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## Emotions and Language in Cognitive Development

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### Abstract

The present study is dedicated to the question of the role of emotional activity of a human being in the making of cultural forms of behavior, consciousness and language. The study is carried out within the framework of cognitive practices directed at the making of consciousness and thinking. The author proceeds from the assumption that the basis for recording sense regulators in the human psyche was the emotional activity that was developing in the communities of higher animals. The appearance of words is connected with the increasing differentiation of senses. At this stage there appear binary oppositions, and rational rules of operating senses are formed. In the language synthesis of emotional and rational a cognitive means of mastering and transmitting senses is created.

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### 1. Introduction

Modern cognitive studies are of integral character. They unite efforts of specialists in the field of anthropology, psychology, philosophy, linguistics, neurophysiology etc. Investigation of language is one of the points of meeting of the above mentioned scientists because the making of language and its life in the society is simultaneously the formation and development of consciousness and thinking. All these processes were developing in the context of socio-genesis. That is why paying special attention to the fundamental factors of formation a human being is of the exceptional interest, and among those factors we point out two principal circumstances. On the one hand, it is the formation of a subject action as an evolutionally new cultural form of behavior, different from innate ones,

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transmitted inside the community. On the other hand, it is the formation of new forms of non-innate behavior programmed by cultural means, executed by symbols and senses, among which language and speech perform the universal part. In this process the emotional activity of the psyche has been and still is exceptionally important upon which alongside with all the rest foundations the ability of a human being to mastering senses and word is based.

## **2. Methodology**

Mental development of a human being is a multifactorial process in the course of which thinking has been formed as the ability to operate senses and meanings in accordance with certain rules that were given the name of laws of logics. The given evolutionary process appears as overcoming some quality barrier dividing biological and cultural stages of development. The transition from a biological stage of hominid communities to a cultural level is connected with the affirmation of a symbolic behavior of a human being. This position is accepted by modern cultural anthropology as an obvious fact. It is as quite obvious that linguistic means of managing behavior were created in the course of making the world of senses and meanings demanding necessitating in its turn the development of psychic abilities of a human being. At least two factors have made possible the course of the above mentioned cultural processes, namely, socio-genetic precondition of the formation of cultural senses that manage behavior, and the development of means of mastering and using sense meanings. Our greatest interest here lays with the second aspect of the evolution of the highest psyche that is the successive connection between biological and cultural levels of psychic development (Cheshev, 1999) The important factor of the mentioned transition was the emotional ability of animals that became one of the means to master the world of senses coded in the course of development by a system of linguistic symbols.

## **3. Discussion of Results**

There are all the reasons to suppose that the start of the socio-genesis was connected with the principal change of the character of relations between the hominid communities and the natural world. Instead of the possible adaptation to the natural conditions of living there comes the reorganization of the natural world carried out through the acts of the subject activity. The subject activity of hominids that had been formed in the course of a distinctive natural selection became a qualitatively new form of the active adaptable vital function of hominid communities. The most important characteristics of this function is its cultural, that is artificial property. Thus, the mastering of activity became possible only for the organized community that can preserve and transmit cultural skills, acquired habits and practices. In its turn the community organization is made secure through stable forms of social behavior. As mentioned above, such programs in biological communities are based upon direct heritability, while in human communities this problem is solved through cultural programming. The formation of artificial (non-genetic) forms of social behavior and the development of symbolic means of behavior management has determined the process of the consciousness making. L. S. Vygotsky stated that “the mechanism of social behavior and the mechanism of consciousness are one and the same” (Vygotsky, 1982, vol.1). This means that the making of consciousness is preconditioned by the evolution of behavior of hominid communities. Thus, the study of the making of cognitive abilities is closely connected both with the thorough investigating the development of social behavior, and the development of active operations.

Emotional activity of the highest animals that was developing under the life conditions in the communities is of the fundamental importance for the mastering of the world of symbols. L.S. Vygotsky insisted upon the idea that it was impossible to perceive the making of thinking aside from the affects: “He who has torn off thinking from the affect at the very start of the process has closed for himself forever the way to clearing out the causes of thinking as it is” (Vygotsky, 1982, vol.2). This statement of the psychologist is equally correct both for the processes of phylogenesis, and those of ontogenesis. A child masters operations of thinking only at a certain stage of development while its emotional activity is its primary innate means of connection with the surrounding world. Emotionally affective reaction of an evolutionary developing human being onto a symbolic action has preceded the building of logical connections among symbols. This is proved by field investigations of modern ethnologists. As evidence to this thought may serve the observations of Levi-Brule that have given the foundation for building a concept of the primitive collective thinking. Collective thinking, as the French ethnologist observes, is based upon

the emotional infectiousness the community members get through ritual and other social actions they participate in. Collective consciousness is unable to fulfill critical evaluation of the reasons and grounds of behavior as it is basically emotional and devoid of means for any evaluation. The feeling of complicity shared by the members of a community is applied not only to the outer world, but also to the community as such. It takes possession of an individual during collective actions. The uniformity of experiencing collectively the formation of sense meanings is the ground for the psychic mastering of the world of senses at the early stages of the community development. The ability to dichotomy of senses, to operate them correctly (that is looked for by K. Levi-Stross in early cultures) is a later product of development. It presupposes the availability of words denoting the meanings of senses and only under this condition there appears linguistic thinking obeying the binary logics.

