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# Symbolic Activity and Agency

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## Abstract

Symbolic activity and agency are interconnected processes that underlie the human ability to act freely and independently of external conditions. Symbols, as a key element of this activity, enable humans to transcend immediate reality by operating with hypothetical and abstract events. This becomes possible through the transformation of S-R (stimulus-response) associations, where symbolic activity liberates the subject from direct dependence on external stimuli, creating the basis for free and purposeful behavior. Important aspects of symbolic activity may include the processes of pleromatization and schematization. Pleromatization is associated with the expansion of the sign field, where sign-vehicles are abstracted from objects, forming a field of possible meanings and interpretations. This field creates the basis for multiple action variants and alternative paths to achieving goals. Schematization, in turn, organizes this field by forming specific routes through the creation of point-like signs. The interaction of field-like signs and point-like signs allows the subject to transition from possible events to actual actions, thereby facilitating the manifestation of agency. Field-like signs represent potential possibilities, while point-like signs represent concrete paths for their realization. Two-stage models of free behavior help to understand how symbolic activity overcomes the rigid determinism of S-R relationships. In the first stage, action variants are generated, where the subject evaluates various possibilities based on field-like signs. In the second stage, one of the variants is selected and realized through point-like signs. These models demonstrate how internal motives arising from symbolic activity can replace external causes, creating a sense of freedom while maintaining internal determinism. Thus, agency does not exclude determinism but relies on internal motives rather than external stimuli.

Keywords Symbolic activity · Agency · Determinism · Idealization · Sign

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## Introduction

The symbol is the subject of numerous studies, not only in philosophy and semiotics but also in linguistics, psychology, cultural studies, and other fields of science. It is difficult to find an area of semiotic research that has not touched on the nature of the symbol.

Fundamentally, symbols function as significant cultural phenomena that play an important role in human communication and are used to convey information. People use symbols to express their thoughts and feelings. Moreover, some studies use symbolic behavior to describe the abilities of animals. In particular, Deacon (1997) proposed a theory of the hierarchical nature of reference. Savage-Rumbaugh et al. (1980) reported that some monkeys are able to move from the indexical level, characterized by the ability to solve problems of classifying food and tools, to the symbolic level—the ability of monkeys to use new lexigrams (Deacon, 1997).

The wide use of the term symbol is associated with different approaches to its definition. A symbol is distinguished from a sign, and one way of distinguishing them is to use the criterion of arbitrariness and nonarbitrariness. Thus, Jakobson (1985) distinguished between a symbol and a sign based on the presence of a natural and arbitrary connection in the latter. A number of thinkers and philosophers, such as Hegel (1988), de Saussure (1959), and Piaget (1965), believe that a symbol presupposes a natural connection between the signifier and the signified, whereas a sign is based on convention. Peirce (1958) and Morris (1971), conversely, believe that a symbol has an arbitrary nature and that iconic signs have an element of involuntariness in the form of resemblance to their object.

According to Vygotsky (1984), in the early stages of development, a child does not yet understand the conventionality of a sign. The arbitrary connection between a sign and its meaning cannot yet be established. Conventionality appears in children of 4–5 years of age through play, thanks to symbolic activity, when children agree among themselves that one object will have one meaning and another object will have another meaning (Vygotsky, 1984).

In this article, we adhere to the definition of a symbol as an arbitrary sign. This allows us to view symbols as tools that are independent of specific reality and can be used for abstract thinking and action.

The concept of agency characterizes the ability of a subject to act freely and to behave independently of external circumstances. It is seen as the ability of a subject to perform an intentional action. Therefore, if a person spills coffee on purpose, then he is an agent. However, if he spills the coffee because someone shook his hand, then he is no longer an agent (Davidson, 2001).

Ferrero (2022) offers four images of agency, i.e., an approach that provides a basic orientation in selecting the questions to be considered: (1) agency as creation—the ability to produce something new, for example, to initiate an action; (2) agency as self-constitution—associated with the behavior of an organism aimed at its self-preservation; (3) agency as psychological causality—a psychological ability to achieve a goal through desires; and (4) agency as reason responsiveness—defined as the ability to respond to reasons.

Sokol et al. (2015) identify three levels of agency: biological (self-regulation of the organism), psychosocial (conscious, goal-directed action), and sociocultural (the influence of cultural norms and values on individual and collective action). According to Baumeister et al. (2011), processes such as self-control, rational choice, planning, and initiative are key components of agency. These processes enable individuals to act purposefully and autonomously.

From a broader perspective, Tomasello (2022) approaches agency by linking its development to the need to adapt to unpredictable environmental conditions, particularly in social interactions. Tomasello proposes a model of agency development that traces its evolution from ancient vertebrates to modern humans. He identifies four key types: goal-directed agency in ancient vertebrates (e.g., lizards), capable of flexibly directing their actions toward goals; intentional agency in ancient mammals (e.g., squirrels), capable of planning and controlling their actions; rational agency in ancient primates (e.g., chimpanzees), possessing logical reasoning and reflective control; and social-normative agency in ancient humans, who developed the ability to pursue shared goals and normatively regulate behavior within groups (Tomasello, 2022).

In the article by Falikman (2023), it is noted that Tomasello's approach to agency does not mention Vygotsky's cultural-historical approach. The article points to a communication gap that emerged at the beginning of the 20th century between researchers in American psychology and the cultural-historical approach, which has not been fully bridged even today (Falikman, 2023).

