them, and, so to speak, assimilates them. Because they are repeated in play they cease to be unbearable. If we follow Freud's idea to its logical conclusion, we could assert that the more a child plays, the smaller his chances of turning into a traumatized neurotic during childhood.

Freud's theory of play is erroneous, first of all, because it follows from a concept of childhood as a period of continual traumatic situations, continual conflicts, and continual pressure exerted by society and adults. This essentially false understanding of the period of childhood as a period of continual conflict has been adopted relatively widely. Aspects of this understanding can be seen in statements by W. Stern that we have already cited. We have also encountered it in the theory of the child's initial autism and of egocentrism as the transitional stage from autistic to realistic thinking, based on the idea that the adult world represses the autistic thinking of the child, which Piaget developed in his earlier works.[6] We can also find this concept in Koffka's theory of the "two worlds" and in a number of other concepts of childhood and play.

It is precisely these ideas of Freud's that led his direct disciples to consider sex drives that do not find outlets and are thus inhibited and repressed to be the

innate drives that underlie the psychological lives of children and consequently their play. Thus, H. Hug-Helmuth, continuing Freud's line of reasoning, writes:

> The strength and tenacity with which the sex drive, in all its components and forms of realization, struggles against the upbringing that attempts to suppress it, leads us to expect to find manifestations of it in play. And indeed, there is almost no play that does not contain a clearly expressed sex drive either directly or in a sublimated form. (1926, p. 181)

The adherents of Freudianism extrapolate such interpretation to virtually all types of children's activities. Since play, from their viewpoint, involves unconscious symbolism, behind which lie various forms of the sex drive, then almost all the objects a child uses in play or in other activities begin to be interpreted as symbols serving to implement these drives. M. Klein (1932), evidently by analogy to the symbolism of dreams, considers that some objects in play (cars, engines, fire, light, etc.) have deep symbolic meaning. S. Isaacs, (1930, 1933) interprets play with cars and engines, construction of towers, and manipulation of materials such as clay to be manifestations of the child's fantasy about his parents' sexual relations, and the construction of "little houses" and "cozy corners" as the embodiment of hidden desires to return to the mother's womb, where the child could be alone with her without his rival, the father, being able to intrude.

M. Lowenfeld (1935) accepts not only the thesis that play is symbolic, but also the "tendency to obsessive repetition" as feasible interpretations of the play and other pastimes of small children. Pastimes with such materials as water, sand, clay, and a fondness for playing in mud are interpreted as obsessive symbolic manifestations of interest in bodily functions, especially sexual functions; shaping, perforating, and breaking off pieces of soft and easily deformable materials—are the result of unconscious fantasies associated with feeding and bodily orifices.

Thus, given these interpretations, the building of various structures with blocks, modeling clay, and plastic, drawing, manipulation of various engines and cars, whittling, hitting nails with a hammer, and the like are considered to be symbolic expressions of various forms of sexual drives and "tendencies toward obsessive repetition."

Given such psychoanalytic interpretations, play loses its specificity. Why should a child's activities with sand or water be called play? Of course children love to interact with sand and water and this is easy to understand. Sand and water are materials with inexhaustible potential for action. But all you have to do is give the child the opportunity to interact with these substances without showing him how to do so or giving him the appropriate tools and

toys, and such manipulations will soon be abandoned. They, of course, will come back with new force if you offer the child a shovel or a scoop or give him molds so that he can make sand patties. Soon, however, the child will get tired of this too and you will have to offer him a car that he can use to haul sand from one place to another.

The situation with shaping, puncturing and cutting, and hitting nails with a hammer is analogous. Of course, a knife, hammer, and nails are attractive to a child, and every normal child attempts to get hold of some for his own use. He uses them in accordance with the models provided by adults. To think that a child is drawn to them because they are ideal means of realizing his unconscious fantasies is to ignore the real life of the child in his environment.

But if, as psychoanalysts think, all the child's pastimes involve the acting out of unconscious fantasies serving to satisfy secret, ultimately sexual, desires, then that means that they conceive of the child as a creature encapsulated in a world of his obsessive innate, biological drives. The falsity of this position is so obvious that it is superfluous to criticize it.

Works such as those described above are very numerous, too numerous to count. When you read and analyze them you get the impression that the main content of the child's life is not the external world, but the "deep," primitive biological, essentially sexual drives. The evidence that is provided mainly has the nature of free analogies and associations, which are completely different in different adherents.

The pansexualism of Freud and his followers has been criticized more than once. Even Stern wrote:

> The psychoanalysts assert that repressed thoughts—unconscious desires—are revealed in dreams and in selection of roles. Specifically, according to Freud, a child's desires, which are totally erotic in nature, use "roles" only as a cover. For example, the little boy's jealousy of his father, whom he feels is his rival for the love of his mother, causes him to take on the role of the father himself—so as to push out his rival so to speak. The justifications cited by psychoanalysts for their assertions cannot convince the unbiased critic. In any case, the calm child psychology that does not cloud its observations with such arbitrary interpretation cannot find material in early childhood that confirms these ideas. (1922, p. 179)

In the psychoanalytic interpretation of play it is not merely the outlet-demanding sex drives that are assumed to be innate. The mechanism underlying the symbolic realization of these drives is also taken to be innate.

Adherents of classic psychoanalysis assume that the very form of play develops on the foundation of the same mechanisms that underlie dreams and adult neuroses. Thus, Hug-Helmuth writes, "Repression, displacement,

sublimation, the formation of symbols, and identification give shape to play" (1926, p. 177).

Psychoanalysts have directly and virtually without any limits transferred the mechanisms underlying the dynamics of psychological life that they have discovered in their work with adult mental patients (hysterics, neurotics, etc.) to healthy children, from infants to young men and women. Even if you accept the dynamics of the relationships between various structural systems—the id, ego, and superego—and the mechanisms of repression, suppression, sublimation, and so on, it would still be natural to suppose that these "systems" and the mechanisms of their interaction are not given innately, but must develop. It is difficult to believe that an infant from birth possesses an id, ego, and superego. In the most extreme case one might assume that the original drives, which are present from birth, form the content of what Freud calls the id. According to Freud, the ego and superego develop in the course of individual experience.[7] But, if they are the result of life, the result of collisions with reality, then they cannot have existed from birth and there must be some explanation provided as to how they reach the level of development at which they can play the role of factors that determine psychological dynamics. But if we acknowledge that these "factors" do not exist from birth, and instead develop as the child does, then we would have to radically change the interpretation of various forms of children's games and the whole theory of infant sexuality in that the systems and the relations between them have not yet developed.

Thus, the theory of childhood sexuality and play contain a logical contraction between, on the one hand, the major "factors" in psychological life and the relationships among them that are supposed to have existed from birth, and on the other hand, the assertion that some of these develop as a result of interaction with reality. Freud's theory, while dynamic in form, in essence proves to be deeply metaphysical and devoid of any principle of development in psychological life.

In the statements of Freud quoted above concerning play, there is one idea that deserves special attention. It is that children's play is under the influence of the desire that dominates at their age—to be an adult and do what adults do (see 1925, p. 48). At first glance it may seem that this idea contradicts the overall understanding Freud and Freudians have of children's play. But this is not the case.

In the general context of Freud's views, the desire to be an adult is nothing other than an external manifestation of the same tendency to satisfy the innate sex drives. In the psychoanalytic system, to be an adult means to satisfy ones sexual drives freely, without any constraints, and to possess the object of one's desires without any impediments. The urge to be an adult is most clearly

expressed in the so-called Oedipus complex, in which identification with the father is the route to getting rid of him in order to possess the mother as the main sexual object.

The idea that the urge to be an adult is present in play is not new. It can be found in the works of many psychologists. We have already stated that it can be found in the works of Sully. However, in his works, as in those of many other psychologists, this urge is not associated with the fulfillment of innate sex drives.

We can find mention of the urge to be an adult in Hegel. However Hegel attributed the development of this urge to a later age. Thus, he wrote:

> When the child goes from playing to serious activity, that is, to studying, he becomes a boy. Starting at this point, children begin to become curious, especially about stories. They begin to see meaning in ideas about which they do not have an immediate perception. But the main factor here is the awakening feeling that they are still not what they should be and the vital desire to become what the adults around them are. (1956, p. 91)

Do children really have this desire? This is a subject for research and analysis. We can, however, say with confidence that if it existed, then it would not be innate, but would arise during the development of the child's relationship with the adults around him.

At the present point in child psychology we have already amassed sufficient facts showing that the relationship between children and adults undergoes development. During this development the child is emancipated under the guidance of adults. Every step toward this emancipation, at the same time, represents a new form of relationship between the child and adults. The urge to become like adults is only noted at the end of early childhood and is manifest in the form of a desire to act independently. This is the well-known "I'll do it myself" of the child at the border between the early and the preschool years. By the end of the preschool period this desire takes the form of the child's consciousness of his place among adults and the evolving urge to perform serious, socially significant, and valued work.

Finally, during the period of transition between elementary school age and adolescence, it takes the forms of a "feeling of adultness" and attempts to challenge adults. This is the general pattern of development of the urge to become like adults.

The statement of Freud cited above contains, albeit in the most general and unelaborated form, an affirmation of the importance of play for the development of the relationships between children and adults.

It is precisely this aspect of Freud's theory that A. Adler developed. According to Adler, the realization of his own weakness and dependence is

painful to the child and he tries to suppress the pain with fantasies of power and dominance—and thus plays wizard and fairy. The little boy who rides horseback on a stick or the girl who acts bossy with her doll or little brother in the capacity of mother are unconsciously taking revenge for all the limitations and barriers they constantly experience in real life. Fiction thus is nothing other than an internal protest against a real feeling of inferiority.

Stern was sympathetic to this idea of Adler's and even attempted to argue that he himself had originated it. He made the following entry in his journal:

> Gilda is playing mother and baby with her little brother. The apartment has been cleaned and the baby put to sleep. Nevertheless Gilda grumbles; any movement he makes in his sleep is not permitted and is punished with slaps. In general, punishment is her favorite part of the game. Everyone possesses some love of power. And the poor child, who in normal life must submit, tries, if only in play, to hold the reins of power. (1922, p. 180)

Stern adds a note to this entry: "This entry was from 1906, that is, it was written before the publication of Adler's theory."

While with this remark he seems to be associating himself with this theory, nevertheless he did not espouse it fully, but returned to the theory of instincts. He wrote:

> It would seem that not one of these theories points to the most important motives for selecting roles. These should be sought in the main stimuli for children's play mentioned above: imitation and exercise. The child takes on roles that he knows from his real life or fairy tales and prefers those of them that correspond to the instincts that exist in him in embryo form and will develop later. (Stern, 1922, p. 181)

Although in Adler's theory there is none of the pansexualism that characterizes Freud's psychoanalysis, in principle, the understanding of play remains the same. The only difference is that to Freud the child is constantly undergoing traumas and failures because of his inability to fulfill his infantile sexual urges, while to Adler sexual urges are replaced with the urge to self-assertion (to him Freud's sex drives are also a form of self-assertion, which in Adler's theory has become all-encompassing). Adler, like Freud, believes that the child experiences continuous traumatic influences: the drive for power and self-assertion are repressed and the child gratifies these unconscious desires in play, and by ceaselessly repeating them he heals. Thus, underlying the understanding of the interactions of the child and adults, the child and the reality surrounding him, is the idea of the innate antagonism between them.

The Freudian interpretation of play stimulated the extension of the practice of psychoanalysis to children. In practice play was used in two ways—as a

projective diagnostic technique and as a therapeutic tool (play therapy).

The potential for using play as a projective diagnostic technique, in the Freudian view, arises from the belief that play represents repressed desires. This symbolism is, naturally, unconscious, and thus must be interpreted.

The use of play as a means of therapy is based on two factors. First, play may be used as a tool, which, in the hands of psychotherapists, replaces classical psychoanalytic techniques—such as word associations and the interpretation of dreams. Repressed desires are elucidated and made available to consciousness, just as in standard psychoanalytic therapy. Second, the free and repeated reproduction of the traumatic situation, corresponding to "obsessive reproduction" as the basic drive in play, is supposed to lead to the gradual healing of the unbearable emotional experience. These two ways of using play are implicit in Freud's definition of play and were further worked out by psychoneurologists, educators, and psychoanalysts working primarily with children with behavior disorders.

We will focus on a few questions relating to the practical use of play based on its psychoanalytic interpretation.

Since sex desires in children and the associated emotional experiences are concentrated around the family and family relationships, the materials and sets of toys used for projective play consist mainly of dolls and objects needed to play out a number of life situations, particularly family ones. These dolls represent individual members of the family (father, mother, older or younger siblings), school situations (teacher and children), and so on. Under these conditions, the child is given the opportunity to play relatively freely, constrained only by the material that has been given him, and to take on some role, assigning other roles to the dolls and playing out a life situation, or to engage in so-called director's play, in which certain situations are played out with the dolls having been assigned roles, functions, and properties and the child acting as director.

