

The Problem of Subject and Subjectivity in Psychological and Pedagogical Sciences in the Context of Training Future Teachers

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Abstract: The article analyzes the multimodality of approaches to the concept of subjectivity of a primary school teacher in Ukrainian education. The purpose of the article is how to determine the well-established traditional (mostly destructive) and promising directions for the development of the doctrine of subjectivity in the Ukrainian psychological and pedagogical discourse against the background of historical and current experience. We identified a number of contradictions in the qualification of this phenomenon, the stability of traditional approaches and the avoidance of interdisciplinary neurophysiological and pedagogical understanding of the problem in Ukraine. We also found out that the ideas of Ukrainian scientists are of an expressive dual nature: they are divided into sociocentric representations of the subject as an indicator of the social level and nature-centered (subjectivity as an innate permanent resource for self-development). We also made some comments on the use of traditional and innovative ideas of subjectivity in the educational process. The greatest drawback of the Ukrainian scientific discourse is the lack of consideration of neurophysiological patterns in the understanding of subjectivity. Nevertheless, the maximum use of such ideas outlines the prospects for a new stage in the development of psychological and pedagogical science in Ukraine. The international contribution of the article lies in the re-inventory of views on the subjectivity of the post-totalitarian state against the background of world trends. This will allow countries that have little experience in transforming education, psychology and sociology (Ukraine, Russia, Belarus, Kazakhstan, etc.) not to formally adopt the experience of Western democracies, but also to acquire constructive traditions in their own discourse.

Keywords: *traditionalism, intention, neural connections, self-control of the subject, student orientation, the formation of the teacher's subjectivity.*

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1. Introduction

The problem of studying subjectivity in Ukrainian scientific discourse is characterized by the absence of conceptual research and, at the same time, by the variety of traditional, fragmented, innovative and alternative approaches.

The traditional concept of "subject" means a person as an active, creative, independent, responsible social human being, capable of action and adequate social behavior. Another meaning of this concept is a complex reflection of the essence and behavioral characteristics and levels of personality development: "person", "individual", "personality" and "individuality". The third meaning of the term concerns the principle of subjectivity, widely used in philosophical, psychological and pedagogical research.

A propaedeutic analysis of pedagogical and psychological Ukrainian literature shows that there are such particular ideas on understanding the content of the subject approach and the principle of subjectivity:

- there is a widespread application of the principle of subjectivity in many sciences, including pedagogy;
- there is a search for a single entity that would unite all areas of activity and existence of the person - everyday, social and professional;
- the concept of "subject" is concretized by such procedural indicators as self-awareness, self-assessment, self-determination, self-regulation, self-reflection, Ego-concept, professional Ego-concept;
- the growing role of this methodological concept in the psychological and pedagogical sciences as one of the system-forming foundations of the study of the personality of any specialist.

Under the influence of these trends, the psychological and pedagogical sciences are dominated by the opinion that determines the most valuable for the personality of the student, student, listener and specialist their mental, internal, subjective (Melnyk et al., 2019; Nerubasska & Maksymchuk, 2020; Sheremet, 2019). In this regard, the focus of the student as a subject on the knowledge of his own mental life is the epistemological aspect of the subject of psychology and an important educational aspect of the work of any teacher in the HEI, who is a real subject of pedagogical activity (Gerasymova et al., 2019; Maksymchuk et al., 2020; Onishchuk, 2020). Other problematic scientific issues are also studied, in particular, the following: analysis of the phenomenon of subjectivity and its mechanisms, components of subjective experience (Tatenko, 1996); substantiation of

regularities of development of subjective bases of the person in ontogenesis (Vedinyapina, 1998); development of pedagogical systems aimed at the development of subjective qualities of learners (Pelypchuk, 2007), etc.

This concept of diversity and even entropy gives relevance to our article as an attempt to separate the traditional, destructive and progressive in understanding subjectivity and its consequences for education.

Therefore, **the purpose** of the article is to review modern inter-scientific trends in understanding subjectivity in education, keeping track of historical views on subjectivity in Ukrainian science and defining the main approaches to the subjectivity of a teacher in Ukraine with the argumentation of positive and destructive theories.

