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## **The Problem of Development in German Psychology and Its Influence on Soviet Pedology and Psychology**

(Werner—*Introduction to Developmental  
Psychology*, University of Hamburg,  
1926, 337 pp.)

An analysis of Werner's book is of special interest for us because he, on the one hand, gives us a clear idea of the current level of development in bourgeois science of human developmental psychology and, on the other, shows us the roots that have nurtured and, to a certain extent, continue to nurture the various currents in Soviet pedology and psychology.<sup>1</sup>

Werner's book is an attempt to present a universal theory of mental development and to establish the general laws governing the transition of one form of mental activity into another.

### I

What is meant by developmental psychology, which is what the author himself calls it, is not the investigation of a special domain of phenomena as the subject matter of a particular science, but merely a method for understanding phenomena and facts described by a number of specialized psychological disciplines covering the various stages of development, including animal psychology, psychopathology, the psychology of primitive man, and child psychology. Thus, this book is not

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a systematic exposition and generalization of facts in any specific area, but rather serves the purpose of posing and clarifying a special problem of development on the basis of the above-enumerated sciences.

If we should ask the place of this science in the ranks of other psychological sciences, we should find that it is above them.

First, a few words about the structure of the book.

It consists of two parts. In the first, the author gives us some fundamental orientation to the methods and subject matter of general developmental psychology. In this section he acquaints us with his formulation of the problem of development and the principal concept it entails.

The second part develops the author's main conception through abundant illustrative material about children, primitive man, animals, and psychopaths in various areas of psychological development, in terms of specific psychological functions, the complex forms of behavior, and the structures of the personality as the culmination of all of these.

The author starts out as follows: the behavior of an adult, cultured human being is a system in which the various stages of development are reflected: "primitive," "cultured," and "civilized." These stages are manifested as a function of various external and internal states (degree of diffuseness, the state of the emotions, etc.). Thus, he writes: "Man has not just one way of responding, not just one sphere of subjective experiences, but rather, the same person may manifest himself differently under different conditions, according to the various stages of development." This multilayered character contains the answer to the riddle of how a logically thinking European is able to understand a child, a psychopath, and primitive man. On this basis, and establishing by means of comparison features of similarity in the phenotype (external) of the child and the primitive, the primitive and the mentally ill, and between all of these and animals (including lower animals), Werner arrives at the conclusion that there are general laws that govern all.

How does Werner approach the problem of development? How does he understand it? To find out, let us turn to the author's principal postulates.

He says:

In developmental psychology,<sup>2</sup> as in biology, there are specific, empirically established intellectual types that represent specific stages. It is not enough to register their existence: they must be placed in a particular context. This can be done only through the principle of development.

There are two aspects to the problem of development: static and dynamic. Determining the structure of each stage (diachronic) is one task; determining the forms and the direction of their genetic interrelation is another.

Whereas previously the concept of development focused on a physical (mechanical) explanation of phenomena, now it takes an organic approach. This means that each stage is regarded as organic, as is the direction of its development. This means that development is creative development: each new stage is something unique and new compared with the more primitive, but each stage is also a rela-

tively closed organic whole.<sup>3</sup> Life means the creation of structure; development is the formation of new structures—creative change.<sup>4</sup>

Werner contrasts his understanding of the problem of development to the associative-mechanistic conception, which essentially disregards the qualitative uniqueness of each stage of development and sees the difference as being solely in the greater number of attributes in the higher form compared with the lower form and reduces human behavior to a simple sum of responses. Accordingly, the author develops the following postulate, namely, that each subsequent stage is unique and new relative to the lower, more primitive stage. If one just compares thought in the adult and in the child, respectively, the author says, the difference lies not in the circumstance that a child thinks less logically (in a quantitative sense) than an adult; his thought is not prelogical or nonlogical: it is logical, but qualitatively different from the thought of a cultured adult. Hence, the path taken hitherto by investigators, i.e., from the norm of a scientifically thinking adult to an understanding of the child's mind, is wrong, and must be changed, because such an approach merely records that the signs of development, identical with those displayed by adults, are either present or absent in the child. That approach does not touch upon the qualitative distinctiveness of, for example, a child's thought compared with adult thought.