On the basis of the kind of functions the child assigns to various of the "characters" with which he is playing and the relationships among them, the place he himself occupies in these relationships, the toys he uses, and the operations he performs with them associated with positive or negative emotions, conclusions, sometimes extremely far-reaching conclusions, are drawn about the nature of the unbearable emotions of the child and his drives. Here, too, we cannot escape without the free-ranging interpretations of symbolic uses of objects that are so typical of psychoanalysts.

Projective diagnostic techniques using play and various other pastimes to reveal the internal life of the child (dominant sexual urges, affective complexes, etc.) are very dubious. First of all, they are inadequately associated with Freudian or any other psychoanalytic underlying postulates.

At the same time, if we eliminate the fantastic sexual interpretation, the analysis of the proposed play procedures shows that they all contain varying degrees of attempts to create a situation in which it is possible to portray social relationships to which affect is attached, and, thus, they all implicitly suggest that role playing centers around social relationships among adults or between the child and adults. The majority of these situations provoke the child to recreate relationships and to identify those that are central to him at the given moment.

It is well known that at a relatively early age children rather precisely differentiate the attitude of adults to them. Even simple actions associated with child care (feeding, putting to bed, dressing, etc.) differ in nature depending on whether the care is provided by mother, father, grandmother, or grandfather. In his consciousness, it is as if the child anticipates the results of his behavior and gradually, first at a purely emotional level, makes generalizations about his relationships with adults. We have even observed a child, who in his second year generalized such relations verbally "When granny says no, that means no."

Here, as in a multilingual family, where each adult speaks to the child in another language, the child communicates with each of them in his or her own language. The child establishes differentiated relations with every member of his family. It is these relations that, the moment he starts to role play, the child recreates through play, and, by recreating, identifies them.

Here it would be appropriate to recall a remark made by Claparede. In an article we have already cited, he wrote that play can permit the child to play the dominant role that is forbidden him by life, and is a good example of affective compensation. But this is more the content of play than play itself. Continuing Claparede's idea, one might say that play is not play because one can manifest self-assertion or compensation in it, but, rather, the reverse: the child can manifest self-assertion, compensation, and the like because this is play.

On the basis of the idea that play is an expression of the child's internal life, Hartley, Lawrence, and Goldersson (1952) proposed observations of various types of children's activities (dramatized play, construction play, water play, use of graphic materials, etc.) under the conditions typical of a children's institution for normal children in order to gain understanding of the general course of their development, as well as the behavioral problems of individual children.

There cannot be any disagreement on this issue. Many experienced educators use observations of children's collective and individual play as a means of studying them.

We might mention several ways to use the data from observations of play. First, role play, as the reproduction of relationships and activities of adults, helps to elucidate how a child thinks of adults and the meaning of their activity and relations with others, including the child himself. In this aspect, play may serve as a means for understanding the child's objective situation. At the same time, it does not reveal the personality traits or emotional experiences of the child himself. Thus, if a child reproduces in his play an aggressive father or caring mother (or vice versa, a severe mother and amiable father), then this does not at all mean that he himself is aggressive or caring or that one of his parent's aggressive attitudes has a particular effect on him.

Second, because in role play the child participates in real relationships with the others playing, then it is in these relationships that he manifests his own traits and certain emotions. Thus, he may try to take only authoritarian roles, to command others; he may manifest aggression or show consideration toward his playmates; he may be timid and shy; he may help his playmates or interfere with them; he may share the toys or keep all the best ones for himself: he may attempt to play his role to the best of his abilities or be careless about it; and so forth. Systematic observations of the child while he is playing or engaged in other activities is, in itself, the only means by which an educator can study children. But the psychoanalytic interpretation is irrelevant here.

The other way child psychologists use play involves so-called play therapy.

Starting in the 1930s, a great effort was put into more or less systematic attempts to develop a play therapy technique. The literature on this topic subsequently began to grow so rapidly that it was assigned its own section in *Psychological Abstracts* starting in 1948. Work in this area forced work devoted to the study of play per se into second place. At the present time, there are a number of different directions in the development of play therapy.

V. Axline (1947) divides play therapy techniques into two major groups: (1) directive techniques, in which the therapist takes on the function of interpreting and correcting; and (2) nondirective techniques, in which the child is given complete freedom in his play.

Directive play therapy grew out of attempts to apply psychoanalytic techniques to children. Anna Freud was one of the first to develop the technique of play therapy as a partial substitute for the verbal methods of psychoanalytic technique.[8] In her view, play cannot be considered to be the equivalent of free associations, and, in order to understand the problems of the child, other methods must also be used, interpretation of dreams, free drawing, and so on. In her opinion, the therapist must play an active educational role in the play situations, directing the child's impulses onto a new track and regulating his

instinctive life. The therapist's main task is to strengthen the child's ego using play and other tools.

Klein's method is more radical. She believes that play and play therapy can replace the technique of free associations on which adult psychoanalysis is based. In Klein's system, every action of the child in the play situation and every toy that he uses in play is treated as possessing a profoundly symbolic meaning. The task of play therapy is to make these unconscious tendencies conscious. The therapist participates in the child's play fantasies, directing the play according to the nature of the symbolization of unconscious desires. During the course of the play, the therapist explains to the child the meaning of the symbols, thus making them conscious. Klein believes that almost all children's play is based on masturbation fantasies and thus interpretations must be directed at relieving the feeling of guilt that the child feels about this. The task is first to reveal the hidden anxieties and guilt of the child and then to relieve them.

Both these modifications of play therapy are specifically psychoanalytic in nature. They follow from Freud's postulates on the symbolic nature of children's play and interpret it in the spirit of infantile sexuality of children. The degree of arbitrariness of these interpretations fluctuates, ranging from the totally arbitrary to the actual identification of real problems that the child has. The same critical remarks we made with regard to Freud's theory of play apply to these two modifications as well. As for the efficacy of these two types of psychotherapy, opinions are very contradictory. As a rule, this type of psychotherapy continues for a relatively long period, in any event for months. Thus, it is completely impossible to say whether its ultimate effect results from the psychological mechanisms associated with the specific properties of the play process or with prolonged interaction with the psychotherapist.

However, the so-called nondirective play therapy technique is based on somewhat different principles. Underlying it, as Axline notes, is the idea that play is the sole natural means of self-expression the child has and that gives him the opportunity to "play out" his feelings and problems. In this technique the child may do or say anything he wants in the playroom. During the entire session, the therapist adopts a friendly demeanor and never gives any direct instructions. In the playroom, the child is the most important person, he is in command of the situation and of himself. No one tells him what to do, and no one criticizes what he does, no one interferes in his world.

In this situation, the child suddenly feels that here he can drop his inhibitions and fully reveal himself. Here he does not have to struggle against other forces, such as the authority of adults or the competition of his peers; he is not the target of someone else's whims or aggressions. Here he is an individual

with his own rights. He can say anything that he likes, can play with the toys the way he feels like playing, can hate and love and be as indifferent as a stone; he can be as stormy as a hurricane or as sluggish as he likes and no one is going to slow him down or try to hurry him.

Axline thinks that in this situation the child is given the opportunity to play through his accumulated feelings of stress, upset, lack of confidence, aggression, fear, embarrassment, and confusion. As he plays out these feelings, he brings them to the surface, sees them, and learns to control them or rejects them. Because of this the child achieves emotional stability and becomes more psychologically mature.

Nondirective play therapy is, in essence, not psychoanalytic. Here, difficult behavior is not reduced to repressed sex drives, nor is there an interpretation of the symbolism of play. Indeed, what is involved is only play in the broadest sense of the term. In essence, this technique amounts to providing the child with the opportunity to engage in any activity he chooses (drawing, playing with clay, building, playing, etc.) under conditions of interaction with an adult that are in some sense very unlike those in which the behavioral difficulties arose. The behavioral difficulties that are corrected in this type of therapy are mainly those induced by conflicts between adults and children, and this is why practice in a new type of relationship with an adult may lead to correction.

Despite its relatively widespread use, play therapy has not yet been the object of special psychological evaluation studies and expertise in using it is all empirically based. Analysis of the evolution of play therapy suggests that its purely Freudian implementation is increasingly eroding. The goal of future special psychological studies should be to elucidate the real mechanism underlying its corrective effects and to separate the rational from the mystical. It seems to us that this can be done only in the context of development of a theory of play and an understanding of its role in the development of the child's personality.

We have focused on the Freudian interpretations of play in such detail because these interpretations are the most widespread in Western literature.

As we have noted above, Freudian interpretations of play seem to us to be unacceptable and incapable of revealing the true nature and significance of play in psychological development. The main shortcomings of this theory are the following. First, it is one of the most biological theories, and completely ignores the ontogenetic development of the individual, identifying the main human drives with those of animals and reducing all of these drives to the sexual. Second, this theory illegitimately extends the hypothetical dynamic mechanisms of psychological life purported to exist in the adult mentally ill to children, assuming the innate existence of these mechanisms and thus

precluding any possibility of development in the child's psychological life. Third, this theory contains an incorrect idea of the system of relationships between the child and society, seeing them as antagonistic and leading to the child's continual subjection to traumatic experiences by adults; play thus is considered a means through which the child escapes from reality into a special symbolic world of fantasy. Fourth, this theory completely ignores the development of play in the history of society as well as in the history of a particular individual, and pays no attention to the significance of play for psychological development.

We have also focused on the Freudian theory of play in such detail because it has influenced the understanding of certain leading psychologists of the child's psychological development. Thus, Freud's influence can be seen in the early works of Piaget in connection with the development of general issues of child psychological development and his understanding of the nature of play. This theoretical conception has entered child psychology as the "theory of two worlds." Piaget writes:

> One of the services performed by psychoanalysis is that it demonstrated that autism has no use for adaptation to reality, since, for the "ego" pleasure is the only consideration. The sole function of autistic thought is the attempt to provide immediate (uncontrolled) satisfaction of needs and interests, to deform realty so that it fits the "ego." (1932, p. 401)

In describing autistic thinking he says that:

> autistic thinking is subconscious, that is, the goals that it follows or the objectives it sets itself are not represented in consciousness. It does not adapt to external reality, and creates for itself an imagined reality, the reality of a dream. It does not try to establish the truth, but to satisfy desires and remains purely individual. As such it cannot be directly expressed in speech; it is expressed first and foremost in images, and, to be communicated, must resort to oblique methods, expressing the feelings that rule it through symbols and myths. (1932, p. 95)

Piaget's basic idea in his early works is that the child assimilates the reality around him in accordance with the laws of his thinking at a particular stage, first autistically, then egocentrically. This assimilation creates a special world, in which the child lives and satisfies all his desires.

This idea was strikingly expressed by Claparede in the foreword to Piaget's (1932) book.

> He (Piaget) indicates that the child's mind is, so to speak, simultaneously building on two planes, one located above the other. Work performed in the lower plane in the first years of life is vastly more important. This is the

> work of the child alone, which without any order or organization, attracts to itself everything that can satisfy his needs and crystallizes it around them. This is the plane of subjectivity, desire, play, whims, and *justprincip*, as Freud would say.
>
> The upper plane, on the contrary, is gradually erected by the social environment, of which the child becomes increasingly aware. This is the level of objectivity and logical concepts—in a word, of reality. This higher plane at first is very fragile. As soon as any pressure is put on it, it bends, cracks, and collapses and the elements that comprise it fall down on the lower level, mixing with the elements belonging to the latter, while some pieces remain stuck between the earth and sky. It is understandable that the observer, who has not seen these two planes and who thinks that play takes place on only one, would get the impression of extreme confusion, because each of these planes has its own logic and each one howls when it is treated with the logic of the other plane. (1932, pp. 59–60)

L.S. Vygotsky correctly points out that "even if neither Piaget himself nor Claparede had mentioned Freud and his pleasure principle, no one could have any doubt that we are here dealing with a purely biological theory, one that attempts to deduce the uniqueness of children's thought from children's biological nature" (1932, p. 99).

It follows inexorably from the ideas that autistic thinking itself creates an imagined reality (the reality of a dream) and that there exist two planes on which children's thinking functions, that the child must exist in a bifurcated world consisting of his own world and that of adults. These two worlds, these two realities, in principle cannot be merged, because each of them is based on different principles. One is the world of the pleasure principle and the other, of the reality principle.

Play, in Piaget's view, belongs to the world of autistic dreams, the world of desires that cannot be fulfilled in the real world, a world of inexhaustible possibilities. This world is more important: it is the true reality for the child. In any event, this world is no less real to the child than the other—the world of compulsion, the world in which objects retain the same properties, the world of constancy, the world of adults. Considering the development of concepts of reality, Piaget indicates that, until the age of two or three, what is "real" is simply what is desired. At the second stage, two very different realities appear, both of which are equally real—the world of play and the world of observation. Piaget summarizes this idea as follows: "Thus, children's play must be acknowledged to have autonomous reality, meaning that the actual reality to which it is opposed, is vastly less real for the child than for us" (1932, pp. 402–3).

