

DEVELOPMENT OF COGNITIVE, CREATIVE AND RELATIONAL SKILLS IN THE CHILD THROUGH THE GAME

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ABSTRACT

One of the first and main activities with which a child develops basic knowledge learning is the game. Through the game, child approaches motor activity and is able to stimulate his cognitive, creative and relational abilities. The purpose of this research work is to analyze the structures of the game activities related to motor activity and movement that allows the child to learn the didactic-educational principles and guarantee his correct psycho-physical development.

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Introduction

In a methodological-didactic perspective, we can divide the three great types of structures that characterize the games of children into three types of structures encompassing exercise, symbol and rule, while the construction games are those that allow for the transition between these three types of games and the adaptive behaviors. Some games do not suppose any particular technique: simple exercises implement a set of different behaviors that have no other end than the pure pleasure of their functioning.

The child performs such actions only for fun and, not for necessity or for learning new behaviors. The simple exercise game, without the intervention of symbols, fictions or rules, is what particularly characterizes animal behavior. In the child, the exercise game is the first to appear and is what characterizes the stages of preverbal development, in opposition to the stage during which the symbolic game begins, so the game activity goes far beyond the reflected patterns and continues in almost all the actions.

Although it is essentially of sensory-motor type, the exercise game can also affect higher functions: for example, asking questions for the pleasure

of questioning, without having any interest in the answer. A second category of games for children is what is called symbolic game⁽¹⁻⁴⁾. The symbol implies the representation of an absent object, since it is a comparison between a given element and an imagined one; a fictitious representation, since this comparison consists of a deforming assimilation. For example, the child who moves a box by imagining a car symbolically represents the latter through the former and is satisfied with a fiction, since the link between the signified and the signifier remains entirely subjective. Because it implies representation, the symbolic game appears only during the second year of a child's development.

However, between the symbol itself and the exercise game there is an intermediate term that is the symbol in acts or movements, without any representation: for example, the ritual of movements performed by a child to fall asleep is first only derived from its context and reproduced in the presence of the pillow (in the form of a game), and then is imitated in the presence of other objects (in the sixth stage), which marks the beginning of the representation. This continuity does not prove that the symbol is already contained in the sense-motor playful assimilation, but it shows instead that when the

symbol is included in the sensory-motor exercise it does not suppress the latter at all, but it simply subordinates it^(1, 4-6). The majority of symbolic games, except for the constructions of pure imagination, implement complex movements and actions. They are combined, being them sensory-motor and symbolic, but are defined as to the extent that the symbolism integrates the other elements to itself. Furthermore, their functions increasingly differ from simple exercise: compensation, fulfillment of desires, suppression of conflicts (and so on) are continually added to the mere pleasure of dominating reality. Finally, during the development phase, a third great category (that of the rules) is superimposed on the symbolic games.

Contrary to the symbol, the rule necessarily presupposes social or inter-individual relationships. A simple sense-motor ritual, such as walking along a balcony touching all the bars with one's own finger, is not a rule. The rule is an order imposed by the group, in such a way that its violation is perceived as a fault. Like the symbolic game, which frequently includes a set of sensory-motor elements, even the rules game can have the same content as the previous games. However, it also presents a new element, the rule, which differs from the symbol as much as the latter does from a mere exercise, and which necessarily results from the collective organization of game activities^(1, 7).

Game, body exploration and development of motor skills

Exercise, symbol and rule seem to be the three consecutive orders that characterize the great classes of games, from the point of view of mental structures. However, there is also a fourth type of games, those of proper games construction or creation, which mark an internal transformation of the notion of symbol in the sense of an adapted representation. However, in fact, the construction game implies a whole activity of actions sorting and tools classification, and involves designing the transformation of materials, thus representing a sort of further step. All this while remaining in the playful dimension that continues to motivate the child first, and the young guy then, to search for the construction of mental images that, from the static position of the copy in the presence of the "original" or in recalling his memory in its absence, must switch to that dynamic involving the intentional anticipation of the product: to make a construction, in fact, one must have a pro-

ject in mind; in this sense they are of great interest for the educational and didactic dimension, and gain great recognition in the training of the disabled^(1, 7-10).

