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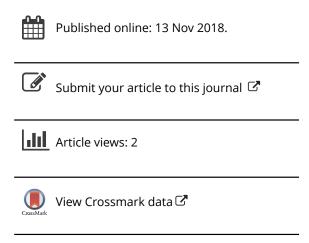
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# The Theoretical and Empirical Foundations of the Sociocultural-Interdeterminist Dialogical Metatheory of the Integration of Psychological Knowledge

V.A. Yanchuk

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### V.A. YANCHUK

# The Theoretical and Empirical Foundations of the Sociocultural-Interdeterminist Dialogical Metatheory of the Integration of Psychological Knowledge

This article examines the problem of finding the theoretical and empirical foundations of the integration of psychological knowledge in the context of a sociocultural-interdeterminist dialogical metatheory. An argument is made for the idea of the four-dimensionality of the continuums of psychological phenomenology, of which the universal systemic foundation is culture. Heteroqualitative, multidimensional. and multiparadigm psychological knowledge conceptualized in the form of three four-dimensional continuums. Based on the introduced principle of dialogical interdeterminism, a case is made that the interaction among their constituent structural elements is interdeterminist in character. Theoretical and empirical substantiation is presented for the innovativeness of the approach.

**Keywords:** heterogeneous system, dialogical interdetermination, integration, intersubjectivity, culture, cultural-scientific tradition,

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V.A. Yanchuk is doctor of psychology and dean of psychology faculty at the Belarus State University.

metatheory, methodology, principle of dialogical interdeterminism, sociocultural-interdeterminist dialogical approach, four-dimensional continuums of psychological phenomenology

## Introduction to the problem of finding the methodological foundations of the integration of psychological knowledge

In analyzing the problems of the theoretical and empirical foundations of the integration of psychological knowledge, one must stress that they are generated by the state of psychology as a whole at the beginning of the third millennium. The unabated discussions in recent years of the problem of the reproducibility of the results of psychological research, the limited capabilities of available psychological knowledge to provide clear explanations of the intercultural diversity and unabated conflicts within it, and so forth, have revealed pronounced contradictions between universalist psychological concepts and the diversity of manifestations of psychological phenomenology, which fundamentally do not want to fit into established standards. In speaking of psychological knowledge as a whole, one can quite clearly state that it has the status of an eternal wanderer who has never found its lodestar.

A retrospective look at the history of psychology brings up numerous pieces of evidence of constant rethinking of both its subject matter and its purpose. An indirect piece of evidence of that is a statement of what is already the third (after behaviorist and cognitive) revolution—this time a cultural-dialogical one. Using as an example an analysis of the works of Brunner, Shotter points out a qualitative shift from internal mental concepts to dialogically structured social practices (Shotter 2001, p. 167). Describing the situation in psychological knowledge, he notes: "We will not only lack a shared basis on which to judge the adequacy and relevance of people's claims to knowledge, but we will lose the basis on which we can proclaim ourselves as beings worthy of respect and civility. For us to acquire and retain a grasp of its nature, to achieve insight into our practices of Self, is not easy. To repeat: Instead of a

theoretical, explanatory account, we need first to come to a practical understanding of the joint, dialogical nature of our lives together" (Shotter 2001, p. 181).

More and more factors are emerging to shatter the unrealistic hopes of finding a comprehensive universal foundation that would enable psychology to free itself from its complex of being unscientific in the rigorous academic sense. A kind of "stab in the back" was dealt by the publication in the highly authoritative journal *Science* in August 2015 of the results of a massive study of the reproducibility of 100 experimental and correlational studies published in three well-known psychological journals. An expert assessment conducted by a group of 270 researchers showed that only 39 percent of them may be interpreted as relatively unambiguous, and even then with significant caveats. As a sweetener, it implicitly concludes that the reviewers were satisfied with the process but by no means with the results (Bohannon 2015, p. 910).

To grasp the full significance of this expert finding for contemporary empirical-experimental psychology, which is dominant in the majority of foreign as well as Russian scientific psychological journals, it should be explained that the studies were based on a classical positivist methodology that postulates the principles of operationalization and verification as the fundamental underpinnings of the objectivity of scientific knowledge. In the first instance, what matters is the measurability and quantifiability of the results of a study as the basis of the objectivity (unambiguousness) of scientific knowledge. In the second, the key is its reproducibility (replicability) in a spacetime continuum. And if the actualization of one of them in a study is questioned (in this context—the principle of verification or reproducibility of the results of studies), then the results too are assessed as unobjective, i.e. not scientific.

Such a painful charge inevitably elicited a reaction from the psychological community. One of the first to respond was Barbara Spellman, the editor-in-chief of the journal *Perspectives on Psychological Science*, published by the Association for

Psychological Science, who described the present situation as none other than Revolution 2.0 (Spellman 2015, p. 886). In defining the specifics of this revolution, she notes that it is not a scientific revolution requiring radical changes in fundamental underpinnings, of which there have been quite a few in the history of science, but a revolution similar to a political one. She enumerates its prerequisites: numerous setbacks in attempts to replicate the results of studies (low verifiability); numerous questions regarding research practices (a replication of what is common knowledge; the provision of not all variables, etc.); standard statistics (rising dissatisfaction in checking the significance of the null hypothesis); problems with the openness of research data (the unfeasibility of obtaining data for a subsequent double-check and meta-analysis); fraud (the incident involving Diederik Stapel, who was found to have fudged data in all of his 50 scientific publications); and others (Spellman 2015, p. 887).

Such charges were made not only against psychologists but also against representatives of other fields of knowledge. Critical comments about the methods of inquiry being used were made about the neurosciences, biomedical and political sciences and the social sciences as a whole. In particular, in 2013 the U.S. National Science Foundation Directorate for Social, Behavioral, and Economic Sciences formed a subcommittee on replicability in science. To solve this problem, a recommendation was made that open science and strict rules be created: the reproducibility of studies; open data; guarantees of the necessary size and representativeness of a sample; use of X, Y and W statistics; pre-registration; a determination of the type of reproducibility. In concluding his passionate "cri de coeur," Spellman identifies the most important factor:

We want to understand how minds work and we want to understand how to apply what we know in the real world: It is likely that some subtle and difficult-to-replicate phenomena might be existence proofs that tell us something about the first; repeating the research and looking for moderators and mediators of the effects may help us with the second. We will value both data and theory. We will value both confirmation and exploration. We will realize that we have already picked a lot of the low-hanging fruit

and that we can investigate new levels of complexity with our new methods for data collection (from brain imaging to wearable devices) and analysis. (Spellman 2015, p. 894)

The last point is especially important, since any preoccupation with the perfection of method and technique may divert from what is key—the real, social, "living," feeling and experiencing social world, whose patterns are by no means easy to inscribe in the preparatory scheme of a science that studies a world that is "not living," let alone social and sensual.

This problem found its expression in a whole series of key publications, in which the authors propose various kinds of solutions (Earp and Trafimow 2015; Patil et al. 2016). This list could go on and on while we point out what is most important in them: an avoidance of the discussion of the basic problem—the qualitative way in which psychological phenomenology differs from that of natural science. It is already obvious, for one thing, in its inaccessibility to direct measurement, even in light of the increasingly complex technical capabilities of research, including into brain activity. What is measured is not the psyche itself but its mediated manifestations. And the reaction to a stimulus is mediated by the subject's internal activity, which actually is what led to the crisis in behaviorism. It had been consistently trying to establish laws of behavior in circumvention of the "black box" of human consciousness, which does not lend itself to measurement as a guarantor of the objectivity or universality of the laws of behavior. This is also characteristic of cognitive psychology, which with certain innovations is trying to continue the naturalscience tradition in psychological research in what is now a quest for mental representations (Shotter 2001).

In this context we should recall the 120th anniversary, commemorated last year, of the birth of L.S. Vygotsky, who accomplished a historic upheaval in psychology, manifested in the "opening of the black box" of mental activity through a scientific proof of the semiotic mediation of mental activity. Vygotsky convincingly showed that a person, first of all, reacts not to a stimulus per se but to the sign of the stimulus, and second, he

does not even react to an objective sign but to its meaning, which in turn is determined by the historical-cultural context that changes over time (Cole 2010; Yanchuk 2016c).

The search for additional reasons for reviving Aristotelian atomistic logic, which is aimed at finding finite and exhaustive knowledge and is fundamentally a dead end for psychological knowledge, is essentially unsuccessful because knowledge becomes finite and does not fit into the infiniteness of development. This is graphically presented in the criticism of Modernism by representatives of Postmodernist philosophical thought, the details of which in the context of psychological knowledge one can find in a key paper by the author (Yanchuk 2003). In order to avoid a possible accusation of author's bias, I will quote an authoritative researcher, Toomela, who is productively working on this problem and is well versed both in Western and in Soviet psychology:

Last 60 years in psychological research have given us thousands, perhaps even millions, of ways how to predict statistically one psychological variable by way of another. At the same time, many fundamental questions have even not been asked because of limited methodological thinking. We still find 'objective' scores without knowing how many different psychological mechanisms may underlie the same score. We do not know how psychological aspect of experimental conditions may have contributed to study results. Study of fragments gives very little to understanding a human person as a whole. (Toomela 2007, p. 18)

The unrealistic optimism that sometime someone will form, from the millions of empirically established fragments of description of psychological reality, a holistic understanding of the nature of psychological phenomenology leads to the opposite result—the drowning of psychology in particulars and as time goes on, the worse it gets. Meta-analysis, which has become popular recently, does not solve the problem, since it is intended from the outset to analyze knowledge within the framework of fragments again, even if they are obtained by different researchers. Quite reasonably, a number

of questions come up in regard to who will integrate these fragments and on what metafoundations? No answers to these questions are provided. It is quite obvious that the crisis being discussed is inevitable, but the proposed solutions to it, based on upgrading techniques and technology, opening up the procedure and data bases, and relying on the capabilities of meta-analysis, will not solve the problems in general. And there will be no avoiding fundamental answers to the fundamental questions about the qualitative specifics of psychological knowledge and its subject matter in the foreseeable future.