In general, Piaget's concept of development may be presented as follows:

At first only a single world exists for the child—the subjective world of autism and desires; then, under the influence of pressure from the world of adults, that is, the world of reality, two worlds develop—the world of play and the world of reality, with the first being more important to the child. This world of play is, in a sense, what remains of the purely autistic world. Finally, under pressure from the world of reality, these remaining elements are repressed and then a kind of single world again exists, with the repressed desires appearing only in dreams or fantasies.

The difference between Piaget's conceptions and the conceptions of psychoanalysis is that, for the latter, play is a manifestation of repressed desires and an urge to repeat, while for Piaget, it is what remains (i.e., what is still not repressed) of desires that, as psychoanalysts also believe, cannot be fulfilled in the actual world. The creation of this special imagined world in play obeys a special logic—the logic of syncretism. "Syncretism," writes Piaget, "by virtue of its mechanisms, is an intermediate link between autistic thinking and logical thinking, as, by the way, are all other manifestations of the egocentric world" (1932, p. 173).[9] Naturally, this kind of thinking is characteristic of the major functions controlling dream images: the coalescence, so that several different images are merged in one, and the transference of the features characteristic of one object to another. This leads to symbolism in play. Play, thus, is symbolic and its symbolism is determined by the special, syncretic logic with which the imaginary world of play is constructed. This imaginary world—this world of play—contradicts the world of reality and is more real to the child.

While in the view of pure psychoanalysts the child escapes from the horrors of reality to the world of play, Piaget sees the world of play as the remains of the primordial world of desires not yet crowded out by reality. Despite this difference, both for Piaget and the psychoanalysts, the world of adults and the original world of the child are opposed to each other as antagonistic forces. The first crowds out the second; the second, to the extent possible, opposes the first. They are built on completely different foundations and are alien to each other and irreconcilable. The only mechanism possible between them is that of mechanical repression.

Koffka espoused a similar position. Although he made a number of specific critical remarks about the theory of egocentrism, on the whole he accepted the theory of two worlds that correspond to two fundamentally different structures of behavior. Koffka starts with the generally known and widespread fact that, in play, one object is substituted for another. Koffka writes:

> As my starting point, I will take the following example. A child may play with a piece of wood and treat it like a "living plaything," but, in a short time, if he is diverted from his game, he may break this same piece of wood in two or throw it in the fire. How can these two types of behavior with

> regard to a simple piece of wood coexist? . . . I think that we will best understand play psychology if we look at the child's actions from the standpoint of the extension of those behavioral structures in which they occur for the child. (1934, pp. 221, 229)

Considering the process of development as a process in which longer and more interrelated behavioral structures are gradually being constructed, Koffka believes that, at the earliest stages, there exist only relatively short behavioral complexes, which are independent of each other and equal in value. At this stage there is still no play. Koffka writes:

> But gradually, the child begins to construct more long-lasting behavioral structures and now it is typical that various behavioral structures exist side by side without having any particular influence on each other. As the two systems of structures that form first, I would point to those actions, processes, and things that are somehow associated with adults, and, alongside these, those that are independent of adults. First the child slowly, dimly, and vaguely begins to distinguish the world of adults from his own. (1934, p. 229)

In this way, according to Koffka, two worlds form: the child's world and the world of the adult.

Koffka continues his thought:

> But we must go even further. The relative independence of the different structures is true not only of these two large structures—the world of the child and the world of the adult—but also of individual functions within each of them. While the adult world, in accordance with a principle that is different from that of the child's world, attempts to encompass the whole, so that the independence of individual actions of each other increasingly disappears, things are different in the child's world. The child may be a coal miner one day and a soldier the next; he can treat a piece of wood like a baby one minute, and immediately afterward throw it in the fire. Various actions do not conflict, because there is no relationship between them, just as the games adults play are not related to each other. . . .
>
> It is sufficient that a thing fulfills a desire that exists in the given moment, and this thing already has all the features necessary for allowing the desire to be fulfilled. A piece of wood may be cuddled—thus, at that moment it is a beloved and indulged child, and the fact that it does not have any of the other characteristics of indulged children is irrelevant, because complete likeness to whatever the child has experienced is not mandatory. There is no such thing as a unified world for a child. (1934, p. 230)

The excerpts cited rather clearly demonstrate the almost complete identity of Koffka's ideas with those of Piaget with respect to the existence of two

worlds, the world of desires and the antagonistic world of adults, the world of rigid rules and requirements. The difference lies only in the terms with which the two psychologists describe these worlds. Koffka characterizes them in terms of structures possessing different extents, interdependence, and rigidity; Piaget, in terms of the logic of egocentrism and autism and the logic of reality. For Koffka the structures from the world of adults repress the primordial structures of children; for Piaget, it is the logic of adults that represses the primordial autistic logic of children.

Vygotsky provided a general evaluation of the concept of two worlds. He wrote:

> It is difficult to imagine more violence to the facts than this sort of theory of children's play. After all, the very essence of children's play is the creation of an imagined situation, that is, a sense field, which alters all the child's behavior, causing him to adjust his actions and behaviors only to the imaginary situation, and not to the real one. As for the contents of these imaginary situations, they are always taken from the world of adults.
>
> We have already had one occasion to dwell on this theory of two worlds—the child's world and that of adults—and the theory that is derived from it of the two souls that coexist simultaneously in the child's consciousness. Here we will indicate only what this theory signifies for the overall concept of development that Koffka propounds.
>
> It seems to us that, because of this concept, Koffka conceives of the child's development itself as a mechanical repression of the child's world by the world of adults. This understanding inevitably leads to the conclusion that the child grows up in a world of adults that is hostile to him; that the child forms himself in his own world, that structures from the adult world simply repress the child's structures and take their place. Development turns into a process of repression and replacement, with which we are so familiar from the theories of Piaget. (1934, p. LIII)

The basic question here is the question of whether a special child's world exists, and, if it does, what it is like and how it relates to the adult world.

Piaget, like Koffka, answers this question as follows. Yes, a special child's world exists. It is a subjective imaginary world the child himself creates, a world of fulfilled desires where the pleasure principle rules. The child lives in this world, which he himself has created, and in it he satisfies his desires.

The world of adults is a world of objectivity, a world the child finds as a given. This is a world of objects possessing constant features and modes of use, a world of speech, logical concepts, and ideas, a world of adults and their relationships. This world, from the very beginning, is alien and hostile to the child. The subjective world of the child and the objective world from the very

beginning are opposed to each other. The adult world has power on its side; it exerts pressure on the child, it crowds him out of the world of subjectivity and erects another, objective, reality in its place. This is Piaget's and Koffka's position. However we cannot agree with it.

Of course, the child does not immediately enter into all areas of the life of the adults surrounding him. This is a long and gradual process. And it is the adults who gradually lead the child into their worlds.

The problem with the concept of two worlds is that, to its adherents, the "special" child's world takes the form of the world of innate desires, which, furthermore, are not gratified. It is because of this lack of gratification of innate desires that the world of subjectivity, autism, and imagination arises in the first place. However, these presuppositions are erroneous: first, the idea that the child's needs are born with him in the form of psychological structures, in the form of desires or drives, and second, the idea that the child's needs are not satisfied.

From the moment of birth a child has certain physiological needs. These include the physiological needs for food, a certain environmental temperature, oxygen, and so on. They are satisfied by the adults caring for the child. The baby would die of hunger and cold if adults did not keep him alive. The satisfaction of primary needs is the basic and essential condition of a child's life during childhood.

These needs do not exist from the very beginning as psychological entities, that is, as drives. Psychological drives develop by themselves on the basis of satisfaction of physiological needs. It is well known that a child may fret because he needs sleep or food, but the adult must guess at his physiological status and satisfy him. It may be assumed that subjectively these states are experienced as a kind of stress without any specific objective content, as generalized needs without objects.

As numerous works have shown (N.L. Figurin and M.P. Denisova, C. Bühler, H. Wallon, and others), the first psychological needs that the child develops are social. First and foremost these involve the need for the presence of, and interaction with, an adult. Meticulous studies of the development of interactions conducted by M.I. Lisina (1974, a, b), have persuasively demonstrated that the child's first psychological need is for interaction with adults. Evidence of this includes observations of the transformation of purely physiological reactions of crying and smiles into behavioral acts the object of which is an adult. Lisina remarks on this subject, "Very early, in the first months of life, the child develops the psychological need for another person, the urge to win his or her attention, and enter into closer emotional contact with him or her" (1974 [a or b omitted in original], p. 12).

To express ourselves rather metaphorically, we might say that the psychological needs of a small child are objectified in the adult who cares for him. To the child, the milk he sucks is not separable from his mother.

The world of the child is, first and foremost, the significant adult, the most important part of the child's environment and of the world of adults. The child enters the rest of the world only through the evolving system of "adult–child" relationships.

Let us assume, however, that there are some original desires, that these desires are not satisfied, and that the child creates for himself a subjective, illusory world. Could these unsatisfied desires be satisfied in this world? This question would have to be answered in the negative because it is not possible to satisfy any needs in the world of the imagination. And this is true not only of organic desires and needs but also of social ones. As Vygotsky correctly said, "in ontogenesis, to assume the hallucinatory satisfaction of needs as the original form of children's thinking is to ignore the indisputable fact that, to quote [E.] Bleuler, 'satisfaction comes only after actually consuming food,' that is, to ignore the fact that the older child never prefers an imaginary apple to a real one" (1932, p. 70).

Let us suppose that those who believe in the theory of the two worlds object that they can dispense with their postulated unsatisfied innate desires. They can acknowledge that when the needs appear they are satisfied by adults, however, later they cease to be satisfied, but nevertheless persist and this creates the imaginary world, which for the child is his true inner world. In principle this is possible, insofar as needs develop, some disappear, and others arise, and neither the dying of some needs and desires nor the birth of others is a simple act.

However, given this understanding of the child's world of imagination and dream, play becomes an expression of the urge to recreate the previous states and form of needs that no longer exist. This position returns us to Freud and the psychoanalysts. In addition to what we have already said about these theories in connection with the theory of the two worlds, we should point out that, even given this understanding of the developmental course of needs, it remains unclear why the so-called world of the child, which, perhaps, in light of the above, is a world of imaginary, illusory quasi-satisfaction of dying needs, should be more real to the child than the world of new needs that can be satisfied by adults. Imagine the simple everyday fact of substituting one type of food fed to the child for another. This is an actual change in the way a need is satisfied. According to the theory of the two worlds, the illusory pseudo-satisfaction provided by the previous food is the world of the child, and the actual satisfaction provided by the real food is the world of adults. The first is

a much more real world to the child than the second, and the child lives in this world of the past. It is difficult to imagine that the illusory sucking of the breast is more real to the child than the actual satisfaction of his need by drinking juice or milk from a cup. This understanding of the relations between the real world with its actual satisfaction of needs and the imagined world with its illusory satisfaction does not stand up to criticism.

At the same time, it must be especially emphasized that the notion of the association between play and needs and the unique features of the world in which the child lives are correct. From the first days of life, the child truly lives objectively in a world that is differently perceived and experienced than that of adults. However, to correctly describe the world of the child, we need to list the features of his objective world, that is, the objective conditions with which he actually interacts. Then it will become clear what the relationship is between this world and the world of adults. Those who espouse the idea of two worlds attempt to describe the subjective world of the child in its relationship with the objective world of adults, without considering the association and relationships between the child and the objective world. The only objective relationship that they see is the relationship of the displacement of the child's subjective world by the objective world of adults. This understanding is extremely limited.

To approach an understanding of the child's subjective world, its contradictions and conflicts, at least to some extent, we first have to consider an objective picture of the child's life, to clarify the relationship between the objective world of adults and the objective world of the child.

If such an analysis had been conducted, it would have shown that the child's world is always some part of the adult world, refracted in a unique way, but still a part of the objective world. The adherents of the two-worlds concept will never conduct such an analysis because they consider the subjective world of the child to be independent of his objective world. These views can be overturned only within a system of logical materialistic views of the mind.

K. Lewin (1935) and his student S. Sliosberg (1934), who conducted a special experimental study devoted to clarifying the difference between serious and play situations, have a somewhat different position on this issue. Sliosberg, following Lewin, distinguishes layers with different levels of reality within the "life space" of each individual. The world of fantasy and dreams belongs to the unreal layers. In these layers it is vastly easier to overcome difficulties than it is in the layer of reality with its rigid facts. The main problem addressed by the study is the relationship between reality (in the child's "life space") and satisfaction of needs. Sliosberg's method is the opposite of Piaget's: involving actual relationships to things and conversations with child about reality.