Investigation of a child's thought must begin not with an examination of how children draw conclusions in the syllogisms of formal logic, but with the child's living reality.

But what are the objectives of developmental psychology?

Werner says:

The various branches of psychology have outlined their main objective: to study the stages of development and their respective directions. This raises questions: Is there any need at all for comparative psychology? How can one compare the stages of the mind at all, and what in the psychology of the various peoples of the earth and in pathology can be relevant and useful in the study of the child?

Pausing to examine the biological law introduced into psychology by Stephen Hall, Werner says: "Stern found a felicitous way out of the existing state of affairs when he cautiously introduced the theme of genetic parallels. 'When intellectual life begins to develop,' says Stern, 'it leads to general, lawful phenomena, regardless of whether this is in the individual or in the species.' "

According to Werner, the development of the mind essentially involves a growing differentiation, a refinement, of mental phenomena and a growing centralization. Thus, for example, children and primitives have a special kind of thinking that we may call concrete. Thought in the narrow sense (concept formation, judgment, etc.) has still not been differentiated from perceptions into its specific function, but emerges from perception only gradually. But this differentiation does not mean independent and discrete development of each function as such. Rather, these functions develop in specific relationships with one another: the lower are

subordinate to the higher, and thought establishes a definite order in the diversity of sense perceptions.

The full gist of Werner's conception is contained in these propositions; they define both the basic concepts with which he operates, the structure of the book, and the choice of the illustrative material.

To clarify the basic problem of development as Werner sees it, let us look at his principal concepts: "In the givens of consciousness (*Bewusstseinsgegebenheiten*)," he says, "we must distinguish meaning, function, and sense, on the one hand, from their specific manifestations (phenomena) on the other."

This statement is concretized by the next example: an automobile is perceived not only when it is directly before the perceiver but also when the latter sees only the train of dust from an approaching automobile: it is said in this case as well that there is an automobile. "Consequently," concludes Werner, "each perception has a sense that, in this particular example, is represented in different ways, from a train of dust to the clear perception of an automobile."

Accordingly, "sense" is introduced in a variety of ways into a perceived image: it may be unclear, pale, or complete. The author establishes the degree of development with the aid of the following terms: complex-discrete (*complex-abgesondert*), undetermined-determined (*unbestimmt-bestimmt*), and diffuse-articulated (*verschwommen-praegnant*).

All these features that, according to Werner, characterize the givenness of consciousness from the perspective of its "symbol" or "meaning" are covered by the first pairs of terms; features characterizing these "givens" from the perspective of form are covered by the second pair; and the main terms are complex-discrete and diffuse-articulated.

Let us give some concrete illustrations of these terms. The behavior of a cultured person is marked by the fact that he perceives the phenomena of surrounding nature in their objective significance. Primitive experiences are characterized by limited differentiation of the subject and the object, an intertwining of ideas and affect.

This fact that the perceived world is determined not by attributes, but by affective meaning is especially conspicuous in children. The author gives an example from the behavior of Scupin's son. "Bubi wanted very much to have some cocoa, which, however, was too hot; steam was rising from it. Bubi cried out, petulantly: 'Old smoke, go way; the smoke wants to drink.'" For the author this example shows that a child understands the things around him not in terms of purely intellectual factors, but in terms that are affectively colored. The child's imagination is enlivened by lifeless things, by virtue of his general biological needs. Werner uses the term *complex* to describe this undifferentiated mode of perception in which discrete psychological images appear unclearly, but this given of consciousness will be called "diffuse" seen from the perspective of the relation of the part to the whole.

The following is a concrete example:

We perceive people's faces primarily not as consisting of separate parts, e.g., eyes, nose, forehead, etc., but as a whole, as a physiognomy. One can imagine very well the physiognomy of some person or other without precisely identifying what kind of nose he has, the relation of the chin to the mouth, to the forehead, etc.

Thus, the essential aspect of diffused perception is the lack of differentiation of the parts in the whole. Also, it is characterized by a lack of differentiation between the essential and the nonessential.

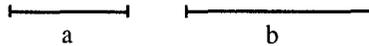
The author illustrates this by means of the following experiment done by Volkelt with a spider:

A spider observes from afar the flies being caught in a spider web. He attacks a fly at the precise moment it gets entangled in the web, yet at the same time will run from the smallest fly if the latter enters his dwelling. Thus, he perceives a fly not as such, but as a "fly in a spider web," as an undivided whole—a situation. The fly in this situation is not an essential part of the whole.