The aim of our article is to explain agency through symbolic activity, in which the interaction between field-like and point-like signs occurs through the processes of pleromatization and schematization. The approach to symbolic activity in the article is largely based on the cultural-historical approach (Vygotsky, 1984, 2005, 2023). The analysis of sign interaction is grounded in Valsiner's (2024) concepts of field-like signs, diffuse signs, and fixed point-like signs.

## Symbols and Possible Situations

A symbol has an important characteristic, which is that it loses its connection with concrete reality. The expression "It is the thought that counts" means that the intention itself is important; the thought is the main thing. The act of attention, care, and awareness with which the action is performed is important. The action itself can lose its real dimension.

Cassirer (1944) argued that owing to the symbol, we draw a line between the actual and the possible between the real and abstract being. The loss of the symbolic function excludes a situation in which hypothetical objects are considered. Without symbolic activity, a person operates only with the present reality. This is particularly evident in a number of pathologies. According to the studies of Goldstein (1940), Cassirer (1944) noted that patients with aphasia have difficulties with abstract thinking. They have difficulty dealing with unreal things. For example, patients with paralysis of the right hand cannot say, "I can write with my right hand," but they can say, "I can write with my left hand" (Cassirer, 1944, p. 81). They remain at the mercy

of concrete experience. They lose the ability to move into the realm of nonconcrete "possible" experiences.

Underdevelopment of symbolic function is characteristic of children. This is particularly evident in children with developmental delays. When a developmentally delayed patient was asked how much cider she could buy for one dollar if a barrel cost four dollars, she replied that she would not pay much for the cider because it was sour (Cassirer, 1944). She found it difficult to accept a situation in which something was happening in the abstract. A symbol is therefore a sign that points to an object in its abstract form, outside the present situation. A symbol characterizes a specific thing that is used as a sign to express an abstract idea (Kumekawa, 2020). Piaget (1950) also discussed how the emergence of a symbol enables a person to operate with things that are currently absent. For example, a child begins to play with a pebble that symbolizes a sweet. At the same time, a symbol only appears when a representation is created that is separate from its own action, such as when a child puts a doll or a teddy bear to bed. The symbol thus represents a departure from the present situation and an appeal to an absent situation. In particular, the child performs actions detached from the current context; he can pretend to be asleep when he is not (Piaget, 1950).

#### Transformation of the S–R Relationship in Symbolic Activity

Both animals and humans use tools, which are means of transforming the world, in their activities. Mediatory activity is characteristic of both animals and humans. However, what is the essential difference between animals and humans?

Unlike humans, animals are strongly dependent on perception. Köhler (1947) focused on this topic. He showed that monkeys are strongly dependent on the structure of the visual field, as if they were its slaves, and are unable to use voluntary effort to follow the sensory structure. He believed that this subordination to the visual field is what unites monkeys with other animals (Köhler, 1947).

This pattern can be seen throughout the diversity of natural forms of perception. For example, a monkey will use a stick as a tool, but only if the stick itself and the object to which the tool is to be applied are in the same visual field. If the structure of the visual field changes, the monkey that has seen the stick forgets it. Despite the mediating activity, the animal's behavior remains within the framework of the S–R relationship. Objects act as stimuli to which animals respond directly with a particular response. The stimulus and response are here directly 'fused' in the present tense.

According to Schopenhauer (1985), animals have only visual representations and live exclusively in the present. In humans, in contrast to animals, there is a fundamental transformation of S–R relations. This transformation is best illustrated by the example of the development of the pointing gesture, which may be the initial basis for the emergence of language in humans. According to Vygotsky (2023), the child first tries to grasp a certain object, but it turns out that it is too far away. As a result, the movement is not complete; the child does not receive the object. However, the characteristic movements are interpreted by the mother as an attempt to take this object; she reacts to the movement and gives the object to the child. This is the first time the child achieves a goal through another person. The grasping movement takes

on the meaning of pointing. A pointing gesture is formed; the movement aimed at reaching an object is now transformed into a means addressed to another person.

The pointing itself has a symbolic nature, through which an abstraction from concrete reality takes place through another person. The symbol is formed precisely as a means of influencing mediated reality—not directly on the object but on another person. The object can only be reached through another person. This separates S from R. With R, the effector functions are performed by another person. A new link is now established between S and R, namely, its symbolic activity.

According to Vygotsky (2023), the mastery of symbols occurs through the "stimulus-means" stage, when a child begins to use objects not only as stimuli but also as tools to achieve goals. For example, in play, a stick can symbolize a sword, allowing the child to transcend concrete reality and act in an imaginary world. This process is key to the development of agency, as the child learns to operate with symbols that are independent of specific stimuli.

Cassirer (1953–1959) defines man as an animal symbolicum, a being that creates symbolic forms. Man no longer interacts directly with reality but immerses himself in symbolic reality. Cassirer writes, "Between the receptor system and the effector system, which are to be found in all animal species, we find in man a third link which we may describe as the symbolic system" (Cassirer, 1944, p. 42).

Vygotsky noted that the child's use of an aid disrupts the fusion of the sensory field with the motor field, creating a functional barrier between them, and the involvement of the symbolic system leads to the creation of movement on a new basis: "The inclusion of a 'functional barrier' transfers the complex reactive processes of the child to another plane. It excludes blind impulsive attempts, in the main affective and distinguishing the primitive behavior of animals from the intellectual behavior of man based on preliminary symbolic combinations. Movement detaches itself from direct perception and submits to symbolic functions included in the reactive act, thus breaking with the natural history of behavior and turning a new page: that of the higher intellectual activity of man" (Vygotsky, 1984, p. 45). Thus, the inclusion of symbolic systems restructures motor skills and transfers them to a higher level<sup>1</sup>.