In the phenomenology of the game for the child, then, the construction game has a more clear evidence coinciding with symbolic games and rules, but it should not be denied that it widely subsists in the functional game phase too, even if, for simple actions on which it is applied it does not get that attention which is only realized by who, instead, takes care of favoring school integration with the realization of a cognitive action in subjects with strong understanding difficulty. The child's first game activities can be considered of exploration and manipulation type, and their development is encouraged by interactions with the environment and with the people who are in it. It is to satisfy this need for activity and exploration of things that the adult sometimes also introduces toys into the child's field of action; elements that help steer an existential reality that is still too big and complex to be globally and directly explored.

The games therefore have a double meaning: on the one hand they respond to the physiological needs for movement and tactile, sonorous, olfactory and visual exploration; on the other hand, by adapting reality to the child, they allow him enriching his faculties and knowledge in order to gradually recognize the objectivity of the external world, developing control, intervention, transformation, exercise and creativity skills. Thus the child likes observing the movements of his own hands, bang on a surface to cause noise, take and leave the objects, bring them to his mouth, pass them from one hand to the other, hit overhanging objects and observe their swinging^(1, 7, 9-11).

The child's world, initially centered on the discovery of himself and the other, progressively becomes enriched by the presence of objects, things to watch, to take and explore. The child's first responses to non-familiar objects are cautious, almost suspicious: as he becomes familiar with things, his action turns from exploration into manipulation, and finally into a game. The exploration and game times, therefore, do not coincide, and generally it can be said that the game begins only when the effect of the novelty has come to an end and the child has become familiar with the new objects. At a behavioral and functional level, there are many differences and similarities between exploration and game. Exploration and game, though different in functions, are two sides of the same coin, the relationship between the child and the physical world.

Children are more concentrated and can withstand more interruptions when they are exploring something; their heart rate is more regular, behaviors are more stereotypical and less flexible, unlike what happens, however, during the game. As the child grows up, the time spent exploring decreases, and the time for playing increases. A very important progress in the relationship with the physical world is made possible by the oculus-manual coordination and the ability to take things and bring them to the mouth. The evolution of this skill involves both the movement of the arm towards the object, and the gesture of the prehension itself: at the beginning, as for the arm, the child's movement is casual, disordered, it almost seems to "sweep off" the object rather than approaching it; subsequently, with the increase of the motor control, the "target" at the object becomes more accurate and precise. Even the gesture of taking something undergoes an evolution, and it turns from the palmar pressure, without the use of the thumb, to a more efficient grip that employs the thumb with the other fingers of the hand. Once discovered the possibility to take and hold the object in order to look at it or to inspect it with the fingers, an intense activity focused on the objects begins: this activity includes, in the first months, the extension of the same action to everything that a child picks, and in the second semester of life, it is followed by the exploration of differences, i.e. the selective manipulation according to specific properties of objects^(7, 12).

At the beginning, as Piaget observed, the child's motivation does not come from the object itself, but from the action. Subsequently, from 8-9 months onwards, the focus shifts to the object and to what can be done with it. In this period we can observe what Bruner defined the "mastery game", while revisiting Piaget's concept of exercise, which is the desire to go beyond the boundaries of newly acquired skills. In other words, the same object will become part of different action schemes, and the child will systematically explore the various possibilities offered by different actions. During the first two years, the child develops multiple manipulation patterns ranging from simple oral-mouth exploration to visual exploration, from generic to functional manipulation, to finally get to the spatial-temporal and causal combination of several objects put together appropriately.