For the author development is a movement from the complex to the discrete in terms of content, and from the diffuse to the articulated in terms of form. He calls this path of development differentiation.

However, as Werner points out, another process is closely linked to this one, namely, centralization, expressed in the fact that differentiation of functions or parts of the whole is accompanied by the establishment of specific relations both between functions (subordination of the simple to the complex) and between the whole and its parts.

Thus, in perception of these two lines:



(a and b), the process of centralization is expressed in the fact that these two lines stand in specific relation to one another. For example, a geometer perceives them as a trapezoid, and there we have the subordination of our perception to thought. The same situation occurs in relations between the parts and the whole and in the establishment of relations between essential and nonessential parts.

Let us now see how Werner's conception looks when applied to the problem of development of the individual as the most systematic of those problems he articulates. As we have already indicated, this problem is posed comparatively within the context of an examination of ontogenetic, historical, and pathological development. In primitive man the structure of the personality is complex: he confuses "self" with the social environment. Werner goes on to say:

Hence, we get a kind of "I" of primitive man that is not distinguished from "you" and other members of the clan or even from animals, whose voice and movements he imitates. The savage also confuses himself with things. The witch doctor identifies himself with the rain, and thus dresses himself in a long garment.

The complex structure of the primitive personality is also expressed in the fact that the corporeal and spiritual person is an undifferentiated unity for a sav-

age; at the same time, the "self" of primitive man is concrete, for he does not experience inner qualities as anything specific and does not differentiate them from physical qualities. Thus, we find among many Indian, Mexican, Egyptian, and other people a situation in which they find it possible to avoid evil spiritual qualities by immersing themselves in a bath or simply washing them away.

Coupled with this complex "self" of the savage is, on the other hand, the "diffuse self." Essentially, the savage differentiates very little between essential and nonessential attributes and draws no clear distinction between the essential nature of "self" and random external properties. Hence, he attributes not only his actions, voice, clothing, and name to his own person but also his entire social and economic environment.

Here we may apply the law of *pars per toto*, which means that each part belongs to the whole and is determined by it. For the savage the distinction between man and woman is based on external attributes. For example, the male is the one who has an arrow and the woman is the one who has a pestle for grinding maize.

Thus, complexity and diffuseness of the self of primitive man characterize the undifferentiated structure of the savage's personality.

Werner sees the further development of the personality of primitive man in a growing separation of the personality from the surrounding environment and in the process of centralization, which the savage links to magic. Werner says: "All the characteristics of a diffuse self initially exist in the sphere of magic; . . . later they are strengthened through magical and religious views and acquire a new sense." This new sense of magical coherence consists in the fact that personal belongings such as name, clothing, voice, etc., are determined by magical powers. "Pneuma is a magical being that pervades the whole in all its parts." A limited centralization of the primitive personality with regard to essential attributes and a limited centralization of a stable self develop only gradually.

"It is very difficult to answer the question of the development of the self." One can therefore give only a few fragmentary references on the basis of existing sources. First we have a growing articulation of the personality through magical interpretations and judgments. For example, at first all parts of the body were equally bearers of magical properties, but gradually the magically important parts around which centralization and subordination take place began to be differentiated. Thus, primitive human beings distinguish between the lower feelings and the higher ones, and link the first to the lower part of the body and the latter to the upper part. Man is therefore divided corporeally and spiritually into higher and lower spheres.

A further differentiation according to the spiritual and the corporeal takes place with this division of the psychophysical personality into higher ethical and essential and lower evil and unessential. For example, in Melanesia the view is widespread that so long as the bodies of the deceased smell, the spirit is weak; but it becomes strong at the moment of total decomposition. Such a magical view demonstrates the contradiction between internal functions and bodily functions. This contradiction exists in precisely the same form in the view of the ancients that

every person has a double. Later this gave rise to faith in the permanence and eternal nature of the self.

