

Cognitive Concept of Psychological Types in the Context of the Problem of Intercultural Communication

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Abstract: This article reveals the theoretical foundations of the cognitive concept of psychological types, which is being developed by a research team based on the "Laboratory of Cognitive Research of Consciousness named after Said Makhdikhon Sattorov" and Moscow International University. This concept is positioned as an effective tool for solving problems of intercultural communication. The cognitive concept is based on the main provisions of the concept of psychological types by Carl Jung (Jungian Psychological Types Theory). We have proposed a new terminology for the designation of mental functions (S, I, E, L), classes of mental functions (class of constructive functions and class of receptive functions), areas of function work (exoversion and endoversion instead of extraversion and introversion) and 16 psychological types. New definitions are given to the basic concepts of the theory of psychological types. The psychological type is described as a cognitive system of receiving, converting, storing and transmitting information.

1 INTRODUCTION

In the context of large-scale globalization, the problem of intercultural communication is one of the central ones in modern society (Zhang, 2011; Shi, 2015).

Fundamental and applied research on this problem is carried out within the framework of various scientific disciplines (Sun, 2017).

In particular, the problem of intercultural communication is studied in differential psychology.

We believe that typological concepts are effective tools for solving the problem of intercultural communication.

The typological approach makes it possible to analyze intercultural communications in the context of identifying the behavioral characteristics of representatives of different cultures.

Modern psychological scientists claim the existence of a national character, as

stable features characteristic of members of a particular national (ethnic) community, features of

perception of the world, motives of actions (ideas, interests, religion).

The peculiarities and specifics of the behavior of a particular nation is a structural element of the national character.


We believe that each ethnic group belongs to a certain psychological type.

In modern differential psychology, Carl Jung's theory of psychological types has proved to be promising.

The theory of psychological types was first outlined by Carl Jung in the work "Psychological types" in 1921 (Jung, 2001).

The Swiss scientist, as a result of long-term observations of the behavior of his patients, came to the conclusion that there are stable typical differences between people.

Jung introduced a number of terms to denote the typical differences he discovered: "extraversion" and "introversion" as two attitudes, as well as "thinking", "feeling", "sensation" and "intuition" as four mental functions.

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1.1 Extroversion-Introversion

By extraversion, Jung meant the direction of psychic energy (libido) outward – to objects of external reality.

Introversion, on the contrary, presupposes the direction of psychic energy to the inner world of the subject.

Thus, an extrovert in his life is influenced by external objective processes, and also influences them himself.

An introvert, on the contrary, seeks to distract his consciousness from external objects, "... as if he had to protect himself from the excessive power of the object" (Jung, 2001).

An introvert is focused on his subjective experiences, feelings, mental states. For an extrovert, objective facts, external processes and states are a priority. By mental function, Jung meant a form of mental activity (a form of libido manifestation), which fundamentally remains equal to itself under various circumstances.

Jung used 4 mental functions in his classification.

1.2 Thinking – Feeling

If the functional essence of thinking is the definition of what *something* that exists means, then the essence of feeling lies in the value significance of what exists.

People with a dominant thinking function (thinking types) give more weight to reason in their decisions. Judgments of the thinking type are based on what meaning should be attributed to the facts in question. And the way in which an individual deals with the facts themselves will depend on this meaning (Jung, 2001).

Feeling types neglect thinking in favor of the emotional factor (feelings) and the adaptation of the individual will depend entirely on the sensory evaluation that he attributes to these facts (Jung, 2001).

1.3 Sensation – Intuition

The functional essence of sensation is to establish that *something* exists, and the essence of intuition is to assume where this *something* came from and where it should go.

People with a predominant sensation function (sensing types) are focused on the reality tangible by the senses, on specific events, details.

For people with a predominant function of intuition (intuitive types), on the contrary, actual reality is taken into account only to the extent that it

looks like it provides shelter to opportunities that become the main driving force, regardless of the way in which real things are presented in the present (Jung, 2001).

1.4 Rationality – Irrationality

All these four mental functions were distributed by Jung into two classes: a class of rational functions and a class of irrational functions.

Rational functions most fully fulfill their purpose in accordance with the laws of reason, principles and norms.

The essence of irrational functions is the pure perception of reality.

Thus, the class of rational functions includes thinking and feeling, since it is the moment of judgment (the relationship with principles and norms) that has a decisive influence in their work.

Sensation and intuition are irrational functions, since they detach themselves from everything rational (extra-rational).

1.5 Psychological Types

Jung emphasized that in the struggle for existence and adaptation, each person instinctively uses his *most developed (differentiated) function*, which as a result becomes the criterion of the habitual way of reacting.

For example, for a thinking type focused on objective logical judgments, sensation, feeling and intuition recede into the background.

