



A. Beck's Cognitive Psychotherapy and L. S. Vygotsky's Cultural - Historical Psychology

Alla B. Kholmogorova

KHOLMOGOROVA-2007@YANDEX.RU

Moscow State University of Psychology and Education

Moscow Research Institute of Psychiatry – Branch of The Serbsky Federal Medical Research

Center for Psychiatry and Narcology

Last year was celebrated by the international professional community as the 95th jubilee of Aaron Beck - founder of one of the most authoritative branches of modern psychotherapy, the influence of which on the sphere of modern mental healthcare can be compared with the value of Sigmund Freud's psychoanalysis in the last century. Developmental psychologists celebrate one more anniversary last year - 120 years since the birth of the creator of cultural-historical psychology, founder of Moscow psychological school - Lev S. Vygotsky, who was called "the Mozart in psychology" by a famous British philosopher and methodologist working in the USA [Tulmin \(1981\)](#). Mozart discovered a new epoch in music and died at the prime of creative life - sick, poor and lonely. L. S. Vygotsky in the same way made a revolution in the psychology of the last century and died at the age of 37, persecuted and rejected by the official Stalinist science, in isolation from the international community.

Overcoming and criticizing a number of methodological principles of behaviorism and psychoanalysis, connected with ignoring the leading role of the conscious and ideation in human behavior, became L.Vygotsky's main objectives already in the 1920-30-es of the last century, when these main branches of psychology and psychotherapy were just gaining strength. [Beck \(1976\)](#); [Beck, Rush, Shaw, and Emery \(2003\)](#) postulated the central role of ideation disorders in psychical pathology when behaviorism and psychoanalysis were victoriously marching in the universities and clinics of America and Europe, and the defining role of "sex" versus "reflex" in human behavior was fiercely defended by the representatives of two contradictory approaches. This hardly made professor A. Beck's professional way easier as he ended up caught in crossfire, but it reflected his principal position as scientist and practician which he implemented with admirable consistency, despite sometimes furious resistance of opponents. As a result, as German methodologist A. Dürssen aptly remarked, cognitive psychotherapy acted as a "bridge between behaviorism and psychoanalysis" ([Dührssen, 1985](#)).

Now, considering the insufficiently understood and inadequately appreciated L. S. Vygotsky's heritage in historical perspective on the one hand, and the vast fruitful field of

scientific and practical works sown with Beck's ideas (Beck et al., 2003) – on the other, it is possible to state that there is close internal connection between different branches that never crossed before – cognitive psychotherapy and the Moscow psychological school. As Meichenbaum, one of the famous followers of Beck, noted: “to a certain extent, the works of Lev S. Vygotsky and his student A. Luria had an influence on CBT, especially for children. These authors thought that a child is socialized by means of interiorizing interpersonal communication and turning it into internal speech. The models of socialization and interiorization that they offered became a theoretical basis for the development of the children's CBT modification” (Meichenbaum, 1998).

Let us note the most important methodological points that bring together CBT and cultural-historical psychology. Research of cognitive activity or cognitive processes is central for the works of Vygotsky (1982a, 1982b, 1983) and his followers, for example, the author of the theory of stage wise formation of mental actions Gal'perin (1959), the founder of the Moscow school of clinical psychology Zeygarnik (1986) and many others.

Both cognitive psychotherapy and the Moscow psychological school view the subject's own activity as the driving force of development (Alford & Beck, 1997; Leont'ev, 1978). Stressing the leading part of consciousness in development distinguishes cognitive psychotherapy from behaviorism and psychoanalysis and reconciles it with the Moscow psychological school.