Research methods - generalized and summarized analysis of theoretical and methodological sources, historical and typological analysis, comparative analysis, complex interdisciplinary analysis, correlative analysis to establish the correspondence and validity of heterogeneous theories to the modern integrated anthropocentric understanding of neurophysiological, mental, professional and self-development human activity.

Filling with data. We have chosen general studies of subjectivity and the problem of the formation of professional subjectivity of a teacher by thematic extraction of relevant works, theories and ideas for the analysis of Ukrainian ideas on subjectivity. This is due to the fact that the practical issues of the formation of subjectivity are most relevant in sensitive periods of ontogenesis, as well as the fact that the formation of subjectivity from birth and life in Ukrainian science is almost not considered.

Research ethics is based on a tolerant attitude towards irrelevant ideas of subjectivity and recognition of their historical significance, as well as respect for copyrights through citation and vocation. The author's view of the differentiation and validity of subjective-centric theories does not claim to be an exhaustive result of the alternative approach of the authors of the article.

2. New approaches to subjectivity in international scientific discourse

The importance of the concept of a human subject for modern education lies in the change in educational products in the leading countries of the world. This paradigm is based on the principle of the humanitarianism of space and its complete anthropocentricity. This means that teaching-memorization of ready-made knowledge is still irrelevant and ineffective. The natural mechanisms of subjectivity are increasingly used in collaboration between methodologists and neuroscientists. Personal production of knowledge, "making experience" show greater efficiency in comparison with borrowing ready-made experience, and assimilation gives way to reflection.

Now cognitive mechanisms are considered not as educational and psychological, but neurocognitive in the educational environment, which helps to develop methods of individual or microgroup synthesis of new knowledge based on natural neurocognitive mechanisms (Demchenko et al., 2021; Kosholap et al., 2021; Prots et al., 2021; Trifonas, 2003).

Modern neurophysiological research has transferred the humanities to the factual, experimental natural field. This allows us to postulate the fact that subjectivity is an innate human quality that is responsible for reflection and self-realization. Since any education is an improvement or the creation of new neural connections, then traditional cognitivism and the provisions of didactics should be abandoned. Instead, the problem of reflection, self-identification and making relevant decisions comes to the fore. Thus, subjectivity is a biosocial trait that has developed on the basis of relict mechanisms of survival and adaptation. Educational and living performative conditions (performative environment) are necessary for its development and implementation (Troman, 2008). Also Sh. Troman proved that performative activity in solving life problems, multi-vector hobbies and activities contribute to both self-identity and better educational competencies. That is, subjectivity is formed and developed in an inspired, creative and responsible attitude towards all aspects of life that are holistic, interrelated and equally important. Subjectivity, which is hidden in the deep "I", will develop only in conditions of honesty with oneself and respect for one's own immanence. This will ensure both educational satisfaction and development and efficiency.

The real subjectivity of a person is manifested, registered, and can be described empirically in the "then and there" mode. The concept of the CMIS-framework, described in the study by G. Englund and J. Gerdin, is the self-formation of a teacher if he works in the conditions of "conformity, reflection, identification and realization (CMIS)" (Englund & Gerdin, 2019).

If the approach to teaching is made only from the side of traditional pedagogy, it is possible to use only external stimuli and coercion. Recognition of subjectivity as the main energy resource of a person will make it possible to use its nature, the intention to self-affirmation, development, adaptation, etc. The neurophysiology of subjectivity is based not only on the natural need for the development of all "self", but also on the connections of all mechanisms of higher nervous activity (memory, thinking, fantasies, dreams, activity intention), which have been experimentally proven. This connection is very long-standing, as it enables survival, adaptation, socialization and fulfillment (Baddeley, 2017).

Scientists only in the III millennium finally proved the existence of neurophysiological mechanisms of cognitive, transformative activity and creativity itself. This determines the essence of the subjectivity of a person who is motivated by nature to master the world.

In recent decades, psychometric brain studies have confirmed the neurophysiological mechanisms of cognitive activity, creativity and motivation. It turned out that not only methodological and long-term cognitive forms of educational activity play an important role, but also spontaneity, intuition, insight, switching, epistemological discovery, experimentation and improvisation (Benedek & Fink, 2019). It is clear that these long-term and controlled processes of cognition should not be opposed to subjective (spontaneous and irrational), because in the personality they constitute a single complementary whole.

