

Chapter 1

DEFECT AND COMPENSATION¹

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In those systems of psychology, which place at their center an integral approach to personality, the idea of overcompensation plays a dominant role. "What does not destroy me, makes me stronger" is the idea formulated by W. Stern when he pointed out that strength arises from weakness and ability from deficiencies (W. Stern, 1923, p. 145). The psychological trend created by the school of Adler, the Austrian psychiatrist, is very widespread and influential in Europe and America. This so-called "individual psychology" (i.e. the psychology of personality) has developed the idea of overcompensation into a whole system, into a complete doctrine about the mind. Overcompensation is not some rare or exceptional phenomenon in the life of an organism. An endless number of examples can be given demonstrating this concept. Rather, it is to the highest degree, a common and extremely widespread feature of living matter. True, until now no one has worked out an inexhaustible and comprehensive biological theory of overcompensation. In a series of separate areas of organic life, these phenomena have been studied so thoroughly and their practical application is so extensive that we have substantial grounds for talking about overcompensation as a scientifically established, fundamental fact in the life of an organism.

We inoculate a healthy child with a vaccine. The child endures a mild case of the disease and upon recovering becomes immune to smallpox for many years. This organism acquires an immunity, i.e. it not only has recovered from a mild illness which was brought on by inoculation, but comes out of the disease healthier than before. This organism succeeded in producing an antidote which was considerably stronger than the vaccine administered. If we now compare our child with others who have not been vaccinated, then we shall see that with respect to this terrible illness he is overly healthy: he will not only not become ill now, like other healthy children will, but he will not even be able to become sick, he will remain healthy even when this poison again infiltrates the bloodstream.

While at first glance paradoxical, this organic process which transforms sickness into superior health, weakness into strength, and infection into immunity, bears the label of superior overdevelopment or "overcompensation," as some authors say. This means, essen-

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tially, that any injury to or reactions which are considered immediate danger harmless. A system of organs which possesses In a moment of danger it acts of accumulated strengths and the antidotes than the dose compensates for the harm in gaining superiority over the defend itself than before the

White blood cells rush to the infection. This, too, is an example with an injection of tuberculin to overcome it. The discrepancy between action and the counteraction of superior health through danger are all important factors in psychology this phenomenon in isolation from the organism's system, as its distinct, unique lesser role in the system of where such an important phenomenon amounts to the phenomenon of functioning organs which have organs out of necessity enter must adjust. This struggle is also bears the seeds of increase of illness or removal of the full function of both and the nervous system takes over the precisely and perfecting the work that organ a psychological superior remaining organ's operation.

"The sensation of having psychological development,"

The feeling or consciousness reflects an evaluation of one's force behind psychological presentiment and foresight and attention, sensitivity, interest compensation leads to the conscious transformation of an inferiority and ability. Having struggled Greece's greatest orators. It natural handicap, by magnificent pronunciation, filling his mouth waves which muffled his voi-

tially, that any injury to or negative influence on an organism evokes from it defensive reactions which are considerably more energetic and stronger than is necessary to render the immediate danger harmless. An organism represents a relatively closed, internally connected system of organs which possesses a large reserve of potential energy and concealed strengths. In a moment of danger it acts as a unified (integral) whole, which mobilizes its latent reserves of accumulated strengths and bombards the endangered location with much larger doses of the antidotes than the dose of bacteria threatening it. In this way, the organism not only compensates for the harm inflicted on it but always generates a surplus (of the antidote), gaining superiority over the danger and rendering the organism considerably more able to defend itself than before the onset of danger.

White blood cells rush to the infected area in greater quantity than is needed to combat the infection. This, too, is an example of overcompensation. If a tuberculosis patient is treated with an injection of tuberculin (i.e. tubercle bacillus) then the organism is being counted on to overcome it. The discrepancy between irritation and reaction, the inequality between the action and the counteraction within the organism, the surplus of the antidote, the cultivation of superior health through disease, and the ascendancy to a higher stage by overcoming danger are all important factors for medicine and pedagogy, treatment and education. Even in psychology this phenomenon was widely adopted when the mind began to be studied not in isolation from the organism -- a soul dissected from the body -- but within the organism's system, as its distinct, unique and higher function. Overcompensation was found to play no lesser role in the system of personality. It will suffice to look at modern psychotechniques where such an important personality forming function as physical exercise essentially amounts to the phenomenon of overcompensation. Adler turned his attention to defectively functioning organs which had been impeded or destroyed as a result of a handicap. Such organs out of necessity enter into combat and struggle with the external world to which they must adjust. This struggle is accompanied at times by increased illness and fatality but it also bears the seeds of increased possibilities for overcompensation (A. Adler, 1927). In the case of illness or removal of one of two organs (a kidney, a lung), the other organ takes over the full function of both and develops in a compensatory manner. Similarly, the central nervous system takes over the compensation of a single impaired organ, determining more precisely and perfecting the work of that organ. The psychological system superimposes on that organ a psychological superstructure which elevates and increases the efficiency of the remaining organ's operation.

"The sensation of having a defective organ constantly stimulates the individual's psychological development," Adler quotes O. Ruele² (1926, p. 10).

The feeling or consciousness of one's inferiority, caused by an individual's defect, reflects an evaluation of one's social position. This feeling becomes the primary driving force behind psychological development. "Significantly intensifying the phenomena of presentiment and foresight along with their operating factors such as memory, intuition, attention, sensitivity, interest, in a word, all the psychological features" (p. 111), overcompensation leads to the consciousness of superior health in a diseased organism, to the transformation of an inferiority complex into a superiority complex, a defect into giftedness and ability. Having struggled with a speech defect, Demosthenes went on to become one of Greece's greatest orators. It was said of him that he acquired his great art by increasing his natural handicap, by magnifying and multiplying the obstacles. He practiced his speech pronunciation, filling his mouth with stones and trying to overcome the roar of the ocean waves which muffled his voice. "*Se non vero, ben trovato*" (Even if it is not true, it is well

thought up), goes the Italian proverb. The way to perfection is through the conquest of obstacles. The obstruction of a function stimulates a higher level of its operation. In similar ways, L. von Beethoven and A. S. Suvorov serve as examples of this. The stuttering K. Demulen was an outstanding orator; the blind, deaf-mute Helen Keller³ a famous writer and prophet of optimism.

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Two circumstances force us to take a special look at this doctrine. First of all, particularly in the circles of German social democracy, it is often linked with the teachings of K. Marx. Second, this doctrine is intrinsically tied to pedagogy in theory and in practice. We will put this question aside inasmuch as the doctrine of individual psychology is connected with Marxism; the solution of this question would demand a special investigation. We note only that there have already been attempts made to synthesize Marx and Adler and to study personality within the context of the philosophical and social system of dialectical materialism. We are attempting to understand the reasoning behind the rapprochement of these two lines of thought.

A new direction has already emerged, separating itself from the school of S. Freud⁴ as a result of the differences in political and social views of the advocates of psychoanalysis. Apparently the political side played a significant role here inasmuch as F. Wittel (1925) tells how Adler and some of his supporters withdrew from the psychoanalytical circle. Adler and his nine friends were Social Democrats. Many of his followers like to stress this point. Ruele (1926, p. 5), who attempted to synthesize Marx and Adler in his work on the psychology of the proletarian child, states that "Sigmund Freud up until now has done every thing to make his teachings available and useful only to the reigning social strata. As a counterbalance, A. Adler's individual psychology bears a revolutionary character and its conclusions fully coincide with the principles of Marxist revolutionary socialism."