The conceptual inconsistency of existing psychological knowledge in the area of the methodological and theoretical foundations is obvious. I will cite the authoritative opinion of Henriques, who describes the current state of psychology this way:

(1) There is no agreed-upon definition; (2) there is no agreed-upon subject matter; (3) there is a proliferation of overlapping and redundant concepts; (4) there are a large number of paradigms with fundamentally different epistemological assumptions; and (5) specialization continues to be increasingly emphasized at the expense of generalization and thus the problem of fragmentation only grows." (Henriques 2008, p. 736)

One gets the impression that psychology as a science is afraid of the variegated reality of human life and is trying to avoid the risk of looking like a nonscience. In the view of one of the most authoritative representatives of cultural psychology, Valsiner,

Psychology struggles with its self-identity. It tries hard to live up to the standards of science—imported from other sciences—and resists the ephemeral nature of its own phenomena. Our real psychological experience is that of the fullness of feeling, thinking, and acting as we are—here and now. These phenomena are rapid—emerge and vanish at an instant—multi-layered (as they include meta-level reflexivity), and collective (individuals—be they persons or representatives of animal species—are embedded in a wider social network). Furthermore, the psychological phenomena of here-and-now (acting, feeling,

and thinking) are guided by their histories (through memory) and anticipations of the future (goal setting and actions towards future objectives. (Valsiner 2009, p. 2)

An attempt by the author to accomplish the multifaceted task of integrating the psychological knowledge accumulated in the existing multiplicity of paradigm coordinates and trends of traditions and approaches is presented within the framework of the sociocultural-interdeterminist dialogical metatheory of the integration of psychological knowledge (Yanchuk 2015a, 2016a, 2016d).

One must pay attention to the format of the metatheory because of the requirements for its structure. What should the metatheorist's task be? According to Turner, he should:

(1) evaluate the clarity and adequacy of concepts, assumptions, and models; (2) find similarities, overlaps, and differences in theories; (3) compare existing empirical data (including historical data) for an evaluation of the validity of theories; (4) distinguish what is most essential in a theory from the less essential; (5) synthesize theories of determine a position regarding them; (6) redefine a theory in accordance with empirical and conceptual foundations; (7) formalize a theory while making it as rigorous as possible; (8) find the most suitable language for describing the essence of the theory; (9) know how to deduce a theory to finding an opportunity for empirical testing. (Turner 1990, p. 40)

What are the criteria for evaluating metatheory? According to Edwards, they are *conceptual integration*: metatheory should represent the integration of methodological and epistemological pluralism in the research field *ontological scope*: metatheory should have the ability to provide integrative capabilities that can explicate and define the place of various ontological elements of various epistemologies and methodologies; *ontological depth*: metatheory should demonstrate how various ontological models correlate with ontological complexity and integrate them into a logically consistent approach; *empirical validity*: metatheory should possess the ability to provide exhaustive and consistent explanations of phenomena related to the research field; and *internal congruence*: all of the propositions and concepts presented in the metatheory should be in full congruence with one another (Edwards 2010).

In the Postmodernist tradition, the evaluation of metatheory uses an approach of evidence-based validity that presupposes "the testing of hypotheses according to their ability to explain the data in a specific domain" (ibid., p. 67). A special status is held by integral metatheorizing, which is typified by its large scale, openness to the variety of scientific theories and socio-cultural knowledge in all parts of the world and the use of other approaches as metatheoretical resources (Wallis 2010). Research becomes integrative if it: i) is consciously and explicitly performed within an appreciative context that can move across and within various disciplines; (ii) adopts systematic research methods and principles; (iii) uses, as conceptual resources, other integrative approaches; (iv) is characterized by goals of inclusiveness and emancipation (Edwards 2010, p. 185).

This type of integral metatheorizing is the most aligned with the author's notion of the integration of psychological knowledge that is represented within the variety of fields and systems of paradigm coordinates based on qualitatively excellent ontological and epistemological foundations. Its framework embodies the author's concept of finding solutions to troublesome questions related to the fact that behavior derives not only from mental activity but also from the biological nature that causes it to materialize; to ascertaining the specifics and mechanisms of the interaction of symbolically represented culture with a biological substance, for which mental activity is the mediator; to recognizing the role that unconscious mental processes or the unconscious play; to understanding that man not only reflects external reality but also experiences it while interwoven with being-in-the-world. And that experiencing existential solitude or isolation by the social environment affects cultural integration and social adaptation. That the person does not exist in its own psyche but "emerges" from its confines into the social and natural world and that these "emergences" lead to recognition of its lack of adaptability or of suitability. That changed circumstances (social and natural) may significantly also transform internal mental processes and a person's actual biology as well.

The adaptation to an altered external environment should not occur spontaneously but be controlled, with knowledge, among other things, of psychological patterns. Ascertaining why psychological knowledge by no means always keeps up with changes occurring in the life of society, and empirically established facts by no means always correlate with the realities of human existence. These questions could continue ad infinitum. Some answers to them will be presented from the standpoint of the proposed metatheory.

An understanding of psychological diversity in the infinitude of its manifestations requires that accumulated knowledge be regularized on the basis of various systems of paradigm coordinates, traditions, and approaches that make it possible, in a dialog with one another, to find additional foundations for mutual enrichment, which in turn contributes to a deepening of the understanding of its qualitative specificity (Yanchuk 2012). To accomplish this highly complex task, three four-dimensional spaces are proposed, defined on the basis of the criteria of the heteroqualitative natures and spheres of the psyche and the areas of its study. These spaces, however, do not exist as autonomous self-sufficient essences but as mutually complementing and expanding the possibilities and the depth of understanding of the nature of the conceptualized phenomena. Since, taken together, they describe the psychological specificity of man in his biopsychosocial essence in the conscious, unconscious, and existential spheres that are studied as aspects of the person, the environment, and activity, it is extremely important to find a common foundation that is intentionally present in each of the components of the triad under discussion and that accounts for their distinctiveness from the etic and emic perspectives.

# Positioning in the heterogeneous, multidimensional, and multiparadigm space of psychological knowledge

The most complex task is finding foundations for arranging the infinitude of knowledge in the field of psychological

phenomenology, which is related to man's existence in a social environment. First, this existence if multifaceted; and, second, it is actualized in a complex interaction of the biological, the psychic, and the social. Additionally, the purely psychological component outside the context of the biological substratum can be separated only in the abstract. Third, the social nature itself is multifaceted in terms of its representativeness in the context of multiculturalism, which adds the aspect of strong cultural differences, which are impossible to ignore either in the field of psychology or in the fields of sociology and biology. In fact, as a result of the sharp increase in migration, their presence is becoming increasingly obvious, and the processes of cultural integration just do not want to fit into classical concepts and lend themselves to simple solutions based on universal foundations. Fifth, there is the question of what the concrete or substantive basis should be for an attempt to itemize the infinitude and diversity of psychological knowledge.

I recognize the fundamental impossibility of encompassing this infinitude within the framework of individual consciousness. However, since I am generally well informed in the problem area and basically well oriented in the interdisciplinary study of the phenomenon of human beings, as well as the trends of interdisciplinary integration in their study, I propose as criteria the interaction among the heteroqualitative natures and sphere of the psyche and the areas of study that have been constituted in psychological knowledge through the history of its evolution and development.

The overall structure of the existing diversity of psychological knowledge may be represented in the form of a series of three-dimensional continuums. By the criterion of the heteroqualitative natures: the biological, the psychic, and the social; by the criterion of the realms of reality: the conscious, the unconscious, and the existential; by the criterion of areas of study: the person, the environment, activity, and so forth, which are visually depicted in Figure 1. The distinguishing feature of the dimensions of these

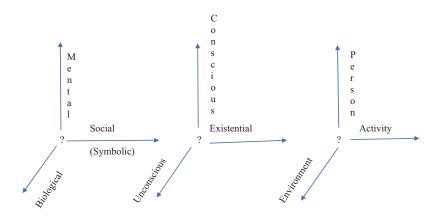


Figure 1. Three-dimensional continuums of the representation of the different-quality natures (biological, mental, social); and the domains of reflected reality (conscious, unconscious, existential); and the areas of research (personality, environment, activity) of psychological phenomenology.

spaces is autonomy, which is manifested in the extreme limitedness of questions regarding their interaction with one another.

The aforementioned continuums enable us to include in the scope of analysis the achievements of the biopsychosocial approach, which has lately received wide recognition, including in the biomedical sciences; the psychoanalytic approach and the existential-phenomenological approach, whose contribution to the development of psychological knowledge is self-evident; and, finally, the traditional areas of research, which were articulated already by Kurt Lewin in his famous formula B = f(P, E).

Paradigmatic diversity is represented by an even wider range of approaches: the behaviorist approach and its current development in the form of a cognitive-learning modification; the interactionist approach; the psychoanalytic approach; the cognitivist approach; the existentialist-phenomenological approach; the activity-based approach; and others. It should be noted that much of the ideological discourse represented in them has been devoted, in the view of J. Valsiner, "to social positioning of oneself within some general

perspective designated by an-ism (mentalism, behaviorism, cognitivism, interactionism, transactionism, socio-culturalism and even humanism!) and setting up socially normative prescriptions for the methods through which 'scientific facts' are produced. The isms have been fighting one another for dominance in the field—leading from the 'Era of Behaviorism' to the 'Cognitivism Restoration,' and to further eras" (Valsiner 2009, p. 4 [English translation from http:// www2.clarku.edu/departments/psychology/pdfs/valsiner2009inte grating.pdf]). Time proved to be the best healer from the unrealistic optimism of their representative regarding the very possibility of finding universal, exhaustive solutions alone. The behaviorists, the most consistent and orthodox builders of objective psychology, were unable to overcome the resistance from the activity of the "black box," which they did all they could to ignore, and gradually evolved into a cognitive-learning-behavior approach with much less selfconfidence. Similarly, the mystical flavor of the unconscious was no help to psychoanalysis in taking over the leading position. None of the other isms able to accomplish this, either, as they ran into the qualitative specificity of the human psyche, which not only reacts to external stimuli, but under certain circumstances is driven by unconscious impulses, deals with cognitive tasks, and so forth. This heterogeneity did not fit at all into the framework of unidimensional logic. The methodological foundations of paradigmatic diversity in the form of alternative ontological-epistemological dichotomies (objective—subjective; determinism—indeterminism; heredity—variability; knowability—unknowability; atomism—holism; rationalism irrationalism; statics—dynamics; etic-emic; nomothetic-idiographic; etc.), as well as a proof that it is impossible to reduce them to a common principle, were presented in a special study (Yanchuk 2000).