The integration of symbolic activity between S and R in man has led to the transformation of nervous activity. According to Ukhtomsky (1978), there is a significant difference between the reflexes of the lower levels of the nervous system and cortical reflexes. In particular, they consist of the difference in the intervals between the moment of reception and the moment of reaction to this stimulus. For the lower levels of the nervous system, the interval is so small that the physiological impulse can be compared with the impulses of classical mechanics. For cortical activity, the interval becomes significant because the apparatus of the cerebral cortex allows orientation at great distances in space and time (Ukhtomsky, 1978, p. 263).

<sup>&</sup>lt;sup>1</sup> Notably, Vygotsky, like Cassirer, refers to the destruction of symbolic function in pathological cases of language disorders. He observed cases in which, in aphasia, movements became impulsive again—they merged with perception. When speech was lost, movements were no longer mediated by higher symbolic instances (Vygotsky, 1984).

#### Idealization and Symbolic Activity

The symbol causes the dissociation of the S–R relationship. Owing to this dissociation, there is a transition to the sphere of the unreal, the possible; the person is freed from the concrete situation, and his behavior becomes conscious: "The behavior of the child reaches a higher level, acquiring a relative freedom from the situation that directly attracts it, and impulsive attempts are transformed into a planned, organized behavior" (Vygotsky, 1984, p. 24). The mechanism of symbolization that transforms a real situation into an abstract one may be the process of idealization. In the process of idealization, there is a liberation from real material existence, but its separate properties are preserved in another virtual form. Hegel wrote: "Nowhere so much as in the case of the soul (and still more of the mind) if we are to understand it, must that feature of 'ideality' be kept in view, which represents it as the negation of the real, but a negation, where the real is put past, virtually retained, although it does not exist" (Hegel, 1894, p. 25).

According to Schopenhauer (1985), there are external, objective causes that compel us to act at a given time. These causes are driven by stimuli that appear in an external form: light, heat, and sound act on our senses and cause appropriate reactions. However, in addition, there are motives, which are internal, subjective reasons that stimulate our behavior regardless of external conditions. A motive is a cause mediated by cognition (Schopenhauer, 1985). In other words, a cause is something that acts on us from without, whereas a motive acts on us from within. Schopenhauer (1985) suggested, in irritation, there is an inseparability of cause and effect, whereas in motives, they are completely separate. Thus, a moving body communicates motion to a resting body through their interaction; the cause of the immediate passes into the effect. Here, cause and effect are homogeneous, commensurable, and tangible. As we ascend the ladder of being, however, this commensurability diminishes; it gives way to separateness. Causes are separate from actions; they are incommensurable and heterogeneous. In the transition to the motive, the cause becomes increasingly less material and tangible. While the animal lives in a narrow present and its behavior is regulated only by visual representations as causes, man carries these causes everywhere in his head; he becomes independent of present reality (Schopenhauer, 1985).

With respect to liberation from the power of concrete reality and the preservation of the determinants of behavior in actual form, Hegel (1894) wrote that first, at the stage of pure intuition, we are immersed in spatiality and temporality, from which we are liberated at the level of representation. At the same time, intuition is not something past; it is removed in representation, which is expressed in particular in language. For example, in the word "to have," in the expression "I have seen it," the present is directly indicated; I still have what I have seen; it is present in me at the present time (Hegel, 1894).

In the process of the formation of symbolic activity, there is an idealization of causes and their transition to the internal plan. First, the afferent part of a behavioral act (S) is idealized; it is transformed from an external cause into a motive. Thus, a child acts on an adult with a pointing gesture that contains not a physical object but its idealized form. In response, the adult performs an activity (R) in a spatiotemporal coordinate system inaccessible to the child. Now, by separating R, the object is taken

out of the present. This object is symbolized; it is moved from the realm of the concrete to the realm of the possible.

The operation of the object outside the concrete situation is initially possible only with the participation of the adult because it is the adult who realizes R outside the present situation. This situation clearly represents the presence of the child in the zone of proximal development. The zone of proximal development characterizes the distance between the activity that the child performs with the help of the adult and the activity that he or she performs independently (Vygotsky, 2005). Creaghe and Kidd (2022) suggested that symbolic interaction and symbolic play prepare the child's development and constitute the child's zone of proximal development.

In the subsequent development of the child, a radical break in activity takes place. The child begins to apply sign-symbolic means not to the adult but to himself and thus to control his behavior. Symbolic signs "are also applied as a means of self-influence, a means of auto-stimulation, creating thus a new and superior form of activity in the child" (Vygotsky, 1984, p. 25). This stage already occurs through the idealization of the executive part of the behavioral act (R). The child masters other people's behaviors and begins to perform them independently. Vygotsky (1984) used the word "internalization" in this context when another person's external ways of behaving are immersed in the child's internal plan and become his or her own.

In Hegel's (2010) philosophy, the synthetic stage of dialectical development is characterized by the fact that we preserve ourselves in our opposite; we preserve ourselves in the other. Alternatively, we can reveal the ideality of the other, and in an idealized form, we immerse it in ourselves and turn it into a subordinate moment. These subordinate moments become the executive parts of a behavioral act. By idealizing the executive part, the child is freed from the need to interact with another person. He performs the reactions independently at each moment. Idealization of the executive part of the behavioral act leads to symbolizing not only the object with which the interaction takes place but also the subject itself. Self-symbolization takes place, in which the subject places himself outside the present and abstracts from the concrete situation. He now acts freely in any spatiotemporal coordinate system. Thus, agency is associated with a transformed temporality. Bratman (2000) proposed the concept of a temporally extended planning agency. Emirbayer and Mische (1998) define agency as a process that draws on the past but is future oriented. It is "a temporally embedded process of social engagement" (Emirbayer and Mische, 1998, p. 963).