As has already been mentioned, all this is debatable, but there are two aspects which make such a rapprochement psychologically possible and warrant attention.

The first is the dialectical character of the new doctrine; the second is the social basis of the psychology of personality. Adler thinks dialectically: personality develops by means of opposition. A defect, ineptitude, or inferiority is not simply a minus, a shortcoming, a negative attribute, but also a stimulus for overcompensation. Adler introduces "the basic psychological law of dialectical transformation: as a result of a subjective feeling of inferiority, an organic defect will be transformed into a psychological drive to compensate and overcompensate" (A. Adler, 1927, p. 57). From this position Adler allows us to include psychology in the context of a broad biological and social doctrine. Indeed, all true scientific thought is advanced by means of dialectics. Even Charles Darwin⁵ taught that adaptation results from unfitness, from struggle, destruction, selection. Marx, too, taught that in contrast to utopian socialism, the development of capitalism will inevitably lead to communism through the demise of the capitalistic dictatorship of the proletariat and will not retreat to the sidelines somewhere, as might seem possible from a superficial glance. Adler's teachings also attempt to illustrate how an expedient and higher level arises from an inexpedient lower level.

As A. B. Zalkind correctly noted, the psychology of personality breaks away from the "biological stimulus approach to personality" and manifests itself "as a really revolutionary

characterological movement" dynamic, formulating forces (p. 177). Adler's teachings stand of E. Kretschmer,⁶ for whom a and "the entire subsequent development of that basic biological teachings, however, are also in set Adler apart from Freud: the and the idea of the ultimate essential connection between ment of personality and character a succession of combative objects definite position with respect to the social environment. In the existence of a defect in itself realization. In connection with each psychological act not only future direction of personality. Simply put, understanding psychology and the past essentially represent movement, and to bring to light Adler's teachings on the structure future-oriented perspective, while vative, backward-looking teaching.

Just as the life of each organism dynamics of personality are given, think, feel, want, or act without a single act and the development of their future-oriented tendencies of dramatic character created by a act" (ibid., pp. 2-3).

The future-oriented perspective processes, brings us to one of the individual psychological pedagogical application of Adler's psychology we have just described, pedagogical biological sciences, engineering sciences; namely, the highest can only by application. From the other helps us understand child development state of childhood lie the very source of functions. The more adapted for future development and rearing of inferiority. Hence, ineptness childhood development. Such an pedagogy. Just as the flow of a

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characterological movement" because, in contrast to the teachings of Freud, it puts the dynamic, formulating forces of history and social life in the place of biological fate (1926, p. 177). Adler's teachings stand in opposition not only to the reactionary biological schemes of E. Kretschmer,⁶ for whom an innate constitution defines body structure, while character and "the entire subsequent development of human character is equated with a passive unfolding of that basic biological type inherent in man" (Zalkind, *ibid.* p. 174). Adler's teachings, however, are also in opposition to Freud's characterological system. Two ideas set Adler apart from Freud: the idea of the social basis for the development of personality and the idea of the ultimate direction of this process. Individual psychology negates the essential connection between the organic substrata and the overall psychological development of personality and character. The entire psychological life of an individual consists of a succession of combative objectives, directed at the resolution of a single task: to secure a definite position with respect to the immanent logic of human society, or to the demands of the social environment. In the last analysis, the fate of personality is decided not by the existence of a defect in itself but by its social consequences, by its socio-psychological realization. In connection with this, it becomes necessary for the psychologist to understand each psychological act not only with respect to the past but also in conjunction with the future direction of personality. We may call this the ultimate direction of our behavior. Simply put, understanding psychological phenomena from the perspective of both the future and the past essentially represents the dialectical need to perceive phenomena in eternal movement, and to bring to light their future oriented tendencies, determined by the present. Adler's teachings on the structure of personality and character introduce a new and profound future-oriented perspective, which is valuable for psychology. It frees us from the conservative, backward-looking teachings of Freud and Kretschmer.

Just as the life of each organism is directed by the biological need to adapt, so, too, the dynamics of personality are guided by daily social demands. "We are not in a position to think, feel, want, or act without some kind of goal before us," states Adler (1927, p. 2). Both a single act and the development of personality as a whole may be understood on the basis of their future-oriented tendencies. In other words, "The psychological life of a man, like a dramatic character created by a good playwright, strives for its final denouement of the fifth act" (*ibid.*, pp. 2-3).

The future-oriented perspective, introduced by this interpretation of psychological processes, brings us to one of the two aspects of Adler's method which compels our attention: individual psychological pedagogy. In Wittel's opinion, pedagogy is the main area of application of Adler's psychology. At the same time, with respect to the psychological trend we have just described, pedagogy occupies the same place that medicine does for the biological sciences, engineering for physics, and chemistry and politics for the social sciences: namely, the highest category of truth, since man proves the truth of his thoughts only by application. From the outset, it is clear why precisely this psychological movement helps us understand child development and child rearing: in the unsocialized and unadapted state of childhood lie the very seeds of overcompensation, or the superior overdevelopment of functions. The more adapted some young animal species are, the smaller their potential for future development and rearing. A guarantee of superiority is given only in the presence of inferiority. Hence, ineptness and overcompensation represent the motive forces of childhood development. Such an understanding gives us the key to classical psychology and pedagogy. Just as the flow of a current is defined by its shores and its river beds, similarly,

the main psychological line of a growing child's development is defined out of objective necessity by the social channel and social shorelines shaping personality.

3

The doctrine of overcompensation has an important significance and serves as a psychological basis for the theory and practice of educating a child with a loss of hearing, sight, and so forth. What horizons will open up to the pedagogue, when he recognizes that a defect is not only a minus, a deficit, or a weakness but also a plus, a source of strength and that it has some positive implications! In essence, psychologists learned this a long time ago; pedagogues have also known this. Only now, however, has this most fundamental law been formulated with scientific accuracy. A child will want to see everything if he is nearsighted, hear everything if he has a hearing loss; he will want to speak if he has a speech problem or a stutter. The desire to fly will appear in children who experience great difficulty even jumping (A. Adler, 1927, p. 57). The dynamic forces of any educational system spring precisely from this opposition between a given organic defect and desires, fantasies, and dreams, that is, the psychological drive to compensate for the defect or loss. In educational practice, this is confirmed at every step. If we hear that a boy limps and therefore runs better than anyone else, we understand that it is a question of this very law. If experimental research shows that, in comparison with the maximum reactions occurring under normal conditions, greatly accelerated and intensified reactions will occur in the face of obstacles, then again we have the same law.

The concept of exemplary human personality which includes an understanding of its organic unity must serve as the basis for educating an abnormal child.

In contrast with other psychologists, W. Stern examined the structure of personality in greater depth. He presumed the following: "We have no right to conclude that a person with an established abnormality has a propensity for abnormality. In the same light it is impossible to reduce a given abnormal personality to a specific isolated characteristic as the sole primary cause" (W. Stern, 1921, pp. 163-164).

We shall apply this law to somatics and psychology, to medicine and pedagogy. In medicine, there is a growing tendency to base the sole criterion for health or illness on the question of whether or not the entire organism functions expediently, while individual abnormalities are taken into account only inasmuch as they are normally or insufficiently compensated for by other functions of the organism (*ibid.*, p. 164). Moreover, in psychology, microscopic analysis of abnormalities has led to reevaluation and an examination of these functions as an expression of an overall abnormality in the personality. If we are to apply Stern's ideas to education, then it will be necessary to reject both the concept and the term "defective (handicapped) children."