Something similar took place in regard to the areas of study, which since Lewin's time have consisted of the person, the environment, and behavior (activity). The emphasis on each of them individually took psychological knowledge to that same methodological dead end. Emphasis on environment, while not taking into account the person and his activity, led to a dead end. In the case of

the activity-based approach, the same thing occurred when priority was given to activity-based and personal determination. Lewin's undirected determination, expressed in the universal formula B = f(P, E), gave way to the partially bidirectional determination of A. Bandura, expressed in the formula  $B = f(P \leftrightharpoons E)$ , which underscores the interdependent and reciprocal conditioning of the relationship among the person, the environment, and activity.

The lack of prospects for the development of psychology at a time when the totality of specific concepts of the overall subject of study is unintegrated has intensified the effort to find potential foundations for integration. The difficulty of this task stems from the need to overcome the either/or logic that predominates in classical science and that from the outset is aimed at proving the advantages of the promoted solution to the problem by concentrating on the weaknesses of the alternatives and one's own advantages over them. There are more than enough examples of this (Valsiner 2007; Brinkmann 2011; Weinstein et al. 2013; Hart 2014, Proietto and Lombardo 2015; Mazur and Watzlawik 2016).

A more productive alternative is proposed by the integrative pluralists, who proceed from an affirmation of the multifaceted complexity of mental life and call, in contrast to the reductionists, for a limitation on stringent epistemological, methodological, and ontological requirements. They argue that it is necessary to use different approaches, based on different theoretical foundations in regard to this complexity and multidimensionality (Watanabe 2010). As P. Healy notes,

On the epistemological level, the relevant differences hinge on a distinction between (what has been variously described as) a third- versus a first-person perspective, an explanatory versus an experiential approach, a natural science versus a human science orientation. On the methodological level, they center on a distinction between quantitative/experimental versus qualitative/descriptive approaches, and on the ontological level, on a distinction between 'natural' and 'human' kinds, and between a 'metaphysic of things' and metaphysic of persons. (Healy 2012, p. 273)

The pluralists hold the view that the inclusion of the various dimensions of our life and different perspectives is an essential condition for studying and understanding our complex, multifaceted psychological functioning, the mental aspect, the aspect of what is experienced, the neurophysiological aspect and the behavioral aspect. In addition, they contend that the advantages of one approach can compensate for the limitations of others, that different approaches are mutually complementary (Smythe and McKenzie 2010). This approach is the most productive and conducive to the integration of efforts in the area of comprehending the extremely complex and diverse psychological phenomenology, which is the main objective of the sociocultural-interdeterminist dialogical approach that I have been developing for a number of years.

## Sociocultural-interdeterminist dialogical methodological and theoretical foundations of the metatheory of the integration of psychological knowledge

In order to determine the very possibility of finding foundations for the integration of heterogeneous, multifaceted, and multiparadigmatic knowledge, we must turn to the history of the evolution of the world view of the nature of all that exists, man in particular. Conducting such an analysis required the formulation of a construct, "the cultural-scientific tradition," which is defined as a set of philosophical, epistemological, scientific-theoretical, and emotional-esthetic concepts that is polysemic and dynamically mobile according to the historical, social, and national context ... a description of a certain mentality, a specific way of viewing and perceiving the world and of assessing both man's cognitive capabilities and his place and role in his environment. The use of this construct made it possible to trace the trend of the world-view foundations of various traditions (Cultural Syncretism, Theocentrism, Anthropocentrism, Modernism, Postmodernism) and to supplement them with the tradition of Dialogism, which found its highest embodiment in dialog as a condition, mechanism, and driver of culture and science in conditions of diversity (Yanchuk 2005, pp. 34 - 35).

The changes that have occurred throughout the history of humankind show a forward movement from a fragmentary, fetishized world view, stemming from an extreme scarcity of knowledge about the nature and essence of what is observed and resulting in the attribution of animacy and divinity to objects in the world around (hylozoism), to a more systemic, anthropocentric knowledge, which was initially oriented toward finding universal (objective) laws of the structure of the world and then, after colliding with the problem of the potential depletability of the innovative and heuristic resources of any knowledge, based on an immutable universal foundation, arrived at the idea that its diversity and polyphony in its understanding, multiple paradigms and polyvariant nature were necessary and productive.

However, existence in conditions where there are no unambiguous, universal truths that act as the foundation for reaching a consensus gives rise to the problem of finding something in common, shared basis, without which coexistence and co-creativity are impossible. That something is a dialog that presupposes the acceptance of otherness and dissent as basic foundations and the joint creation of knowledge that takes into account existing similarities and differences, the construction of a home that is equally comfortable for everyone living in it. Dialog presupposes pluralism and tolerance as basic prerequisites for the joint creation of knowledge that takes into account all of its possible views and interpretations, which mutually complement one another and mutually enrich the participants in the process of co-construction.

G. Henriques, in assessing the current state of the world view that defines human activity and discourse, positions it as "fragmented pluralism," which means philosophical world views that are fundamentally contradictory and incompatible. "Fragmented pluralism," from his point of view, "does not seem to be an ideal state of affairs, and at a very basic level I am advocating for a shift toward an integrated pluralism. An integrated pluralism is

where there are differences in emphasis that stem from disparate needs, goals, and other idiographic factors, but each individual is connected to the same, common base of shared, general understanding" (Henriques 2008, p. 750).

Therefore, it is in a dialog of alternatives, including at the paradigm level, that a unique opportunity emerges for solving the impasse that is inevitable for any knowledge that rests on a universal, immutable, dogmatic foundation—an impasse characterized by the depletability of its heuristic potential, of which the scientific revolutions are a vivid illustration.

In order for a dialog to occur, it must have a subject. The difficulty of formulating one in regard to psychological knowledge stems from the multitude of alternatives, representing various approaches, traditions, paradigm coordinates and epistemologies that have extremely little in common. With the exception of the abstract construct of the "psyche," which is regarded as the basis of similitude but simultaneously is the subject of debates with no alternatives, the areas of consensus are extremely limited.

The first solution that comes to mind is the formulation of a definition in which there is room for all traditions and approaches in light of the aforementioned continuums of psychological phenomenology, representing the heteroqualitative natures and spheres of the psyche and the areas of study. These foundations define the subject of psychology as "the being-in-the-world of the self as a biopsychosocial, socioculturally interdetermined dialogical essence in interaction with the social and natural environment in the conscious, unconscious, and existential dimensions" (Yanchuk 2006, p. 204). The category of "being-in-the-world" fixes attention on the existential aspect of man's being, which underscores man's "interwovenness" in his life, the experiencing of it. The category of "the self" is concentrated on the aspect of the relationship between the external and the internal, which is manifested in man's relationship with his environment, history, etc. The three-dimensional biopsychosocial continuum is focused on the complexity of the interaction of three heteroqualitative natures—the biological, the psychic, and the social (the symbolic). Sociocultural interdeterminism emphasizes the aspect of the reciprocal determination of the person, activity and its situational context, which is manifested in the fact that any change in one of them results in a change in the two others. Finally, psychological phenomenology is analyzed historically in the conscious, unconscious, and existential dimensions, which constitute another continuum in the understanding of psychological phenomenology.

The definition in the subject must presuppose taking account of the qualitative specificity of the phenomenology being analyzed, which I see as the following:

- a lack of direct access to mental reality and the impossibility of its isomorphic and authentic measurement and verification;
- the dominance of the second-signal or symbolic system, which makes it possible to remove oneself from the "here and now" and move around in space and time;
- heteroqualitative natures—biological, psychic, and social (symbolic);
- · semiotic subjectivity and intersubjectivity;
- the existential experienceability and interwovenness of being-in-theworld:
- the significant influence of the unconscious, which has been recorded and transformed in past experience;
- cultural-historical conditioning;
- active participation in the process of creating the circumstances of one's own life.</BL</li>

It is this qualitative specificity that defines the constraints in the area of ontological-epistemological foundations and the methodology and methods of inquiry that are customarily used in natural science. Additionally, one can refine ad infinitum the technical support and techniques of research and ensure the absolute transparency of the procedure and empirical data. However, the objective analyses of living essences are

experiencing their being-in-the-world, endlessly working out semiotic meanings and senses, forming and rethinking values and norms, radically changing their relation to objects and events under the influence of objective and subjective factors, and many, many other things; as a result, it will be basically impossible to achieve a comprehensive result. By killing living flesh, it is possible to obtain an excellent anatomical cross-section. It will be fine in every way, but soulless. Hence, psychological inquiry requires qualitatively outstanding tools and techniques based on appropriate methodological foundations that are free of a scientific inferiority complex if they differ from those in natural science. Additionally, if psychological knowledge does not run away from real life and produces knowledge that promotes its harmonization, then its authority will also be much higher than if it forces itself into the usual framework and templates. Although in physics, the object of verification of theories is inanimate in nature; in psychology, it is an animate social life.

The definition in the subject as an initial foundation requires working out the conditions for holding a dialog. The first condition is the creation of an alternative to the classical, no-alternative, either/or logic. In such logic, alternative approaches begin to be viewed not as mutually exclusive but as mutually complementary (Bibler 1991). But the purpose of developing scientific knowledge is then to work out ways and means of establishing a productive inter-paradigm and interdisciplinary dialog that is aimed at mutual enrichment and mutual development in the area of deepening the understanding of psychological phenomenology. The practical implementation of this kind of logic requires the formulation of a fundamentally new methodological approach that makes it possible to create the groundwork for a genuine dialog that essentially presupposes from the outset the mutual adoption and working-out of joint, consensus-based solutions. The author's attempt at a solution for this problem is presented as part of an integrative-eclectic approach to the analysis of psychological phenomenology given the existing diversity of traditions (Yanchuk 2000).

The essence of the approach is based on a multiplanar, multilinear, and multivector analysis that creates the possibility of a qualitatively different insightfulness, which assumes the inclusion in the scope of the examination of the different aspects of the multiplicity, dialogicality, and diatropicality of the phenomenon under study. The ability to take an opponent's position, the inclusion of ideas in the competition, critical reflection, and critical positioning afford an opportunity for a novel analysis that turns into another "perpetual motion machine" of the progress of knowledge. The issue is not integration, which inevitably gives rise to a tendency toward monopolization of the truth with all of the attendant consequences, but precisely the free use of multiplanar, multivector knowledge related to the traditions that work most productively in the problem domain and their tools.