### Agency, Activity, and the Self

According to Sokol et al. (2015), agency is based on activity. This means that an organism does not merely respond to external stimuli but actively interacts with its environment and strives to achieve its goals. Activity is a fundamental property of living organisms that distinguishes them from inanimate objects. This property allows organisms to adapt to changing conditions and maintain their integrity.

The concept of agency implies that an individual is an active subject, whereas an individual lacking agency is in fact an object subordinated to external circumstances. Such a person is characterized by a state of passivity. If agency is characterized by

activity, the passive state is characterized by reactivity—reacting according to the S-R principle.

Brembs (2011) provides examples of studies on flies that demonstrate that the brain is capable of initiating behavior even in the absence of external stimuli. In this context, a distinction is made between actions (spontaneous, initiated by the brain) and reactions (triggered by external stimuli). In relation to actions, Brembs introduces the concept of the self. The self is the organism's ability to initiate actions independently, without external stimuli. This means that the organism is an agent, not merely a passive respondent. For example, if a child suddenly stands up and starts running, this action is not caused by external stimuli but is the result of internal processes in the brain. The self is closely linked to agency, where the source of activity lies within the subject itself. Moreover, agency is an important aspect of moral responsibility, as only an agent can be held accountable for their actions. If a person commits an action that has negative consequences, they can only be held responsible if the action was the result of their own choice, rather than external factors (Brembs, 2011).

Mead (1934) argued that the self is not an innate quality but a product of social interaction. It is formed through communication with others and develops when a person begins to perceive themselves as an object capable of viewing themselves from the outside.

Overcoming the passive state is closely connected with the relationship with another person, owing to which we acquire the substrate of symbolic activity. In the process of symbolization, we create a transparent, ideal boundary with the other, and in this other, we find ourselves. At every point in time and in every place where we were previously dependent on each other, we now retain ourselves. Through the expansion of the symbolic substrate, the self overcomes passivity and is preserved everywhere as a subject.

Symbols, especially significant ones like language, play a key role in the formation of the self. They enable a person not only to interact with others but also to reflect—to become aware of their own actions and thoughts. By using symbols in communication, a person simultaneously constructs their self-concept based on how others perceive them. Thus, the self develops through social processes and becomes possible due to the individual's ability to interpret the reactions of others (Mead, 1934).

According to Morris (1946), a symbol represents a sign of a sign. It is autonomous because it is generated by its interpreter and can arise in various conditions, making it independent of a specific external environment. At the same time, a symbol is conventional because there are no restrictions on the actions or states of an organism that can serve as synonymous signs, replacing other signs—that is, symbols (Morris, 1946).

## Symbolic Activity and the Cunning of Reason

The relationship with another person as the basis of symbolic activity is also confirmed by etymological analysis. For example, the Greek word "symballein" means "throw or place something together", and the word "symbolon" was used in ancient Greece as a means of identification between two people. For example, a piece of bone, a shard or a coin would be divided into two pieces, and then each person would receive their half. When the people met again, they would match the divided parts and thus identify each other. Thus, the symbol contains a moment of separation involving the other person and then reunion. The symbol reflects a connection between two people in which people begin to function as a whole. Bakhtin (1979, 1984) suggested that a symbol always reflects another person. According to Mead (1934), a gesture becomes a significant symbol when it is perceived both from one's own perspective and from the perspective of another. Gillespie (2007) points out a key similarity in the concepts of Vygotsky and Mead. For them, symbolic activity involves two perspectives: that of the subject (the action, such as reaching for an object) and that of the observer (the interpretation, e.g., the mother perceives it as a gesture of desire). When the child masters both perspectives, their action transforms into a meaningful pointing gesture. According to Polyakov (2007–2008, 2011, 2014, 2016), if ordinary signs can express subject-object relationships, symbols are characterized by subject-subject relationships. Symbols are based on cultural phenomena in which the interaction of two or more people is mediated (Polyakov, 2022). Within the incipient symbolic activity, causality, like a coin, breaks into two parts: the child influences the adult (S), and the adult performs a certain action for the child (R).

When the child idealizes and interiorizes the ways of acting, the unity of determinism is restored. The child now directs his action to himself and performs it himself. S–R are reunited, but now indirectly, through a symbol. In this way, man does not interact with the world and with himself directly but rather indirectly—through another person, whose action appears first in real form and then idealized.

In agency, not only freedom of action but also rationality is achieved. Hegel (2010) considered the notion of "the cunning of reason" for mediated interaction with the world. "Reason is as cunning as it is powerful. The cunning consists generally in the activity of mediating, which, by letting the objects, in keeping with their own nature, act on one another and wear themselves out on one another, without meddling immediately in this process, achieves its purpose alone" (Hegel, 2010, p. 281). In this case, of course, we are not talking about the effect of another object on an object but of a subject on a subject. In this interaction, the goal is achieved, but it is achieved indirectly—symbolically, without entering into direct interaction with reality. This is a kind of cunning of reason, owing to which man leaves his concrete situation. This new reality is the reality of the possible world of events.