T. Lipps examined this question in the light of a general law for all psychological activity, which he called the law of damned up energy (*zakon zaprudy*).

"If any psychological event is interrupted or impeded in its natural course, or if, at some point, an alien element intrudes, then there occurs a flood of energy at the point of interruption, delay, or agitation in the course of the psychological event" (T. Lipps, 1907, p. 127). "Energy is concentrated at the given point; it is increased and can overcome the delay. It may continue to flow but in a roundabout way. Here, among other things, the high value placed on things lost or damaged is relevant" (*ibid.*, p. 122). This constitutes the main idea

of overcompensation. Lipps regarded the drive as a manifestation of this law, not only in and tragic experiences but also in the fact that, when some obstacle appears, any purposeful activity, even if previously aimless, automatic energy, will move to one side. The goal, which was previously to an overflow of force channels.

The goal of any mental process is to overcome an obstacle. The point of interest is not the functions; now directed at this obstacle. For this reason, a defective personality becomes the ultimate goal. This is why Adler called a defect the main line of life's plan. The formula "defect is strength" for a child with some functional or organic defect only seems to be the goal, which is actually the starting point.

The education and rearing of a child with a defect come combative to the defect. Education of these children is based on the tendencies emerge in the foreground of the educational process as his motivation. The child, on the basis of natural compensation, will arise as a result of the defect. It is necessary to select, in the approach to the gradual formation of the personality, the path of the defect.

What a liberating truth this is! It is a superstructure circumventing the defect. Using every possible means, the isolation and seclusion can be overcome. We have to use all our psychological powers. We have to struggle to be healthy and full. We have to overcome a defect, a minus.

Education has neglected this law. Pedagogues have not been acquainted with the handicap and the psychological state but also a defective state. They did not know the former, the defect. They did not know the latter, the psychological state but also a defective state. They thought that the development of a child with a defect strives to transcend the defect. The psychology of victory over blindness.

An inaccurate understanding of the failure of traditional education: the defect only as a defect is similar to a disease. It cultivates disease in him. In traditional education depend not only on the defect but also on the goal toward which they must be directed. It is inasmuch as all the processes of

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in its natural course, or if, at some flood of energy at the point of ological event" (T. Lipps, 1907, p. eased and can overcome the delay. among other things, the high value 22). This constitutes the main idea

of overcompensation. Lipps gave this law universal significance. In general, he viewed any drive as a manifestation of this phenomenon ("of flooding"). He explained not only comic and tragic experiences but also cognitive processes by the operation of this law: "When there appears some obstacle, any purposeful activity will necessarily be channeled through some previous aimless, automatic event." Present in the dammed up energy is the "tendency to move to one side. The goal, which is impossible to reach by a direct path, is attained thanks to an overflow of force channeled by one such detour" (*ibid.*, p. 279).

The goal of any mental process can be attained only thanks to some difficulty, delay, or obstacle. The point of interruption of any automatic function becomes a goal for other functions; now directed at this point, they are transformed into purposeful (goal-oriented) activity. For this reason, a defect and the resultant disruption of the normal functioning of personality become the ultimate developmental goal for all individual mental powers. This is why Adler called a defect the basic motivating force in development and the final goal in life's plan. The formula "defect overcompensation" is the main line of development for a child with some functional or organic defect. Thus, the "goal" is defined beforehand, yet it only seems to be the goal, when in fact it is the primary cause of development.

The education and rearing of handicapped children should be based on the fact that along with a defect come combative psychological tendencies and the potential for overcoming the defect. Education of these children should take into account that precisely these tendencies emerge in the foreground of a child's development and must be included in the educational process as his motivating strength. Constructing the entire educational process on the basis of natural compensatory drives does not mean alleviating all difficulties that arise as a result of the defect. It means instead concentrating all strengths on the compensation of the defect, selecting, in the appropriate sequential order, those tasks which will bring about the gradual formation of the entire personality from a new standpoint.

What a liberating truth for the pedagogue! A blind child develops a psychological superstructure circumventing his impaired vision with only one goal in mind: to replace sight. Using every possible means available to him, a deaf child works out ways to overcome the isolation and seclusion caused by his deafness. Up to now we have neglected these psychological powers. We have not taken into account the desire with which such a child struggles to be healthy and fully accepted socially. A defect has been statically viewed as merely a defect, a minus.

Education has neglected the positive forces created by a defect. Psychologists and pedagogues have not been acquainted with Adler's law of the opposition between a physical handicap and the psychological drives to compensate. They have taken into account only the former, the defect. They didn't understand that a handicap is not just an impoverished psychological state but also a source of wealth, not just a weakness but a strength. They thought that the development of a blind child centers on his blindness. As it turns out, his development strives to transcend blindness. The psychology of blindness is essentially the psychology of victory over blindness.

An inaccurate understanding of the psychology of the handicapped has caused the failure of traditional education for blind and deaf children. The previous understanding of a defect only as a defect is similar to the view that the vaccination of a healthy child merely cultivates disease in him. In fact, it produces superior health. It is most important that education depend not only on the development of natural strengths but also on the ultimate goal toward which they must be oriented. Full social esteem is the ultimate aim of education inasmuch as all the processes of overcompensation are directed at achieving social status.

Compensation strives not for further deviation from the norm, even in a positive sense, but for a superior, if somewhat one-sided, twisted, hypertrophied development of personality, it nevertheless strives in the direction of the norm and toward an approximation of a certain normal social type. A definite social type always serves as the norm for overcompensation. We will find in a deaf-mute child, cut off from the world and excluded from all social contact, not a decreased desire to communicate but an intensified desire to be included in social life. Such a child's psychological capacity for speech is in reverse proportion to his physical ability to produce speech. Although it may seem paradoxical, a deaf child, even more than a normal child, wants to speak and vigorously (impetuously) gravitates toward speech. Our educational system has sidestepped this issue, and the deaf, without any instruction and in spite of it, have created their own language, arising from this desire to communicate. This is something for the psychologist to examine. Herein lies the reason why the deaf-mute have failed to develop oral speech. In exactly the same way, a blind child develops an increased ability to master space. In comparison with a seeing child, the blind child has a greater sensitivity toward that world which is accessible to us without the slightest difficulty, thanks to sight. A defect is not only a weakness but also a strength. In this psychological truth lie the alpha and omega of social education for children.

4

The ideas of T. Lipps, W. Stern, and A. Adler contain a wholesome nucleus for the psychology of the education of handicapped children. These ideas, however, are obscured by their vagueness, and in order to completely grasp their significance, we must explain more precisely how they relate to other psychological theories and views which are similar in form or spirit.

First of all, the unscientific optimism which spawned these ideas easily arouses our suspicions. If every defect gives reign to some compensatory strength, then it can be seen as a blessing. Is this really true? Overcompensation, in fact, is only one extreme of two opposite outcomes, one of two possible poles of development affected by a defect. The other extreme is the total failure to compensate, retreat into illness, neurosis, complete asociality from a psychological standpoint. Unsuccessful compensation transforms the child's energies into a defensive battle with illness, directed toward a false goal, heading life's entire course along a false path. Between these two extremes we find every possible degree of compensation from minimal to maximal.