As a result of a long series of interestingly designed experiments on substitution of various objects in real and play situations, Sliosberg comes to a number of important conclusions.

Thus, analyzing the relationship between play and levels of reality, Sliosberg finds that, in the play situation it is much easier to replace one object with another than it is in a serious situation, and thus, the play situation has certain characteristics typical of the unreal layers. However, it does not follow from this that play belongs to these layers. Summarizing the experimental material pertinent to this issue, she concludes that play situations should be considered a special area (*Sondergebiet*) within the real layer, which differs from the other areas of this layer because it has more dynamic and fluid properties that are closely related to the unreal layers, and a close connection with certain structures of the unreal layers of a particular individual's "life space."

Sliosberg emphasizes that the relationship between the paired concepts—the serious and play situation, the unreal and real layers—should not be considered simple, and, although processes in the play situation are dynamically related to processes in unreal layers, play and unreality are not identical.

In connection with the question under examination about the existence of two worlds in which the child lives, Sliosberg's data on the dependence between the satisfaction of needs and the substitution of objects, that is, the transition to the play situation, are of interest.

The experimental facts obtained in Sliosberg's research and her conclusions seem to us to be of significant interest, in particular, because two questions are clearly posed in them. First, there is the question of the lack of justification for identifying play with the unreal (the world of dreams and fantasies). Second, there is the question of the relationship between the satisfaction of needs and play.

Lewin (1935) did not set himself the task of explaining the nature of play. Play interested him only to the extent to which it graphically and clearly revealed the dynamics underlying displacement, which he was studying experimentally. He does explicitly assert that the enormous area of play has an extremely close relationship to the dynamics of displacement, whether of objects or actions.

Simplifying Lewin's ideas slightly, we may summarize them:

1. The psychological environment of the adult is differentiated into levels with varying degrees of reality. The real levels may be described as the layer of facts whose existence does not depend on a person's individual desires. This is the sphere of realistic behavior, major difficulties, and so on. The most unreal level of behavior is the level of hopes and fantasies. This layer of greatest unreality is highly dynamic. The bond between the individual personality

and the environment at this level is tenuous and weak. On the unreal level "you can do everything you want."

2. Transitions between one level and another are possible. If the conditions of the real level become too unpleasant for some reason, for example, as the result of excessive stress, the desire arises to escape from the real level into the level of unreality (into daydreams, fantasies, and even mental illness).

3. Points 1 and 2 are in principle realized in the same way in the behavior of adults and children. However, it is characteristic of the child's psychological environment that, first of all, the differentiation of levels of reality is not as clear, and second, that the shift from the level of reality to that of unreality is easier to achieve.

4. The major mechanism of moving from levels of various degrees of reality to the unreal layer is displacement. (Freud uses the concept of displacement but fails to define it.)

5. A number of characteristics of displacement have been established: (a) the greater the need, the stronger the tendency to displace; (b) a displaced act often occurs in situations in which it is impossible to attain a certain goal and in which there is psychobiological stress; (c) a displaced act grows out of a system of stresses associated with the original action; (d) in many cases, a displaced act fails to lead to full satisfaction and the individual only feels more dissatisfied; (e) the more real the displaced act, the higher the displacement value of the act (thus, the value of displaced acts in the unreal world is minimal—D.E.); (f) when displacement does not arise spontaneously, the displacement value is higher to the extent that the displaced act corresponds not to the new goal, but to a new way of reaching the original goal; and (g) the greater the need, the lower the value of the displaced act, but, on the other hand, the drive to perform the displaced act increases with increased stress associated with the need.

The above is a schematic summary of certain of Lewin's views on the issue of different levels of reality in the structure of the personality and on the dynamics of displacement as the major mechanism for going from one level to the other. We have cited these views only because they are directly related to the interpretation of certain aspects of play.

In describing play, Lewin notes its major dynamic pattern: on the one hand, play deals with phenomena that belong to the level of reality in the sense that they are accessible to observation by others (e.g., in contrast to daydreams); on the other hand, play behaviors are significantly less bound by the laws of reality than are other forms of behavior. The goal that is set in play and its achievement give the individual special pleasure. This dynamic flexibility of play approaches the dynamics of the unreal levels and is especially obvious in

the changeability of things and people (play roles) that takes the child far beyond the bounds of the reality level. According to Lewin, play may be classified on the basis of the principle of its dynamic flexibility. The rules of play may be so rigid that, in its dynamics, a particular game may approach the level of reality.

Clarifying the issue of the difference between a play situation and a serious one, Lewin states that the issue of unreal displacement is very closely associated with the question of play. According to Piaget, children's worldviews have a mystical character. The thing and its name, fantasy and reality, lies and truth—all these are inadequately distinguished for the child. The question arises: can an unreal phenomenon or an unreal object satisfy the child's needs?

Sliosberg conducted a comparative study and found that satisfaction attained with a substitute for the real object (e.g., scissors made out of paper) is completely possible, and in each particular case, depends on the nature of the situation as a whole. The play situation does not have strict boundaries. It may be called free. Certain forms of substitution are possible only in play situations where objects do not have the fixed meanings they have in real situations. In a serious situation, the child usually rejects play-like substitutions. It is interesting that in play, that is, in the play situation, the child frequently rejects real objects or real actions proposed to him in lieu of the play ones. Experience shows that, even for adults, the acceptance of substitution depends on the situation as a whole. A very important factor for accepting a substitution is the intensity of the need itself. Experience shows that the child more easily accepts plastic scissors if he has already played with real steel scissors. In general, the stronger the need, the lower the value of the displaced act. On the other hand, the urge to perform the displaced act strengthens as the stress associated with the need increases.

These views of Lewin and Sliosberg are interesting in a number of ways. They represent an extraordinary combination of Freudian and anti-Freudian interpretations. They have borrowed two important points from Freud: first, the idea that the shift to an unreal level results from lack of satisfaction of needs at the real level and the associated high level of stress; and second, the concept of substitution of other objects or actions for those associated with the satisfaction of needs.

At the same time their understanding of different levels of reality is very different from the Freudian one. Each of these levels is characterized not by what is represented in it (and what is represented is always the same—reality), but rather by how it is represented, that is, the rigidity of the representation and the flexibility and dynamism of the processes that occur at this level. Various levels of an individual's psychological life, from the real to the highest

form of the unreal, as depicted by Lewin, can be understood as various modes of existence of the real. Indeed, Lewin poses the question of the interaction between various modes of existence of needs and the levels at which they may be satisfied.

Studies conducted by Lewin's colleagues show that the more real the displaced act is, the higher the displacement value of the act. This means that acts at the unreal level have minimal displacement value with respect to satisfying needs. It would be more correct to say that the satisfaction of needs is impossible at the unreal level.[10] However, at the same time, the stronger the need, the greater the urge to perform the displaced act.

Even a simple delay of the satisfaction of some need causes this need to shift to a new less real level of existence. Lewin characterizes the dynamics of acts in this level as less rigid, more flexible, and dynamic. However, no matter what the dynamics are, an act performed at the unreal level cannot lead to the satisfaction of needs.

A question naturally arises: what happens to the need as a result of a shift to unreal levels and acts on these levels? Lewin does not answer this question. We can answer it only hypothetically. The appearance and disappearance of needs is possible only through their actual satisfaction or lack of satisfaction, that is, only at the real level, to use Lewin's terms. No need can directly originate at an idealized level nor can one disappear because it has been satisfied through a shift to this level. However, it is completely possible that acts based on needs on an unreal level can also exist on a real one. For example, we can cite anticipation of satisfaction or lack of satisfaction, postponement, consideration of different means or modes of satisfaction, and so forth. Dreams and daydreams are a form of internal psychological activity based on needs. Internal acts based on needs do not all have identical effects with respect to content and levels of stress. This internal psychological activity refines and shapes the content of the needs, exacerbates or ameliorates their intensity. But only real life can have a decisive role in maintaining or eliminating them.

In our opinion, Lewin and Sliosberg have captured one of the most important features of children's play. They note that, on the one hand, play is a special level of reality, and, on the other hand, that actions undertaken in play are similar to those undertaken on the "unreal levels" with respect to their dynamics. This duality—truly one of the typical features of play, in which, transforming himself, the child transforms all the objects he plays with and manipulates them on the basis of the meaning that he himself has assigned to them.

What is important is the assertion that play is nevertheless an aspect of reality. And this is indeed true. Play is not unreality. For this reason, as we

have shown in our experimental research, play has a level of rigidity characteristic of reality. The child in play manipulates objects relating to real life. At the same time, substitution of objects and actions are very widespread in play. What area of reality remains real in play? Sliosberg and Lewin fail to answer this question. After all, it is completely possible that by shifting to an ideal level with respect to certain elements of reality one enables a deeper understanding of other elements and other areas of reality. As we know, it is frequently the case that an escape from reality is at the same time a more profound understanding of it. These questions remain unresolved.

The dynamics of displacement, which is extensive in play, pose the question of the possibility of satisfying needs through play. Is it true that play satisfies some needs, and if it does, which ones?

We can answer this question only hypothetically. Some needs may be satisfied in play to the extent to which the actions are real and not imagined in nature. Thus, if a child plays a game that involves real relationships with his playmates, then these real relationships can satisfy certain needs, for example, the need to interact with other children. However, where the child is operating on a purely imaginary level, needs may not be satisfied.

Let us assume that Freud was right when he said that all children's play is under the influence of the desire dominant at their age, that of growing up and acting the way adults do. Can play satisfy this desire? Of course not. The child performs these play actions on an imaginary level. He takes the role of an adult and manipulates objects that are substitutes for real objects; the actions he takes are representational rather than real in nature. Thus, operating at this level, the child cannot satisfy his desires. In this case, what happens to the desires (needs) during play? We may hypothesize that during play they are only formulated and they are formulated as needs.

When he begins to play, as we have tried to show in our experimental work, the child still does not even know what it means to be an adult. He takes advantage of opportunities to call himself an adult, to replace the actual objects that adults use with substitute objects (toys), and acts in this world, which is not yet completely divorced from the real (seen and object-based) world "like a grown-up." This activity, which is so changeable in its themes (mama, doctor, fireman, driver, policeman, etc.) always reproduces, with varying breadth and depth, various aspects of the activity of adults with objects, their relationships, and the meaning and motives of their activity. What is occurring is a process of crystallization, the formulation of an initially unclear, dim tendency into a need. What is formulated is the need for serious, socially significant and valued activity.[11] And this means that the need to be like an adult and to live like adults do has developed. The child cannot satisfy this need through

play. The occurrence and formulation of this need leads, on the contrary, to the phasing out of role playing. The new social need formulated through play is realized and satisfied differently under different historical conditions, either in real work performed jointly with adults or in education.

Thus, if we look at play from the standpoint of the child's motivations, then it is neither a means of fulfilling repressed desires nor a form of obsessive repetition of conditions under which the repression occurred, nor is it a way to fulfill the remains of children's primordial desires. Play is not a special encapsulated and closed special world of the child that stands in contrast to the world of adults. It is one of the main means by which the higher forms of specifically human needs evolve. Play is directed at the future and not at the past.

Lewin and his colleagues were primarily interested in play as a model they could use to study certain issues of motivational dynamics. For this reason, he did not attempt to elucidate the psychological nature of play or define its significance for psychological development.

In Piaget's work, the problem of the psychology of children's play is considered from a completely different perspective. These problems are an organic part of his theory of intellectual development. Before the major work in which Piaget presented his understanding of play and its significance to intellectual development (Piaget, 1945), he had already conducted, first, the now classic studies of the earliest stages of intellectual development (birth and the development of sensorimotor intelligence), and second, research on the characteristics of operational thinking, in which concepts are already present.

In the introduction to his book devoted to the formation of symbolic thinking in children Piaget (1945), notes that what was important for him was to establish a bridge between sensorimotor activity and operational forms of thinking. This task involved tracing the very beginning of the development of mental representation. Piaget solved this problem on the basis of an analysis of development, on the one hand, of imitation, which when it involves delayed imitation of a model presupposes the presence of a representation of the model, and, on the other hand, of the symbolic function, which is most strikingly represented in children's symbolic play and which presupposes differentiation of the "signifier" and the "signified," that is, the symbol of the thing or action.

It is precisely with regard to the latter task that Piaget devotes the greatest attention to so-called symbolic play, its nature and significance in intellectual development.

We have already touched upon Piaget's views of play that he developed in his early works. In these, the problem of play is treated in relation to the problem of egocentrism. Piaget considered play to be one of the most striking

manifestations of this characteristic of children's thinking, lying between the autistic thinking of the earliest period and the logical thinking that develops from confrontations with reality and the adult thinking of the adults around the child. We have already given our views on the theory of two worlds.