The development of the integrative-eclectic approach found its expression in a sociocultural-interdeterminist dialogical addendum that offers a number of conditions for deepening the understanding of psychological phenomenology:

- pluralism and tolerance in their essence, realized in the basic, conscious acceptance of the possible and useful existence of alternative explanations of the nature of the phenomena being analyzed;
- alignment of the basic ontological-epistemological foundations that define the attitude toward the fundamental issues related to the knowability of the reality to be studied and explained, accompanied by an affirmation of the congruence and misalignment of positions;
- sociocultural interdetermination, expressed in recognition of the reciprocal influence and reciprocal conditioning of all the factors present in the functioning of the phenomenon being studied;
- dialogicality, manifested in the ability to create joint knowledge that takes into account individual and cultural differences, based on the logic of mutual enrichment and mutual development (Yanchuk 2012, p. 14).

Having defined the methodological and theoretical foundations of the dialog, we can proceed to the question of the essence of the proposed metatheory. The paramount question is to define the substantive framework of the theory or the spaces of psychological phenomenology to which it can be extrapolated. The orientation toward building integrative spaces presupposes a definition in a common foundation that permeates all the others and gives rise to their distinctiveness.

The renewed interest in the cultural conditioning of psychological phenomenology was the basis for putting forth the idea of a four-dimensional continuum, where culture is the fourth universal, all-pervading dimension. This is in line with the current context of the cultural revolution in psychology (Valsiner 2014a, 2014b). In addition, empirical confirmations of the influence of culture (the presence of strong cross-cultural differences) have accumulated in various fields of scientific knowledge (anthropology, biology, medicine, neuroscience, etc.) (Ellis and Stam 2015; Keith 2011; Toomela 2007; Gelfand et al. 2011).

# Four-dimensionality of the spaces of the interdetermination of psychological phenomenology of the intercultural dialog

As was noted earlier, in the process of the ordering of psychological phenomenology that was presented in different systems of paradigm coordinates, traditions, and approaches, three spaces were proposed on the basis of the criteria of the heteroqualitative natures and spheres of the psyche and the areas of its study. These spaces, however, do not exist as autonomous, self-sufficient essences, but as mutually complementing and mutually expanding the possibilities and depth of understanding of the nature of the phenomena that are addressed. Since, taken together, they describe the psychological specificity of man in his biopsychosocial essence in the conscious, unconscious, and existential spheres that are studied as aspects of the person, the environment, and activity, it is extremely important to find a common foundation that is intentionally present in each of the components of the triad under discussion and that accounts for their distinctiveness from the etic and emic perspectives.

I propose culture as such an all-pervading construct, defined in the manner of R. Priest as a learned configuration of concepts, images, generalizations, representations, values, norms, and other symbolic elements that are widely shared by members of a given society or social group that functions as an orientational and normative structure of behavior and as a communicative matrix through which behavior is interpreted, integrated, coordinated, and sanctioned. Culture is not a static entity but is a living, self-developing mechanism that grows qualitatively in each successive change of generations, which receive the experience of the preceding ones in a concentrated and critically (or uncritically) redefined form.

Culture, as J. Valsiner, one of the leading representatives of cultural psychology, stresses, "when viewed as the process of the semiotic mediation of human living, is thus a tool for the flexibility of the human psyche to encounter a wide variety of settings. Some of these are oriented towards the construction of something new, reaching new frontiers of understanding and being" (Valsiner 2014a, p. 258). Consequently, culture may also be viewed as a mediator in the context of the designated spaces and their components.

Therefore, heteroqualitative, multidimensional, and multiparadigm psychological knowledge may be depicted as part of the following four-dimensional continuums, each of whose components is in a state of interdetermination mediated by culture: the biological  $\leftrightarrow$  the psychic  $\leftrightarrow$  the social  $\leftrightarrow$  culturally conditioned; the conscious  $\leftrightarrow$  the unconscious  $\leftrightarrow$  the existential  $\leftrightarrow$  the culturally conditioned; the person  $\leftrightarrow$  the environment  $\leftrightarrow$  activity  $\leftrightarrow$  the culturally conditioned. A visual representation of these spaces is shown in Figure 2.

These four-dimensional spaces of the integration of psychological phenomenology reflect the trend that has developed in recent years of the culturalization of various areas of research and the strong tendency toward interdisciplinary integration and cooperation. In particular, in discussing the problems of the

relationship between the cultural and the biological in regard to human emotions, Matsumoto and Hwang show that

culture also regulates emotions by elaborating on subjective experience. Cultures affect the relative intensity of emotional experiences. Cultures also facilitate the emergence of cultural emotions, which are unique to human cultures and require cultural knowledge for elicitation. These emotions may be universal but not necessarily biologically innate and may be somewhat different in different cultures. Shame, guilt, jealousy, and love, for instance, may exist all around the world, but there are likely major cultural differences in what specific cultural events elicit them, their form, function, and meaning. Cultures also elaborate emotions by creating emotional meanings, which are attitudes, values, and beliefs about emotions requiring higher level cognitive skills including abstract thinking, memory, and language, guiding how individuals should think about emotions. All of these are more highly influenced by culture (Matsumoto and Hwang 2012, p. 96).

The complex interaction of the biological, the psychic, and the social has begun to be intensively studied in medicine as well (Goli and Yanchuk 2012; Goli et al. 2015). These factors were integrated as part of the widely recognized biopsychosocial model. Following this model, a large number of studies were aimed at determining cognitive factors that affected pain and incompetency. These works

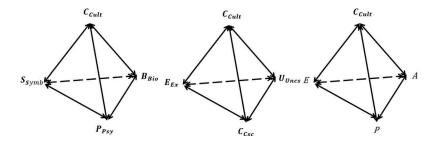


Figure 2. Four-dimensional continuums of the representation of different-quality natures (biological-psychic-social) and spheres of reflected reality (conscious-unconscoous-existential) and areas of research (person-environment-activity) of psychological phenomenology.

clearly demonstrated that a patient's attitudes, concepts, expectations, and coping strategies in regard to expected difficulties, as well as the healthcare system itself, can affect patients' descriptions of their pain, their activity, incompetency, depression, and reaction to treatment. The role of culture in this process was persuasively shown in a dissertation study conducted under my supervision by Goli, "A Comparison of Concepts, Coping Strategies, and Pain-Management Methods Among Iranian and Belarusian Patients Experiencing Chronic Pain" (Goli 2014). The results of this study showed that dealing with such a grievous phenomenon as chronic pain depends to a large extent on medical personnel treat the patient and whether he has the psychological motivation to be cured.

Studies of this kind also stimulated interdisciplinary integration, a vivid example of which was the joint conference in 2014 of physicists, medical experts, and psychologists in Suzhou, China, which demonstrated the productivity of a joint discussion of the phenomenon of man both as a biopsychosocial essence and as a physical object (Yanchuk 2014a). The dialog among representatives of what seemed to be the qualitatively pre-eminent fields of knowledge made it possible to form a common understanding of the specific nature of the heterogeneity of the nature of man, the distinctiveness of monodisciplinary and multidisciplinary perspectives of the phenomenology of behavior and, most important, the trends and possibilities of expanding the horizons and deepening the understanding of problems.

The traditional concentration on the conscious processes of cognitive activity, thanks to Freud's genius, was supplemented by the dimension of the unconscious, and later of the existential. In his interaction with his inner and external world, man appears not only as an information-processing cognitive system but also as one under the considerable influence of the unconscious, manifested in the formation of an attitude toward the present, past, and future, directing interpretation, and actualizing internalized, automated behavioral algorithms, and so forth. Man not only makes decisions and reacts to what is happening but also experiences it, interwoven with life, with being-in-the-world.

The brilliant array of existentialists (Heidegger, Binswanger, Sartre, Kierkegaard) focused attention on man's interwovenness with the world, on his experiences of the present, and his relation to the world, expressed in being-in-the-world. Unlike Freud, who brilliantly analyzed illness, Kierkegaard experienced it and described it from inside. This kind of interwovenness and experience of being-in-the-world is not captured by classical tools; it remains outside their framework. However, it is invisibly and sensually present in human behavior, determining one's relation to that behavior and one's interpretation, inner experience, and co-experience; consequently, failing to take it into account is tantamount to walking away from the reality of life and simplifying it. Boss emphasizes in this regard that only bringing in epistemology, which has the ability to truly comprehend our "human being-in-the-world," makes it possible to understand the complex nature of human behavior (Boss 1983).

## Principle of dialogical interdeterminism

The question of the relationships among the highlighted components of the four-dimensional spaces is of special importance for the development of psychological knowledge. The traditional fragmentation of psychological knowledge into smaller and smaller units in the search for the specific primeval atoms of the psyche causes it to drown in an immense amount of aspects and details, which lead us farther and farther away from an understanding of the holistic, systemic functioning. Moreover, the qualities of the systemic nature of the psyche is manifested in the fact that during the interaction of these individual fragments, new qualities form that are not reducible to the simple sum of the elements making up the system, the Gestalt that was experimentally established by Wertheimer in the case of the phi phenomenon. The components of Gestalt are in continuous interaction, forming more and more new qualities and changing qualitatively at each successive stage of interaction. Those same psychodynamics take place, and what needs to be explored is not the

statics but the dynamics of the mental processes and phenomena (Valsiner et al. 2009; Witherington 2007).

A description of the specific nature of the interaction that brings about a qualitative change in the system, not reducible to the simple sum of its constituent elements, through the classical principle of determinism is an extreme simplification of reality. This was the basic premise underlying the principle of dialogical interdetermination, whose substance will be presented in the following section.

In essence, it is based on the author's development of K. Lewin's well-known three-component formula, which describes behavior as a function of the person and the environment: B = f(P, E). A reinterpretation of this formula in the context of reciprocal determination was performed by one of the outstanding psychologists of our time, Bandura (Bandura 1978). Describing Lewin's approach as undirectional, he proposed a partly bidirectional transformation of Lewin's formula in the form of  $B = f(P \leftrightharpoons E)$ . Bandura developed the principle of reciprocal determinism, which represents the following formalized relationship among these elements, depicted in Figure 3.

Any change in one of the elements of the triad inevitably brings about changes in the other two and vice versa. As Bandura stresses, "interaction, which is analyzed as a process of reciprocal determinism, behavior, internal personal factors, and environmental influences all operate as interlocking determinants of each other" (Bandura 1978, p. 346). In his view, "social learning theory treats reciprocal determinism as a basic principle for analyzing psychosocial phenomena at varying levels of complexity, ranging from intrapersonal development, to interpersonal behavior, to the interactive functioning of organizational and societal systems" (Bandura 1978, p. 356).