Secondly, these ideas are easily confused with directly opposing views and can be mistaken for a return to the past, to a Christian mystical notion of weakness and suffering. Do we not find in the ideas indicated above a high value placed on the superiority of illness at the expense of health, on the recognition of the benefit of suffering, and, in general, on the cultivation of weak, wretched, and impotent forms of life to the detriment of the strong, the normal, and the powerful? No, the new doctrine places a high value not on suffering itself but on overcoming it; not on the humble acceptance of a defect but on mutiny against it; not on weakness alone, but on the impulses and sources of strength engendered in it. Thus, the new doctrine is diametrically opposed to the Christian understanding of the sick. At issue is not poverty but potential wealth of spirit; misery becomes the impulse for overcoming weakness and building up strength. There is a close affinity between Adler's ideal of strength or power and the philosophy of F. Nietzsche,⁷ for whom the will to power was the primary

motivating drive in man's psychology. Its significance is the ultimate goal, derived from the Christian ideal of wealth.

Third, we must distinguish between the biological theory of organic compensation of sensory organs [lit. vicariousness] and the first presentiment of that truth which impetus for the development of personality expressed naively and is distorted when compared to the relationship between the blind and the other diseased one. In this case, the healthy organs and recedes a step in sociopsychological instances, and does not affect the vital and necessary functions. The shortcomings of this theory. For example, touch does not occur automatically in the blind, the contrary, in a blind child, touch is automatically replaced but with a different view that the blind possess a hereditary skills. A. Petzold,⁸ who has written (1925), saw precisely the basic concept. He proposes that what is the most difficult to internalize by means of speech is that the teachings on the transfer of the blind person is brought just as no of transference (ibid., pp. 30-31) is not limited to its isolated function, the entire personality. A defect is in one direction. Only a naive understanding disregards the sociopsychological direction and overall nature of the one.

Fourth, we must finally ascertain our recently formed therapeutic distinction between these two concepts. In the doctrine of conditional reflexes in the educational process, the doctrine of standing the very process of education analyzed the education of the blind and have come to a more profound difference between the education of the blind are formed identically from an

⁸ The reference seems to be to Petzold [Ed.]

om the norm, even in a positive sense, but hypertrophied development of personality, and toward an approximation of a certain norm serves as the norm for overcompensation. The world and excluded from all social contact. Intensified desire to be included in social life. This is in reverse proportion to his physical condition. Paradoxical, a deaf child, even more than normally (spontaneously) gravitates toward speech. Our desire, the deaf, without any instruction and in spite of the desire to communicate. This desire lies the reason why the deaf-mute have a greater desire to communicate. In this psychological truth lie the reasons.

contain a wholesome nucleus for the development. These ideas, however, are obscured by their significance, we must explain the theories and views which are similar.

When these ideas easily arouses our desire for sensory strength, then it can be seen that, in fact, is only one extreme of two extremes. Development affected by a defect. The other extreme, illness, neurosis, complete asociality. Compensation transforms the child's energies into a new goal, heading life's entire course toward every possible degree of compensation.

Directly opposing views and can be seen in the notion of weakness and suffering. The value is placed on the superiority of illness and the benefit of suffering, and, in general, on the benefit of life to the detriment of the strong. This places a high value not on suffering but on mutiny against a defect but on mutiny against the source of strength engendered in it. Thus, the lack of understanding of the sick. At issue is the question of the impulse for overcoming illness. The difference between Adler's ideal of strength and the will to power was the primary

motivating drive in man's psychological makeup. However, Adler's view that social significance is the ultimate goal of compensation just as clearly divorces psychology both from the Christian ideal of weakness and from the Nietzschean cult of individual strength.

Third, we must distinguish the doctrine of defect-overcompensation from the old, naive biological theory of organic compensation or, in any case, from the theory of the substitution of sensory organs [i.e., vicarious sensory organs]. Doubtless, this view already contained the first presentiment of that truth which states that the failure of one function serves as the impetus for the development of other compensatory functions. But this presentiment is expressed naively and is distorted. The relationship between sensory organs may be compared to the relationship between paired organs; touch and hearing directly compensate for the loss of sight in the same manner as one healthy kidney will take over the function of the other diseased one. In this case the impaired organ (the eye) automatically capitulates to the healthy organs and recedes into the background while the ear and skin, leaping over all sociopsychological instances, are stimulated to compensate. After all, loss of sight does not affect the vital and necessary functions. Science and practice have long since exposed the shortcomings of this theory. Factual research has shown that intensification of hearing and touch does not occur automatically as a result of impaired vision (K. Buerklen, 1924). On the contrary, in a blind child we are dealing not with the possibility of sight being automatically replaced but with the difficulties arising from its absence. These difficulties are resolved by the development of a psychological superstructure. Thus, we encounter the view that the blind possess a heightened memory, intensified attention, and enhanced verbal skills. A. Petzeld,⁸ who has written the best work on the psychology of the blind (Petzeld, 1925), saw precisely the basic characteristic of overcompensation in this phenomenon. He proposes that what is the most distinctive feature in the personality of the blind is the power to internalize by means of speech the social experience of the seeing. H. Grischach has shown that the teachings on the transference of one sense organ have not withstood criticism: a blind person is brought just as near to the seeing world as he is removed from it by this theory of transference (ibid., pp. 30-31).^{*} There really is a kernel of truth in the theory that a defect is not limited to its isolated functional failure but also involves a radical reconstruction of the entire personality. A defect brings to life new psychological powers and gives them new direction. Only a naive understanding of the purely organic nature of compensation, a disregard of the sociopsychological aspect of this process, and an ignorance of the ultimate direction and overall nature of overcompensation distinguish the old doctrine from the new one.

Fourth, we must finally ascertain the true implications of Adler's doctrine judging by our recently formed therapeutic social pedagogy based on the data of reflex psychology. The distinction between these two circles of ideas can be summed up with the statement that our doctrine of conditional reflexes offers a new basis for constructing a mechanism for the educational process, the doctrine of overcompensation offers a new mechanism for understanding the very process of child development. Many authors, including this one, have analyzed the education of the blind and deaf from the point of view of conditional reflexes and have come to a more profound and important conclusion: There is no fundamental difference between the education of a seeing and a blind child. New conditional connections are formed identically from any input. The effect of organized external influences is a

* The reference seems to be to Petzeld who, apparently, cited Grischach. No reference to Grischach is supplied [Ed.]

determining factor in education. The first school directed by I. A. Sokolianskii⁹ worked out a new method for teaching deaf-blind children speech on the basis of this doctrine and with it achieved both amazing practical results and theoretical positions, which surpass the most progressive systems of European special education for the hearing impaired. We must not, however, stop here. It is impossible to think that theoretically all differences between the education of the blind, deaf, and normal children can be limited. This is impossible because, in fact, a difference exists and makes itself known. Historically, all past experiences with education for the deaf and the blind attest to this. It is still absolutely necessary to take into account the specific developmental characteristics of a child with a defect. The educator must become aware of those specific features and factors in children's development which respond to their uniqueness and which demand it. From a pedagogical point of view, a blind or deaf child may, in principle, be equated with a normal child, but the deaf or blind child achieves the goals of a normal child by different means and by a different path. It is also particularly important for the educator to know precisely the uniqueness of the path on which he must lead the child since it is impossible to state that blindness does not cause a profoundly unique main line of development.