Piaget's work (1945) on the formation of symbols refines, continues, and deepens his earlier views on play. Like research on the birth of the intellect in sensorimotor intelligence and the description of its developmental stages, this research is based on facts obtained through observations of child development. This book is filled with numerous extremely interesting observations. Above all, we must be grateful to Piaget for rehabilitating this method and demonstrating that psychologists' observations on the course of development, especially, in early childhood, may provide the researcher with facts that could not be obtained in any other way.

It is true that the nature of Piaget's observations in the form that they are cited give rise to some doubts. These stem in particular from the almost complete absence of facts regarding the system of interactions between children and the adults who are rearing them. Only Piaget (as the observer-experimenter) and the child are present in the examples. We have no idea what occurs between the observation sessions. This naturally limits the potential for correct interpretation of the facts obtained. At the same time, both imitation and the initial use of one object in place of another, that is, the occurrence of the symbol, are born out of the joint activity of a child and adults: imitation as part of the interaction between a child and an adult, and the use of one object to "signify" another as part of joint activity to master manipulations of objects.

Piaget specially emphasizes that his own children, whom he observed, were protected from the influence of adults (suggestions of what to play, etc.) and from the pedagogical "manias" of nannies, and, for this reason, manifested, although slower, more correct in Piaget's opinion, progress in development of imitation than children who are subjected to constant attention on the part of those around them.

How he succeeded in creating this environment is impossible to imagine. Is it possible to deprive small children of care on the part of adults and of interactions between adult and child? We think that it is not. Even the examples Piaget cites show that such interaction did indeed take place. Here is just one of these:

> Jacqueline invents a new sound, thrusting her tongue between her lips, and pronouncing something like "pfs." When her mother repeats this sound, Jacqueline, delighted, repeats it herself with a smile. A long period of mutual imitation follows: (1) Jacqueline pronounces "pfs"; (2) her mother imitates her and Jacqueline looks at her without moving her lips; (3) as soon as her

> mother stops, Jacqueline begins again, and so forth. Then, after a long quiet pause, I myself say "pfs." Jacqueline laughs and immediately imitates me. The same reaction on the next day, starting in the morning (before the noise is spontaneously produced) and throughout the day. (1945, observation 9)

We have here a striking example of interaction between adults and child and the perfectly obvious reinforcement by adults of a certain type of interaction. There are many such examples in this research, and they clearly show that isolating the child's development from adults and from interaction and joint activity with them is not possible. It is something else, again, how we choose to treat this. One can, like Piaget, ignore the system of relationships between the adult and the child and consider that they have no significance in development. Such exclusion or attempts at exclusion of adult influence presupposes a particular understanding of development. Wallon correctly called this understanding "Robinson Crusoism," the idea of psychological development as a spontaneously unfolding process that occurs in the course of elemental direct confrontation of the child with the physical world around him.

But one can conceptualize the process of psychological development in another way, as occurring in the form of developing relationships—communication, interaction, and cooperative activity between the child and adults, and the study of the developmental process—as one that must give due consideration to the nature of this interaction, in the ideal case, as the conscious construction of the child's system of relationships with adults, and, through this, of his interaction with the physical world.

During his study of imitation, Piaget established a series of stages in the development of this type of behavior. According to Piaget, the main route to the development of imitation involves the gradual isolation of this form of behavior as an accommodation that tends to modify the child's existing schema to accord with a model. Here, Piaget clearly distinguishes between imitative accommodation and the accommodation characteristic of intelligent behavior, in which schemata are associated with a material object in the process of using it in various ways. It is precisely because of this distinction in the study of the genesis of imitation that acts involving objects were not considered, insofar as the mastery of means of manipulating objects was considered to be based on models of such actions shown to children by adults.

The actions that were used to establish the stages of development were imitations of speech sounds and various movements of the hands, fingers, or face, or hand movements coordinated with various other parts of the body. These are more gestures than actions with objects. The distinction between the process of the child's mastery of actions with objects and the mastery of speech sounds and gestures not requiring objects has both advantages and

disadvantages from the standpoint of research. The advantage is that the imitation of modeled gestures or "pure movements" is not clouded by the child's spontaneous direct empirical attempts at actions with objects or orienting motions to their properties. The disadvantage is that there is no possibility here of capturing the mechanism of orientation to the model because it is purely sensory (visual-motor or acoustic-articulatory). As a result, the genesis of imitation is described in its external aspects rather than explained. It remains completely unclear what the child does with the model of "pure movements" when he imitates them, and how the shift from stage to stage occurs. This is especially true of the shift to the last stages of imitation, where the child, on the one hand, succeeds immediately in imitating new models, and, on the other hand, moves on to delayed imitation, that is, to imitation based on mental representation.

We can only regret that Piaget does not consider the possible influences of the mastery of imitation on the development of the child's manipulation of objects associated with fixed modes of use and learned from adults. At the same time it must be acknowledged that the analysis of imitation as pure accommodation is possible only because "pure movements" were selected as the models because in such cases the occurrence of assimilation is not possible.

In his discussion of the properties of imitation at the sixth and last stage of development, Piaget cites a number of extremely interesting observations that go beyond the bounds of imitation per se. We will cite only one example.

> At age one year, six months, twenty-three days, Jacqueline looks at an illustrated newspaper and fixes her attention on a photograph (very reduced in size) of a small boy who has opened his mouth very wide (an expression of surprise something on the order of "O?!"). Then she tries to reproduce this expression, and succeeds to a surprising extent. This observation is interesting because the situation had no imitative context. Jacqueline saw only an image. What happened seemed to imply that in order to understand what she was looking at, Jacqueline had to imitate it with her body. (1945, observation 53)

This observation shows that the child uses her body for a sort of modeling of the position, movement, and properties of certain objects. A.V. Zaporozhets has also noted the existence of this type of modeling as a means of cognition through a unique form of imitation.

The study of imitation led Piaget to the idea that the newly forming mental image is an interiorization of imitation. The idea that images or representations are born out of actions is in agreement with Soviet researchers. However, imitation, which, according to Piaget, is pure accommodation to a model of

"pure movement," can underlie only the image-representation of this movement but nothing more. The image-representation of an object arises on another basis and precedes the interiorization of imitation.

Thus, according to Piaget, imitation is pure accommodation to a visual or acoustic model that forms from undifferentiated sensorimotor movements.

The whole second section of Piaget's book on the formation of the symbol is devoted to the problem of play. In his introduction to this section, Piaget defines play, which is, according to him, first and foremost, simple assimilation, functional or reproductive. Piaget further refines this idea as follows: if the intellect brings about equilibrium between assimilation and accommodation, and imitation is a continuation of accommodation, then play must be, in essence, assimilation or assimilation dominating accommodation. All further content of this part of the book is directed to proving this idea.

The difficulties in understanding this concept of play, and indeed the whole developmental theory Piaget proposes, is associated with the extreme vagueness of the processes that he calls "assimilation." In his book, *The Psychology of the Intellect* [Psikhologiia intellekta], which was published after the book on the formation of symbols in children and which represents the culmination of the work performed by Piaget and his colleagues before 1946, Piaget writes:

> The actions performed by an individual on the objects that surround him may be called assimilation (using this term in the broadest possible sense) in that these actions depend on preceding behavior directed at these or other analogous objects. Indeed, any connection between a living thing and his environment has the characteristic feature that this living thing, rather than passively succumbing to his environment, actively transforms it himself, imposing his own structure on it. Physiologically, this means that the individual consumes substances in the environment, which are then assimilated by the structures of the body. What occurs psychologically is essentially the same thing; only in this case, instead of affecting substance, the changes that occur are completely functional in nature, caused by the motor activity, perception, and interaction of real or potential actions (conceptual operations, etc.). Thus, psychological assimilation is the inclusion in one's behavioral schemata of objects that themselves are nothing more than an outline of actions with the potential for being actively reproduced. (1969, p. 66)[12]

In the introduction to part two of this book, in which, as we have said, a preliminary definition of play is provided, Piaget cites factual material. This material is meant to show how, in the course of differentiation of the initially merged processes of assimilation and accommodation, actions arise in which assimilation begins to dominate. This is the first appearance of play. Before this differentiation, despite the obvious dominance of assimilation characteristic of

the earliest period of sensorimotor development, there is still no play. Thus, Piaget excludes from the category of play so-called functional play with the child's own body occurring during the first months of life.

Having considered all the criteria for play advanced by various theorists (the inherence of the goal in the activity itself, the opposition to work, the production of pleasure, the relative inadequacy of the organization of actions, liberation from conflicts, and super-motivation), Piaget finds that they are all based on the dominance of assimilation over accommodation and that all these phenomena are only a manifestation of such dominance of assimilation. It is interesting to note that Piaget considers freedom from conflict to be one of his indisputable and generally accurate criteria for play. Such conflicts result from the collision of individual freedom and submission and in real life may be resolved only through submission, rebellion, or collaboration. In play, the ego takes revenge either by eliminating problems or by the fact that the resolution has become acceptable. This is the result of the same assimilation through which the ego subordinates the entire world to itself and thus frees itself from conflicts.

After having critically considered some of the theories of play (Groos's theory, the theory of recapitulation, Buytendijk's theory), Piaget gives his own interpretation of play, which is based on the structure of children's thinking.

Piaget isolates three basic structures of play, which form a single series: exercise play, symbolic play, and rule-governed play. All these are similar in that they are forms of behavior in which assimilation dominates. They differ because at each developmental level reality is assimilated using different schemata. Piaget states directly that exercise, symbol, and rule are the three sequential stages that characterize the large classes of play from the standpoint of their mental structures. Whatever the structure of the child's thinking at a certain stage of development is also the structure of his play, in that play is nothing more than the assimilation of reality to the current structure of thinking. Piaget summarizes all his arguments on this point with regard to the symbolic form of play (which is of most interest to us) in the following formula: symbolic play is egocentric thinking in its pure form. According to him, play has at its basic function the protection of the child's ego from forced accommodations to reality. The symbol, as the personal, individual, affective language of the child, is the main means of such egocentric assimilation.

In a work providing general materials on child psychology, Piaget and B. Inhelder (1966) summarize their views on symbolic play, stating that symbolic play marks the highest point of development of children's play. It has an essential function in the child's life. Forced continually to adapt to the social world of adults, the interests and rules of which are external to him, and to the

physical world that he still understands badly, the child cannot satisfy the affective or even intellectual needs of his ego by means of the type of adaptation that is more or less complete in adults but remains more incomplete for the child the younger he is.

Thus, for the sake of his affective and intellectual equilibrium, in order that he may have some area of action where instead of adapting to reality, on the contrary, he may assimilate it to his ego freely and without asking permission, he needs play. Play transforms reality through more or less pure assimilation in accordance with the needs of his ego, imitation is more or less pure accommodation to external models, and the intellect is an equilibrium between assimilation and accommodation.

An essential instrument of social adaptation is language, which is not invented by the child but is transmitted to him in a complete form that is mandatory and social in nature. This language is not capable of expressing the needs or life experience of the child's ego. For this reason, according to Piaget and Inhelder, the child needs a special language that can serve as the means of his own individual expression, that is, a system of signifiers that he himself has constructed and can use in accordance with his desires. This language is a system of symbols characteristic of symbolic play. Symbolic play is not only assimilation of reality to the ego, as is play in general, but it is also assimilation strengthened by a language constructed by the child himself and transformed at the whim of his needs.

Evaluating Buytendijk's theory positively, Piaget and Inhelder consider it to be much more profound than Groos's theory. At the same time, they believe that the characteristics of the "dynamics of childhood" that Buytendijk considers the critical factor in play, are insufficient to explain the specific characteristics of play. It is for this reason that it proved to be necessary to use the concept of assimilation to the ego. Inhelder and Piaget emphasize several times that in symbolic play assimilation occurs as a result of a unique use of the semiotic function, involving arbitrary construction of symbols to express everything in the child's life experience that cannot be expressed and assimilated through the language system.

This symbolism is "centered" on the ego and involves more than mere formulation and expression of various conscious interests of the individual. Piaget emphasizes that symbolic play frequently is based on underlying unconscious conflicts: sexual interests, defenses against anxiety, phobias, aggression, or identification with the aggressor, escape from danger, risk or competition, and so on. In these cases, the symbolism of play is close to the symbolism of dreams. It is on this basis that methods of child psychoanalysis using children's play were developed.

Piaget's ideas about play as the expression of unconscious conflicts and the similarity of play symbolism and dream symbolism show how close his understanding is to that of the psychoanalysts.

Analysis of the evolution of Piaget's views leads us to the conclusion that his first ideas about play as a manifestation of purely egocentric thinking did not change, but simply became deeper after his analysis of symbolic play. Play in Piaget's last works is presented not simply as egocentric assimilation, but as the sort of egocentric assimilation in which a special symbolic language is used making it possible to realize this assimilation more fully.