The formation of a teacher's subjectivity is an internally personal process, where emotions (positive and negative) play a much greater role than objective factors and rational attitudes. V. Hastings conducted psychological studies of the formation of subjectivity and self-identity of young teachers and found: for a long time, contradictions have been competing in the psyche of a young professional (professional confidence - uncertainty; justification - unjustification of professional expectations; acceptance - rejection of a professional role) (2008). The relatively complete formation of professional subjectivity occurs over the years, when professional reflection, job satisfaction, the development of individual tools and style create a critical mass of positive incentives. The latter outweigh uncertainty and dualism (Isayev, 1997). This shows that professional training is only a component of professional subjectivity. The latter is more important, it "entails" self-improvement, experience, the need for activity.

Since subjectivity is the highest human manifestation of adaptation, it implies that the teacher overcomes destructive internal and external factors that form detachment from the profession and cause stress. Subjectivity, being a factor of real and professional "survival", acts as a constant resource for reflection, processing of emotional experience, development of professional and life flexibility and emotional intelligence (Bibby, 1999).

The rapid change in educational paradigms and social conditions in the second half of the twentieth century and the onset of the era of neoliberalism forced scientists to change their opinion about the subjectivity of the teacher. It is now clear that subjectivity is not so much focused on society, the fulfillment of social and professional duty, as on the search for self-identity, countering the uncertainty of a globalized neoliberal society and maximum activity freedom (Yee, 2011).

3. The main stages of the study of the problem of the subject and subjectivity in Ukraine

The need to clarify the essence of the concepts of "subject" and "subjectivity" and to distinguish the pedagogical aspect in it is a currently important scientific task. To do this, it is advisable to turn to the genesis of these concepts in Ukrainian science. Thus, based on the analysis and generalization of the scientific achievements of the classics of the study of this issue, we can identify the main stages of research on the problem of the subject and subjectivity.

The first stage begins in the 1920s, which emerged as an alternative to the subjectless paradigm, which absolved matter without man, and explained cognition and activity without subject. But even during this period, the anthropological paradigm, the basis of the subjective approach, is gradually spreading.

The second stage is associated with the dominance of the natures of psychology in science (40-60 years of the twentieth century) and cultural-historical theory (70-80 years of the twentieth century). However, regardless of the presence of unfavorable objective and subjective factors in those years, the classics of Soviet psychology worked on the substantiation of the concept of "subject" in psychology - Rubinstein (the concept of man) and Ananiev (man as a system of individual, personal and subjective properties and traits) (Ananiev, 1980; Rubinstein, 2002).

For example, S. Rubinstein gave a methodological justification for the category of subject in psychology. Under the subject, he understood the way a person realizes his human essence and substantiated the philosophical and psychological concept of man. He put forward the theory of the subject's appropriation of his own body and appearance, abilities, character, temperament, "as well as the Thought to which man has given all his strength, and the Feeling with which he grew all his life" (Rubinstein, 2002).

In his concept, the person is primarily the subject of his activity and consciousness, thinking, feeling, initiating action (Rubinstein, 2002).

This enabled his students and followers to identify the following main qualities of the subject:

- activity as the main determinant of changes in the world that a person makes;
- self-regulation and self-organization as its ability to integrate, independence, self-determination and self-improvement.

The concept of man by S. Rubinstein was expanded by K. Abulkhanova-Slavska and A. Brushlinsky. In particular, Abulkhanova-Slavska

notes: the psychological category of the subject allows to find in different individuals a different degree of their activity, a different degree of integrativeness, a different degree of self-determination; to reveal the relationship between the ideal of development and the actually achieved level, the capabilities of the individual and the real extent of its activity (1999). This is how the concepts of subject, personality, individuality are synthesized (Abulkhanova-Slavskaya, 1999; Abulkhanova, 2006; Brushlinsky, 2003).

During these years, V. Myasyshev (2011) substantiates his concept of human attitudes. The most important types of attitudes, in his opinion, are needs, motives, emotional attitudes, interests, evaluations, beliefs, and the dominant attitude that subdues others and determines the way of life, it is - orientation (Maslow, 1999). The highest degree of personality development (Kostyuk, 1989) and its attitude are determined by the level of conscious attitude to the environment and self-awareness as a conscious attitude to oneself (Myasyshev, 2011; Nikolaenko, 2007).