At the same time, the personality develops further from its fluid, ambiguous, and complex form to a stable, unambiguous, and discrete form. Werner writes:

We find the most important references with regard to the development of self-cognizing individuality in magical thinking, especially in its advanced forms. Separation of this personality from the collectivity of its race or of the society in which the individual lives is essential. It is very likely that the self-awareness of the individual person was initially a species consciousness. This differentiation of species consciousness depends on an overall magical orientation, and was related to it. Thus, in primitive society worship of such life events as birth, sexual maturity, marriage, and acceptance into military or sacred unions dominated; the personality distinguished itself through belonging totally to one or another organization.

The development of awareness of one's own uniqueness and irreducibility proceeds further with the differentiation between men and women, differentiation by age, and, most importantly, with the domination of some clans over others. We arrive thus at the conclusion that the development of the personality moves from a complex social relationship with the surrounding environment, through differentiation of its specific aspects, and, finally, to the individual, represented as a single, discrete person.

Werner then goes on to examine the personality of the child:

The diffuse and complex character of the self, the fact that it is not differentiated from other persons and things, that it displays no relief, the unambiguously expressed content of sensations, its relative indeterminacy—these also are facts of development in child psychology. One may observe how a child does not differentiate "I" from "you," or from the things surrounding him. Things and persons are generally inadequately differentiated, and the opposition between the living and the dead is inadequately developed. Similarly, the child's personality is more complex than the personality of an adult; a distinction between the corporeal and the spiritual is alien to the child. Thus, Piaget's subjects say that they think with their mouth. By analogy with primitive man, the child's personality is not simply complex: it is also diffuse in a certain sense, in that the self has a broader span. Hence, a preschooler does not immediately recognize his parents when they change their clothing. The diffuse nature of the self is matched by the fact that, for child development, the law of *pars pro toto* is applicable, and children identify the head with the whole personality. A child hides his head and thinks that it is not visible.

The unclear demarcation between one's own self and the external world that takes place in the child goes back to the improbable mobility of the child's personality, expressed especially clearly in quick transitions from reality to play and the transformation of one person into another. Finally, the split of the personality is very important for a child's personality. Thus, Scupin's son divides himself into the "good" Bubi and the "bad" Bubi, and the bad is spoken of in the third person. However, this division of the personality is not normal, but emanates from the fluidity of the child's personality.

After enumerating these basic attributes characterizing the development of the child's personality and drawing an analogy with the development of the personality of the savage, Werner concludes his review.

He then goes on to discuss the pathologically primitive personality or, in other words, psychopathy. "Psychopathic changes in the personality occur; they evolve in parallel with the above characteristic transformations of the world of things" and approximate the structure of primitive types. Despite the specific difference between a psychopath, on the one hand, and a child or a savage, on the other, a difference that resides in those inner driving forces that ultimately produce a pathological state of the personality, and despite differences in the content and expression of the internal expression of the illness, there is still a broad, formal similarity between them, which the psychologist studying development cannot ignore.

Thus, in certain forms of psychosis, expressed in the unique complexity and diffuseness of the ideas, feelings, and thought of the individual, we also find complexity and diffuseness in the personality itself. Complexity is manifested in these illnesses in the fact that they do not restrict the rigorous world of the real and the imaginary. For example, one patient told how "it was dusk on the street when she was walking," and she felt that the stars were drawing her to them; she felt she was related to the people she met. In such patients, as in children, there is no rigorous discrimination between self and other; and they also have the same fluidity of personality that makes it possible for them mentally to become other persons.

The formal similarity to primitive peoples becomes very clear if we see how the self changes with regard to a magically thinking and acting subject within a pathological personality. The demonic and magical features of the schizophrenic bear this out.

This magical feature of the schizophrenic derives from the diffuse, blurred, and hence fluid structure of his personality. Here we see the same thing as in primitive man and children: that clothing and the peripheral elements belong to the self. Werner enumerates a number of characteristics of schizophrenics that are analogous, in formal terms, to characteristics of primitive men and children.

Werner does not limit himself to establishing only what is shared in common: he also pays due attention to differences in these three levels of development. It will be useful to look at these differences between the child and the primitive.

1. The child is flexible, but is not yet a fully formed organism. On the contrary, the aggregate of external natural displays on the part of primitive man over many epochs becomes traditional, congealed.