One more thing uniting cognitive psychotherapy with Moscow psychological school is the view of the problem of affect and intellect connection as one of the keys for understanding development. Disputes about this issue among the cognitive scientists were in many ways anticipated by L. S. Vygotsky in his principle of affect and intellect unity with the increasing role of intellect in development. He pointed out the basic distinctions between conception logical ideation of an adult and pre-conception ideation of a child, emphasizing the impossibility of solving the problem of affect and intellect connection outside the problem of development. In this sense, L. S. Vygotsky's position marks the guideline for the whole cognitive-behavioral tradition, where the problem of development was traditionally underestimated, and where the attempts of static solving the problem of affect and intellect connection still dominate. Three types of understanding their connection in psychology may be singled out: 1) cognitive processes are primary, emotions are secondary; 2) emotions are primary, cognitive processes are secondary; 3) finally, cognitive and emotional processes are simultaneous. According to L. S. Vygotsky, in the process of ontogenesis these relations constantly change towards the increase of the cognitive processes' role, they never stay in the form set once and for all. “Its not just the properties and structure of the intellect and affect that change in the course of development, it's the relations between them [. . .] the study of a child's life – from its most primitive forms to the most complex – shows that transition from the lowest to the highest affective compositions is directly linked with change of relationships between affect and intellect” (Vygotsky, 1983, p. 225).

One should also note the affinity of L. S. Vygotsky's “internal speech” concept and the concept of “automatic thoughts” by Beck. While observing his patients Beck comes to the conclusion about the essential, if not defining, influence on the person's emotional

condition of subconscious cognitive processes in the form of surrogated internal speech or images that arise involuntarily and do not get in focus of consciousness. Therapeutic work on finding the problem train of thought is extremely laborious, since a lot of cognitions connected with problems are automatic and they are not directly noticed by the patient. L. Vygotsky wrote in his critique of classical behaviorism "Consciousness as the problem of behavior psychology" on the role of such thoughts in the regulation of emotional condition and behavior and on the difficulties of their registration: "... a person is always thinking inwardly: and this never fails to influence their behavior; a sudden change of thoughts during the experiment will always clearly reflect on the whole behavior of the test subject (a sudden thought: "I will not look in the device"). But we know nothing about the way to take account of this influence" (Vygotsky, 1982a, p. 79).

It was A. Beck who managed to develop a system of methods to reveal this hidden internal speech. The method of finding and registering the subconscious cognitive processes or, in his terminology, the automatic ideas, may be compared with the method of free associations by Z. Freud, who made psychoanalysis a practically working system. Beck created the whole system of technique in order to reveal and register automatic thoughts, by actually "aiming the probe" in the unconsciousness, in the deep peripheral processes of consciousness.

Vygotsky's fundamental work *Thinking and speech* (Vygotsky, 1982b) gives a lot of attention to the issue of internal speech, which structurally differs from the external speech: it has predicative telegraph character and does not exist in the form of clearly verbally defined sentences. L. S. Vygotsky also wrote about pre-conceptive ideation that is irrational and that has essentially different structure in comparison with the logical one – domination of random connections by separate attributes of concepts instead of their complex as a whole.

According to A. Beck, automatic thought is born from internal cognitive scheme, the mechanisms of which are still not fully described. However, one can assume that these are, first of all, voices of parents and other significant persons transformed into certain system of beliefs and into internal speech, and also strong emotional experiences structured in diffuse idiosyncratic images - for example, the self-image of helpless and unloved person, connected with extended difficult experience of orphanhood in childhood. The affective load of this image makes it inaccessible to logical ideation even when the child becomes a capable adult. According to the expression of psychoanalyst E. Bibring, there is a certain "psychobiological state of helplessness" suffered in childhood that has a tendency to actualize in situations of separation, parting, losses in the further life.

The ideas stated by parental figures are not subject to analysis and critical evaluation; they are simply taken on faith. In this way, E. Sokolova remarks: "One can assume, that cognitive and affective components of self-esteem do not develop simultaneously - a child starts feeling loved or rejected much earlier, and only later does he acquire the abilities and means of cognitive self-perception" (Sokolova, 1989, p. 55).

Secondary logical processes of ideation proceeding by the principle of reality are built upon the primary ones. They can either contradict the primary cognitive schemes, and

then the action of the latter leads to breach of logic and various cognitive distortions. Reorganization of deep schemes is possible due to the person's ability to the tertiary processes of ideation aimed at the analysis of their own ideation. In Western psychology, they are called *metacognitive processes*, and in the Russian psychology of ideation the term *reflection* was introduced for their designation.