A special approach to understanding the subject of Ukrainian leading scientist Romenets. He substantiated the action structure of the relationship between man and the world. The subject of mental activity is, in his opinion, most fully in the form of personality, and an essential form of its manifestation is an act. It focuses on all aspects of the psyche for a decisive situational change. Situation, motivation, action, aftereffect - its complete structure. As a result of shifting the emphasis on these components of the act is the spiritual progress of man and humanity. In the set of its definitions, the act is the logical center of the subject of mental activity (Romenets, 2006).

During this period, Tatenko (1996) analyzed the main directions of foreign psychological science and came to the conclusion that in its development the science of subjectivity moved along the ascending and descending vectors, which in a certain way deny, but also complement each other with the energy of their opposition. In accordance with this distinction, ideas about a person as a subject of mental activity are differentiated (Tatenko, 1996).

The third stage. During the 80-90s of the twentieth century. fundamental research of the problem of the subject and subjectivity by our scientists begins.

In the former USSR, A. Brushlinsky (2003) was the undisputed leader and one of the founders of the new direction in the study of subject psychology, as evidenced by his series of monographs, scientific articles, and speeches at conferences on subject psychology. Basically, having completed his research on this issue, he substantiated a holistic, original and well-

formed version of the subject's psychology (Brushlinsky, 2003). The scientist not only developed the subject-activity approach of his supervisor S. Rubinstein, but also put forward new ideas about the scientific foundations of the psychology of the subject.

Compared with the classical Rubinstein (2002) variant of the subject-activity approach in the psychology of the subject, A. Brushlinsky significantly expanded the idea of the content of a person's activity as a factor in determining his psyche. He called a subject- a person who is at the highest level of development, which provides him with activity, integrity and autonomy: "The most important quality of a person is to be a subject, i.e. the creator of his history, the arbiter of his own life. This means initiating and conducting, first of all, practical activity, communication, cognition, contemplation and other types of specific human activity (creative, moral and free) and achieving the necessary results "(Brushlinsky, 2003, p. 86).

V. Znakov summarized: the fundamental novelty of A. Brushlinsky's theory consists, first, in the transition from the microsemantic to the microanalytical method of mental cognition; secondly, in a significant expansion of the idea of the content of activity as a factor in determining the psyche; thirdly, in the integral systemic nature of the study of dynamic, structural and regulatory plans of the analysis of the psychology of the subject (Znakov, 2003).

Such views were widespread at that time in the Soviet Union, which included Ukraine, therefore they correlate with the ideas of Russian scientists. For example, V. Petrovsky (1987), who in Russian psychological science also studies the problem of human subjectivity, rightly notes that the transitions of the individual to new stages of development "... determined from the outside by the inclusion of the individual in a particular institution of socialization or due to objective changes within this institution, on which the individual depends in his formation " V. Petrovsky (1987, p.16). Accordingly, only because society creates a system of higher education, it arises as a stage of formation and development of the personality of a certain specialist who is motivated by professional and career growth.

Modern (fourth) stage. At the beginning of the XXI century in Ukraine, the leading is the humanistic understanding of the sources of personality development. Rybalk (2003), Yagupov (2009) and a number of other scientists place a special emphasis in the educational process of the HEI on the humanistic paradigm of education and upbringing, the need to ensure the personal and nature subjectivity of the student (student, listener) in the educational process of an educational institution. The outstanding educational philosopher Kremen summarizes this approach as broadly as possible and

goes beyond the institutional boundaries of the formation of subjectivity: "... the principle of child-centeredness comes to the fore, but not in the sense of attention to the child as an abstract, generalized - but to a specific child with its essential characteristics. This is important at all stages of educational activities - from the environment to the university" (Kremen, 2006, p. 16).

In turn, Osnytsky emphasizes the primacy of consciousness in the subjective manifestations of man and defines the subject as a conscious and independent carrier of their own activity. He distinguishes five interconnected and interacting components: 1) value experience, which is associated with the formation of interests, moral norms, ideals and beliefs, which together guide human efforts; 2) the experience of reflection, which helps to combine human orientation with other components of subjective experience; 3) the experience of habitual activation, which orients in their own capabilities and helps to better adapt their efforts to solve important tasks; 4) operational experience, which combines specific means of transforming the situation and its capabilities; 5) experience of cooperation, which contributes to the unification of efforts, joint solution of problems and provides a preliminary calculation for cooperation (Osnytsky, 1996).