When we read Piaget's book on the formation of the symbol in children and analyze the factual material it contains, we are struck by the fact that the interpretation of symbolic play as the dominance of assimilation does violence to the facts and often contradicts them, and is thus more a subjective interpretation than a proof.

Piaget's theory contains internal contradictions. We will point out only a few of these. Thus, as J. Flavell writes, from the point of view of Piaget himself

> assimilation is, by its very nature, a conservative process in the sense that its major function is to change the unknown into the known, to reduce the new to the old. A new assimilating system must always be only a variant of one that has already been acquired and this supports both the gradual nature and the continuity of intellectual development. (1967, p. 75)

However, play is not a conservative force, but, on the contrary, an activity achieving a true revolution in the child's relationship to the world, including the transition from "centered" thinking to "decentered" thinking. It plays a progressive role in the development of the child's whole personality, including the shift of his thinking to a new higher stage. Symbolic play is thus not egocentric thinking in its pure form, as Piaget thought, but, on the contrary, a victory over such thinking. In play the not-understood becomes the partially understood through special actions orienting the child to what he does not understand. Play is more an expression of new but still weak unreinforced thoughts requiring support by actions with things, than it is a manifestation of the old egocentric thinking that has outlived its usefulness and is no longer able to cope with new tasks. Indeed, in play, the child reexperiences new phenomena that have struck him and his involvement in this experience has been noted as an important aspect of play by almost everyone who has studied it.. But this is a special form of experience involving externalization, materialization, and active re-creation. In play, the child manipulates his experiences and externalizes them, materially recreating the conditions under which they occur and translating them into a new form, a gnostic form, so to speak.

Piaget gives a great many examples to show this convincingly and graphically. Thus, he often speaks of his daughter's symbolization of bells and of a dead duck. The little girl, after asking various questions regarding the mechanism of the bells she had heard on an old wooden bell tower during a religious holiday, stands motionless near her father's desk and makes a deafening noise. "You are disturbing me, can't you see I am working." "Don't talk to me," answers the child, "I am a church." In exactly the same way, after being deeply impressed by the sight of a plucked duck on the kitchen table, the little girl was found in the evening prone on the couch, and was suspected of being ill, because of which she was bombarded with questions, which at first when unanswered, until she said in a muffled voice, "I am a dead duck."

Piaget believes that what occurs in these examples is assimilation to the ego. We do not agree. This is more likely the use of the position and movements of the body to model phenomena that have struck the child, thus facilitating identification of and orientation to their properties—a vertical motionless object that makes a loud sound in one case, and a horizontal, motionless, and noiseless object without any sign of life, in the other.

Thus, we must decide whether play is the rule of assimilation, the subjugation of reality to egocentric thinking, and thus without progenerative significance for psychological development, or whether it is a new, incipient form of thinking, albeit not yet solidified, and requiring various "crutches," that is, material supports for its functioning, and thus highly important for the formation of these new forms of thinking. (In this case, we are considering the meaning of play in the narrow sense that Piaget uses.)

Piaget's understanding of the symbol and how it is represented in the child's play also gives rise to doubts. More than once Piaget emphasizes the difference between the sign and the symbol, and he is correct to do so. He considers the play symbol the individual language of the child and strongly emphasizes its personal significance. At the same time he neglects the fundamental difference between the play symbol and all other symbolic representations. Because the symbol is a means for projecting "symbolic schemata" on other objects, then, according to Piaget, the way lies open in play for assimilating anything to anything else, so that any object can serve as the fictional substitute for any thing. In actuality this is not precisely true.

In his work "The Prehistory of Written Speech" [Predystoriia pis′mennoi rechi], Vygotsky wrote:

> As we know, in play it is easy for the child to have one object stand for others, to substitute them, and make them into signs. It is also known that, here, the similarity between the toy and the object it signifies is not important; the most important thing is their functional use, the possibility of using

> them to perform a representational gesture. Only here, in our opinion, is the key to the explanation of the entire symbolic function of children's play: a wad of rags or a stick of wood can become a baby in play, because they permit the gestures that depict the carrying of the baby in one's arms or feeding it. The movements of the child himself, his own gesture is what gives the sign the function corresponding to the object, that has meaning to him. (1935, pp. 77–78)

It is thus not possible to agree with Piaget in his likening of the symbolism of play and the symbolism of dreams. These two have two completely different functions and two different dynamics.

It is interesting that Piaget analyzes the process through which the symbol arises in detail but stops at the threshold of the flourishing of symbolic play, the point where it turns into the developed form of role play. This is no accident. Piaget believes that, when play advances to this stage, symbolism loses its purely assimilative function. He even says that the "pure" individualistic symbolism decreases when this occurs because it begins to contain a mixture of collective associations and social relations. It seems to us that the analysis of the developed form of play makes it possible to understand the function of symbols and the essence of play as a whole as a special type of activity engaged in by the child.

Piaget's is one of the most complete conceptions of children's play, although only within the limited frame of intellectual development. It deserves a significantly more detailed analysis than we have provided here, but this would require an entire book. It seems to us that such an analysis would also be important because we find that the internal contradictions of Piaget's entire system of ideas about the intellect and its development are particularly clear in his concept of play. Piaget's unquestioned contribution lies in the fact that he posed the problem of play in connection with the shift from sensorimotor intellect to representational thinking, and the correct statement of a problem in science is sometimes more important than its solution. In any event, after he published his work, it was no longer possible to consider the problem of intellectual development without considering the role of play in this development.

It seems to us that Piaget considers the role of play in the development of the child's thinking too narrowly and that this significance is really deeper.

We cannot agree with the explanation of play as purely egocentric activity, espoused by both Piaget and the psychoanalysts. The criticisms we made in our analysis of the Freudian understanding of play, also apply to a significant extent to Piaget's general view of play as purely egocentric assimilation.

Finally, we should briefly discuss the view development by the French psychologist J. Chateau (1955, 1956). Criticizing ideas of Groos and all the

scientists who consider play to be the expression of numerous and heterogeneous tendencies and needs, Chateau claims that such theories, while they note the specific features of certain types of play, do not reveal the essence of play activity. In Chateau's opinion, he psychoanalysts moved in this same direction, but on still narrower paths, in their attempts to interpret play in order to reveal hidden complexes. The purely practical goals that psychoanalysts followed here led to all play beginning to be considered a symbolic expression of more or less hidden tendencies.

Chateau does not deny that pleasure is involved in play, but postulates that the satisfaction a child receives when he plays is moral satisfaction. This moral satisfaction is associated with the fact that in every play situation there is a definite plan and more or less strict rules. Fulfillment of this plan and compliance with these rules give rise to moral pleasure. According to Chateau, this is understandable because play is serious to the child. Play is self-assertion; its result is an attainment, the mastery of a new form of adult behavior. The child has no other means of self-assertion except play. Even in functional games, there are elements of self-assertion, manifested by executing possible versions of the mastered behavior and in extending it to all sorts of new areas.

Functional play, which is characteristic of early childhood also takes place in the preschool period, when elements of striving for some particular achievement and for self-assertion are clearer. Appearing during the first year of life and developing rapidly in the preschool period, imitative play includes identification with the model, and, because of this, may provide practice in knowing and understanding others, and thus act as a weapon against egocentrism. This type of play furthers the child's understanding of the differences between his own real-life position and that of adults. Imitative play ultimately develops into play in which imitation itself becomes the goal. The evolution of imitative play, according to Chateau, shows that such play, like other types, is only a pretext for demonstrating certain traits or attainments.

Like other types of play, imitative play mainly serves to allow general self-assertion of the individual. The urge for self-assertion is seen most strongly in play (games) with rules. In the majority of cases these games are social and thus self-assertion becomes social self-assertion in a group or by means of a group.

Starting with this idea, Chateau naturally comes to the conclusion that all play is a test of will, thus a school for voluntary behavior, and, consequently, a school of individuality.

First and foremost, it must be noted that, although Chateau uses the term "self-assertion," he understands it not as compensation for inferiority that has occurred as a result of pressure from adults, and not as a tendency for

domination, which is typical of Adlerian concepts. To Chateau self-assertion is an expression of a striving toward improving and overcoming difficulties, toward more and more new attainments. He considers this striving for self-improvement a typical human characteristic that distinguishes the human child from young animals.

Chateau focuses on the analysis of games with rules, in which elements of voluntary behavior, overcoming difficulties, and social affirmation through compliance with rules can be seen very clearly. However, in studying this type of play, Chateau has extended the understanding of it to all types of play, in particular to role playing, or, as he calls it, imitative play. It is true that there is some basis for this because in every kind of play involving roles, there undoubtedly are implicit in the roles hidden rules with which the child playing the part complies. Imitative games contain elements of volitional behavior, including overcoming immediate desires and taking, as Vygotsky put it, "the line of most resistance." However, the essence of role play lies elsewhere.

The self-assertion and self-improvement that Chateau believes to be the main content of all play is also not characteristic of children from birth. To assume that the tendency to self-assertion is innate in the child from the beginning would, even from Chateau's standpoint, be incorrect because this would make his views similar to those who, like Groos, saw in play only a manifestation of certain preexisting tendencies. Play may become a form of self-assertion and self-improvement when these tendencies become the main content of the individual's life. Psychological research shows that the tendency to self-improvement appears relatively late in the course of development—in any event, not during the preschool years. Thus, this tendency cannot underlie play in younger children. Of course, even in the process of functional play and imitative play various abilities develop and improve. However, the child is not playing because he has an inherent desire for self-improvement, but undergoes self-improvement because he plays.

The voluntaristic [i.e., concerned with the will] views developed by Chateau, although they are a good antidote to the excessive intellectualization of play characteristic of psychologists such as Dewey, are similarly one-sided and do not explain either the origin nor the nature of play, particularly role play.

Chateau's works contain many valuable observations and thoughts. It seems to us an important thought that imitative play fosters the clarification of differences between the child's and the adults' position in real life.

In our critical overview, we have attempted to trace the development of the theory of play from the late nineteenth century to the present time. Each of the scholars whose views we have touched upon—Groos and Buytendijk, Freud and Bühler, Koffka and Lewin, Piaget and Chateau—has made a contribution

to solving the problem of the psychology of play. During our presentation of each of their views, we have attempted to point out that contribution. At the same time we have investigated the dead-ends to which one or another hypothesis leads. The elucidation of these dead-ends is very important in science, sometimes no less important than the positive contributions because it closes off paths that will not lead to the truth.

First of all it should be noted that the general approach to elucidating the nature of play that was used in the analysis of animal play was almost mechanically extended to attempts to understand the nature of children's play. This approach failed to justify itself.

The history of work on the psychology of play also shows that the psychoanalytic theories, that is, theories based on the idea that children's play is a manifestation of innate instincts or deep-seated drives, cannot lead to the solution of this problem. The postulation of such tendencies is based on the idea of the identity of the processes of psychological development in young animals and in human children.

Nor can the naturalistic theories lead to success because, although they deny the innate basis of children's play, they represent the process of its psychological development as a kind of adaptation to the environment, with human society as the environment.

All of the scholars we have listed consider the child as isolated from the society in which he lives and of which he is part. The child and adults, the development of their relationships, the changes that occur in the child's position in society have completely dropped out of the researchers' fields of view. Moreover, these relationships are believed to have no direct connection to psychological development. Even when they consider imitation, which is certainly an aspect of the relationship between the child and adults, it is presented as an imitation of the physical model and not included in the context of interaction between an adult and a child, that is, it is presented purely naturalistically. For some reason, they completely forget that the child lives in a human society and in an environment consisting of manmade objects, each of which is associated with a socially developed means of use that is modeled by adult humans. They also fail to see that the way objects are used is not written on them, nor is the human meaning of actions physically apparent. Finally, they do not notice that the appropriate manipulation of an object can be mastered by a child only through a model, and the meaning of the action can be learned only if the action is included in a system of interpersonal relations.

The route that is directly opposite to the one that leads to this dead-end for the naturalistic understanding of play is the study of play as a form of life and a special activity of children and as a means of orientation to the world of

human actions, human relations, and the goals and motives of human activity. This route has not yet been tested. This is the route we have chosen.