## Mand as a Tool to Influence Another Person

The concept of mand was developed by Skinner (1992) within the framework of operant behavior theory. What is a mand? For example, we say the word "stop" to someone to make them stop doing something. The use of this command becomes part of our behavior because the other person reinforces it with certain outcomes. With constant reinforcement by results, the likelihood of using this command increases. The use of the command itself depends on the degree of deprivation associated with the reinforcement. Our request for someone to give us a sweet will be stronger the

more we have not received the sweet. Thus, mand is a verbal operant that is controlled by the consequences of behavior: "The term 'mand' has a certain mnemonic value derived from 'command', 'demand', 'countermand', and so on, and is conveniently brief. A 'mand', then, may be defined as a verbal operant in which the response is reinforced by a characteristic consequence and is therefore under the functional control of relevant conditions of deprivation or aversive stimulation" (Skinner, 1992, pp. 35–36).

Skinner considers an example of mand formation in which one person asks another for bread. For this to be possible, first, the person must be hungry (with the presence of some degree of deprivation). Second, a listener must be present when the command is given to the speaker. The command "Bread, please!" acts as a verbal stimulus for the listener, in response to which the listener gives bread to the speaker. Thus, the listener reinforces the speaker's mand with the result of giving bread.

The mand is a verbal stimulus addressed to another person. Obviously, the separation of S and R that we have been considering takes place here. The person who speaks produces S but directs it to the listener, who performs a certain R, which leads to certain results.

An important feature of the verbal operant is that it operates primarily for the benefit of the speaker (Skinner, 1992). The listener is an agent of reinforcement; he or she serves the interests of the speaker. The speaker, as the subject, uses the cunning of his reason to achieve his goal. In doing so, he receives reinforcement in a coordinate that is not available to him. In this way, the mand can be seen as an indication that arises first as a result of the effect on the other person. A symbolization of reality makes reinforcement possible beyond a particular situation.

The relationship with another person is also revealed in the case of the so-called extended mand (Skinner, 1992). In some cases, the speaker addresses "listeners" from whom it is impossible to receive reinforcement, such as dolls or animals. This situation is possible to the extent that they resemble real listeners whom the speaker has addressed in the past. On the one hand, the inability to receive reinforcement can lead to a weakening of the mand; on the other hand, it can become "irrational".

For example, the speaker uses the command "stop" in relation to both people and a car with faulty brakes. This means that a mand is used in a situation where there seems to be no real listener. However, the mand is possible only as a result of influencing another person. It is a means of pointing to another person, the listener, who is still present to the speaker, albeit in a reduced form. In addition, in the use of the extended mand, symbolization takes place, in which a transition is made from an actual situation to an abstract one. People can refer to a possible reality or to absent objects. For example, a thirsty person may 'pretend' to drink from an empty glass (Skinner, 1992).

In some cases, the reality of the other is quite obvious in the symbol; in others, it is hidden. The fact that the reality of another person can be quite difficult to recognize may be related to the so-called process of decentration.

## Decentration and Agency

Decentration is one of the key concepts in Piaget's (1950, 1965, 1953) theory of cognitive development. According to Piaget (1950), the human psyche is initially egocentric. For example, in one of his experiments, children poured liquid from a vessel of one shape into a vessel of another shape. Up to a certain age, they felt that as the shape changed, so did the amount of liquid (Piaget, 1953). This experience shows that the child's consciousness is centered, depending on the specific coordinate in which it is located. Being in it deforms his perception of reality. There is a strong dependence on the visual field and the power of the S–R relationship. Only later did the child become capable of coordinating different points of view and taking into account several points of view. There is liberation from the distorting influence of a singular position—a single point of view. Decentering is a key step in the transition from object-based to abstract thinking.

Decentering leads to a broadening of the scope of interaction with reality and is obviously related to symbolic activity, which takes one beyond the concrete situation into the world of the possible. By overcoming egocentrism, a person can "reach" any time–space coordinate. Coordination with other people's points of view is the basis of decentration.

Mead (1934) develops the concept of the generalized other. This is not a specific person, but rather a collection of ideas about what behavior is considered expected and acceptable, characterizing the norms and rules that exist in society. Mead uses the example of play, in which children learn to take on the roles of others. Initially, they imitate specific individuals, such as parents or teachers, but over time they master more complex role-playing games that require considering the rules and expectations of others. In a game of baseball, each player must not only perform their own role but also take into account the actions of other participants and the rules of the game. In this way, they adopt the perspective of the entire group, mastering the viewpoint of the generalized other, which is crucial for social life in general (Mead, 1934). It is evident that in this process, the child decenters their own position. In the generalized other, individual perspectives are coordinated.

Some things lose their real dimension and become symbols. Therefore, a gift is not so much a thing as a symbol. We often speak of a symbolic gift, implying that the main thing is to pay attention to the person, while the value of the gift itself may be insignificant. In this case, the separation from the real dimension is due to the other person who gives it a symbolic dimension. The gift reflects the relationship between one person and the other. However, in cases of large-scale decentration, the reality of other people (the generalized others) remains hidden.

In the process of decentration, it is as if one were to put oneself in the place of another person, internalizing his actions, owing to which it is possible to reach any object in any temporal position.

Free behavior, or agency, is the result—the sum of past interactions with others. In agency, the subject does not occupy a fixed coordinate but decenters itself through multiple interactions. While a person is egocentric, he has not yet crossed the boundary with the other, has not yet revealed his ideality, and is therefore still in a passive, suffering state, dependent on the other. For example, a person performs his activity only at a certain time when another person is participating in this activity. This happens especially in the stage of formation of the zone of proximal development of the child.