Thus, in the twentieth century in the philosophical, psychological and pedagogical sciences, man is studied as a subject of activity, a subject of communication, a subject of cognition, a subject of the way of life, a collective subject. The development of views on subjectivity during this period went from the recognition of anthropocentrism in education and the need to take into account the personal phenomena of a person in education - to the recognition of subjectivity as the main resource and mover of personal and collective development.

4. Traditionalist understanding of subjectivity

Despite the fact that in the previous chapter we demonstrated the historical development of Ukrainian views on subjectivity, which generally coincides with world trends, the bulk of theories widespread in educational methodology are concentrated around two vectors. We call them the traditionalist and forward-looking approach.

We define the core of the traditionalist as something that understands subjectivity as the highest aspect of development, and not a cross-cutting level of personality development and/or considering the social aspect of the development of subjectivity as the main one. Let's consider the main ideas of such approaches.

For example, Ananiev singled out the traditional triad "individual-personality-individuality", correlating each category of components with the

understanding of man as a subject of cognition, communication and activity: "Exploring the structure of man as a subject, we begin "from above", with social functions at the molar levels associated with personality, and end with the analysis of "bottom" - the study of mechanisms that provide the necessary tone of activity and general natural properties of man as an individual ... The unification of the laws of history and nature in the form of historical transformation of the nature of the individual and the inclusion of this nature in social structures is carried out by the relationship of levels in a single psychological structure" (Ananiev, 1980, p.144). This position recognizes: subjectivity is not so much an immanent attribute of a person as the result of its social maturation, at a certain level. In addition, we believe that the "top-down" deductive approach does not correspond to the anthropocentric paradigm and the recognition of the natural neurophysiological foundations of subjectivity.

In teaching aids for higher education, subjectivity is considered in the context of social maturity, and not a natural resource. For example, in Ukraine, the concept of "maturation of students" as social subjects, which falls on the student age itself, is still popular. It is believed that adolescence is an extremely important stage in the consolidation and development of the subjective structures of the personality and the future teacher, since it marks the transition from the egocentric position of the growing personality (cognitive, moral, communicative) to the reflexive one with respect to oneself and other people. At this age, qualitative changes occur in various mental spheres - cognitive, volitional, emotional, and a number of new formations appear, showing the intensive development of reflexive processes in the sphere of consciousness" (Sergeev & Borytko, 2001, p. 34). These new formations are subjective in nature.

We also noticed a narrowed methodological setting, according to which the subject in pedagogy is considered as a person, the main or parity in the definition of educational activity. The "White Book of National Education of Ukraine" states: "We need to change the relationship between teacher and student (professor and student). The teacher should not be over the student, stop rigidly regulating and unambiguously determine his development and cognition, but becomes as if next to him, helping to construct and implement the optimal path of cognition and development based on individual essence" (Alekseenko et al., 2010, p. 14). This thesis is correct, but it assumes that subjectivity is a social, administrative and organizing category, and not an internal, psychological one.

Thus, in this perspective, the concept of "subject" means a higher level of student development as a future teacher, and subjectivity - is its

leading manifestations as a creative subject first educational, and later and pedagogical activities. Note that the definition of "subjectivity" includes the concept of **attitude** and characterize the attitude of the student to himself as a figure, to the subject of educational and future pedagogical activities. In Ukraine, this approach is crucial, because, on the one hand, we study the specialist in pedagogical activities, which is autonomous, and on the other - show the importance of the human factor in such activities, ie the crucial role of internal position and subjective attitude.

Of course, this approach leads to the fact that, the dilemma of the relationship between the concepts of "person", "individual", "individuality", "personality" and "subject" in psychological science is not clearly resolved. The argument of this thesis is the following statement of A. Brushlinsky: "... every individual is a subject, but the subject is not reduced, of course, to the individual ... However, the subjects can only be people, and not animals and not machines" (Brushlinsky, 2003, p.73). So, according to A. Brushlinsky, the subject of activity can only be a person as a representative of society, consisting of a contradictory inextricable unity of many subjects of a smaller scale, that is, various social classes, groups, nations, individuals interacting with each other.