Essentially, the ultimate character of all psychological acts—their future-oriented directedness—becomes apparent in the most elementary forms of behavior. Goal-oriented behavior had already been observed in the simplest forms of behavior which the Pavlovian school studied from the point of view of conditional reflex mechanisms. Among innate reflexes, Pavlov discovered a unique goal-oriented reflex. With this contradictory label he probably intended to point out two factors: (1) the fact that even here we are dealing with a reflex mechanism; and (2) the fact that this mechanism takes on the appearance of purposeful activity, that is, becomes intelligible only in relation to the future. "All life is the realization of one goal," says Pavlov, "the preservation of life." (1951, p. 308). Indeed, he called this reflex the reflex of life. "All of life's advancements, all its culture, are achieved by means of this goal-directed reflex and is achieved only by those people striving to attain a specific goal which they themselves have set" (ibid., p. 310). Pavlov straightforwardly formulated the significance of this reflex for education. His ideas coincide with the theory of compensation. "For a complete, true and fruitful manifestation of the goal reflex," he says, it must be placed under a specific amount of stress. An Anglo-Saxon, the highest embodiment of this reflex, knows this well, and therefore he will answer the question: "What is the main condition for achieving a goal?" in a manner most unexpected and incredible to a Russian's eye and ear with the answer: "The existence of obstacles." It is as if he were saying: "Let my goal-reflex exert itself in response to some obstacle and precisely then I will attain my goal, no matter how difficult it may be." It is interesting that the possibility of failure is totally ignored with such an answer" (ibid., p. 311). Pavlov regretted that we do not have "any practical knowledge about such an important factor in life as the goal reflex; this knowledge is so essential in all areas of life, beginning with the most fundamental education" (ibid., pp. 311-312).*

C. Sherrington¹⁰ has said the same about this reflex. In his opinion, a reflex reaction cannot really be understood by a physiologist without knowledge of its goal, and he can learn about this goal only by examining reaction in light of the whole organic complex of normal

* The Russian text does not provide for quotations within quotations. Thus Pavlov's ascriptions to a putative 'Anglo-Saxon' and Vygotsky's ascriptions to Pavlov are unclear in the Russian and were extrapolated in the translation [I. d.].

functions. This position guarantees the strategic position of the Adlerian point, not only in general physiological formulations" (quoted in *Adlerian actual theoretical correspondences of this basic path*," along which

The experimental research has been and accelerated in the past. It was analyzed simultaneously with the and a manifestation of overcompensation phenomena under the label of compensation (Vygotsky, 1982). V.P. Protopopov: intensity of concentration development of normal people" (1925, p. 26); process. This means that the process

It is impossible to analyze the examination will lead us to come to the paradoxical conclusion: education of the deaf-mute, the of the blind easier than that established by the degree of compensation in this the direct result of the abnormality. "This is not a paradigmatic new views on the nature of motivation" (*Reflexology*..., 1926). Protopopov: namely that for the blind-deaf with extreme ease (1925, p. 100)

How do such psychological conditions it is beneficial to compare the conditions on the basis of the degree of pedagogical goals under various and a single level of pedagogical of education in both cases. It will eight-year-old child the multiple in the first case is conditioned to teach a blind-deaf child development, and the education of child only the minimum, hardly the contrary, if we were to assume the educator of a normal child, it with less effort. Who can manage worker, a shop-assistant or a professional can only answer this question in the opportunities for social compensation. A club for the deaf of social life. Or let it first be a newspaper or to enter into social

y I. A. Sokolianskii⁹ worked out the basis of this doctrine and with positions, which surpass the most hearing impaired. We must not, really all differences between the blind. This is impossible because, actually, all past experiences with absolutely necessary to take into child with a defect. The educator in children's development which pedagogical point of view, a blind child, but the deaf or blind child and by a different path. It is also uniqueness of the path on which blindness does not cause a profoundly

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functions. This position guarantees the right to synthesize both psychological theories. "The strategic position of the Adlerites," A. B. Zalkind states, "represents the very same dominant point, not only in general physiological terms but also in clinical and psychotherapeutic formulations" (quoted in *Advancements in Reflexology*, 1925, p. vi). The author sees the actual theoretical correspondence of these two theories as a confirmation of the "correctness of this basic path," along which both are headed (ibid.).

The experimental research, already cited, demonstrating that reaction may be strengthened and accelerated in the presence of opposing and obstructing stimulations, may be analyzed simultaneously with respect both to a manifestation of [an impulse for] dominance and a manifestation of overcompensation. L. L. Vasil'ev and I have described these phenomena under the label of dominant processes (Bekhterev,¹¹ and Vasil'ev, 1926, U.S.S.R., Vygotsky, 1982). V.P. Protopopov¹² has shown that, judging by the greater persistency and intensity of concentration developing as reaction, "The physically handicapped surpass normal people" (1925, p. 26); he explained this by the characteristics of the dominant process. This means that the potential for overcompensation is greater in the handicapped.

It is impossible to analyze questions of education without a future perspective. Detailed examination will lead us to conclusions which attest to this fact. Thus, I. A. Sokolianskii came to the paradoxical conclusion that the education of the deaf-blind is easier than the education of the deaf-mute, the education of the deaf-mute easier than that of the blind, that of the blind easier than that of normal children while, in fact, this sequence is really established by the degree of complexity and difficulty of the pedagogical process. He saw in this the direct result of the application of reflexology to a reexamination of the views on abnormality. "This is not a paradox," asserts Sokolianskii, "but the natural deduction of the new views on the nature of man and the essence of speech" (in *The Ukrainian Herald of Reflexology*.... 1926). Protopopov came to a similar conclusion in his experimental research, namely that for the blind-deaf "the opportunity for social communication can be established with extreme ease (1925, p. 10).

How do such psychological presuppositions benefit pedagogy? It is absolutely clear that it is beneficial to compare the education of blind-deaf children with that of normal children on the basis of the degree of difficulty and complexity only when we have in mind equal pedagogical goals under various conditions (normal, hearing children). Only a common task and a single level of pedagogical achievements can serve as the overall measure of difficulty of education in both cases. It would be foolish to ask which is more difficult: to teach a gifted eight-year-old child the multiplication table or a retarded child advanced math. Here the ease in the first case is conditioned not by specific traits but by the easiness of the task. It is easier to teach a blind-deaf child because the level of his development, the aspiration for his development, and the educational goals to be met are minimal. If we wish to teach the normal child only the minimum, hardly anyone will argue that this would demand more work. On the contrary, if we were to assign the teacher of the deaf the same large-scale tasks facing the educator of a normal child, hardly anyone would undertake the task, let alone seek to do it with less effort. Who can more easily be developed into a specific social unit such as a worker, a shop-assistant or a journalist; a normal child or one who is blind and deaf? One can only answer this question in more than one way. As Protopopov states, for the deaf-mute the opportunities for social communication are easily established, however, in minimal proportions. A club for the deaf or a boarding school (*internat*) will never become the center of social life. Or let it first be proven that it is easier to teach a blind-deaf child to read a newspaper or to enter into social discourse, than it is a normal child. Such conclusions

inevitably arise if we examine only the mechanics of education without taking into consideration the course of development of the child himself and his perspectives.