Evolutionary precondition for the emotional mastering of senses is the emotional memory inherent in all individuals standing at a biological stage of development. The closeness of the emotional animal and human spheres was pointed out by K. Lorenz in his time: “Animals are much less clever than we are accustomed to think, but in feelings and emotions they are much less different from us than we consider” (Lorenz, 1984). Indeed, emotional life and emotional memory of animals provide them with more multifactorial and more flexible adaptation to the outer environment. It is necessary to point out that emotional abilities develop best of all among the higher animals living in communities. Psychic activity of individuals and expressing their emotions become an important and decisive means of building relations inside the communities represented by families, groups of families and so on. Another psychic process connected in higher animals with their emotional activity was given the name of imprinting - strong emotional engraving preserved by the psyche of the animal and influencing its behavior. Emotional excitement, emotional experience acquiring the features of an affect becomes an important means of imprinting serving for engraving sense meanings influencing behavior. Generally, any state of a strong emotional excitement creates the possibility of imprinting realized in the presence of the whole complex of conditions.

The described functions of emotional activity are easily displayed in the process of forming the behavior of human beings in the patrimonial society. “Collective conceptions are quite often perceived by an individual under the circumstances producing the deepest impression upon the sphere of his feelings. This is true, in particular, when we speak about conceptions that are passed on to a member of a patrimonial society at the moment when he becomes a man, a conscious member of a social group, when the ceremony of initiation makes him experience new birth, when he, sometimes through tortures serving as a severe trial, comes to discover some mysteries. “It is difficult to overestimate the emotional strength of those conceptions” (Levi-Brule, 1994). Emotional excitement is strengthened by the effect of collective infection unavoidable in a joint action. It is necessary to underline that experiencing a ritual action leads to the imprinting of sense not yet recognized by thought, but integrally represented in the process described. The sense is imprinted through the context of the action and its correlation with a mystical reality it is connected with.

If senses forming the sphere of consciousness and directing behavior are imprinted through affective emotional state, then the first steps of the formation of rational thinking are most probably connected with the expedient subject action. This action per se does not demand any great emotional effort that may be restricted by a concentrated attention on the part of an individual or a group. It is necessary to carry out correctly the set operation for achieving the goal. That is why instrumental thinking from the very start displays tendency to reasonable rationality correlated with the law conformity of a subject action. L. Levi-Brule draws attention to the essential difference of “a collective thinking “ of aboriginals, among whom he was carrying out his observations, from the thinking processes correlated with practical skills: “Primitive human beings very often display the proofs of astonishing smartness and skillfulness in organizing their hunting and fish-catching enterprises, they very often show the gift of inventiveness and striking craftsmanship in pieces of arts, they speak languages, sometimes very complicated, having almost as complex a syntaxes as our tongues have, and in missionary schools children of Indians study as well and quick as children of the white ... However other evidences, not less astonishing, show that in a vast number of situations the primitive thinking differs from ours. It is oriented in a quite different way. Its processes flow in an absolutely different course”. (Levi-Brule, 1994). The French scientist comes to the conclusion that “to try to find “an explanation” of collective conceptions judging solely in accordance with the mechanisms of mental operations that can be seen in an individual (association of ideas or the naïve implementation of the casualty principle and the like) is to make an attempt doomed to the failure from the very start” (Levi-Brule, 1994).

Processes of thinking are formed as operating with meanings. This is one of the functions of the higher psyche appearing alongside with the formation of sense fields that are used by a human being. The word has become one of the principal means of differentiating senses as well as a means of operating senses and transmitting sense meanings. It can be indicated that sense meanings are formed initially in two spheres of human activity. Namely, in the sphere of rational practical action – for denoting actions and objects, and in the sphere of sense meanings connected with regulating social behavior. At the starting stage of the society development the needs of the second sphere were evidently more urgent. The transition of simple skills of activity does not demand complicated operations with meanings. In the experiment carried out by Japanese scientists who studied the behavior of macaques, a certain macaque, Imo by name, invented a procedure of washing grains of maize of sand (Mc-Farland, 1988). Her experience was spread in the community and as it follows from the description, the mastering of the given procedure by other individuals did not demand linguistic means. The situation differs greatly while coding the meanings connected with the regulation of social behavior. Differentiating senses demands differentiating means of their denotation. Moreover, these means had to convey the emotional background of the action and through the emotional coloring of sounds the attitude towards those sense events and facts of action were conveyed. Namely at this stage the subtle work of the formation of a language is started, the language which is able to reflect the diverse world of cultural meanings and the world of psychic experiences connected with them. In the long run both described processes will be combined in a certain way, though their evolutionary difference will display itself in the properties of the literary picturesque language and the language of business, science and so on. Literary language has to convey emotional attitude to reality in which a human being is realizing his or her behavior. This is not necessary for the language of science, and moreover, it must be at most free from this function. The word fulfills a synthesizing function in the processes of making consciousness both in phylogenesis and ontogenesis: “Consciousness reflects itself in a word as the sun reflects itself in a small drop of water. The word is related to consciousness as a small word is related to the great one, as a living cell is related to an organism, as an atom is related to the cosmos. The word is a small world of consciousness. A sensible word is the microcosm of the human consciousness” (Vygotsky, 1982, vol. 2).

#### 4. Conclusion.

The making of consciousness is at the same time the formation of cultural forms of behavior. This process cannot follow the principles of pure logics, the principles of rational expediency. Cultural senses controlling behavior should be affectively experienced to get firmly established in the human psyche and become regulators of behavior. The word helps the further mastering of behavior through systematization of senses leading to revealing their systematic hierarchy. Rationality and emotionality are necessarily connected in word usage combining emotional and cognitive development of a human being.

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