D. Meichenbaum defines metacognition as processes of self-regulation and the thoughts about them. The psychotherapist assists the client in developing the ability to "notice", "catch", "interrupt" and "watch" his or her thoughts, feelings and behaviors. In addition, the therapist must make sure that if there are positive changes in the client's behavior, the client is aware that they are due to his or her own efforts (Meikhenbaum, 1998).

Based on the research of foreign and domestic psychologists it is possible to define at least three levels of the cognitive processes' organization: 1) primary pre-logical, based on affective connections; 2) secondary, based on logic, rational connections; 3) reflection or metacognitive processes based on the person's ability to understand and change the deep foundations of their ideation and activity. *Development of mature person consists in gradual transition to the third level of cognitive organization.*

Early emotional experience on the one hand and pre-logical ideation of the child on the other hand act as sources of cognitive scheme in ontogenesis. It is possible to assume that if the schemes are negative and excessively affectively charged the development of secondary processes of ideation and reflexive ability is broken, which leads to various behavioral and emotional problems.

Based on the understanding of idiosyncratic character of internal speech one can claim that a patient needs indirect verbal support to develop their hidden semi-acknowledged thoughts. The directive advancing approach, characteristic for the rational-emotive therapy by Ellis (*challenging*) creates threat that the patient receives the knowledge of their irrational belief from the outside, but does not acknowledge their own idiosyncratic structures.

It is necessary to ponder on the problem of cognitive psychotherapy method and that hypothetical method of help, which can be extrapolated theoretically from the research work of the Moscow psychological school. In her last works on the analysis of psychic pathology B. Zeygarnik especially stressed the role of violation of *mediation* (опосредствование) or the ability of conscious reorganization of personal emotional reactions, closely connected with the person's comprehension of their values and directives. She saw this as the basis of behavior self-adjustment. The data about the defects of the ability to comprehend their rational structures in various mental frustrations was received in a number of researches [(Kholmogorova, 1983, 2011; Sokolova & Nikolaeva, 1995; Zaretskii & Kholmogorova, 1983; Zeigarnik, Kholmogorova, & Mazur, 1989; Zeygarnik & Kholmogorova, 1985), etc.]. Hence the primary goal of psychotherapeutic help – the development of reflexive ability underlying self-adjustment.

According to L. S. Vygotsky, a mature person is distinguished by the ability to control the affect: "Ideation can be a slave to passions, their servant, but it can also be their master"

(Vygotsky, 1983, p. 235). This is the strategic purpose of cognitive psychotherapy: to develop ability to master one's own ideation by directing it into a more realistic constructive channel, and through that to get the power over emotions. In other words, *the main purpose of cognitive psychotherapy – the development of alternative ideation and reorganization of dysfunctional beliefs – can be reformulated as the development of reflexive ability.*

Actually, the cognitive psychotherapy puts into practice one of the central theses of L. S. Vygotsky about the necessity of submitting the affect to intellect in the process of normal development and becoming a mature person. However, psychotherapy simultaneously becomes a source of new emotional experience for the patients – feelings of support and understanding with extreme respect for autonomy – this is the deficiency that a therapist needs to fill for many patients. This experience also promotes the change of cognitive schemes; therefore, these processes – cognitive and emotional – are inseparably bound.

The idea of *mediation* that was especially interesting to B. Zeygarnik in the last years of her life is connected with the category of sense. *Mediation can only be defined as arbitrary sense formation, control of person's own rational sphere through its acknowledgement and reorganization.* Such an ability, according to B. Zeygarnik, is the basis of mental health; she connected the breach of mediation with different forms of psychic pathology. Research of reflexive mental regulation carried out by the group of Moscow psychologists – [Alekseev \(1975, 2002\)](#), [Zaretskii \(1984\)](#), [Semenov \(1980\)](#) contained important conceptual framework and methods for the further research in this area.