Thus, in line with the traditionalist understanding, we can talk about that the personality is a kind of covering that surrounds the sphere of subjective content of a particular person as a social, professional and professional subject in Ukrainian society. Thus, the personality itself acts as an external "covering" to the subject, which can both transmit and transform the true subjective manifestations of the person, depending on various objective and subjective factors. Among the subjective factors, the leading place that plays a strategic role in acquiring the professional subjectivity is the system of motivational attitudes - aims, needs, motives, meanings.

5. Perspective views of Ukrainian scientists on subjectivity

The progressive ideas of Ukrainian scientists regarding the subjectivity of a teacher and any other professionally mature personality consist in the awareness of the truth: the subject is the bearer (initiator, creator, manager) of substantive and practical activity and cognition; the formation of the subject is the process of mastering by the individual his own spiritual life.

Vedinyapina very successfully summarizes this view: "Subjectivity - the basic category of anthropological psychology, which determines the general principle of existence of human reality, the direct identity of man; as

a form of being and a way of organizing human reality, subjectivity manifests itself in the ability of man to adopt a practical-transforming attitude to his own life and finds its highest expression in reflection" (Vedinyapina, 1998, p. 112). Thus, subjectivity - a social, activity-transforming way of human existence, as the self - subjectivity is an obvious and directly given form of human existence.

Scientists who take this approach recognize: personality is manifested through mental, biological and social activity, which, when properly updated in the educational process in HEI create a unique subjectivity of each future specialist, ie his individual style of future teaching, professional "Ego" - concept, professional consciousness and self-awareness, etc.

The subject of cognition is, according to I. Smyrnova, the bearer of subject-practical activity and cognition, the source of cognitive activity aimed at the subject of cognition. The subject of cognition can be a person (individual) or various social groups (society as a whole). When the subject of cognition is the individual, his self-consciousness (experience of his own "Ego") is determined by the whole sphere of culture created during human history. Successful cognitive activity can be carried out under the condition of active role of the subject in the cognitive process (Slobodchikov, 1995; Smyrnova, 1998).

Thus, Ukrainian science recognizes epistemological and ontological aspects of the definition of "subject". Analysis of the results of research on this problem makes it possible to identify relatively independent perspectives on the use of the concept of "subject" in the philosophical, psychological and pedagogical sciences. In particular, V. Tatenko in his monograph "Psychology in the subjective dimension" identifies eight such perspectives:

1. In the act of introspection a person in relation to his own psyche can be considered in two ways: as epistemological and ontological subjects of mental activity.

2. The term "subject" is often used to denote an active, proactive participant in interpersonal interaction. A monosubjective psychological approach here will mean that the "activator" of interaction is one specific person, polysubjective - will involve the presence of several such "activators".

3. The concept of "subject of mental activity" can mean the ability of a living system - the individual - to autonomous functioning, self-determination and self-development on the basis of a life project that defines the integrity of the system, carries different ways, algorithms and techniques of individual existence, its intentions and potentials.

4. A person can be considered as a carrier of various forms of activity, activities, psychological functions and social roles, which he has to some extent mastered. So let's assume that we can talk about it as a poly-, multi- or bi-subject formation, i.e. as a subject of cognition, communication, behavior, work, and so on. The same can be done on the basis of a time criterion, distinguishing what subject the individual was once, what he is now and may become in the future. The qualitative criterion also allows to state that there is a real and ideal, developed and undeveloped consciousness, to determine its actual and potential force in relation to a particular person as a social subject.

5. Differentiating the subjective instance of the inner mental world of the individual, it is necessary to take into account the criterion of its constancy-variability as a subject of mental activity.

6. Subjective activity is carried out as a dialogue. However, this is an internal dialogue of a person as a subject with himself, and not the communication of two separate subjects (an example here is a game of chess with himself).

7. The problem of mono-polysubjectivity can be interpreted in the context of the problem of personal development as a subject of mental activity in ontogenesis.

8. Mental norm and pathology are traditionally differentiated by the criterion of mono-polysubjectivity. Dissociation, bifurcation, splitting of a person into two or more "individuals" are known to occur in the case of schizophrenia and the like. The dissolution of the subject center, the transformation of individual peripheral mental formations into independent functional entities that fight for the status of the subjective nucleus, which have a destructive effect on the psyche, is a sign of mental illness. Recovery, therefore, is associated with the transformation of a polysubjective system of mental activity into a holistic, monosubjective system.