The operation of overcompensation is determined by two features: by the range and extent of a child's disability, the degree of divergence in his behavior, and the social demands made for his education, on the one hand, and by the compensatory reserve and the wealth and diversity of functions on the other hand. This reserve is meager in a blind-deaf child; his ineptness is huge. Therefore, it is not easier but immeasurably more difficult to educate blind-deaf children than normal children, if the same results are desired. As a result of all these constraints, what remains and has a deciding significance for education is the possibility that a child with defects may achieve full, even superior social standing. This is achieved exceedingly seldom. However, the possibility itself for successful overcompensation stands out like a blazing torch, like a lighthouse guiding the path of education.

To think that every defect will inevitably have a fortunate outcome is just as naive as it is to think that every illness will certainly be ultimately cured. Above all, we need a temperate view and realistic evaluations. We know that the problems in overcompensating such defects as blindness and deafness are enormous: the compensatory reserve is poor and insufficient and the developmental path exceedingly difficult.

Therefore it is even more important to know the correct direction. In fact, even Sokolianskii took this into account, and to it he owes the large success of his system. It is not this theoretical paradox which is so important for his method, but an excellent, practical, conditional setting for education. According to his method mimicry (sign language) not only becomes absolutely pointless but the children themselves do not use it even on their own initiative. On the contrary, oral speech becomes an insurmountable physiological need for them (in *The Ukrainian Herald of Reflexology...*, 1926). This is something about which not a single method in the world can boast and which serves as the clue for the education of the deaf-mute. If oral speech becomes a necessity and supplants mimicry for the children, then it means that instruction is directed along a line of natural overcompensation of deafness; its direction is in line with and not in conflict with the children's interests.

Traditional instruction in oral speech, like a worn cogwheel, did not mesh with the whole mechanism of a child's natural strengths and drives. It did not stimulate inner compensatory activity and was therefore ineffectual. Beaten into children with classical cruelty, oral speech became the official language of the deaf. The task of education, however, must be summed up as a mastery of a child's inner developmental strengths. If Sokolianskii's chain method has achieved this, then it is because the method in fact incorporated and mastered the forces of overcompensation. These initial successes are not a reliable indicator of the merits of the method; this is a question of techniques and their perfection. Finally, it is a question of practical success. Only the physiological need for speech ensures success and is of primary importance here. If the secret for creating this need (i.e., establishing the goal) has been discovered, it is speech itself.

The position established by Petzeld has the same meaning and value for the education of the blind: the possibility of knowledge for a blind person means the possibility of acquiring full knowledge of everything; a blind person's potential for understanding means basically the possibility of understanding everything completely (A. Petzeld, 1925). As the author sees it, two characterological features categorize the entire psychological makeup and structure of personality in a blind person: an unusual spatial limitation and a total mastery of speech. A blind person's personality grows out of the struggle between these two factors. To what extent Petzeld's principle will be realized in a blind person's life, what measures

and what time frame will be necessary for the development of education. After all, we must consider their full potential in the course of education; that degree of development for which they are children. However, in order to achieve this it is extremely important to discard all the social constraints which supposedly limit the development of a child. It is important that education be a real and definite target for the child; otherwise he is doomed to social inferiority.

Summing up, let us dwell on the example of Helen Keller, who has worked to deemphasize the role of her handicap in the entire course of our thoughts and actions. It is clear that if Keller had not been blind, she would not have had the influence, and fame, which came to her. This means that her serious handicap was not all; you see, her reserve of compensatory forces was so great that if it had not been for an excellent method she transformed her handicap into a strength. Helen Keller, a plain inhabitant of provincial Andover, Massachusetts, the center of social attention; she was one of the many millions of American children who were handicapped became socially useful. Her life was not surrounded by luxury and fame, but by the most ordinary educational excursions. Her educational demands were made of the most ordinary things: a writer, a preacher! And she belonged to her and what she really belonged to her and what she really belonged to her. The role played by the social demands on her life had been born into a different setting. Her life would have been a wasteland, cut off from the world. In her biography everyone recognizes the struggle of a person entrapped in the body's prison. As the author writes,¹¹ "we would not have known that a caged-in spirit had not burst forth" (Keller, 1910, p. 8). Understanding the nature of this struggle of two components and that "the struggle goes deeper" (ibid., p. 6), the author's analysis is an interpretation; yet the life of Helen Keller graphically demonstrates that the struggle is determined by two factors: by the popular social demands and by the reserve of psychological forces. Helen Keller's development and for a successful social life. Helen Keller not only did not become a blind

¹¹ This translation is from Vygotsky, 1978, p. 100. [Transl.]

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and what time frame will be needed for its implementation, are questions for the practical development of education. After all, even normal children, more often than not, fail to realize their full potential in the course of their education. Does the proletarian child really achieve that degree of development for which he has the potential? The same can be said of blind children. However, in order to correctly design even a modest educational plan, it is extremely important to discard the constraints limiting our mental outlook, that is, those constraints which supposedly, by their very nature, frame the special development of such a child. It is important that education aim to realize social potential fully and consider this to be a real and definite target. Education should not nurture the thought that a blind child is doomed to social inferiority.

Summing up, let us dwell on one example. Although in recent times scientific analysis has worked to deemphasize the legend of H. Keller, nevertheless her fate best illustrates the entire course of our thoughts developed here. One psychologist noted absolutely correctly that if Keller had not been blind and deaf, she would never have achieved the development, influence, and fame, which came her way. How is one to understand this? First of all, it means that her serious handicaps evoked enormous compensatory powers. But this is still not all; you see, her reserve of compensations was excessively meager. Secondly, this means that if it had not been for an exceptionally fortunate concurrence of circumstances, which transformed her handicap into social pluses, she would have remained an underdeveloped, plain inhabitant of provincial America. But Helen Keller became a sensation; she became the center of social attention; she turned into a celebrity, a national hero, into a miracle for many millions of American citizens. She became the pride of the people, a fetish. Her handicap became socially useful to her: it did not create an inferiority complex. She was surrounded by luxury and fame: special steamboats were even made available for her educational excursions. Her education became the concern of the entire country. Immense social demands were made of her: there were those who wanted to see her become a doctor, a writer, a preacher! And she became all of these. Now it is almost impossible to tell what really belonged to her and what was done for her by citizen demand. This fact best illustrates the role played by the social demand for her education. Keller herself wrote that if she had been born into a different setting, she would have sat in eternal darkness and her life would have been a wasteland, cut off from any communication with the outside world (1910). In her biography everyone recognized living proof of independence, strength and spiritual life, entrapped in the body's prison. Even given "ideal external influences on Helen Keller," one author writes,¹³ "we would not have seen her rare book, if her dynamic, powerful, albeit caged-in spirit had not burst forth irrepressibly to meet this influence from the outside" (H. Keller, 1910, p. 8). Understanding that the condition of being deaf-blind is not only the sum of two components and that "the essence of the concept of deafness and blindness goes much deeper" (ibid., p. 6), the author seeks this essence in a traditional religious, spiritual interpretation; yet the life of Helen Keller did not contain anything mysterious. Her life graphically demonstrates that the process of overcompensation can be defined entirely by two factors: by the popular social demand for her development and education, and by her reserve of psychological forces. This widespread social demand for Helen Keller's development and for a successful social victory over her handicaps determined her fate. Her defect not only did not become a brake but was transformed into a drive which insured her

* This translation is from Vygotsky's text, not from the quoted author. Also see endnote 13 for this chapter [Transl.]

development. This is why Adler is right when he advises us to examine and act in connection with the integral life plan and its ultimate goal (A. Adler, 1927). Even Kant thought, according to A. Neyer, that we will understand an organism, if we analyze it as a rationally constructed machine: Adler advises us to examine the individual as a personified tendency toward development.