Experimental research of reflexive regulation dysfunction in fulfilling creative tasks by schizophrenics showed a major breach of the constructive function of reflection – the ability to understand and change the initial situationally actualized foundations of ideation ([Kholmogorova, 1983](#); [Zaretskii & Kholmogorova, 1983](#); [Zeygarnik & Kholmogorova, 1985](#)). In the research on creative ideation this ability is also called *divergent ideation*. Using A. Beck's terminology one can speak of decreased ability of alternative ideation that is based on the ability to treat one's ideas as hypotheses and flexibly change them where needed. *The concepts of mediation, metacognitive processes, alternative ideation and reflection reflected similar mental reality.*

The issue of studying reflection as the mechanism of activity organization was raised by Russian methodologist and psychologist N. Alekseev in transition from the position of researcher to the position of practitioner, forming and changing ideation, since reflection is, first of all, the mechanism of change. This transition was accomplished by him in the beginning of the 1960, when he worked as a teacher of mathematics at school and concentrated on teaching children to *consciously, purposefully master the ways* of solving certain types of problems, as the means of mathematical ideation organization ([Alekseev, 1975, 2002](#)).

He defined reflection as establishing relationships between various contents previously isolated, and later, based on the works of the German philosopher I. Fichte, presented the scheme of reflexive act description as the sequence of internal actions ([Alekseev, 2002](#)) which are cited below supplemented by V. Zaretsky (item 6), who showed the leading role of

reflection in changing of ideation foundations in the process of accomplishing creative tasks (Zaretskii, 1984). Parallel with the scheme of reflexive act the cognitive psychotherapist's operational scheme or the sequence of basic work methods with automatic thoughts is listed.

Table 1

Structure of the reflexive act according to N. Alexeyev and V. Zaretsky and a cognitive psychotherapist's operational scheme (Kholmogorova, 2001)

Sequence of steps in the reflexive act	Sequence of cognitive psychotherapist's work methods
1) Stop of ideation	Formation of automatic thoughts
2) Fixation of ideation	Formation of automatic thoughts
3) Objectivation of ideation	Assessment of automatic thoughts – working with thought as an object
4) Estrangement of ideation	Formation of alternative view
5) Establishing relationships between different ideation	<ul style="list-style-type: none"> • correlation with other automatic thoughts and establishing beliefs; • establishing relationships between beliefs and relevant childhood experience; • establishing relationships between beliefs and broader life context (consequential analysis)
6) Change of ideation foundations	Transformation of dysfunctional beliefs

Table 1 shows that the sequence of internal actions making up the reflexive act of consciousness and the sequence of steps in cognitive psychotherapy are in relationships of mutual conformity (Kholmogorova, 2001). Therefore, one can conclude that *during cognitive psychotherapy the teaching of reflection is going on as the sequence of internal actions.*

The process of forming reflexive ability is somewhat similar to the method of stage wise formation of mental actions, developed by the follower of L. S. Vygotsky, an outstanding representative of Moscow psychological school Gal'perin (1959). Formation of reflexive ability occurs during cooperation between psychotherapist and a patient, with the leading role of the patient's own activity (which is purposefully provided by the system of the home assignments aimed at constant independent refinement of all components of the reflexive act). *The basic steps in the cognitive psychotherapist's operation may be viewed as a reflexive act brought in interpersonal dialogical space.* During work with the patient such reflexive acts invariably repeat, which eventually leads to interiorization of the reflexive act that was originally executed by two people together. In this process the person acquires the ability

of self-reflection and of changing their own ideation, *i.e. it is not only dysfunctional beliefs or ideas that change, but the whole organization of ideation changes - in B. Zeygarnik's terminology, it becomes more of a mediator.*

Tying the findings of cognitive psychotherapy with the achievements of psychology of ideation allows for seeing the main purpose of psychotherapy of various forms of mental pathology in a new light. It can be viewed as the *development of sense formation or formation of reflexive ability as the system of internal actions – the components of reflexive act or internal means of cognitive processes and emotional conditions' regulation.* Integrative model of psychotherapy based on these ideas can be called *cognitive-reflexive.*

Thus, Vygotsky's ideas and findings of Russian psychology of ideation allow to get a fresh understanding of the psychotherapist's operation process: on the basis of activity approach to mentality (understanding of mental activity as a systems of actions) and cultural-historical approach (understanding of the higher mental functions as derivatives based on the interiorization mechanism from joint external activity with other person - carrier of cultural means and activity methods).