Nevertheless, the exploration of multicomponent (two-component for Bandura) interaction in the context of the principle of determinism is extremely limited (Fogel et al. 1997). In this regard, we can cite the analysis of the possibility of applying the metaphor of physical determinism to psychological

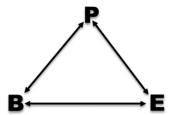


Figure 3. A state of reciprocal determinism. Where: P is the person; E is the environment (the situation); B is behavior.

phenomenology that was done by P. Van Geert, who identified the following constraints: 1) the fundamental unfeasibility of achieving the total precision of the measurement of physical conditions; 2) determinism (or rather the unfeasibility of determinism) is a two-way phenomenon that makes it impossible not only to predict the future but also to use the past to a highly limited degree (events lose information about their past and, hence, all information regarding the past is lost in the process of entropy); 3) if problems are reduced to the microlevel, determinism, in terms of predictiveness and knowability, demonstrates a significant deviation from the precision of physical predictions; and 4) microscopic indetermination leads to macroscopic order, simplicity, and predictability, mainly thanks to the law of large numbers (van Geert 1997, p. 17).

An alternative to determinism is offered by indeterminism, which focuses attention on free will and free choice as not determined by prior causes, that not all events have causative foundations. A fundamental analysis of the role of indeterminism in psychological and behavioral development is presented in the work *Dynamics and Indeterminism in Developmental and Behavioral Science* (Fogel et al. 1997). This work presents the indeterminist approach from historical, philosophical, and theoretical perspectives in the context of the approach of dynamic systems, which afterward became the subject of the same kind of fundamental analysis in regard to Dynamic Process Methodology in the Social and Developmental Sciences (Valsiner et al. 2009).

Paradoxical as it may seem, the limitedness of both the determinist and the indeterminist trends in psychological knowledge has been persuasively shown by van Geert, who writes:

determinism and indeterminism are antithetic concepts as they both stand for a 'dead' universe. A deterministic universe is dead because it has no degrees of freedom: Everything is predestined, and no information is created because all information is contained in the initial state (whatever that may be). An indeterministic universe is lifeless because it contains an infinite number of degrees of freedom. No information is created because every event has a similar probability. However, where the two principles meet, information and order are created in the form of highly reduced degrees of freedom, in which differences between events become meaningful and informative. The new concept of complex order, emerging out of self-organization. In order for complex order to emerge, both determinism and indeterminism are needed (van Geert 1997, p. 21).

As an integrative solution, I have proposed the principle of dialogical interdeterminism. The basic concepts of the approach are the concepts of interdetermination and dialogical interdetermination. In this context, interdetermination refers to the process of reciprocal conditioning and reciprocal changes in the elements of heterogeneous dynamic systems, which integrates both determinate and indeterminate types of interaction and is embodied in the acquisition of a new quality that is not reducible to the simple sum of its parts. The specific nature of dialogical interdetermination consists of interaction that is based on the unconditional acceptance of the otherness of elements of heterogeneous (polyphonic) dynamic systems and aimed at finding mutually acceptable structural and substantive foundations and forms (often as a compromise) that contribute to the formation of jointly created, aligned, and internally accepted states of homeostasis (intersubjectivity, interexistentiality, biopsychosocial balance, etc.) that support optimal coexistence in conditions of a concrete social and natural environment as part of a local (zone of proximal development)

space and time and a more distant vision of one's future life (zone of distant development).

The prefix "inter" reveals the way we can overcome the root metaphor of psychological comprehension both at a popular and scientific level, by keeping it in its initial state. Such a metaphor is the distinction "inside/outside," which is linked to a mentalization of the space. Meaning is neither "inside" nor "outside"; it is "between" (Mininni 2010, pp. 24 – 25). The creation and management of the states of the life-sustaining functional processes presupposes finding more acceptable forms of organizing interaction at the level of the heteroqualitative natures and spheres of the psychic, personal, environmental, and activity-related components. It is this kind of interaction that a kind of mutually satisfactory compromise (balance, homeostasis) is achieved, making for either an optimal or a minimally adequate state of coexistence that ensures the integration and coordination of behavior.

The essence of the proposed meta-approach lies in building an argument for the dialogical interdeterminedness of the functional state of dynamic heterogeneous psychological systems at certain points on the space-time continuum (stages, periods, etc.), which is achieved by finding a balance in the interaction of the related internal and external systems that determine the survival of the system itself in conditions of a concrete social and natural environment. It underscores the mutually influential mutually conditioning nature of the interaction among the heterogeneous elements making up the system (polyphony), which are in the process of constant change. Any change in one of them inevitably brings about a change in all of the interrelated elements of the system, and vice versa. In fact, changes that have taken place bring about a change in the quality of the dynamic heterogeneous system itself, which acquires neoformations in the form of the expansion, re-interpretation and re-experiencing of the experience that has been gained. These elements are simultaneously both autonomous and mutually conditioning vis-à-vis one another. It focuses attention on the fact that none of the

elements exists self-sufficiently but only in relation to the others. In essence, we are talking about acquiring a system of a new quality that is not reducible to the simple sum of its parts (by analogy with Wertheimer's Gestalt) (Wertheimer 1912). The latter is sustained until the internal and external element of the related systems reach a state of critical mass in terms of the accumulated contradictions, which makes it necessary to transition to a new quality that is conducive to resolving them. Furthermore, the transformation of the quality of the system is not linear but takes place in stages. The state that is reached persists until the internal and external life-sustaining functional resources run out in the specific conditions of the social and natural environment. The dialogical character of this kind of transformational interaction is manifested in the joint creation of opportunities for coexistence and co-development by all the related elements of the dynamic heterogeneous system.

In the process of dialogical interdetermination, behavior, internal personality-related factors and the influence of the environment constitute interdependent interdeterminants of one another, conditioned by the interdeterminative interaction of heteroqualitative biological, psychic and social (symbolic) natures and spheres of the conscious, the unconscious, and the existential, which are conditioned by the cultural context. In this regard, attention is focused on the cultural conditioning of behavior, which is its universal interdeterminant, defining the distinctiveness of psychological phenomenology of the biopsychosocial and conscious-unconscious-existential aspects in the dimensions of the person, the environment, and activity.

A similar idea has been articulated in the approach of "historical ecology," developed by C.L. Crumley, who underscores the character of human adaptation to the constraints of the environment, which depends on circumstances and has a potentially wide range of possibilities (Crumley 1994). It asserts that not only does a person adapt and regulate his behavior vis-à-vis the environment, but simultaneously he makes efforts to modify that environment in order to achieve a state of satisfactory

equilibrium. A fairly extensive amount of empirical material has been accumulated on this kind of interdetermination in regard to biological knowledge. Numerous studies show the adaptive transformation of brain structures to conditions of interaction with the environment (Gergen 2010), genetic changes (de Jong 2000) related to changes in the natural environment (e.g., environmental warming and pollution) and many other results.

To develop these approaches, I have proposed the principle of dialogical interdeterminism, complementing the principle of interdeterminative cultural conditioning, which is universal, by including it as well in the biopsychosocial and conscious-unconscious-existential continuums. This overcomes the reduction of the analysis of psychological phenomenology to the space of the areas of study, which is indirectly present in the concepts of Lewin and Bandura previously discussed. The distinguishing features of these approaches are graphically presented in Figure 4.

In the proposed approach, the person-environment-activity space reflects more of an external description that does not lay claim to the deeper strata of understanding of the specifics of psychological phenomenology. The addition of the biologicalpsychic-social-culturally conditioned space expands the horizons for viewing the domain of problems of psychological phenomenology and their complexity. The greater part of human nature is social in the sense of the priority of its symbolic quality and the second-signal regulation of behavior. Failure to take the latter into account leads to biologizing, which reduces the diversity of mental manifestations to being determined by various combinations of genes. This is again the same reductionism that is periodically manifested in the sensational "discoveries" of genes of criminality, marital infidelity, and so forth. Such reductions represent not only a gross simplification intended for an uninformed audience but also pose a social threat to the fate of persons in whom this combination is identified. I am not even speaking of the problem of the ethical aspect of such "discoveries." The example of the biopsychosocial approach, which is becoming increasingly popular, even in a field of knowledge as

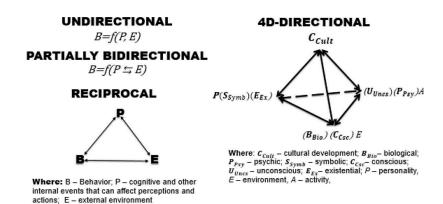


Figure 4. A comparison of the undirectional (Lewin), partially bidirectional (Bandura), and 4D-directional (Yanchuk) interaction of determinants (interdeterminants) of behavior.

conservative as medicine, attests to the significantly more complex interaction of these determinants. Without focusing on a consideration of the problem of which interdeterminant comes first, I focus on specifically on the aspect of reciprocal conditioning and reciprocal determination. The cultural conditioning of the biological, the psychic, and the social has already been discussed.

The relation of dialogical interdetermination is underscored by the element of its reciprocal influence and reciprocal change. Any change in one of the elements inevitably brings about a change in all the interrelated elements. In fact, changes that have taken place bring about a change in the quality of the heterogeneous system itself, which acquires neoformations in the form of the expansion, re-interpretation and re-experiencing of the experience that has been gained. These elements are simultaneously both autonomous and mutually conditioning vis-à-vis one another, and the latter focuses attention on the fact that none of the elements exists self-sufficiently but only in relation to the others.