Monosubjective approach orients to perceive the psyche of a person as a subject-centered whole and, accordingly, provides for the separation of the relevant instance, which ensures the quality of the psyche in the functioning and development of the human being as a subject of knowledge, behavior and activities. Such a focus of the mental V. Tatenko (1996) is designated by the concept of "*subjective core*", which represents the intra-integrated ontopsychic formations that carry the "essential code" of the ontogenetic transformations of the individual upon reaching the level of his own human being based on the natural potencies of the individual.

So, we can determine the stages of the formation of subjectivity on the basis of generalizations of relevant Ukrainian studies (not devoid of a sociological aspect). This is most arguably presented in the study of Maksymenko, the quintessence of his ideas can be represented in the form of the genotypic formation of the subject (2006):

1. The beginning of the process of human development as a subject of mental activity is associated with the "awakening" in the prenatal period of existential intuition of the subject nucleus, inclusion in the development of the mechanism of self-questioning and the dominance of such a higher mental function **as an attention**.

2. Convinced of his belonging to being, the child as a subject of his own mental development releases the next round of his "spiral" - "awakens" the experiential intuition of the subject nucleus, includes in the development of the mechanism of self-perception, actualizes as dominant such a higher mental function, as a **memory**.

3. The transition to the next - preschool - stage of the ontogeny of subjectivity is stimulated by the exacerbation of the internal inconsistency of the "accumulation" of unreflexed experience, which leads to the "awakening" of the reflexive intuition of the subject core, including in the development of the self-esteem mechanism and replaces the dominant higher mental function with **imagination**.

4. Over time, the internal contradiction between the free play of the imagination and the ontopsyche readiness of the child as a subject to direct this process in the right direction for her becomes more acute. As a result of this, the intuition of the subject core "awakens" in the younger schoolchild, the subjective mechanism of self-actualization is included in the development, the **will** as the highest mental function becomes dominant.

5. At the next ontogenetic stage, the subject-mental ability to act arbitrarily according to an external pattern (learning to read, write, count, etc.) contradicts the adolescent's awareness of himself as a subject of arbitrary activity, able to determine himself in the "virtual reality" of individual existence. This contradiction "awakens" the corresponding intuition of the subject nucleus, includes in the development of the mechanism of self-determination, gives a dominant role to such a higher mental function as a **speech**.

6. The contradiction between the desire for self-determination, independence in decisions and limited internal resources necessary for their implementation, "awakens" in adolescence the next potential intuition of the subject core, causes the inclusion in the development of the subjective

mechanism of self-potency and dominance of such higher mental function, as **thinking**.

7. In adulthood, the main contradiction in the development of the individual as a subject of mental activity manifests itself in the internal resistance of the life practice of determining from the outside what to expect from the future. It is this contradiction that "awakens" the intentional intuition of the subjective nucleus, becomes an internal impetus for the inclusion in the development of the mechanism of self-laying and separation in the status of the dominant such a higher mental function as an **experience**.

8. The level of mental development reached at the age of majority makes possible and necessary the internal transformation of the genetic ("reverse") logic of becoming an individual as a subject of one's own mental life into a functional ("direct") logic of further ontogenetic *self-development* of subjective activity. However, the completeness and maturity of the functional structure of the subject can be acquired only as a result of its testing in various types of "adult" activities, the development of cross-functional links, which also provides some clarification and correction of violations that accumulate during previous development.

9. At the stage of reaching adulthood, a person must prove to be a psychologically mature subject of mental activity, able to consciously, responsibly and creatively, i.e. through action to direct their own development to the subject of cognition, behavior and activity.

Thus, any person with a properly functioning psyche can become a person and an individual, i.e. *a subject of behavior, communication and activity in the process of gaining social, professional and professional experience and forming their individual style of behavior, communication and activity*. The main mental mechanisms, without which such changes in a person can not occur, are consciousness and self-awareness, reflection and self-reflection, evaluation and self-evaluation, self-determination and self-regulation of their behavior, communication and activities. How this psychologically occurs in the ontogenesis of the person notes S. Maksymenko, revealing the ontogenetic transformations of man as a subject of mental activity (2006).