In the case of decentration, the transition to the other person's point of view takes place; the boundary with the other person is crossed. Now, several others become cosubordinated, variant ideal moments. In this case, specific moments of interaction with them are removed, and the person as the subject remains invariant. He can act independently of the other, whether or not he participates in a joint activity.

### The "Semiotic Condenser" and Agency

The term "semiotic condenser" was used by Lotman in relation to the symbol: "The symbol acts as a kind of condenser of all the principles of signification and at the same time leads beyond signification. It is a mediator between different spheres of semiosis, as well as between semiotic and extra-semiotic reality" (Lotman, 2016, p. 183). What is the specificity of symbolic activity?

Lotman (2016) compared reminiscence, reference, quotation, and symbol. Reminiscence or quotation act as a kind of indexical sign, pointing to a larger text, whereas a symbol stands out from the surrounding semiotic context. Reminiscence, reference, and quotation are parts of a new text; they fulfill their functions in the synchronicity of the text. The symbol pierces the thickness of cultural experience, fulfilling the function of the diachrony of culture. According to Lotman (2016), the symbol does not belong to a synchronic slice of culture; it comes from the past and goes into the future. He writes, "As an important mechanism of cultural memory, symbols carry texts, plot schemes, and other semiotic formations from one layer of culture to another" (Lotman, 2016, p. 170).

The symbol ensures the unity of the text and condenses vast and significant texts. Owing to this, the memory of culture does not disintegrate into temporally isolated layers. It takes the content beyond its specific situation and brings it to a new coordinate, to a new point in the narrative. The symbol acts as a "messenger of other cultural epochs" (Lotman, 2016, p. 170). The symbol falls from the depths of memory, comes to life in a new text, germinates like a seed in new soil, and unites with new cultural experiences.

In symbolic activity, there is a break with its original coordinate. The content is transferred to new conditions. The symbol is an independent formation, has a closed meaning, and has a pronounced boundary. When it is included in a syntagmatic series, it still retains its independence.

A reminiscence or a quotation is "bound" to a certain place and time by its plan of expression and its content. A symbol, conversely, does not belong to a specific level of culture but can move freely through temporal dimensions. It absorbs all that is necessary. Its independence is expressed in overcoming belonging to a specific place, which obviously contributes to the manifestation of agency. The same symbols can freely pass through different cultural layers. When they are realized, they always play out the content they contain in new conditions, abstracting from the original concrete situation.

## The Substrate of Symbolic Activity

In Physics, Aristotle (1984) discusses the concept of the infinite. In his view, the infinite in the philosophical sense does not actually exist; the infinite is a potential concept. If the infinite actually existed, it would be a complete and whole thing, with limits and boundaries. However, the infinite, in essence, allows us to go beyond the limits of actual existence. We can illustrate this idea of Aristotle with the following example. If we are in one room, we can go to another room and from another room to the next room, and so on, to infinity. If we stop, it means that the number of rooms is not infinite; we have reached a certain limit. Therefore, infinity is just a possibility that Aristotle associates with matter. At the same time, matter acts as a basis, a necessity for things; for example, without iron, there is no saw, and without stones, there is no house (Aristotle, 1984).

Symbolic activity is also organized on a certain substrate on a certain matter. First, we have our own substrate, but it has narrow limits—these are the limits of the concrete situation. We rely only on the means that nature has given us—natural means. Beyond the limits of the natural substrate, the possibility to act freely—to exercise agency—appears only at the expense of a new substrate provided by another person<sup>2</sup>. The new substrate is transformed into one's own through internalization. Thus, the adult's means become the child's means, on which the child can now rely independently. As a result, the boundaries of the substrate of symbolic activity are abolished because the boundary with the other disappears and the substrate becomes potentially infinite. The subject is constantly transcending its own limit; it can act at any time freely, at its own discretion, enriching itself with new means. Man thus transcends the limits of his narrow, natural substrate and, relying on the symbolic substrate, enters the realm of possible experience.

# Dynamic Semiosis and Symbolic Activity: Processes of Pleromatization and Schematization

Humans, unlike animals, are capable not only of using signs but also of creating them. But what conditions are necessary for the independent creation of signs? When an experimenter creates a conditioned stimulus for a dog, the sign-vehicle (e.g., a sound) and the designated object (e.g., food) appear as a unified complex. Similarly, in the early stages of human development, stimuli used for memorization exist in an undifferentiated unity with their objects. In this regard, Vygotsky notes that, in the early stages of development, a name functions as a property of the object itself. The close connection between the name and the object leads to the child, for example, refusing to call a lamp a table and vice versa, since "you cannot write on a lamp, and a table cannot provide heat" (Vygotsky, 1984, p. 70). Thus, at this stage, the

 $<sup>^2</sup>$  The case of a man with Parkinson's disease who could hardly stand alone is interesting in this respect. Vygotsky, observing this patient, put pieces of paper on the floor in front of him so that a path was formed. The patient, when he stepped on them, suddenly walked. He literally began to rely on the means that the other person had given him (Leontiev, 1990).

child still lacks an understanding of the conventionality of the sign—the arbitrary establishment of a connection between the sign and its meaning. For a stimulus to later function as a sign-vehicle, it must break free from the syncretic structure. Conventionality emerges in children aged 4–5 during play through symbolic activity, when children agree among themselves that one object will have one meaning and another object will have a different meaning (Vygotsky, 1984). An agreement arises between the children—the conventionality of the sign. According to Chudova (2012), when a gesture is replaced by a conventional sign (e.g., a red traffic light as a sign to stop), the situation transcends biologically significant contexts and becomes culturally conditioned.