Each of the most developed mental functions can function in two settings: extroverted and introverted.

As a result, the combination of two attitudes and functions allowed Jung to discover 8 psychological types (Table 1).

Table 1: Classification of Jung's psychological types.

Attitudes \ Function classes	Rational functions	Irrational functions
Extroverts	Extroverted thinking type	Extroverted sensing type
	Extroverted feeling type	Extroverted intuitive type
Introverts	Introverted thinking type	Introverted sensing type
	Introverted feeling type	Introverted intuitive type

2 MATERIALS AND METHODS

Our research team is based on the "Laboratory of Cognitive Research of Consciousness named after Said Makhdikhon Sattorov" and Moscow International University has developed a new cognitive concept of psychological types based on the developments of Carl Jung.

Our concept is developed within the framework of the cognitive paradigm, the basic category of which is the category "information".

By information we mean a set of information about external (objects) and internal (subjective states) reality, which can be perceived, transformed, transmitted and stored in memory in a certain way.

3 RESULTS AND DISCUSSION

Jung correctly noted that psychology is a virgin land where the language still needs to gain a foothold. The temperature, as you know, can be measured in Reaumur, Celsius or Fahrenheit, and the only thing to do here is to say which method was used to measure in each given case (Jung, 2001).

In the cognitive concept, the terminological apparatus of the theory of psychological types has been updated.

Jung defined mental function as a form of mental activity that remains equal to itself in various situations.

Since Jung associated mental function with the concept of "libido" ("psychic energy"), it (mental function) is a form of manifestation of libido (at a certain energy level).

However, the concept of "libido" ("psychic energy") is excluded from our terminological apparatus, since it is vague and speculative in its content, and also corresponds to the foundations of psychoanalysis to a greater extent.

Our concept is developed within the framework of the cognitive paradigm and in it the description of mental functions is based on the category "information", which, along with such categories as "substance" and "energy" is one of the fundamental in modern science.

Thus, the attitude in the cognitive concept is a source of information flows (internal and external), the mental function is a form of information manifestation, and the psychological type is a cognitive system (detailed definition in 3.5).

3.1 Endoersion – Exoersion

The terms extroersion – introersion, many years after the publications of Carl Jung, have become ambiguous.

This is largely due to the fact that the original interpretations of these terms have been proposed by various psychologists (for example, Eysenck).

We consider it correct to use the new terms "exoersion" and "endoersion" instead of the usual terms "extraversion" - "introversion".

We also propose to consider attitudes as types of intentionality, and not libido directions, as in Jung.

Intentionality is the focus of consciousness on certain sources of information.

If a person's consciousness is directed to external sources of information, then this is an exovert intentionality. Therefore, an exovert is a type aimed primarily at external objects.

Endovert intentionality is the orientation of consciousness towards internal sources of information.

A person with a predominant endovert intentionality – endovert, on the contrary, is concerned with distracting his consciousness from objects, "... as if he had to protect himself from the excessive power of the object" (Jung, 2001).

His attention is directed from external objects to himself, to his Ego.

To denote these two types of intentionality, we have introduced two corresponding signs: a) the "+" sign for the exoersion b) the "-" sign for the endoersion.

3.2 Class of Constructive Functions and Class of Receptive Functions

As noted above, Carl Jung divided the four mental functions into two classes, which he called the class of rational functions and the class of irrational functions.

In our opinion, the concepts of "rational" and "irrational" are not quite correct to apply to the analysis of functions.

For example, a feeling type (according to Jung) may well behave irrationally if its dominant sense function has tremendous power over it.

We believe that those functions, the essence of which consists in the absolute perception of reality, are more correctly called receptive functions (from the Latin word "receptio").

Accordingly, the functions, the essence of which is to coordinate actions with the laws of reason,

principles and norms, we will call constructive functions (from the Latin "constructivus").

3.3 Receptive functions: Sensitive function (S function) – Intuitive function (I function)

S function is a receptive mental function associated with the reception, transformation, transmission and storage of information about specific properties of objects (S+) and the state of their internal environment (S-).

I function is a receptive mental function associated with the reception, transformation and transmission of information about the potential of objects (I+) and subjective images (I-).

3.4 Constructive functions: Logitive Function (L function) – Emotive Function (E function)

L function is a constructive mental function associated with the reception, transformation, transmission and storage of information about external (L+) and internal (L-) objective laws and processes.

E function is a constructive mental function associated with the perception, transformation, transmission and storage of information about feelings, emotional states and values manifested in the act of communication (E+) or in the process of self-reflection (E-).

3.5 Psychological Types

The psychological type is a cognitive system of receiving, transforming (processing), transmitting and storing information (its various forms), possessing intelligence and will.

Information exchange is carried out with the help of four mental functions.