* * *

There is not a grain of stoicism in the traditional education of children with mental defects. This education has been weakened by a tendency toward pity and philanthropy; it has been poisoned by morbidness and sickliness. Our education is insipid; it nips the pupil in the bud; there is no salt to this education. We need tempered and courageous ideas. Our ideal is not to cover over a sore place with cotton wadding and protect it by various methods from further bruises but to clear a wide path for overcoming the defect, for overcompensation. For this we need to assimilate these socially oriented processes. However, in our psychological grounding for education, we are beginning to lose the distinction between the upbringing of animal offspring and the upbringing of children, between training and true education. Voltaire joked that, having read J. J. Rousseau,¹⁴ he felt like walking on all fours. This is precisely the feeling which almost all our new science about the child evokes: it often examines a child as if he were on all fours. This notably, is what P. P. Blonskii recognized. "I like very much to put a toothless child in the pose of a four legged animal: it always tells me a lot personally" (1927, p. 27). Strictly speaking, science has studied the child only in this position. A. B. Zalkind calls this the zoological approach to childhood (1926). There can be no argument: this approach to the study of a human being as one of the animal species, as a higher mammal form, is very important. But this is not all and not even the main thing for the theory and practice of education. S. L. Frank,¹⁵ continuing Voltaire's symbolic joke, says that, in contrast to Rousseau, nature for Goethe "does not negate, but straightforwardly demands the vertical position for man; it does not call man back to a simplified prehistoric primitivity, but forward toward the development and a greater complexity of human nature" (1910, p. 358). Of these two poles, the ideas expressed here are closer to those of Goethe than to those of Rousseau. If the doctrine on conditional reflexes traces man's horizontal course then, the theory of overcompensation gives him a vertical line.

PRINCIPLES OF HANDICAPPED CHILDREN

The Revolution, which reduced special schools for handicapped and retarded children, everything started to do now does not take into account a few years now unrelated in theory and in practice. Republic's system of public education child education (education for the general principles and methods successfully coordinate special enormous creative task of rebuilding policies for such an undertaking.

Given all of its merits, our system blind, deaf-mute, or mentally retarded narrow circle of the school could everything is adjusted and adapted physical handicap of the child and children escape from their isolation tendencies which direct them toward separatism. Because of these shortcomings become paralyzed but even specifically for example, the speech of a deaf child the speech of a deaf child remains does not create a need for it.

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Chapter 2

PRINCIPLES OF EDUCATION FOR PHYSICALLY HANDICAPPED CHILDREN¹

1

The Revolution, which redesigned our schools from top to bottom, barely affected the special schools for handicapped children. In schools for blind, deaf-mute and mentally retarded children, everything stands now precisely as it did before the Revolution, if one does not take into account a few unessential mechanical changes. Thus, work remains even now unrelated in theory and in practice to general principles of social education and to our Republic's system of public education. The problem is that in order to connect abnormal child education (education for the deaf, the blind, the mentally retarded, and so forth) with the general principles and methods of social education, we must find a system which would successfully coordinate special education with normal education. Before us stands the enormous creative task of rebuilding our schools on new principles. We must project basic policies for such an undertaking, in other words, start from the beginning.

Given all of its merits, our special school is noted for one basic shortcoming: be they blind, deaf-mute, or mentally retarded children, the special school locks its pupils into the narrow circle of the school collective: it creates a small, separated, and secluded world: everything is adjusted and adapted to the child's defect. Everything focuses attention on the physical handicap of the child and does not introduce the child to real life. Instead of helping children escape from their isolated worlds, our special school usually develops in them tendencies which direct them toward greater and greater isolation and which enhance their separatism. Because of these shortcomings, not only does the overall upbringing of the child become paralyzed but even special education sometimes amounts to almost naught. Take, for example, the speech of a deaf-mute child. In spite of excellent instruction in oral speech, the speech of a deaf child remains in embryo because the secluded world in which he lives does not create a need for it.

Such a secluded system of education for the blind, deaf-mute, and mentally retarded came to us from Germany, where it flourished and was developed to its logical limits.

Therefore, at first glance, it served as a tempting example. If you read the description of German special schools, you will see that they represent far from ordinary schools. They grew into a series of very complex institutions, which have as their final goal the expansion and advancement of certain special devices for blind and deaf-mute children, to which they have become accustomed in school and which they cannot do without. The number of institutions often exceeds several dozen. If you pursue this, you will learn that some well-endowed schools even own small banks in order to open up credit for the blind and deaf-mute for the purpose of trading and trade activity in their future lives. All such institutions serve the same goal: social charity. In this way, a certain type of fortress is created, solidly conquering for itself a corner of the outside world, and nevertheless bequeathing a certain position on the defective child, even after leaving school. In Germany, even a university education for the blind has until now worn a certain distinction for its special system. The well-known Marburg University includes courses for the blind, which hospitably invite blind citizens from the USSR to come to receive a higher education. It is assumed that those blind persons who wish to specialize in an area of higher education should be separated from the general mass of the student population and placed under special conditions. Precisely because of this, on the one hand, Germany claims to have only an insignificant number of defective children, and, on the other, thanks to the fact that Germany has established maximum isolation of these institutions, many share an opinion about the strength and merit of the German system.

This system differs radically from our pedagogical practice. In our country, instruction and education of the blind and other handicapped children must be seen as a problem of social education; both psychologically and educationally this is a question of social education. In fact, it is exceedingly easy to notice that each physical handicap (be it blindness, deafness or mental retardation) causes, as it were, a social aberration. As soon as his defect is noted, a blind child, from the first days of his birth, acquires some special position even in his own family. His relations with the surrounding world begin to take a different course from that of a normal child. One can say that blindness and deafness mean not only a breach of the child's activity with respect to the physical world but, most importantly, a rupture of all systems which determine all functions of the child's social behavior. That this is actually so will become absolutely clear, if we fully explain this point of view. It is self-explanatory that blindness and deafness are biological factors, and in no way social. The fact of the matter is that education must cope not *so much with these biological factors as with their social consequences*.

When we have before us a blind child as a subject for education, then we have to deal not so much with blindness by itself as with those conflicts which face the blind child on his entrance into the world. At that time, all the systems which determine the child's social behavior are disrupted. And therefore, it seems to me from a pedagogical point of view, the education of such a child amounts to rectifying completely these social ruptures. It is as if we have before us a physically disjointed hand. We have to set the affected organ. The main goal is to correct the break in social interaction by using some other path.

I shall not go into a scientific analysis of the psychological conception of deaf-muteness or blindness. I permit myself to dwell only on those generally accepted notions which can usually be found in literature. *Blindness or deafness as psychological factors do not exist for the blind or deaf person himself*. We are wrong to imagine that a blind person is submerged in darkness, that he feels as though he has fallen into a dark pit. Corroborated both by objective analysis and the subjective impressions of the deaf themselves, sufficiently

authoritative research has testified that the blind do not directly sense the oppressive silence. I would like to deal with a blind child in light of a physiological factor but as a social factor must cope.

In scientific literature attention is given to the nature of the biological causes of one of the senses, say, of hearing, and the remaining sense, that is, touch. The deaf stand out for their special position, understood in narrowly organic terms. It has been from the point of view of the kidney, then the other takes over the functions of the kidney. This defect has always been present in education [has been], from the beginning it is clear to every educator that it is on a second level, as the German child.