It is evident that initially—in pre-symbolic activity—the sign and its meaning form an undifferentiated complex, where they are involuntarily connected, and the substrate of sign activity itself has very limited ranges. Later, in symbolic activity, this complex becomes divided—the sign-vehicle is abstracted from the object. They begin to function as independent elements. In the symbol, the connection becomes arbitrary and conventional. Different sign-vehicles can be used for the same object, and the same sign-vehicle can potentially be used for different objects.

Valsiner (2024) develops the concept of semiosis, in which the process of creating and using signs is dynamic. Signs do not merely transmit information; they create meaning and help us adapt to changes in the environment. In dynamic semiosis, two parallel processes are involved in the creation of meaning-pleromatization and schematization (Valsiner, 2024). It can be assumed that the abstraction of sign-vehicles from objects leads to the pleromatization of sign-vehicles. Sign-vehicles seem to scatter around the subject, forming a kind of field (field-like signs). This field has certain boundaries, as not every element of the surrounding world can become a sign-vehicle-that is, a phenomenon that can become a sign. For example, Vygotsky (1984) noted that fingers in play could not symbolize children, as they are too closely tied to the body. However, the elements of the field are not yet full-fledged signs; they are only sign-vehicles. In subsequent actions, the subject identifies areas within this field-paths that they will follow to achieve a specific goal. The creation of these paths is characterized by the arbitrary connection of the sign-vehicle with meaningthat is, the formation of a full-fledged symbol. The pointing gesture plays a key role in this. Objects serve a substitutive function, but it is the pointing gesture that assigns this function to them. Symbolic activity functions as a system in which gestures assign meaning to specific objects. The pointing gesture transforms potential into act, endowing the sign-vehicle with content-an object. The gesture acts as a kind of interpretant, linking the sign-vehicle and the referent. For example, a child interprets a stick as a small child in play because their own gesture allows them to mimic carrying a small child. The connection between the sign-vehicle and meaning can occur in various forms of symbolic activity. Sapogova (1993, 2000), in addition to play involving substitute objects, identifies the following types of symbolic activity: speech activity-the use of words and language to denote and transmit information; visual activity-drawing, sculpting, and appliqué, where the child creates symbolic representations of objects; and construction-creating models and structures from various materials, where the child uses signs and symbols to represent real objects.

The assignment of meaning through the pointing gesture can be interpreted as the translation of signs from a field-like state to a point-like state. This is a kind of schematization, where the subject creates specific routes within an already prepared sign field. For example, flipping a coin involves preliminarily connecting one side of the coin to one course of action and the other side to another. The subject, as it were, marks out two paths within the already prepared substrate, combining sign-vehicles with meaning. A person acts as a free agent, creating multiple alternative pathways by means of the substrate of symbolic activity.

Thus, symbolic activity involves the interaction of field-like signs and point-like signs. Schematization and pleromatization represent two parallel processes that interact, feeding into each other. At the same time, the field-like nature of signs cannot be verbally expressed or analyzed; it is characterized by an affective sense of experience (Valsiner, 2024). Through pleromatization, the boundaries of semiosis expand as sign-vehicles scatter as elements of the field. The expansion of semiotic boundaries prepares the conditions for the realization of agency. The field-like state creates opportunities for alternative paths to achieve goals. In this state, symbolic activity transports the subject into the world of possible experience. The stage of schematization organizes the elements of the field into point-like signs, transitioning once again from possible events to actual ones.

### **Two-Stage Models of Free Behavior and Symbolic Activity**

Brembs (2011) points out the existence of two-stage models of free will in the philosophical tradition, which combine the randomness of the first stage and the determinism of the second. Two-stage models explain free will through two processes: the generation of behavioral options (freedom) and their subsequent selection (will). Initially, the brain generates several possible courses of action that are not entirely determined by external factors. For example, experiments conducted on flies show that their spontaneous turns are not always related to the environment, indicating internal generation of options (Maye et al., 2007). However, at the second stage, the brain selects one of the proposed options based on experience, motivation, and learning. This process may be predictable but retains an element of flexibility (Brembs, 2011).

The first stage may, to some extent, correspond to the field state of symbolic activity, where the subject evaluates different options for achieving results. The second stage may be related to the formation of point-like signs associated with the schematization of pathways to achieve goals. In the model proposed by Osipov et al. (2018), signs function in two planes—the plane of names and the plane of psychological content. The authors note that without the plane of names, objects would begin to interact directly, as in animals. The emergence of the plane of names provides the possibility of a "view from above." "A multitude of names allows for the existence of a second plane ('a second reality,' in the words of A.R. Luria), movement within which enables the simulation of possible outcomes of action sequences without transitioning to the actions themselves, while taking into account the emergence of a new object after each action and, accordingly, new conditions for activity" (Osipov et al., 2018, p. 80). The existence of two planes characterizes the separate existence of sign carriers and the objects they denote, while the emergence of multiple names signifies the field state of symbolic activity. The interaction between the two planes occurs through the projection of a name onto a specific element of psychological content, leading to the formation of specific point-like signs.

Unlike the concept of free will, which can be based on indeterminism or the ability of a subject to act despite causes, agency is realized within the framework of determinism, although it can create the illusion of independence from causes.

Among the attempts to explain human behavior in the natural sciences are approaches based on reflex mechanisms. Reflex, as is known, contains the principle of determinism, which informs us that all phenomena are related to each other and that there is no action without a cause. However, as we know, freedom is at stake when the idea of universal causality is proposed. This problem often takes on the character of a dichotomy. In particular, one of Kant's (1998) antinomies states that if there is freedom, causality is excluded, and if there is causality, freedom is excluded.