At the same time, the concept of interaction is extremely constraining in relation to the coexistence or dialog of

heteroqualitative (heterogeneous) essences that do not acquire a new, integrated quality but retain their initial uniqueness, yet form a new quality located externally over those that form it. The concept of a dialog in Bakhtin's sense is the most authentic for a description of this state (Bakhtin [McGee, Trans.] 1986b). When people are in a dialog, they interact through a mutually active dynamic of clarifying discourse such as the formation of meanings and find common ground in terms of needs, interests, and wishes, which will be achieved if mutual agreement is reached, while retaining their own uniqueness and relative autonomy. The dialogical character of interdeterminist interaction is manifested, first, in the unconditional acceptance of the Other, stemming from the fact that not existing together is impossible in general, and second, in the acquisition of a new quality by the interacting sides that is not present in either of them individually. This specific feature of dialog as a form of interaction also stems from the qualitative specificity of man himself as an object and subject of cognition. Bakhtin stresses in this regard that "a subject as such cannot be perceived and studied as a thing, because, as a subject, it cannot, while remaining a subject, become voiceless; consequently, cognition of it can only be dialogic" (Bakhtin 1986a, p. 383). Bakhtin's dialogism as a whole may be characterized in terms of content by the following features, as systematized by Salgado and Clegg:

- 1. the primacy of relations over entities (relationality);
- 2. that relations are dynamic and developing processes (dynamism);
- 3. that human relations are mediated by signs (semiotic mediation);
- 4. that a relationship implies alterity, that is, a relationship between I and Other (alterity);
- 5. that human relationships are dialogical, or negotiated, relationships (dialogicality);
- 6. that dialogical relationships include and depend upon a socio-cultural context (contextuality) (Salgado and Clegg 2011, p. 428).

The authors especially emphasize that

dialogism conceives of human beings as beings-in-relation-with-others, it conceptualizes ongoing experience in terms of the dynamic negotiations that constitute such relations ... The negotiation of meaning involves a vast array of voices brought to bear in concrete languages, social norms, personal and social histories, and other forms of shared meaning ... basic principles allow us to construct an account of the psyche that does not disintegrate under the weight of the subjective/objective antimony. Dialogism makes the claim that the psyche and its relational, sociocultural context are inseparable (the principles of relationality and contextuality) but non-identical (the principle of alterity) (ibid., pp. 428 – 429).

The aforementioned features of dialogism create foundations for the integration of the heteroqualitative natures, spheres and domains of psychological phenomenology that are encompassed in the proposed metatheory and that are represented in the form of three culturally conditioned, four-dimensional spaces of biological-psychic-symbolic, conscious-unconscious-existential, and person-environment-activity. Each component of these spaces is in a relation of dialogical interdetermination, forming in aggregate a common dynamic, heterogeneous systemic whole or quality that is not reducible to a simple sum of its parts. Hence, the dialog of spaces assumes the form of a pyramid, each element of which is equivalent to the others, depicted in Figure 5.

The aforementioned approach has made it possible to qualitatively expand the framework of the principle of reciprocal determinism by focusing attention, first, on the interdeterminate character of the interaction of the personality-related, situational, and activity-related determinants of behavior and, second, taking into account their cultural conditioning. The issue here is not a state of unidirectional or partially bidirectional determination, but the qualitatively outstanding character of dialogical interaction, presupposing a basic equivalence, reciprocal conditioning and reciprocal influence and leading to the formation of a new qualitative state that is not represented in the individual determinants.

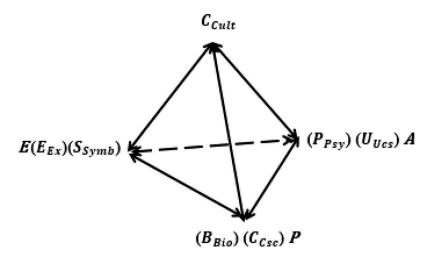


Figure 5. State of dialogical interdetermination. Where  $C_{Cult}$  is cultural development;  $B_{Bio}$  is the biological;  $P_{Psy}$  is the psychic;  $S_{Symb}$  is the symbolic;  $C_{Csc}$  is the conscious;  $U_{Uncs}$  is the unconscious;  $E_{Ex}$  is the existential; A is activity; P is the person; E is the environment.

An indirect confirmation of the productivity the proposed approach is provided in a study of an interaction of interdeterminist character between the person and the environment in the process of purposive psychological influence on academic achievement by African-American students through the establishment of a supportive environment (Powers et al. 2016). Under the conditions of a controlled experiment, it was convincingly demonstrated that "that positive collective consequences can emerge from changing the psychological processes of the individual. The intervention triggered not only a change in individuals but, also through this, a change in group atmosphere, in which the interacting classroom forces found a new quasi-stationary equilibrium, one with benefits for all students regardless of whether they received the intervention (ibid., p. 158). A similar effect was also obtained in research based on a reciprocal-effects model (REM) and a recent meta-analysis, which showed that prior academic self-concept (as opposed to selfesteem) and achievement both have positive effects on subsequent self-concept and achievement (Marsh and Graven 2006).

Writings in recent years show increased interest in the environmental (situational) interdeterminant of behavior (Rauthmann et al. 2015; Funder 2016).

We have set three core principles (with corollaries) to provide a foundation for psychological situation research: Processing, Reality and Circularity Principles. The Processing Principle specifies that information processing of situational information is important and that, as such, psychologically experienced situations matter to individuals. This means that situations only have consequences for people's thinking, feeling, desiring and acting through the psychological processing they receive. The Reality Principle then clarifies how different realities physical reality (cues), consensual reality (normative social reality) and idiosyncratic reality (distinctive personal reality) - are contained within situation experiences to reconcile objectivist and subjectivist perspectives ... The Circularity Principle notes that persons' perceptions and situations' characteristics are confounded when situations are defined or measured in terms of (i) people's mental states or behavior (State Corollary); (ii) observed or assumed consequences on people's mental states or behavior (Consequences Corollary); and/or (iii) only one person's perception (Approximation Corollary). To approximate the psychological situation from different perspectives, more than one rating source of the situation should be employed. (Rauthmann et al., p. 372 [English translation from http://citeseerx.ist.psu.edu/viewdoc/download? doi=10.1.1.689.7622&rep=rep1&type=pdf]

The environment's impact on the educational process and the professional deformation of educators was the basis for the introduction of the construct of "the eco-cultural dialogical environment," under which characteristics are cited that make joint activity more productive and prevent deformational processes (Yanchuk 2013a).

A graphic demonstration of the specific nature of dialogical interdetermination was provided in the case of the phenomenon of the biopsychosocial adaptation of alcoholics (Yanchuk 2015b). It consists of a sociocultural-interdeterminist dialogical process of aligning natural, biological, and psychological states and sociocultural dispositions that is aimed at achieving a balance (physiological, psychological, existential) in interaction with the immediate and mediated social and natural environment. In addition, the situation is viewed in the context of the complex interdeterminist interaction of the biopsychosocial or natural, psychic, and social dialogical elements. The study shows that overcoming alcoholic dependency requires not only ridding oneself of alcoholic biochemical dependency but also forming an ecocultural dialogical supportive environment that promotes social rehabilitation, as well as in-depth psychological work on the existential problems related to the person's inferiority feelings and social isolation.

The role of the cultural conditioning of the heteroqualitative natures and areas of study of psychological phenomena was graphically displayed in the cross-cultural comparison of Iranian and Belarusian patients experiencing chronic pain that was conducted by the Iranian psychologist Goli (Goli 2014). The study showed the key role of psychosocial factors in the results of the experiencing of pain, which defined the specific nature of the patient's behavioral response to the perception of physiological disturbances. It showed that the role of psychological and social factors increases by comparison with biological factors as the pain becomes more chronic (Goli and Yanchuk 2012, p. 46). The embodiment of this idea in practice is the appearance of a new trend in medicine: biopsychosocial medicine (Junne and Zipfel 2015). It has become particularly popular in Japan, which is famous for its life expectancy, and has found a home in the specialized journal BioPsychoSocial Medicine.

The role of the existential interdeterminant in its reciprocal conditioning with the conscious and the unconscious has become the subject of a special study of repeated cases in the cultural integration of migrants. Based on a large sample of migrants from Ukraine, the study showed their existential dissatisfaction with the situation of being away from their homeland and not

being accepted by the local population. The temporary nature of the stay in a strange area deepens these problems and, if there are no supportive integrative environments, may lead to the most adverse consequences. It also showed the role of supportive environments in the process of cultural integration of migrants, as well as the development of intercultural competence as a condition of its efficacy (Yanchuk 2013a; Yanchuk 2014b).

I do not intend to make a further case promoting the benefits of the proposed metatheoretical approach, but I will note that it devotes particular attention to the results of the interaction of the heteroqualitative natures and spheres of the psyche and areas of its manifestation. In terms of integrative neoformations, it offers particularly interesting constructs that identify the results of the kind of dialogical interdeterminate interaction that consists of intersubjectivity, intertextuality, and interexistentiality. All these constructs are of a dual nature: they define the result of interaction, the conditions for it to be successful and the foundations and prospects for subsequent development.

The first to develop in the process of dialogical interdetermination are intersubjectivity and interexistentiality, which characterize jointly produced and shared meanings, as well as coexperiences, making it possible to approach an emotional attitude on each other's part toward what is taking place and to take them into account in future interaction. As Chiu et al. note,

the intersubjective approach is predicated on three premises: (a) Individuals assess and form perceptions of the intersubjective reality in their sociocultural contexts, and some of these perceptions are different from personal values and beliefs; (b) individuals act on behalf of their perceptions of the intersubjective reality—at times, more often than they act on their personal values and beliefs; and (c) individuals inadvertently reinforce and sustain the intersubjective reality through their perceptions and actions (however valid or invalid) (Chiu et al. 2010, p. 483 [English translation from http://www.gelfand.umd.edu/pages/papers/Intersubjective%20culture.pdf]).

The intersubjective approach includes the person-situation interaction in that same context of culture. It states that culture

exists on many levels, representing the process of collective coconstruction of a consensus of members of the cultural community in order to manage the ecology The intersubjective approach views the cultural conditioning of behavior as "goal-directed behaviors resulting from strategic use of culturally prescribed scripts (encoded in the culture's intersubjective knowledge) among individuals who are mindful of the different constraints and affordances in the local environments for the purpose of attaining valued goals (e.g., epistemic, identity and communicative goals)" (ibid., p. 487). Thanks to the adaptive nature of culturally conditioned behavior in the event of environmental changes, the behavior changes as well. Hence, the formation of intersubjectivity performs epistemic and communicative functions, as well as forming an identity.