2. A child enters the adult world from the world of children; his reaction often is a renaissance of adults. The savage lives permanently in an environment befitting him.

3. An infant is not a very social creature; he is by nature egocentric and oriented toward himself. The savage is highly social, and all the views and products of his intellect become intelligible because he has this social structure.

Noting these differences, Werner writes:

Although the biogenetic law is even less applicable to the mind than it is to anatomy and physiology, nonetheless, if one disregards the existing parallels, one loses a fruitful methodological instrument of understanding. If one compares the unique mode of concrete thinking of children with specific forms of thought of the savage and compares the drawings of both, striking parallels immediately emerge that should be accepted as such, in that they have common mental structures. The difference between the child and the savage will be mainly in content, but it will, in all likelihood, occur as the result of essential differences in the environment of these two types. The child will display concrete thinking just as does the savage; but since a child's thought constantly encounters the abstract world of an adult, cultured, human being, it loses its pure form and is not manifest in the unique way we observe it in the savage. Often, however, a child concretizes an adult's abstract expression, for example, using expressions such as "catching cold with my hand." Because a child is not a very social being compared with a savage, parallels with the views of the savage that contain a social base will be fragmentary. Thus, for example, we find the embryos of mystical faith and magic in the child, but only in fragmentary structures. Elaborated systems of views will occur only if mysticism and magic are social and not in an individual structure.

## II

The main characteristic of Werner's conception is its conscious and fundamental formalism, expressed in the view that development is the evolution of form, and in a formal understanding of the content of psychological development as an interrelationship of mental functions: perception, memory, and thought. The author strips them of all concrete content.

He writes: "The concept of a stage of development refers first and foremost to the establishment of common, 'formal' mental characteristics, not to special characteristics and not to content." Illustrating this point with primitive man's hunting, he goes on to say:

The latter [concrete content] has scientific significance for the historian and the ethnologist, but not for the psychologist. The fact that bushmen like the Wedda do not have a sedentary lifestyle, since they are hunters, is a definition by content. But the bushman is invariable and undisciplined in his mind, and hence the work of a sedentary farmer does not suit him; this is a "formal" mental attribute that has tremendous significance for characterizing degree of mental development irrespective of its concrete content.

A fundamental refusal to include concrete content in the subject matter of developmental psychology runs like a red herring throughout all of Werner's work, and is intimately associated with his main task, which is to establish the general laws of development of primitive man, the child, and the psychopath.

The result is that this book does not discuss the distinctive feature of psychological development, namely, that it is a sociohistorical development, in contrast to the development of animals; the social-historical conditions in which the devel-

opment of primitive man, the child, and the psychopath takes place are disregarded, and this blocks the way to scientific clarification of the phenomena of interest to Werner.

Werner's book does contain some references to differences in development between the child and the savage, as we have seen in the first part of this article; but he regards these differences as unessential to his aims.

In contrast to this conception, Soviet pedology and psychology have posed as their tasks determining, in the first instance, what is distinctive and unique in each stage of development. As Vygotsky and Luria put it,<sup>5</sup>

We have tried to determine, first, the profound distinctiveness of each of the three paths of development of behavior (animal, primitive man, and the child) and the differences in mode and type of development. We were interested in determining what is distinctive about these processes, not their common features. We assumed that study of the principal distinctive features of each process of development, features that differentiate it from the general concept of evolution, might lead directly to clarification of the type and specific laws of each of the three processes investigated.

Determination of what is unique and distinctive in each of the three paths of development indicates that these authors conceive the concrete content of this development as being inseparable from the forms in which it is manifested. However, in most of the works of our Soviet pedologists and psychologists, we see that same divorce of form from content, albeit at an elemental level. We have only to peruse Vygotsky & Luria's book. Establishing the criteria for the difference among the three lines of development, they write:<sup>6</sup>

We in each case therefore selected the revolutionary, critical stages in the development of behavior. For us these revolutionary critical moments are the use of tools in the behavior of primates, work and the use of mental signs in the behavior of primitive man, and, in the behavior of the child, the separation of the line of the child's development into two paths, a natural mental path, and a cultural psychological path.