## The problem of the psychology of play in Soviet psychology

The most significant statements about play in prerevolutionary Russian psychology were made by K.D. Ushinskii and A.I. Sikorskii. In conformance with the tradition of his time, Ushinskii considered play in its relation to the working of the imagination, although he considered to be mistaken the idea that children's imaginations were strong, rich, and powerful. He wrote:

> Many people have a concept of a child's imagination and believe that, as the child gets older, the imagination weakens, dulls, and loses its vitality, richness, and variety. But this is a major error that contradicts the entire course of development of the child's mind. The child's imagination is poorer, weaker, and more homogeneous than that of the adult and includes nothing poetic because the aesthetic sense develops later than others. However, the fact is that even this weak imagination of the child has power over the child's weak and still not fully structured mind, a power that the developed imagination of an adult cannot have over his developed mind. (1950, p. 434)

It is interesting that, in the middle of the past [twentieth] century, Ushinskii noted the characteristic of children's play that later became the basis for using play as a projective technique. "We would be very familiar with the mind of an adult," he wrote, "if we could look into it freely; but we have to guess at the mind of an adult from his actions and words and we are often wrong. On the other hand, a child, in his play, discloses his whole mental life without dissembling" (1950, p. 438). Ushinskii considered play to be very important to development and noted that:

> the child lives through play and the traces of this life remain more deeply planted in him than the traces of real life, in which he still cannot participate because of the complexity of its phenomena and interests. In real life, the child is no more than a child—a creature that still has no kind of independence—and he is blindly and fecklessly carried along by the flow of life. In play children are already grown, they try their strength and independently control their own existence. (1950, p. 439)

Ushinskii did not advance his own theory of play, but only remarked on the great significance of play in the child's development and rearing.

Sikorskii considered play mainly from the standpoint of mental development.

> With the exception of sleep and time spent in the throes of unpleasant emotions, the healthy child typically spends all the rest of his time on mental

> work, which consists of observation, play, and amusements. . . . The main instrument or tool of mental development in early childhood is tireless mental activity, which typically goes by the name of play and amusements. (1884, pp. 87, 97)

Having noted that children's play was not the object of his scientific study, Sikorskii writes:

> Gaining an understanding of the play and amusements of children is undoubtedly one of the subjects that merits the full attention of psychologists. Indeed, daily experience shows that play is the main part of children's life and that children engage in it with remarkable tirelessness. It is also easy to become convinced that the complexity and variety of forms of play and the interest that children show in them grows and increases as the child develops mentally. In parallel with this, the structure of play begins to exhibit the child's fantasy and creativity more and more. In general, it may be said that play satisfies some insatiable mental need that drives the child to constant activity. (1884, p. 99)

While Ushinskii emphasized the significance of play for general psychological development—what today we would call the development of personality and moral development—Sikorskii noted the role of play in mental development and mental education.

The appearance of Groos's works influenced Russian psychologists. During the period directly preceding the October Revolution, this was the leading theory, sometimes alternating with the then-popular theory of recapitulation. Thus, V.P. Vakhterov wrote:

> We come closest to the theory of Groos, who looks at play as a means by which children independently educate themselves, but at the same time we do not agree with him on some points and especially on whether play has the objective of preparing children for the practical work that they will do.
>
> Children, through play, attempt to develop all their organs, reflexes, instincts, neural systems, and, in general, all their abilities in a particular order that appears to recapitulate the history of the race, with some exceptions. (1913, p. 448)

Another Russian educational psychologist, N.D. Vinogradov (1916), basically accepted and admired Groos's theory but made some additions to it with regard to children's play. He believed that Groos did not pay sufficient attention to the purely "human factors" of : (a) imagination; (b) imitation; and (c) emotional aspects.

Our goal is not to present a systematic overview of the developmental history of Soviet psychologists' views on play. All Soviet psychologists who in

one way or another touched on the problems of the psychology of play (M.Ia. Basov, P.P. Blonskii, L.S. Vygotsky, S.L. Rubinshtein, and D.N. Uznadze) worked at virtually the same time. All of them were psychologists first, concentrating on general psychological problems. For the majority of them, the psychology of children's play was a particular issue to which they applied their general theories. Although their views differed a great deal from one another's, with the exception of some of Rubinshtein's remarks regarding the views of Vygotsky, we do not have any records of debates among them. The interest of Soviet psychologists centered on the problem of children's play and they almost completely failed to touch on the play of animals.

In Soviet psychology, the first to pose the problem of the psychology of play from a completely new standpoint was Basov. Describing his understanding of the question in the most general terms, Basov writes:

> The uniqueness of the play process is based on the characteristics of the interaction between the individual and the environment, which form the basis for its occurrence. This position has important theoretical significance because it shifts the center of gravity of the problem from the individual to the objective conditions of his existence. Typically, treatments of this issue are different, reducing the entire problem to one or another relationship existing within the individual himself. Some suggest "excess energy" (theories of Schiller and Spencer), others, on the contrary, lack of energy (theory of play as rest, Lazarus); others have attended to the biological desirability of play as a means for exercising organs and functions and preparing them for future nonplay activity (Groos's theory); finally, other groups focus on the emotional factor, reducing everything to the pleasure that is generated by the activity (Bühler).
>
> Understanding play from the inside, from the standpoint of the individual, can come about only by means of its structural analysis as a general type of behavior, considering its whole set of traits and their interrelationships. However, this view from within is insufficient in itself because the structural characteristics of a type of behavior are determined by the nature of the individual's interactions with the environment, and these latter, in turn, depend on the entire set of conditions of this individual's life. (1931, p. 650)

Analyzing the objective living conditions characteristic of childhood and leading to play, with its special structural characteristics, Basov indicates that the most characteristic aspect is the child's lack of any definite obligation, insofar as his existence is maintained by his parents and he still has no social obligations.

This freedom to interact with the environment, according to Basov, leads to a special form of behavior, the major driving force and characteristic of which is *processuality*.

Referring to the fact that play has no definite social content, Basov emphasizes, "Whether or not play has any content or goal, the main factor in the development of this activity is not the content and not the goal, but the process; content and goal are only the external form of the play process not its internal essence" (1931, p. 344).

Basov's colleagues, E.O. Zeiliger and M.A. Levina, conducted a structural analysis of the play of preschool children. This analysis showed that throughout the preschool period there are significant shifts both in the nature of stimulation of play processes and in the nature of the organization or structural forms of the play process. These data are interesting. According to them, first of all, the relative significance of internal stimuli decreases and the significance of external social stimulation increases, and second, the structure of the play process develops from a simple temporal chain of acts through an associatively determined structure to an apperceptively determined one, attesting to the maturation of the internal organization of the play process.

These data, to some extent, contradict the view of play as a purely processual activity. If this were the case, then play would have an associatively determined structure. However, even the play of very small children contains elements of a higher structure. Of course, one cannot agree with the description of play as a purely processual activity. This understanding returns Basov to the view that he himself criticizes, the views of Bühler and his concept of play as the source of functional pleasure.

We cannot today agree with the structural analysis provided by Basov and his colleagues, which carries the imprint of his not yet completely abandoned voluntaristic views of the analysis of behavior. However this need not close off to us the positive contributions this researcher made to the understanding of play and child development in general.

First of all, Basov is responsible for introducing to psychology the concept of general types of activity in which the person appears as an active agent with regard to his environment. Second, we should cite his rejection of a purely naturalistic theory that sees the sources of play as all lying within the individual rather than in the system of the child's interactions with the reality around him. This understanding implicitly contains the idea that play is the product of the special position the child occupies in society and his unique relationship to the reality around him.

Basov, in many respects, was still under the influence of behavioral psychology and identified the concepts of activity and activeness; he analyzed behavior according to the stimulus–response schema, and did not see the material essence of human activity. But at the same time we can find in him, the precursors of a theory of activity types, albeit still insufficiently defined.

The prominent Soviet psychologist, P.P. Blonskii, has a particular view of play.

In his critical analysis of various play theories (of Schiller, Spencer, Groos, Bühler, Dewey, and others), Blonskii stated that in Soviet psychology play cannot be considered exclusively from the physiological, biological, or individual psychological point of view. Overcoming the narrow biologism in the theory of play held in Soviet psychology still did not lead to the development of a fully satisfactory point of view, he noted. He wrote:

> A review of the existing theories of play shows that questions of the nature of play and of why a child plays are still a long way from being answered. The very posing of the question, "What is play?" without special preliminary research studies of individual types of children's play attests to the fact that the question is only in the initial stage of research. A series of detailed special studies is essential. A final resolution of the problem of play can be attained only as a result of such studies.
>
> But still not having a fully satisfactory theory of play, nevertheless, we already clearly understand the significance of play in the life of a preschool child. Play is the basic form of activity of a preschooler. In the process of play he exercises his powers, expands his orientation, masters social experience, and reproduces and creatively combines phenomena from life around him. (1934, pp. 109–10)

In Blonskii's opinion, a satisfactory theory had not yet been developed and could not be, because the term "play" was applied to excessively diverse forms of activity.

Blonskii notes the forms of children's activity that are typically lumped together under the term "play" and analyzes them. They are:

> (1) false play; (2) constructive play; (3 ) imitative play; (4) dramatizations; (5) active motor play; and (6) intellectual play. False play, which should not be called play at all, refers to manipulations of impulsive origin, performed by the infant, mentally retarded, mentally ill individuals, and the like. The explanation of these impulsive manipulations are provided by neurology. On the other hand it is also incorrect to call the child's experimental exploration play. As for constructive play, this is a manifestation of the child's artistic construction skills. Imitative play and dramatizations are manifestations of the child's dramatic skills. Active motor play is nothing more than dramatization in which running has an enormous role. Even intellectual play (chess, checkers, cards) is, in origin, dramatization (armed conflict, etc.). Thus, what is legitimately called play is, in essence, a manifestation of the child's construction or dramatic skills. Given this theory, it is not surprising that play progresses into art.

> It is also easier to resolve the question of the relation between play and work. For constructive play this relationship amounts virtually to identity. The connection between work and dramatization play is more complex but nevertheless definitely exists and is the same as the relationship between work and artistic drama. Thus, the overly general problem of play conceals two very important problems—work and art in the preschool period. (1934, p. 109)

Thus, Blonskii, by reducing what is usually called play to construction and dramatization activities performed by the child, concludes that there is actually no special activity called play.

Blonskii is probably right when he excludes from play manipulations by infants and experimentation as a form of children's exploration of certain objects. It also seems to us that so-called constructive play should be excluded from this category. Manipulations using building materials are vastly closer to modeling and drawing than to imitation and dramatic play. These are productive activities the results of which are a particular product in the form of a drawing, modeled object, or construction. However, Blonskii proposes that the term "play" not be used at all, and that instead we should talk about the child's construction or dramatic activities. But the crux of the matter is unchanged by this change of name. It is true, of course, that play has some relationship to work and to art. The connection is not simple and is not made any clearer if we call play a form of children's art.

Despite his generally rather negative attitude to the possibility of creating a theory of children's play, Blonskii, mentions a series of important features of play and its genesis. Thus, considering play in the early preschool period, he writes:

> Typical play for the young preschooler is imitative and constructive, while active motor (if we do not include simply running) occupies a very modest place in his repertoire. In this regard, the smallest preschooler stands in contrast to the school child, for whom, on the contrary, active motor play is primary, while construction and especially imitative play have receded into the background.
>
> Imitative play of children at first is so simple that it is difficult to distinguish between this and the child's attempts at work. When the child, imitating an adult, taps with a hammer or tries to hammer in a nail, we have, of course, work rather than play. Imitative play is isolated only gradually from similar activities of the very small child. Thus, the imitative play of a small child develops out of his imitations of work activities. Only somewhat later, approximately in the middle of the third year, can we distinguish imitative play from such activities with any degree of confidence. (1934, p. 118)

Of course, the children's actions that Blonskii is talking about are not work

operations. But at Blonskii wrote this, the question of the child's mastery of socially developed modes of using objects had still not been posed. If we were to replace Blonskii's words "imitations of work activities" with a statement that imitative play develops on the basis of the child's mastery of manipulations of objects based on socially developed models as represented by adults, then we would find in it a route for studying the genesis of work. Blonskii was correct when he referred to "imitations of work activities" as being the genesis of play, if these activities are understood correctly.

There are interesting ideas in Blonskii's analysis of the imitative play of small children. He writes:

> In the imitative play of a baby, at the very beginning, although admittedly in a very indistinct form, we can find aspects of dramatization. In these the child himself is playing some role, and others (adults, children, even inanimate objects) are also made to play roles: chairs in a row play the role of a train, and when he puts them together, the child puffs like a steam engine. Such actors in primitive children's dramatizations may even fail to resemble actual people or objects, although the child more readily uses toys representing real-life things and objects (dolls, toy animals, toy dishes, etc.).
>
> The psychology underlying such dramatizations has still not been explained in a satisfactory way. For this reason the explanations offered are very hypothetical in nature. Some psychologists emphasize the role of identification in children's play (Schiller). They consider identification to be a more complex phenomenon than simple imitation, which plays the role of a sort of preliminary stage paving the way to identification. Identification is expressed in a desire to be like another. Identification plays a major role in a number of phenomena, for example, hypnosis, dreams, children's play, drama, and so forth. It leads to role playing. It is not difficult to see that when we call role playing identification, we still do not provide any explanation. The benefit from introducing the concept of identification, however, is that we gain the opportunity to take a broader view of children's playing roles in imitative play, and to generalize this phenomenon in order to seek its psychological explanation in greater depth. However, we must note that, at present, we still have no satisfactory explanation for identification. (1934, p. 118)

Blonskii's positive attitude toward identification as the mechanism that would make possible deeper understanding of the psychological meaning of imitative games is interesting. While generally having a negative attitude toward the Freudian interpretations of children's sexuality, Blonskii borrows from psychoanalysis the mechanism of identification, which, in Freudianism, is associated with deep-seated sexual drives manifested in the so-called Oedipus complex and expressed through identification with the father. This borrowing

of a mechanism with a particular content associated with a specific theory might lead to a Freudian type of interpretation of play.