The intersubjective approach affords a new perspective of cultural competence. It is generally recognized that individuals who have internalized the basic values and norms of their own culture or have developed automated cultural scripts to the level of regulators of behavior are competent members of that culture. Moreover, possessing intersubjectivity is the basis of cultural competence, especially for persons who live in a culture other than their native one. For example, immigrants who have knowledge of cultural nuances demonstrate better sociocultural adaptation (Kurman and Ronen-Rilon 2004) and more socially competent interaction (according to the parameters of achieving personally meaningful goals and quality of relations) with members of the indigenous culture (Li and Hong 2001). Finally, intercultural contacts modify the cultural ecology as well. Frequent intercultural contacts may change even a relatively homogeneous cultural space into a multicultural one, in which local and foreign cultures coexist (Giddens 1985).

The leading mechanism of the formation of intersubjectivity is a dialog, which is actualized in a polyphony representing the entire spectrum of existing positions and approaches. The starting point of the dialog is the right to otherness, including of the qualitative type. Recognition of this right opens one's eyes and ears and directs attention toward finding things in common, with

due regard for differences and the right to them. As a result, a qualitatively new, jointly created order emerges, which is jointly accepted and shared without bias. This qualitatively new order is the result not of self-organization but of joint organization, and both determinism and indeterminism are needed for its long-term development (van Geert 1997, p. 21).

#### Conclusion

In summing up, I stress again the importance of expanding the horizons and finding additional resources for comprehending the psychological phenomenology of intercultural dialog: first, giving them a multidimensional, multiparadigm, and multidisciplinary character presupposes drawing on the resources of knowledge accumulated in related systems of the paradigm coordinates of psychological knowledge and associated fields of knowledge; second, by recognizing the dialogical-interdeterminist character of the interaction of multidimensional, heteroqualitative interdeterminants; third, culturalizing psychological knowledge by drawing on the conceptual apparatus of modern cultural psychology; and fourth, escaping from the framework of person-centrism by including in the scope of analysis the interdeterminate influence of ego-expanse, which includes the social and natural environment, placed in a concrete historical-sociocultural context, among others.

In describing the proposed metatheory as a whole, one can say the following:

1. The basic premise is the affirmation of the complex biopsychosocial, culturally conditioned, heterogeneous dynamic nature of psychological phenomenology. It is a recognition of the fact that many mental disorders and human psychological problems stem from biological abnormalities that are manifested in abnormalities of mental activity and, conversely, many dysfunctions at the biological level have a psychological source (the numerous psychosomatic disorders are an obvious example). Both these and others are often provoked by social discord (and, in turn, determine it),

which is actualized in interpersonal contradictions and the interpersonal and intrapersonal conflicts derived from them, which generate discomfort in social interaction and, as a result, dissatisfaction with oneself. Finally, there are strong cultural differences in each of the components, which must be taken into account, especially in intercultural interaction.

- 2. The biological-psychic-social, like the conscious-unconsciousexistential and the person-environment-activity, are in a state of dialogical interdetermination, which is manifested in their reciprocal conditioning and reciprocal influence, expressed in the acquisition of a new quality that is not reducible to the simple sum of its parts. A qualitative change in one element inevitably results in changes in the other associated elements of the designated heterogeneous system and vice-versa. The acquisition by the heterogeneous system of a new quality presupposes the prior preparation of each of the elements for the future qualitatively new state. This preparation includes the development of biopsychosocial and cultural readiness; recognition of the distinctiveness of the new state and the potential changes related to its formation; the prevention and adjustment of potential unconscious contradictions and disparities between what was established in the experience of the old and the new; facilitation of the existential acceptance of the modified self in its being-in-theworld and recognition of oneself as a self-interdetermining agent.
- 3. The optimal state of the heterogeneous dynamic system comes about through a dialog of the heteroqualitative natures and spheres of the psyche and the domains of its manifestation, which guarantees a balance in the holistic functioning by finding and mutually working out mutually acceptable compromises and optima of joint coexistence. As soon as this balance is disturbed, various discordances and dysfunctions begin to manifest themselves, stimulating a search for resources to resolve them. The specific nature of the dialogical form of interaction in the heterogeneous system is manifested in the unconditional of the otherness of the coparticipants in the process of joint functioning, the orientation to finding mutually satisfactory solutions, and the formation of a distinctive intersubjectivity and interexistentiality and biopsychosocial homeostasis, which create a common

foundation for a coordinated and synchronized mutual understanding and reciprocal development in the conditions of a concrete social and natural environment.

#### References

- Bakhtin, M. 1973. *Problems of Dostoevsky's poetics* (R.W. Rotsel, Trans.). Ann Arbor, MI: Ardis. [not cited in the original.–Ed.]
- Bakhtin, M. 1986a. 1. Bakhtin M.M. K metodologii gumanitarnykh nauk/Estetika slovesnogo tvorchestva. Izd. vtoroe. Moscow: Iskusstvo.
- Bakhtin, M. 1986b. *Speech genres and other late essays* (V. W. McGee, Trans.). Austin, TX: University of Texas Press. (Original work published 1979).
- Bakhtin, M. 1986c. "Toward a methodology in the human sciences" (V. McGee, Trans.). In M. H.C. Emerson, ed., Speech genres and other late essays. Austin: University of Texas Press, pp. 159–172.
- Bandura, A. 1978. "The self-system in reciprocal determinism." *American Psychologist*, vol. 33, no. 4, pp. 345–358.
- Bibler, V. 1991. Ot naukoucheniia—k logike kul'tury: dva filosofskikh vvedeniia v dvadtsat' pervvi vek. Moscow: Politizdat.
- Bohannon, J. 2015. "Many psychological papers fail replication test." Science, vol. 349, no. 6251, pp. 910–911.
- Boss, M. 1983. The existential foundations of medicine and psychology. New York: Jason Aronson.
- Brinkmann, S. 2011. "Towards an expansive hybrid psychology: Integrating theories of the mediated mind." *IPBS: Integrative Psychological and Behavioral Science*, no. 45, pp. 1–20
- Chiu, C.-Y., M.J. Gelfand, T. Yamagishi, G. Shteynberg, and C. Wan. 2010. "Intersubjective culture: The role of intersubjective perceptions in cross-cultural research." *Perspectives on Psychological Science*, vol. 5, no. 4, pp. 482–493.
- Cole, M. 2010. "Vygotsky and context: Toward a resolution of theoretical disputes." In *The Sociocultural turn in psychology: The contextual emergence of mind and self*, M.G. Cole, ed. New York: Columbia University Press, pp. 253–280.
- Crumley, C. 1994. *Historical ecology, cultural knowledge and changing landscapes*. Santa Fe: C.L. Crumley.
- de Jong, H. 2000. "Genetic determinism. How not to interpret behavioral genetics." Theory & Psychology, vol. 10, no. 5, pp. 615–637.
- Earp, B.D., and D. Trafimow. 2015. "Replication, falsification, and the crisis of confidence in social psychology." Frontiers in Psychology, no. 6, doi: 10.3389/fpsyg.2015.00621.
- Edwards, M. 2010. Organizational transformation for sustainability: An integral metatheory. New York: Routledge.
- Ellis, B.D., and H.J. Stam. 2015. "Crisis? What crisis? Cross-cultural psychology's appropriation of cultural psychology." *Culture & Psychology*, vol. 21, no. 3, 293–317.
- Fogel, A., C.D. P. Lyra, and J. Valsiner. 1997. Dynamics and indeterminism in developmental and social processes. Psychology Press.
- Funder, D. 2016. "Taking Situations Seriously: The Situation Construal Model and the Riverside Situational Q-Sort." Current Directions in Psychological Science, 25(3),203– 208.

- Gelfand, M.J., C.-Y. Chiu, and Y.-Y. Hong. 2011. Advances in culture and psychology. Vol. 1. New York: Oxford University Press.
- Gelfand, M.J., C.-Y. Chiu, and Y.-Y. Hong. 2012. Advances in culture and psychology. Vol. 2. New York: Oxford University Press. [not cited in the original.—Ed.]
- Gelfand, M.J., C.-Y. Chiu, and Y.-Y. Hong. 2013. Advances in culture and psychology. Vol. 3. New York: Oxford University Press. [not cited in the original.—Ed.]
- Gelfand, M.J., C.-Y. Chiu, and Y.-Y. Hong. 2014. Advances in culture and psychology. Vol. 4. New York: Oxford University Press. [not cited in the original.—Ed.]
- Gergen, K. 2010. "The acculturated brain." *Theory & Psychology*, vol. 20, no. 6, pp. 795–816.
- Gergen, K. 2011. "The brain as an instrument: Continuing the conversation." Theory & Psychology, pp. 846–848. [not cited in the original.—Ed.]
- Giddens, A. 1985. The nation state and violence. Cambridge: Polity Press.
- Goli, Z. 2014. Sravnenie predstavlenii, koping-strategii i sposobov regulirovaniia boli u iranskikh i belorusskikh patsientov, ispytyvaiushchikh khronicheskuiu bol. Avtoref. dis. Minsk: BGU.
- Goli, Z., and V.A. Yanchuk. 2012. "Effect of racial and ethnical differences in pain perception: Explaining the effective mechanisms on it." *Psikhologicheskii zhurnal*, no. 3-4, pp. 41–50.
- Goli, Z., V. Yanchuk, and Z. Torkaman. 2015. "Cross-cultural adaptation and validation of the Russian Version of the Pain Beliefs and Perceptions Inventory (R-PBPI) in patients with chronic pain." Current Psychology, vol. 34, no. 4, pp. 772–780.
- Hart, J. 2014. "Toward an integrative theory of psychological defense." Perspectives on Psychological Science, vol. 9, no. 1, 19–39.
- Healy, P. 2012. "Toward an integrative, pluralistic psychology: On the hermeneutico-dialogical conditions of the possibility for overcoming fragmentation." New Ideas in Psychology, no. 30, 271–280.
- Henriques, G. 2008. "The problem of psychology and the integration of human knowledge: Contrasting Wilson's consilience with the Tree of Knowledge System." *Theory & Psychology*, vol. 18, no. 6, 731–755.
- Junne, F., and S. Zipfel. 2015. "Research prospects in biopsychosocial medicine: New Year reflections on the 'cross-border dialogue' paradigm." *BioPsychoSocial Medicine*, vol. 9, no. 10, pp. 1–4.
- Keith, K. 2011. Cross-cultural psychology: Contemporary themes and perspectives. Wiley-Blackwell.
- Kurman, J., and C. Ronen-Eilon. 2004. "Lack of knowledge of a culture's social axioms and adaptation difficulties among immigrants." *Journal of Cross-Cultural Psychology*, no. 35, pp. 192–208.
- Li, Q., and Y.-Y. Hong. 2001. "Intergroup perceptual accuracy predicts real-life intergroup interactions." *Group Processes & Intergroup Relations*, no. 4, pp. 341–354.
- Marsh, H.W., and R.G. Graven. 2006. "Reciprocal effects of self-concept and performance from a multidimensional perspective." *Perspective on Psychological Science*, vol. 1, no. 2, pp. 133–263.
- Matsumoto, D., and H.S. Hwang. 2012. "Culture and emotion: The integration of biological and cultural contribution." *Journal of Cross-Cultural Psychology*, vol. 43, no. 1, pp. 91– 118.
- Mazur, L.B., and M. Watzlawik. 2016. "Debates about the scientific status of psychology: Looking at the bright side." *IPBS: Integrative Psychological and Behavioral Science*.
- Mininni, G. 2010. "The method of dialogue: Transaction through interaction." IPBS: Integrative Psychological & Behavioral Science, vol. 44, no. 1, 23–29.

