

## SUMMARY

The core of the problem, treated by this monograph, can be generally expressed as a scientific effort to find out the sources of pathological information in human communication, an effort to find out the mechanisms and laws of human communication both normal and pathological; at the same time it is an effort to find adequate psycho-therapeutical proceedings helping to face stress, caused by pathological communication. When incorporating these problems into his scientific scheme, the author took for his starting point the scientific knowledge of neuro-sciences and sciences on human beings. From the methodological point of view complicated mental phenomena are consistently treated in a way considering the aspects of development, system, models and interdisciplinary point of view. It is evident from the contents of the monograph that the author based his work on the results of his own experiments because he presents in the work a series of original theoretical generalizations. The experiments were carried out within the framework of the scientific research task SPZV VIII-6-6/6 and SPZV VII-5-7 at the department of psychology in Brno.

An important key to understanding individual chapters is the introduction to the monograph, called "Communication between two Brains". It begins in a non-traditional way — with a sci-fi story bringing about an atmosphere convenient for the elaboration of the phylogenetic, anthropogenetic and ontogenetic aspects of human communication. The questions of origin and development of CNS, brain cortex, functional specialization of hemispheres, human expressive speaking activity and the origin of writing are dealt with in a creative way. Further on there are treated and elaborated problems of biopsychological regulation of human objective activity and of the neuroendocrine regulative subsystem (including the description of neuropeptides with central effects — alpha, beta, gama endorfines, enkefalines, VIP, neurotensin, P substances, bombesin).

The author's original conception of set, elaborated on the basis of his own experiments, is presented within the framework of description of the biopsychological regulation of human activity.

From the general psychological point of view author may claim that set belongs to the basic subsystems of the biopsychological regulation in the context of the personality as a whole. The structure of biopsychological regulation is changing in accordance to the level of ontogenetical development, ripeness of CNS, level of individual experiences, on level of interiorization of the social historical experiences of mankind and simultaneously it is influenced by actual external and internal stimulations. In this context characteristic structure of set and its style of the activity are resultative for a certain personality.

In his conception he distinguishes the terms set and "ustanovka". In a hierarchic structure of the set in personality author differentiates a lower biopsychological level in a strict sense and a higher psychosocial one. From the psychological point of view

the controlled correspondence between both the levels is regulated by "ustanovka", however the highest instance is consciousness.

In horizontal level the contents of biopsychological regulation in a strict sense forms energetic active levels, which present a disposal a base for reactions with a certain intensity, duration of continuance etc. During reflection of the objective reality by the subject, the mentioned level can assert partly in the form of energetic readiness for increased receptivity of the subject to certain signals of the environment and partly as basic, mostly inborn programmes of activities.

The proper activity of the subject enriches and modifies also these basic programmes of activity to a certain extent. A sphere of signals on which the subject reacts with an increased receptivity extends. He places to these programmes for instance instincts, primary needs and coherent motives. Lower emotions come under this field. The impulsive motivation corresponds to this level which is characteristic for an early childhood and during the pathological state it may outlast in an adult person.

In horizontal level the contents of the psychosocial level form secondary needs and coherent motives, attitudes, interests etc. Social determinants are the key factors. The higher emotions come under this level. The most important sign of the psychosocial level is consciously willful character of the regulation. There are produced such programmes of the activities here, in which the time and space parameters of the past is composed with that of the future to the optimization of the present.

The term "ustanovka" is to be understood as a result of penetration of actual interior and exterior signals through a number of elements of the biopsychological level in a strict sense and through a number of elements of psychosocial level.

The "ustanovka" becomes a filter which permits only certain characteristic of the set of personality. It is simultaneously an "instruction" for forming a style of the concrete activity. The changing conditions of the environment lead to the change of "ustanovka" and to the change of the style of the concrete activity. The fact itself author means a moment of penetration of the signal through the first and the second level and the fact that a motive itself is actualised, is important on the same level and it evokes a sense in the permanent run of the intellectual activity.