This construct is based on the hypothesis that "Just as in the process of historical development man changes not his natural organs, but tools, so in the process of his mental development he improves the work of his intellect mainly through the development of special 'auxiliary means' of thinking and behavior."<sup>7</sup>

These "auxiliary means"—instruments, tools, signs—are considered by these authors in isolation from production relations in different sociohistorical environments and from the concrete labor of an adult and the practical activity of a child developing in a specific social-class environment; hence they have the same formal character as Werner's undivided wholes. This disregard of the content of the concrete activity of the evolving human being also lies at the root of Werner's attitude toward the biogenetic law transferred to the psychology of Stanley Hall. Demarcating himself from those who apply the biogenetic law to psychological

development, he instead accepts Stern's mechanistic theory of parallels. The gist of this theory is expressed in the following statement by Stern<sup>8</sup>: "Mental life, which begins to evolve, leads to general laws of phenomena, regardless of whether they relate to the individual or the species." "To disregard the existence of parallels," writes Werner, "means to deprive oneself of a fruitful methodological device for understanding."<sup>9</sup> He also uses these parallels as the basis for the structure of his book. One can compare this book as well with the above-quoted book by Vygotsky & Luria. These authors set themselves apart not only from those who accept the biogenetic law but also from the theory of biogenetic parallelism, using this principle, as does Werner, to conceal the formal correspondence between specific aspects of the different levels of development and the link bringing these two lines of development together. For them this lies in the fact that "One process of development dialectically prepares the next one and is transformed into a new type of development."<sup>10</sup>

However, if we take tools, instruments, and signs, divorced from production relations in the sociohistorical environment, as the criterion for the transition from one level of development to another, they are unable to reveal the truly dialectic course of development of animals, primitive man, and the child, and essentially stop, as does Werner, with the establishment of analogies among the different levels of development.

This establishment of parallels among the three levels of development leads both Werner<sup>11</sup> and our Soviet authors to understand psychological development as "organic" development.

Werner sees laws in psychological development that are analogous to those in biology, casting doubt on the possibility of seeing psychological development in terms of historical laws. Is it necessary—indeed, is it possible from a scientific perspective—to view human development within the context of the historical flow of events? This is Werner's question,<sup>12</sup> and he answers it as follows: "If we wish to see clearly the process of development, it would be best for us to turn to that science of development that justified its existence much earlier, namely, biology." Analyzing the concept of development on the basis of biological phenomena—for example, the nervous system—the author then, by analogy, transfers the concept of differentiation and centralization to the domain of psychological phenomena.

Hence, we see clearly that the author situates developmental psychology in the ranks of the biological sciences.

This "organic" approach to psychological development is also evident in the works of Vygotsky. It is manifested in the fact that he regards child development as a succession of forms, a kind of metamorphosis, like the transformation of a caterpillar into a butterfly; and, in his opinion, the development of higher mental functions is governed by the principle of neurobiological laws. "The three basic laws<sup>13</sup> observed in the development of the nervous system, namely, preservation of lower centers in the form of individual stages, the upward movement of func-

tions, and the release of lower centers in illness, wholly parallel the history of the development of mental functions. In particular, the whole of psychological development at a transitional period is an example of a concrete expression of these three basic laws."

We of course cannot say that Vygotsky deliberately ignores historical laws as being dominant in psychological development, as Werner does; but the equation of biological laws with psychological laws stands out very clearly in Vygotsky's writings, which forces him, as it does Werner, toward an organic theory of development in psychology.

The next distinctive feature of Werner's book is his idealistic conception; specifically, the content of psychology is, as we have seen from the above, comprised of the data of consciousness (*Bewusstseins gegebenheiten*), which are distinguished as significations, functions, and meanings, on the one hand, and phenomena and manifest forms, on the other.

Hence, the elements of the mind are original mental phenomena independent of the objective reality that gives birth to them, whose formation (i.e., the data of consciousness) essentially amounts to "reviving the phenomena perceived." The role of objective reality is reduced to "filling (*Erfüllen*) the ready data of consciousness . . . since the sense of 'seeing,'" Werner says, "can more or less be filled with what I see." These statements indicate that the author contrasts the elements of the line to what constitutes their content.

Formulating the question in this way is fundamentally invalid; it is directly contrary to the Marxist-Leninist formulation: "For any natural scientist," says Lenin,<sup>14</sup> "just as for any materialist, sensation is a real and direct connection between consciousness and the external world; it is the transformation of the energy of an external stimulus into a fact of consciousness."