At the same time, Blonskii is completely correct when he puts forward the psychological mechanism of the child's taking on the role of an adult as one of the central problems. While Blonskii's theory, which identifies play and art, is generally not acceptable, his statement that play is born from "imitation of work operations" performed by the child, which could not occur in any other way than through joint activity with adults or in accordance with a model they offer, is extremely important for understanding the origination of roles and thus of play.

Vygotsky made a significant contribution to the development of a theory of play. His interest in the psychology of play arose, on the one hand, in connection with his studies of the psychology of art, and, on the other, in the course of investigation of various aspects of the development of the higher psychological functions. As is well known, Vygotsky, especially in his early works, associated the development of higher psychological functions with the use of signs. This is the source of his interest in the history of the development of the signification function in the course of individual development, the course of the child's psychological development. In his article, "The Prehistory of Written Speech," to which we referred earlier, Vygotsky touches upon play only in connection with its use of some objects as symbols to signify others. In this connection he proposed that the function of the sign or symbol (Vygotsky sometimes uses these terms as synonyms) is conferred upon the object by the action performed by the child. "The child's own movement, his own gesture is what confers the sign function on the appropriate object, and thus gives it meaning" (1935, p. 78). In this statement we can see the difference between Piaget's understanding of the symbol in play and Vygotsky's. Piaget emphasizes the similarity between the symbol and the signified. This may well be true with regard to various other types of symbols, but not those used in play. In play, the crux of the matter is not so much the function of depiction as it is the opportunity, as Vygotsky writes, to perform a certain action with the substitute object.

In his work on adolescent psychology, Vygotsky provided a very compressed and preliminary sketch of his views on the significance of play, writing:

> If we consider primitive societies, we will see that real occupational training for future work takes place in children's play—training in hunting, tracking animals, and war. The play of the human child is also directed at future activity, but mainly activity of a social nature. The child sees what the adults around him do, imitates them, and transfers this to his play; through play he masters social relationships and serves and apprenticeship to prepare him for future social development. (1931, p. 459)

In connection with his work to develop a system of child psychology, Vygotsky once more turned to play as the leading type of activity of preschool children and developed a hypothesis about the psychological essence of the developed form of role playing. As we wrote in our introduction, this view was presented in a 1933 lecture, but was published for the first time only in 1966.

The main points in this hypothesis are:

1. Play occurs when inclinations arise that cannot be realized immediately, while the urge to have desires gratified immediately, which characterizes preschool children, is still present. The essence of play is that it is the fulfillment of desires, not particular ones, however, but generalized affects. The child may not be conscious of these generalized affects. Their main content is the system of relationships between adults.

2. The central and most characteristic activity in play is the creation of a "make believe" situation in which the child takes on the role of an adult and performs it in a play situation that the child himself creates. The "make believe" situation is characterized by the transfer of meanings from one object to another and by actions that reproduce, in a generalized and abbreviated form, the actual actions of the adult whose role the child has taken. This becomes possible on the basis of the separation of the visual field from the sense field, which occurs during the preschool period.

3. All play involving "make believe" situations is, at the same time, play with rules, and all play with rules is play with "make believe" situations. The rules in a child's play are rules for himself, rules of internal self-limitation and self-definition.

4. In play the child operates with meanings that are dissociated from things but supported by real actions. The main genetic contradiction of play is that the movements occurring in it take place in the sense field but the mode of movement remains the same as in external actions. In play all the internal processes are given in external actions.

5. Play continually creates situations requiring the child to perform actions that are not based on immediate impulses, but rather follow the course of greatest resistance. The specific pleasure derived from play is associated with overcoming immediate impulses, with submission to the rule that is implicit in the role.

6. Play, although not the dominant activity, is the leading type of activity in the preschool period. Play contains all the developmental tendencies: it is the source of development and creates the zone of proximal development; underlying play are changes in needs and changes in general consciousness.

We have identified the above points as the basic ones of Vygotsky, although

his hypothesis is significantly broader. One can become completely familiar with all of Vygotsky's points only from his article and the appended notes. This hypothesis is the highest attainment of Soviet child psychology of its time. However, it was only a hypothesis and much in it was, and remains, insufficiently clear, and perhaps, even arguable. Rubinshtein made some criticisms of Vygotsky's hypothesis, which we will cite in full:

> Vygotsky and his students consider the starting and defining point of play to be the fact that when the child plays he creates a "make believe" situation instead of the real one and acts in it in a particular role, which accords with the transferred meaning he confers on the objects around him.
>
> The transfer of actions to an imaginary situation is indeed characteristic of the development of specific forms of play. However, the creation of a "make believe" situation and the transfer of meanings cannot be taken as the basis for the understanding of play.
>
> The main shortcomings of this treatment of play are as follows. (1) It concentrates on the structure of the play situation without revealing the sources of play. The transfer of meanings, the shift into the "make believe" situation are not the source of play. An attempt to interpret a shift from a real situation to a "make believe" one as the source of play could only be understood as an echo of the psychoanalytic theory of play. (2) Interpretation of the play situation as arising out of "transfer" of meaning, not to mention the attempt to derive play from the need to "play with meanings" is profoundly intellectualized. (3) By transforming the fact that in play the child operates in a "make believe," that is, an imaginary situation (which, although essential for higher forms of play, is a derived characteristic) into the source of play and therefore an obligatory element for all play, this theory narrows the concept of play without justification, arbitrarily excluding the earlier forms of play in which the child, without creating any "make-believe situation" plays out some action, taken directly from the real situation (opening and closing a door, putting a toy to sleep, etc.). By excluding these early forms of play, this theory deprives itself of the possibility of understanding play in its development. (1946, pp. 593–94)

All these critical remarks, although, they seem to us not completely correct, must be considered when we work on the problem of the psychology of children's play.

In his book, *Principles of General Psychology* [Osnovy obshchei psikhologii] (1946), Rubinshtein considers the problem of the psychology of play in the chapter devoted to the analysis of activity. The main points in Rubinshtein's view are associated with the development of the psychology of play as a particular type of activity.

> First and foremost, play, insofar as we are talking about the play of adult humans and children, is a cognitive activity, that is, a set of cognitive actions united by a single motive. . . . Play is activity; this means that play is the expression of a particular relationship between the individual and his environment. (1946, p. 588)

Rubinshtein identifies as the primary characteristics that determine the essence of play, to be feature of its motives.

> The first point defining the essence of play is that the motives for play do not involve the utilitarian effect or material result that typically result from a practical, nonplay act, nor do they lie in the activity itself, regardless of its result, but rather inhere in the heterogeneous experiences of an aspect of reality significant to the child or to the player in general. . . .
>
> The motives for play activity reflect a more indirect relation of the individual to the environment; the significance of one or another of its aspects are experienced in play on the basis of a more direct relationship to their own internal content. In play the discrepancy between the motive and the direct goal of an action, which can occur in practical human activity, is eliminated. Play is devoid of the mercenary casuistry of mediation, because of which an action may be motivated by some sort of secondary result not directly related to the object toward which it was directed. In play, only actions whose immediate goals are significant to the individual by virtue of their own internal content are executed. This is the main characteristic of play and this is its main attraction and charm to which only the charms of higher forms of creativity can be compared. (1946, p. 590)

According to Rubinshtein, the characteristics of play actions are tied to the characteristics of play motives.

> In play, actions are more like *expressive* and *semantic* acts than operational devices. They must express the meaning of the action inherent in the intention, the motive, and its relationship to the goal, rather than achieving the goal in the form of a material result. This is the function, the purpose of play actions. . . .
>
> This is the source of the next, externally more striking trait of play, which in actuality is derived from the listed internal characteristics of play activity. This trait involves the possibility, which for the child is a necessity, of substituting for objects that are part of nonplay practical actions others that are used to perform play actions, within the limits defined by the meaning of the play. In the process of the play action these objects acquire a significance determined by their function in the play action. As a result, these features of play make it possible to shift into an imaginary situation. (1946, p. 591)

Posing the question of whether the shift to the imaginary situation is an escape from reality, Rubinshtein answers:

> In play there is indeed a flight from reality, but there is also a penetration of reality. For this reason there is no escape, no running away from reality to a putative special, make-believe, fictitious, unreal world. The lifeblood of play, everything that it embodies in action, it takes from reality. Play goes beyond the bounds of one situation and abstracts from particular aspects of reality in order to reveal others still more deeply. (1946, p. 592)

Rubinshtein leaves open the question of the leading role of play in the psychological development of the preschool child.

> Nevertheless, the issue, which seems to have been resolved by everyone else, of whether play is the leading form of activity in the preschool period, most be left open. Play undoubtedly is very important for the formation of the major psychological functions and processes of the preschool child. But is the play activity, which undoubtedly is an essential component of the preschooler's way of life, the actual basis of his *way of life* and does it determine ultimately the very core of the child's personality as a social being? Despite the generally accepted point of view, we are prone, without, of course, denying the significance of play, to look for the components of his way of life that determine the formation of his personality as a social being in the nonplay daily activity of the child directed at mastery of the rules of behavior and inclusion in the life of the group. Just as, during the period preceding this one, the main aspect of the child's development was the mastery of manipulations of objects and of speech, so in the preschool period the main aspect is the development of the act regulated by social norms. (1946, p. 595)

These in brief are Rubinshtein's views of play. Of course, it is correct, as it is in speaking of all forms of activity, to say that to define play it is essential to define its motives. But what are the specific features of the motives for play? We do not find an answer to this question in the works of Rubinshtein. And this is not surprising insofar as he considers the play situation mainly from the standpoint of play actions. But after all, the center of the play situation is the role that the child takes on. It is this role that determines the entire set of actions that the child performs in the imaginary situation. And the role is that of an adult, whose activities the child reproduces. Thus, the object of the child's activity in play is the adult—what he does and why he does it and his relationships with other people. From this we can hypothetically define the major motive of play: to act like an adult—not to be an adult, but to act in the way that adults do. But for such motives to appear, the child must have separated

from the adult to the extent that allows the adult to become a model, the measure of all things, the standard.

The most important characteristic of the works of Soviet psychologists in the area of the psychology of children's play is, first and foremost, overcoming the naturalistic and psychoanalytic theories of play. Step by step in Soviet psychology we have crystallized an approach to play as a special type of activity performed by the child, one that embodies his relationship to the external world and, most important, to all of social reality, which has its specific content and structures—a special subject and motives and a special system of actions.

The person who came closest, in our estimation, to identifying the psychological nature of play was Vygotsky. Of course, he did not have time to resolve or even pose all the relevant questions. The following chapters of this book are devoted to deepening and further developing his hypotheses [not translated here].

## Notes

1. A general criticism of the theory of hedonism is not part of our task in this book.
2. Freud's theory of play will be discussed below.
3. He is referring to W. Kohler's research on apes.
4. The book by R. Hinde contains an interesting list of the characteristic features of play activities.
5. See, for example, F.V. Bassin, *Problema "bessoznatel´nogo"* [The Problem of the Unconscious] (Moscow, 1968).
6. See L.S. Vygotsky (1956), pp. 56–109.
7. See S. Freud, *Ia i ono* [The Ego and the Id], translated from German (Leningrad, 1924).
8. In my formulation of work on the trends in play theory, I made use of an unpublished mimeographed edition of a relatively complete overview of work on play: U.M. Gallusser, *A First Survey of Research on the Play of Children below the Age of Nine Years* (London, n.d.).
9. Subsequently, after he had learned of Vygotsky's criticisms, Piaget, in his response to these criticisms, acknowledged that the reproach that he uncritically accepted Freud's concepts of the existence of the "pleasure" and "reality" principles was justified.
10. The sole exception to this principle is the possible hallucinatory gratification of drives under the influence of particular narcotics.
11. See L.I. Bozhovich's (1968) book on this subject.
12. Within the limits of this work, we are unable to focus on Piaget's general theory of the psychological development of the child. We have already expressed our view of some points in an article co-authored with P. Ia. Gal´perin [Galperin], "K analizu teorii Zh. Piazhe o razvitii myshleniia" [Toward an Analysis of J. Piaget's Theory of the Development of Thinking], published as an afterword to the translation of the book by

Dzh.Kh. Fleivel [J.H. Flavell], *Geneticheskaia psikhologiia Zhana Piazhe* [The Genetic Psychology of Jean Piaget] (Moscow, 1967).

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