In the conclusion to the introductory treatise the author explains the way in which he understands human communication in pathology and points out the corresponding criteria. Further the author refers to the fact that the twentieth century man's brain is permanently exposed to a pressure of information, to a kind of "information sauna". Generally speaking there are two kinds of information: saturating information (or satiating in the proper meaning of the word) and phantom information (the so-called vacant information, placebo).

The first group is further divided into:

- a) The kind of information satiating positively the emotionally cognitive subsystems of the dynamic system of personality.
- b) The kind of information satiating negatively the emotionally cognitive subsystems.

Both kinds of information can be considered from the point of view of quantity (as consequence of their abundance on the one hand or lack on the other hand) and from the point of view of quality (satiating negatively by their contents). Both kinds of information provoke the so-called information stress (stress caused by a piece of information).

- c) Therapeutically stimulating information (during relaxation, suggestion, rationally emotional information therapy).

The second group is divided (by the author) into:

- a) Neutral information (forming a background for satiating information).
- b) Strain information (pseudoinformation) — if it works permanently or in combination with (for instance) some negatively satiating pieces of information, it is the pathology of information that appears.
- c) Information dangerous for health — also leading to the so-called pathology of information.

On principle the pathology of information is provoked by those pieces of information which have a quasi-meaning and which require to be permanently followed

and paid attention to. They lead to the constitution of a pathological dominant in the brain cortex, they mobilize the above-border stress reactions; they require high and permanent readiness of adaptive mechanisms which gradually leads to wearing out of the organism. Their quasi quality doesn't allow adequate use of this sort of information, which leads to chronic anxiety, fear, emotional tension. The result of this may be the development of neurosis of information, psychosomatic disorders etc.

The introduction is closed by a fitting description of stress.

The following chapter — "Invitation to Communication about Communication" — pays attention to the character of sign and its use for communication. In this connection many conclusions of Morris (1938), de Saussure and other structuralists (1967), of Achmanová (1979), Horecký (1972, 1981), Petr (1977), Novák (1978), Ondruš (1981) are being explained. This group of problems was dealt with by Gamezo and his group of collaborators (1977) — from the psychosemiotic point of view, by Kruševnickaja (1970), Klímenko (1970), Vygotskij (1971) and others — from the point of view of synthesis of psychological knowledge concerning the relation between intellectual and speaking activities. At the same time this chapter explains the principle of rational emotive information autotherapy (REIAT) and its application to removing the consequences of pathology of information.

The chapter devoted to communication on subhuman level explains the difference between information signals of animals and the sign in human communication. A series of systems of communication is presented further on including feromons, complicated means of communication among bees and the communication of primates.

The third chapter deals with non-verbal communication. The conclusions of Thompson (1941), Bernštejn (1963), West (1969), Ekman and Friesen (1969), Morris (1980), Křivohlavý (1980), Smékal (1986) are analysed in great detail. A great attention is paid in this context to proxemics, haptics, posturology, kinesics, gestics, mimicry and sight contact.

The last chapter but one, dealing with verbal communication, includes a brief characterization of the sign in the conception of Peirce (1931, 1935), Morris (1938, 1955), Schaff (1963), Reznikov (1964), de Saussure (1967), Šaumjan (1967), Hjelmslev (1971), Solncev (1971) and others. This chapter also explains the notions connotation and denotation; it gives the author's original conception of sense and meaning and the original model of human communication.

The author's conception stems from the fact that the starting point of every communication act is a motive, which, evokes the sense. The sense is a psychological compositum which consists of cognitive, evaluative and regulative modalities and in the initiative motive, too. The presented study is concretely directed to the creation of the author's conception of the dominant semantic voluminal field (DOSEVOP) and the corresponding (subdominant) semantic voluminal field (VSUSEVOP) between which the sense is semantically modulated. DOSEVOP has a character of a dynamic system with a space characteristics, which are varied by time parameters with intervening variables. All the conception is based on psychosemiotic, neuropsychological and neurophysiological achievements.

The last chapter is devoted to the practical instruction for the REIAT training and relaxation with the aim to work out such autoregulating processes which would diminish or even remove the consequences of information press and manifestation of pathology of information.