Werner's idealist conception is also expressed in his understanding of development as a special perspective of the investigator of mental phenomena. He writes:

Every domain of theoretical psychology, whether it is normal psychology of the individual and of man, the psychology of the child, the psychology of animals, psychopathology, or the psychology of special states of consciousness, can, without detracting from the specialized objectives of each of these areas, be viewed from the standpoint of mental development and, in that case, is developmental psychology.<sup>15</sup>

Thus, for him the problem of psychological development in the strict sense is reduced to the scientist's perspective on the phenomena of the mind, which then becomes a fundamental ground.

We have encountered the same phenomenon in Soviet pedagogical literature, namely, substitution of study of the dialectic unfolding of the process of psychological development by a process of cognition of that phenomenon by the investigator. For example, we read the following in a posthumous article by M.Ia. Basov:

An in-depth understanding requires, first of all, a concept of human develop-

ment. So long as this process of development is conceived without any differentiation into its various directions, our understanding of the factors in this development and the role of each of them will be no more than very general and superficial.<sup>16</sup>

This is quite right. We have encountered critics who, in deference to "wholeness," are very much afraid of any differentiation, seeing in it a source of dualism and all sorts of vices. In reality, in such cases we shall always find the one vice of misunderstanding of the most important thing from the standpoint of a materialist dialectics, namely, the proposition that

the unity of wholeness of an object may be perceived by us on different foundations, depending on how deeply we penetrate that object in our quest to know it. Moreover, that penetration of the object is always accompanied by two contrary processes represented essentially as one process—the growing differentiation and integration of the object. This means that, as we penetrate an object of cognition, which in a sense represents a certain unity, we become increasingly able to understand and differentiate the specific aspects of that unity in all their qualitative uniqueness, in the specificity of their laws, and in their mutual connections, as aspects of one and the same whole. The more frequently and the more thoroughly we discriminate the specific aspects of a knowable unity, the clearer and more transparent that unity will be for us as such, and the degree of integration of the object will be equivalent to the extent of its differentiation.

Here, as in Werner's book, the cognition of reality is divorced from any objective, knowable foundation. The logical inference from this is that the objective world has not developed, and that "There is no objective truth: truth is only the organizing principle of human experience" (Lenin, [*Materialism and empiriocriticism*]. P. 90).

This creates a gap between the subjective and the objective, the external and the internal, which we have pointed out in the formalism of Werner's as well as of certain Soviet works.

However, at this point we must draw a line separating Werner's work from that of our Soviet pedologists and psychologists, namely: Werner in principle justifies this gap, considering it natural; but our Soviet pedologists regard this as a methodological error. For this reason, M. Ia. Basov writes in his posthumous article the following:<sup>17</sup>

All in all, I must say that the broad methodological breakthrough in the problem of development took place in my case along the lines of the dialectic of the relationship between the general and the particular, the objective and the subjective, the external and the internal, and along the line of the special meaning of social reality in determining the laws of human development.

Thus, whereas Soviet pedology and psychology are already aware of the social essence of psychological development and raise the question of the driving forces behind that development, i.e., the role of revolutionary practice and labor as a principal source of this law, in Werner's work, on the contrary, we have a bare,

formal statement of facts that, in some cases, is drawn on to support the formal model he has adopted, and the problem of development in psychology is not even posed.

## Notes

1. This report was presented to the Department of Pedology of the Herzen Pedagogical Institute in Leningrad.
2. Ibid. P. 3.
3. Ibid. P. 6.
4. Ibid. P. 7.
5. Ibid. P. 81.
6. *Etiudy po istorii povedeniia*. P. 6.
7. Ibid.
8. Ibid. P. 6.
9. According to Werner. P. 22.
10. Ibid.
11. *Etiudy*. P. 5.
12. Werner. P. 3.
13. *Pedologiia podrostka*. Part 3–4, p. 347.
14. Lenin, *Materialism and empiriocriticism*. P. 30.
15. Werner. P. 3.
16. Basov, *V bor'be za marksistsko-leniniskuiu pedologiu*. P. 113.
17. Ibid. P. 116.