In Sechenov's (1942) reflex conception of the psyche, the correlation between causality and freedom is reflected in an argument with a hypothetical rival who claims absolute power over his behavior, as well as complete control over himself and independence from external conditions. The rival claims to be able to bend his finger "at any time of the year, day or night, on the summit of Mont Blanc and on the shores of the Pacific Ocean, standing, sitting, lying down, etc., in a word, under all conceivable external conditions, only, of course, in moments of consciousness" (Sechenov, 1942, p. 133). However, this free behavior is prepared on the basis of man's previous experience. He has already made these movements so that they are now associated with all of the external determining conditions, which can no longer interfere with the movement in any way. In other words, free behavior does not exclude determinism; it has its own internal causes.

Vygotsky (2023) also wrote about the two-phase nature of the volitional process, which combines freedom and determinism. In the first phase, the organism independently forms new neural connections (artificially created conditioned reflexes). People predetermine their actions based on conditions, such as how to act depending on a random outcome (e.g., the casting of lots). In the second phase—the executive phase—the already formed neural connection is realized. This is the stage of performing an action, such as dropping a letter into a mailbox or executing an action after the casting of lots. This phase functions as a reaction analogous to Pavlov's conditioned reflex (Vygotsky, 2023).

An example of the implementation of these two phases is an experiment involving the casting of lots, in which a child faces a choice between two actions where motives are balanced, and emotional tension is high. To simplify the choice, a neutral stimulus—the lot—is introduced, with its outcome predetermined to be associated with a specific action (e.g., the black side means one action, the white side means another). Thus, the choice is formally predetermined by the lot, making it strictly deterministic: the child acts not according to their own desire but in accordance with the result of the draw. However, on the other hand, the child themselves gives the lot the power of motivation by independently establishing the rules of choice. This makes the action maximally free and voluntary. Here arises a dialectical contradiction: the choice is both deterministic (dependent on the lot) and free (since the rules are set by the child themselves) (Vygotsky, 2023). Vygotsky (2023) provided an example of arbitrary regulation of behavior, such as when a subject looks at a clock and when the hand reaches a certain point in time, she gets up and walks away. Her behavior seems to be a completely free behavior in which she can choose any time to leave. Obviously, during the formative stages of her psyche, other people performed a certain action at different times, and she internalized these actions. Through decentration, the subject subsequently learned to coordinate the different moments of time and integrate them.

The given example of free behavior is nothing but agency, in which external causes have been idealized and become internal. Owing to idealization, they have been transformed from causes into motives.

At the same time, due to the abolition of external dependence on the S–R relationship, a person appears to have unlimited freedom, although in fact, the determinants have only moved to the internal level. To initiate an action or carry out intentional actions, it is necessary to have determining motives within oneself.

The formation of connections during the phase of creating new neural connections characterizes the freedom to choose various options, which may be associated with pleromatization—the formation of a field state of the substrate of symbolic activity. Pleromatization allows for the elimination of rigid frameworks of necessity, removing strict S-R (stimulus-response) determinism. Thus, Mitchell (2023) criticizes the idea of physical predetermination, arguing that the future is not determined with infinite precision and that processes in the present shape the future. The subsequent formation of a connection between a sign and its meaning realizes the executive part of the behavioral act, determined by point-like signs.

## Conclusion

Man is part of nature and under the power of biological laws, but symbolic systems create new dimensions for him in which he is no longer directly confronted with reality. In the symbolic dimension, man escapes the power of the organic S–R relationship. He overcomes his passive, subordinate state of nature and begins to determine his own behavior as an active subject.

The symbol transports man into the world of possible events, events that do not happen to him directly. He can operate with unreal things; for example, imagine that he is buying cider that he does not need, or a similar activity. Through symbolic activity, it is possible to deal with a situation hypothetically. The key is the mediated interaction with the world that results from social interaction with others. The symbol arises first as a means of influencing another person and then becomes a means of influencing oneself.

In the course of social interaction, a person moves beyond his or her own coordinates into other coordinates by mastering the perceptions and modes of action of other people. Through appropriation—the transformation of other people's behavioral determinants into one's own—a person takes himself out of a concrete situation into a free reality. External causes are transformed into internal motives, and free action is performed in any time-space coordinate. Thus, agency is realized through symbolic activity. Agency can be understood as the ability to act, but to act freely, as an active subject, independent of external conditions. Moreover, agency does not exclude determinism, but it does not rely on external causes but rather on internal motives.

In the course of symbolic activity, the subject masters sign vehicles, abstracts them from objects, and establishes arbitrary connections between the sign and its meaning. This, in turn, expands the boundaries of semiosis and creates conditions for the realization of agency, providing the possibility of alternative pathways to achieving goals. Two key processes-pleromatization and schematization-implement this mechanism. Pleromatization expands the sign field, creating a space of possible options, while schematization organizes it through punctual signs, mapping routes for real actions. Their interaction allows the subject to transition from potential to actual events and back again. Two-stage models of free behavior demonstrate how symbolic activity helps overcome the rigid "stimulus-response" connection. At the first stage, action options are formed, and at the second stage, a specific choice is realized. Internal motives, arising from the symbolic system, replace external causes, creating a sense of freedom while maintaining internal determination. Thus, symbolic activity not only expands the boundaries of human experience but also makes the subject's actions more meaningful and purposeful, enabling them to transcend the limitations of immediate reality.

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