The activity of exploring and manipulating objects is influenced by numerous factors: the novelty and complexity of the stimulus, the quality and quantity of materials, the characteristics of the environments in which the children are, and the indi-

vidual differences. The new materials influence the type of response by the children, who try to reduce the elements of uncertainty by exploring the characteristics of the object. Once become familiar with the objects, another aspect that influences the children's activity concerns the diversity among the various materials they are made of: for example, clay, sand, wood, plastic and then colored blocks, colors with fingers, liquid colors and so on; all substrates that, on the one hand, favor manipulation aimed at constructing something, especially in older children, on the other hand they discourage social interaction, by rather encouraging individual activity^(1, 12-16).

The physical place is another determining factor for the exploratory and recreational behavior of children: being outdoors, in the school playground or in a public park, for example, is very different from being in a classroom or at home with friends. A further element investigated by the study on the child's exploration concerns the relationship between children's individual differences and their exploratory behavior. This is linked to the ability to solve problems assessed in subsequent periods. In particular, this indicates a promising direction of investigation, because it could be assumed that the ability to explore is an important requirement for those activities that need active research, production and integration of information (as in the construction game).

Develop the sensory-motor patterns in symbolic games

In the intellectual exercise game, on the other hand, the child has no interest in what he asks or affirms, because only the fact of asking questions or imagining is what amuses him, while in the symbolic game he is interested in the symbolized realities, in those realities evoked by symbolic activity. In this sense it may be appropriate to classify symbolic games according to the structure of symbols as such: symbols conceived as instruments of playful assimilation. In this regard, the most primitive form of the playful symbol is one of the most interesting, since it precisely marks the transition and continuity between the sensory-motor exercise and the symbolism: the initial symbolic "pattern" consists in the reproduction of a sensory-motor pattern outside of its context and in the absence of its usual objective^(1, 12, 17-21).

These symbolic "patterns" mark the transition between the exercise game and the real symbolic game: as for the former, in fact, they preserve the characteristic of applying a behavior outside of its

context of original adaptation or of its specific purpose, for the simple pleasure of putting it into practice; as for the second, they already show the ability to implement that behavior by modifying its usual meaning, albeit in a fictional context created specifically, both in the presence of new objects conceived as simple substitutes, and in the absence of any material support. But the symbolic sensory-motor pattern already belongs to the symbolic games, even if it does not represent a primitive form centered on the subject: the child limits himself to pretending to put into practice one of his usual actions, without attributing them to others and avoiding assimilating objects between them.

This is how the child pretends to sleep, to wash himself, to swing on a table, to eat, and to bring something; so many patterns that he implements not only without current adaptation, but still symbolically, because he acts in the absence of the usual objectives of these actions and of any real object. Subsequently, the subject will make fictitiously objects or other subjects sleep, eat or walk and will thus begin to symbolically transform the objects in use.

Certainly the playful assimilation of the image of one object to another still remains internal to the reproduction of one's own behavior (pretending to sleep) and does not separate from it, as it happens in the following period, because it remains in the form of an assimilation linked to the actions attributed to things (laying the head on the pillow). The symbol is therefore not yet freed as an instrument of thought itself: it is only behavior, or the sensory-motor pattern, which takes the place of the symbol, and not the object or its image in particular^(1, 7, 21, 22).

Being detached from its context, however, the sensory-motor pattern in symbolic projection begins to grant the primacy of representation on the action itself, and allows the game assimilating the world outside the Self, with means that are infinitely more powerful than those of the simple exercise. Starting from the symbolic sensory-motor pattern, we can thus see the function of the symbolic game taken as a whole. While making the most of the playful dimension, the game allows us developing the spirit of cooperation, socialization and self-control. The compliance with the rules is an essential sign of cohesion and collaboration. The game stimulates the child's various types of intelligences. It is an approach to learning, essential for it to be achieved, and is an inexhaustible source of learning.

Conclusions

The game activities in childhood promote cooperative, active, constructive and well-organized learning; the playful activity is an effective way to lead the child towards the correct psycho-physical development. Through play the sensory and cognitive abilities are developed, as well as the main sensory-motor schemes.

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