The dialectic of external and internal conditions for self-determination of the pedagogical activity of a creative teacher shows that the teacher undergoes certain significant changes, which, from the point of view of developmental psychology, can be defined as his development and self-development, i.e. the conscious creation of himself as a subject of pedagogical activity, individualization of the internal the subjective

professional world, i.e. pedagogical experience, introducing into it a new meaning, values and attitudes, which are caused by the motives and motivation of personal and professional self-determination and becoming as a teacher.

6. Discussion and conclusions

Therefore, the traditionalist approach is not devoid of objective meaning, but limits the understanding of a person only as a social being. Its ideas can be summarized as follows: subjectivity is the inner quality of a person as a social being, the essence of which is the presence of one's own civic position, attitude to life in accordance with the values, norms and principles accepted in Ukrainian society, the adoption of professional ethics and their management in the process of realizing their official competencies (Bondarenko, 2006). They define the student as a subject of behavior, communication and learning activity, as well as an individual style of behavior, communication and future teaching activities.

Thus, in this psychological logic we see the role and place of education in the subjective formation, acquisition of social and professional subjectivity of the person, and we can clearly identify the main mental processes without which such processes can not occur. These are attention, memory, imagination, will, speech, thinking, experience, with the participation of which the formation, development and actualization of subjective qualities - activity, responsibility, initiative. Awareness of teachers of these mental aspects helps them to purposefully form the student professional subjectivity and leading subjective qualities as future teachers, i.e. the most important thing for teachers is that the student is potentially able to change oneself.

A more progressive, flexible and interdisciplinary approach proves that the professional subjectivity of the teacher is rooted in his innate inclinations and early acquired personal humanitarian intention. Formation and development of the subjectivity of the future teacher as a subject of professional activity can be carried out in conditions that meet the requirements of future creative pedagogical activity, by consistent *self-awakening* of substantial intuitions of the subject core in the process of mastering pedagogical education and spontaneous *self-development* in ontogenesis. stage of which is the acquisition of professional education, the leading subjective mechanisms of pedagogical activity directly in the creative, educational, scientific and professional activities.

Therefore, despite the polarity of approaches (social and deterministic natural) in the Ukrainian educational discourse, the pedagogical aspects of subjectivity in most aspects correspond to the modern understanding accepted in the world community, but neurophysiological aspects are almost always ignored. For example, we did not find an account of the creation of new neural connections, the need to create an educational space that would positively stimulate and reinforce learning activities with the synergy of social and internal neuropsychiatric factors (Della Sala & Anderson, 2012).

The Ukrainian discourse practically does not take into account the fact that subjectivity with the acquisition of experience and social maturity is less and less guided by administrative, regulatory or other external and framework parameters. The subject becomes self-governing and requires a minimum of moderation or coercive handling with experience in an environment of uncertainty and heterogeneity of educational and life factors (Kahneman & Tversky 2000). In this regard, on the basis of social maturation and "cultivation" of the subject's neurophysiological mechanisms, independent actions, independent decision-making and self-governing behavior become the most effective resource for his further development and effectiveness.

The difference between the Ukrainian concept of subjectivity lies in the fact that it proceeds only from empirical observations, their theoretical generalizations and taking into account individual psychological regularities. In Western educational discourse, subjectivity is viewed as an interdisciplinary subject of study with an emphasis on the neurophysiological nature. This requires the involvement of scientific methods and systems of terminology (Della Sala & Anderson, 2012). Another difference is that in Western Europe and the USA, scientists consider subjectivity far beyond education: in the context of innate and acquired life intentions, independence and naturalness of their manifestation. The personal motivation of the learning or transformative activity of the subject is "fed" by multimodal reinforcements by receiving perceived or hidden feedback from the outside world (Kazlauskiene & Barabanova 2020). This phenomenon contains a huge potential for self-education and self-development even without specially created educational conditions.

We recognize that traditional educational models, although they took into account some neurophysiological mechanisms of subjectivity, nevertheless considered perception, understanding, memory and reproduction as the main mechanisms of didactics.

The resistance of students to the directive one-way transmission of knowledge can be explained not only by the resistance to deformation of the

autonomy and sovereignty of the subject, but by his natural trust in his own experience and knowledge that he will receive in personal cognitive and transformative activities. We hope that in the near future in Ukraine the main way of acquiring knowledge will be their joint intersubjective generation in a performativity format.

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