16 psychological types were identified in the cognitive concept (see table 2).

The fact is that we identify a psychological type not by one dominant function, as Jung did, but by two dominant functions.

A similar method of identifying psychological types is also used in other typological concepts (Filatova, 2012; Tieger, Barron-Tieger, 2011; Augustinaviciute, 1997; Briggs Myers, Myers, 2014).

Of the two dominant functions, one will be constructive and the other receptive.

Dominant functions are the strongest functions that process information as differentially as possible and in large volumes. These functions are dominant.

Accordingly, the least powerful functions will be subdominant.

For example, if S and L are dominant, then I and E will be subdominant.

In addition, it is important to take into account that the functions are in one of two possible positions: the basic position and the subsidiary position (Jung used the terms "main" and "auxiliary").

If for a type with dominant S and L functions, the latter (i.e. L) is the basic, then S will be subsidiary. This is a constructive sensitive-logitive type, since it is the constructive function that is the base for it.

If, on the contrary, S is basic and L is subsidiary, then this is a receptive sensitive-logitive type.

In addition, if the receptive sensitive-logitive type is an exovert (S+, L+), then it is a sensitive-logitive exovert, i.e. its dominant functions are aimed at performing operations with external sources of information.

The dominant function in the base position is the most powerful function.

If the power of each function is evaluated on a four-point scale, then the dominant function in the base position has 4 points.

The dominant function in the subsidiary position is an auxiliary dominant function, has a power of 3 points.

The subdominant function in the basic position has a power of 2 points, and the subdominant function in the subsidiary position has a power of 1 point (is the weakest).

Table 2: Classification of Psychological Types in the Cognitive Concept.

Type of intentionality		Receptive types
Exoverts	S+ (L+)	(S+) L+
	I+ (E+)	(I+) E+
	S+ (E+)	(I+) L+
	I+ (L+)	(S+) E+
Endoverts	S- (L-)	(S-) L-
	I-(E-)	(I-) E-
	S- (E-)	(I-) L-
	I- (L-)	(S-) E-

3.6 Psychological Types

Jung was right when he argued that the basic psychological functions in the same individual rarely or almost never have the same strength or the same degree of development. Usually one of the functions

has a preponderance in both development and strength (Jung, 2011).

The strength of the functions within the framework of the developed field model (F model) is proposed to be determined by the degree of their brightness in the field system.

The degree of brightness of mental functions is calculated by the formula (1)

$$A/G (1)$$

where A is the number of positive responses for a function in the test, and G is the total number of responses in the test for the same function.

For example, if in the test for calculating the degree of brightness of constructive functions, 15 positive answers to L and 5 positive answers to E were obtained from 20 questions, then the brightness coefficient of the L function is 0.75, and the brightness coefficient of the E function is 0.25.

If in the test for calculating the degree of brightness of receptive functions, 11 positive answers to S and 9 positive answers to I were obtained from 20 questions, then the brightness coefficient of the S function is 0.55, and the brightness coefficient of the I function is 0.45.

Thus, the dominant functions – L and S are identified.

The next step is to determine whether the type is an endovert or an exovert (that is, the type of intentionality), and whether it is constructive or receptive.

This problem is solved in a similar way, i.e. the brightness coefficients of these parameters are also calculated.

Let the test for the type of intentionality have 13 positive responses to the exovertion and 7 positive responses to the endovertion. It turns out: the degree of exovertibility is 0.65, and the degree of endovertibility is 0.35.

Similarly, in the test for determining constructivity-receptivity. Let the constructivity be 0.35 and the receptivity be 0.65.

Thus, a receptive sensitive-logitive exovert, i.e. (S+) L+, has been identified.

For this type, the basic dominant function is the S function, and the subsidiary dominant function is the L function.

Since this is an exovert type, both dominant functions have a "+" direction, i.e. they are aimed at performing operations with external concrete objects.

Accordingly, the subdominant functions will be I- and E-

Our model is called a field model because it describes the psychological type as a field system with a core and periphery.

The core of the field is occupied by the strongest (dominant) functions – in our case, these are S+, L+.

The weakest (subdominant) functions are peripheral (I- and E-).

4 CONCLUSIONS

Thus, in this article, the theoretical and methodological foundations of the cognitive concept of psychological type, developed by an international team of scientists based on the typological ideas of Carl Jung, were outlined.

The cognitive concept considers the psychological type as a cognitive system of receiving, processing, storing and transmitting information.

This cognitive process is carried out by 4 mental functions working in two directions: external (exovertion) and internal (endovertion).

A total of 16 such cognitive systems have been identified.

Our concept can be used in solving problems of intercultural communication, because it allows us to see psychological types in representatives of each culture and predict the interaction between them.

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