To prove such conclusion let us refer to the opinion of J. Wertsch, the Western expert in the field of cultural-historical psychology, whose article published in 1979 and republished 30 years later in the "Human development" magazine anniversary issue, stated: "The development of self-adjustment ability in ontogenesis is the central theme of works of Vygotsky and his followers. . . . his ideas about self-adjustment can be understood correctly only if we conduct the genetic analysis going back to the sources of self-adjustment" (Wertsch, 1979, p. 66). And further: ". . . researchers paid little attention to his idea about transition of interpsychical functioning into intrapsychical" (Wertsch, 1979, p. 67).

These words were written almost 30 years ago, but still there is little attention to Vygotsky's works in the context of modern psychotherapy (Kholmogorova & Zaretsky, 2010), with rare exception (Leiman, 1992; Meichenbaum, 1977; Ryle & Fonagy, 1995); though the main interest of specialists in the field of modern psychotherapy is focused more in the direction mapped out by L. S. Vygotsky - development of ability to consciously self-adjust mental or cognitive processes.

The search for mechanisms providing adjustment of emotional state, behavior and communication became the epicenter of modern research in the field of psychotherapy. This is expressed in rapid growth of a number of similar concepts that describe the processes of self-adjustment and communication – "*mentalization*", "*emotional intellect*", "*social cognitions*", "*metacognitions*", "*theory of mind*", "*reflexive awareness*", etc. These concepts reflect similar psychic reality that the specialists focus upon when developing new methods of treating various psychiatric disorders.

For the sake of justice, it is necessary to note that the development of mentalization capability that became one of the most popular directions of dynamically focused psychotherapists' work (Bateman & Fonagy, 2006), is effectively carried out by means of cognitive psychotherapy, and in many ways, it is the essence of the method suggested by Beck. In

our view, the concept “reflection” is rather heuristic for further development of this branch. It has deep roots in philosophical tradition, which stresses the freedom of human will and the reflection as the major mechanism of this freedom. Assigning psychological meaning to this concept allows viewing the reflection as the basis of emotional self-adjustment, randomness of behavior and effective interaction with other people.

The concept of cultural-historical psychology was born in opposition to the naturalistic concept that viewed human mentality as completely natural instinct formation. L. S. Vygotsky differentiated natural, instinct and higher (properly human) mental functions by the criterion of the mediation of the latter. It means that properly human or higher mental functions are not given evolutionarily, they are formed during interiorization of some cultural means of their organization. That means that they are, first of all, a product and function of cultural development, instead of brain evolution; this is the principal difference of human mentality from the mentality of animals. The main achievement of biological evolution is the highest flexibility of a human brain providing for interiorization of a wide range of means specific to different cultures during learning various cultural practices and behaviors.

From the perspective of cultural-historical psychology, psychical pathology can be viewed as a deficit of methods of psychics’ organization and regulation, and psychotherapy as the process where this deficit is compensated and mental growths appear expanding the self-adjustment ability. Therefore, a psychotherapist’s activity can be treated as the activity that does not simply eliminate the symptoms of illness, but it compensates the underlying deficit through development of a mental “toolkit”. More than half a century was devoted by A. Beck and his followers to the perfection of this toolkit, and they armed the modern psychotherapists, in the terms of L. S. Vygotsky’s concept, with a system of cultural means aimed at the development of a mature and effective organization of ideation and the whole psychical apparatus. This system is gaining acceptance by the representatives of the historically opposing traditions, defining their integration by uniting the best achievements of various schools of psychotherapy into the paradigm, which the European methodologist and researcher of psychotherapy Klaus Grawe was dreaming about, and which he called “general psychotherapy”. In the historical perspective, the resultant force of the two leading traditions in psychotherapy - behaviorism and psychoanalysis – sets clear direction, which can be described as moving the focus of the specialists’ attention “from sex and reflex” to reflection.

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