- Patil, P., R.D. Peng, and J.T. Leek. 2016. "What should researchers expect when they replicate studies? A statistical view of replicability in psychological science." Perspectives on Psychological Science, vol. 11, no. 4, pp. 539–544.
- Powers, J.T., J.E. Cook, V. Purdie-Vaughns, J. Garcia, N. Apfel, and J.L. Cohen. 2016. "Changing environments by changing individuals: The emergent effects of psychological intervention." *Psychological Science*, vol. 27, no. 2, pp. 150–160.
- Proietto, M., and G.P. Lombardo. 2015. "The 'crisis' of psychology between fragmentation and integration: The Italian case." *Theory & Psychology*, vol. 25, no. 3, pp. 313–327.
- Rauthmann, J.F., R.A. Sherman, and D.C. Funder. 2015. "Principles of situation research: Towards a better understanding of psychological situation." *European Journal of Personality*, vol. 29, pp. 363–381.
- Salgado, J., and J.W. Clegg. 2011. "Dialogism and the psyche: Bakhtin and contemporary psychology." Culture & Psychology, vol. 17, no. 4, pp. 421–440.
- Shotter, J. 2001. "Toward a third revolution in psychology: From inner mental representations to dialogically structured social practices." In *Culture, language, self: The philosophical* psychology of Jerome S. Bruner, D. Bakhurst and S. Shanker, eds. Sage Publications, pp. 167 – 183.
- Smythe, W.E., and S.A. McKenzie. 2010. "A vision of dialogical pluralism in psychology." New Ideas in Psychology, vol. 28, no. 2, pp. 227–234.
- Spellman, B. 2015. "A short (personal) future history of Revolution 2.0." Perspectives on Psychological Science, vol. 10, no. 6, pp. 886–899.
- Sripada, C., D. Kessler, and J. Jonides. 2016. "Sifting signal from noise with replication science." *Perspectives on Psychological Science*, vol. 11, no. 4, pp. 576–578. [not cited in the original.–Ed.]
- Toomela, A. 2007. "Culture of science: Strange history of the methodologtical thinking in psychology." *IPBS: Integrative Psychological & Behavioral Science*, vol. 41, no. 1, pp. 6–20.
- Turner, J. 1990. "The misuse and use of metatheory." Sociological Forum, vol. 5, no. 1.
- Valsiner, J. 2007. "Becoming integrative in science: Re-building contemporary psychology through interdisciplinary and international collaboration." *IPBS: Integrative Psychological* and Behavioral Science, no. 41, pp. 1–5.
- Valsiner, J. 2009. "Integrating psychology within the globalizing world: A requiem to the post-modernist experiment with Wissenschaft." *IPBS: Integrative Psychological and Behavioral Science*, no. 43, pp. 1–21.
- Valsiner, J. 2014a. An invitation to cultural psychology. New York: Sage Publications.
- Valsiner, J. 2014b. "Needed for cultural psychology: Methodology in a new key." *Culture & Psychology*, vol. 20, no. 1, pp. 3–30.
- Valsiner, J., C.M. Molenaar, M. Lyra, and N. Chaudhary. 2009. *Dynamic process methodology in the social and developmental sciences*. Springer.
- van Geert, P. 1997. "Que sera, sera: Determinism and nonlinear dunemic model building in development." In A. Fogel et al. (eds.). *Dynamics and indeterminism in developmental and social processes*. Psychology Press, pp. 13–38.
- Wallis, S.E. 2010. "Toward a Science of Metatheory." *Integral Review*, vol. 6, no. 3, pp. 73–120. https://pdfs.semanticscholar.org/bcf6/f4a3c4a3a3421533b6f845d0be402d7d6888.pdf
- Watanabe, T. 2010. "Metascientific foundations for pluralism in psychology." New Ideas in Psychology, vol. 28, no. 2, pp. 253–262.
- Weinstein, N., A.K. Przybylski, and R.M. Ryan. 2013. "The integrative process: New research and future directions." *Current Directions in Psychological Science*, vol. 22, no. 1, pp. 69–74.

- Wertheimer, M. 1912. "Experimentelle studien über das sehen von bewegung". Zeitschrift für Psychologie, vol. 61, no. 1, pp. 161– 265.
- Witherington, D. 2007. "The dynamic systems approach as metatheory for developmental psychology." *Human Development*, vol. 50, no. 2, pp. 127–153.
- Yanchuk, V. 2000. Metodologiia, teoriia i metod v sovremennoi sotsial'noi psikhologii i personologii: integrativno-eklekticheskii podkhod. Minsk: Bestprint.
- Yanchuk, V. 2003. "Psikhologiia postmoderna." In A. Brushlinskii and V. Polikarpov. Vremia kak faktor izmenenii lichnosti. Sbornik nauch. trudov. Minsk: EGU, pp. 175–201.
- Yanchuk, V. 2005. Vvedenie v sovremennuiu sotsial'nuiu psikhologiiu. Minsk: ASAR.
- Yanchuk, V. 2006. "Postmodernistskii, sotsiokul'turno-interdeterministskii dialogizm kak perspektiva pozitsionirovaniia v predmete psikhologii." Metodologiia i istoriia psikhologii. Vyp. 1, pp. 193– 200.
- Yanchuk, V. 2012. "Mezhparadigmal'nyi dialog kak resurs uglubleniia ponimaniia psikhologicheskoi fenomenologii: sotsiokul'turno-interdeterministskaia dialogicheskaia perspektiva. *Psikhologicheskii zhurnal*, T. 1-2, pp. 4–17.
- Yanchuk, V. 2013a. "Eko-kul'turnaia obrazovatel'naia sreda: formirovanie i razvitie. Chast' 1: Obrazovanie, nauka i innovatsii." Adukatsyia i vykhavanne, no. 1, pp. 60–67.
- Yanchuk, V. 2013b. "Eko-kul'turnaia obrazovatel'naia sreda: formirovanie i razvitie. Chast' 2: Ot kul'turnoi k mezhkul'turnoi kompetentnosti." Adukatsyia i vykhavanne, no. 7, 69–76.
- Yanchuk, V. 2014a. "Sociocultural-interdeterminist dialogical perspective of intercultural mutual understanding comprehension deepening." *Open Journal of Social Sciences*, no. 2, pp. 178–191.
- Yanchuk, V. 2014b. "Sotsiokul'turno-interdeterministskaia dialogicheskaia perspektiva uglubleniia ponimaniia mezhkul'turnogo vzaimoponimaniia." *Izvestiia Saratovskogo universi*teta. Novaia seriia. Akmeologiia obrazovaniia. Psikhologiia razvitiia, vol. 3, no. 11, pp. 241–253.
- Yanchuk, V. 2015a. "K postroeniiu sotsiokul'turno-interdeterministskoi dialogicheskoi metateorii integratsii psikhologicheskogo znaniia." In Ot istokov k sovremennosti: 130 let organizatsii psikhologicheskogo obshchestva pri Moskovskom universitete: Sbornik materialov iubileinoi konferentsii: V 5 tomakh. Tom 1. Moscow: Kogito-tsentr, pp. 136–138.
- Yanchuk, V. 2015b. "Chetyrekhmernyi kontinuum ponimaniia fenomenologii biopsikhosotsial'noi adaptatsii: sotsiokul'turno-interdeterministskaia dialogicheskaia perspektiva." In Materialy IV Mezhdunarodnoi konferentsii "Psikhosotsial'naia adaptatsiia v transformiruiushchemsia obshchestve. Sotsializatsiia sub"ekta na raznykh etapakh sotsializatsii. Minsk: Izd. tsentr BGU, pp. 530– 536.
- Yanchuk, V. 2016a. "Sociocultural-interdeterminist dialogical metatheory of psychological knowledge integration." *International Journal of Psychology*, vol. 51, no. 51, July 2016, p. 438.
- Yanchuk, V. 2016b. "Dialogicheskaia interdeterminatsiia v sisteme chetyrekhmernykh prostranstv analiza kross-kul'turnoi fenomenologii." In Teoreticheskie problemy etnicheskoi i kross-kul'turnoi psikhologii: Materialy Piatoi Mezhdunarodnoi nauchnoi konferentsii 27-28 maia 2016 g. V 2 T. Smolensk: Izd-vo SGU, pp. 56–63.
- Yanchuk, V. 2016c. "L.S. Vygotskii i kul'turnyi perevorot v psikhologii." In Psikhologicheskii Vademecum: Vitebshchina L.S. Vygotskogo: sbornik nauchnykh statei, eds. S.L. Bogomaz and V.A. Karaterzi. Vitebsk: VGU im. P.M. Masherova, pp. 21–33.
- Yanchuk, V. 2016d. "Sotsiokul'turno-interdeterministskaia dialogicheskaia metateoriia integratsii psikhologicheskogo znaniia v kontekste problemy sotsial'nogo progressa." In Sbornik materialov mezhdunarodnoi nauchno-prakticheskoi konferentsii: V 8 chastiakh.

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- Chast' 1. Eds. V. S. Belgorodskii; O.V. Kashcheev; V.V. Zotov; and I.V. Antonenko. Moscow: FGBOU VO MGUDT, pp. 317–324.
- Zhu, Y., and S.-H. Han. 2008. "Cultural differences in the self: From philosophy to psychology and neuroscience." *Social and Personality Psychology Compass*, vol. 2, no. 5, p. 1807. [not cited in the original.—Ed.]