If, in good conscience, we consider our experiences connected with the child, we will be able to see how the psychological will be able to see how the physical handicap itself is not by the defect. Our task cannot be to deprive a child of his natural life, prescribing medicine for an illness which it is impossible to live by. From the outset focuses on disability, which is different from the fundamental.

The place of special education is simple to determine if we go to the final analysis, any education is based on the creation of certain natural or conditional reflexes. It is dangerous for us in this respect to look from the education of a normal child, the absence of one of the senses. Physiologists now say: The child's contact with the outside world is through other paths.

The view of external, social factors for pedagogy, holds that a

* Vygotsky seems to be referring to the concept of psychology depending on the [1-4]

ple. If you read the description of at far from ordinary schools. They have as their final goal the expansion of deaf-mute children, to which they cannot do without. The number of this, you will learn that some well up credit for the blind and deaf-mute lives. All such institutions serve type of fortress is created, solidly nevertheless bequeathing a certain ol. In Germany, even a university function for its special system. The blind, which hospitably invite blindness. It is assumed that those blind should be separated from the under special conditions. Precisely we only an insignificant number of fact that Germany has established opinion about the strength and merit

practice. In our country, instruction children must be seen as a problem of this is a question of social education-physical handicap (be it blindness, aberration. As soon as his defect requires some special position even would begin to take a different course and deafness mean not only a breach but, most importantly, a rupture of social behavior. That this is actually explain this point of view. It is of factors, and in no way social. The *which with these biological factors as*

for education, then we have to deal with which face the blind child on his which determine the child's social in a pedagogical point of view, the rely these social ruptures. It is as if to set the affected organ. The main some other path.

logical conception of deaf-muteness generally accepted notions which can *psychological factors do not exist* to imagine that a blind person is fallen into a dark pit. Corroborated of the deaf themselves, sufficiently

authoritative research has testified to the fact that such a conception is absolutely false. The blind do not directly sense their blindness, just as the deaf do not feel that they live in an oppressive silence. I would like to point out only that for the educator, as for any person dealing with a blind child in hopes of educating him, blindness exists not so much as a direct physiological factor but as a result of the social consequences of blindness with which he must cope.

In scientific literature and in public opinion, a false conception has taken firm hold about the nature of the biological compensation for a defect. It is believed that nature, in depriving us of one of the senses, seems to compensate by an extraordinary development of the remaining sense, that is, that the blind have an extremely acute sense of touch and that the deaf stand out for their strongly developed sight. Blindness and deafness have been understood in narrowly organic terms. The pedagogical approach to such children has also been from the point of view of biological compensation (for example, if we take out one kidney, then the other takes over the former's function). In other words, the question of defects has always been posed in crude physical terms. Our whole system of special education [has been], from this perspective, therapeutic or medicinal pedagogy. Moreover, it is clear to every educator that a blind or deaf-mute child is first of all a child and, on a second level, as the German psychologists say, a special child, a blind child or a deaf-mute child.

If, in good conscience, you accept the recently conducted psychological analysis of experiences connected with blindness and deafness (I refer to the most fundamental work in the area of the psychology of the blind, the work published by Buerklen this year), you will be able to see how the psychological makeup of a blind person arises not *primarily* from the physical handicap itself, but *secondarily* as a result of those social consequences caused by the defect. Our task consists of seeing to it that medicinal-therapeutical pedagogy does not deprive a child of normal nourishment, because the doctor is wrong who, when prescribing medicine for an ill person, forgets that the sick must also eat normally and that it is impossible to live by medicine alone. Such pedagogy produces an education which from the outset focuses on disability as a principle; as a result, we have something radically different from the fundamentals of social education.

The place of special education in the general educational system is extremely easy and simple to determine if we proceed from its position in relation to education as a whole. In the final analysis, any educational process may, as the physiologists now put it, be reduced to the creation of certain new forms of behavior; to the formation of conditional reactions or conditional reflexes. However, from a physiological point of view (a position more dangerous for us in this respect), the education of a defective child does not differ in principle from the education of a normal child. Blindness and deafness physiologically mean simply the absence of one of the sensory organs, as we used to say, or one of the analyzers, as the physiologists now say. This means that under the condition in which one of the paths of contact with the outside world is absent, it may, to a large measure, be compensated for by other paths.

The view of external, experimental physiology [sic],* which is a very important view for pedagogy, holds that conditional forms of behavior are in principle connected by the

* Vygotsky seems to be referring to what is, in English, regularly called "physiological psychology;" that branch of psychology descending from what Boring called the "psychological physiologists" of the late 19th century [Ed.]

same path with the various sensory organs, or various analyzers. A conditional reflex may be induced from the eye just as well as from the ear, from the ear just as from the skin, and consequently, when in the educational process, we exchange one analyzer for another, one channel for another, we have embarked on the path of social compensation for a given defect.

After all, it is not important that the blind should see letters. It is important that they should know how to read and to read in the same way that you and I read, and that they learn to do this just as normal children do. It is important that a blind person write, and not just move his pen around the paper. If he learns to write by perforating paper with a pen, we again have the same principle and practically an identical phenomenon. Therefore, the formula by Kurtman, who agrees that it is impossible to measure the blind, the deaf-mute and the mentally retarded by the same standard as the normal child must be reversed.

One should and must approach a blind and a deaf-mute child, psychologically and pedagogically, with the same standard used for a normal child.

Essentially there is no difference either in the educational approach to a handicapped child and to a normal one, or in the psychological organization of their personalities. P. Ia. Troshin's book (1915), now famous in our country, includes this extremely important idea. It is an error to see only illness in abnormality. In an abnormal child, we perceive only the defect, and therefore, our teachings about these children and our approaches to them are limited to ascertaining the percentages of their blindness, deafness or distortion of taste. We dwell on the "nuggets" of illness and not on the "mountains" of health. We notice only defects which are minuscule in comparison with the colossal areas of wealth which handicapped children possess. These absurd truisms, which, it would seem, are difficult to dispute, radically conflict with what we have to say in theory and practice about special education.

I have in my hand a booklet published in Switzerland this year.² In it we read some notions which to our educators sound like a great and important discovery: It is necessary to relate to a blind child just as one would to a seeing child, that is, to teach him to walk at the same time as a seeing child learns to walk, and to give him as much opportunity as possible to play with all children. In Switzerland, these notions are considered absurdities while in our country we believe the opposite to be true. It seems to me that there are two directions in special education implied here: orientation toward illness; orientation toward health. Both the statistics of our practical experience and the data from our scientific theory force us to recognize the first as a false direction for our special education. I could cite some data in this field but will limit myself to a reference to the accounts of the last congress in Stuttgart,³ which took place this year, on questions of the education and well-being of the blind. Here, the German and the American systems came into conflict. The educational system of the former is oriented towards the shortcomings of a blind child, the other toward the child's remaining reserve of health. Although the collision of the two systems occurred in Germany, it turned out to be a shattering experience for the Germans. The German position proved to have no justification in life.

I allow myself to illustrate one point of special education upon which I am advancing as the main thesis. It can be formulated as follows: any question of special education is at the same time a question of special education in its entirety. For the deaf, only the organ for hearing is affected; all remaining organs are healthy. Because of his hearing impairment, the deaf child cannot learn human speech. It is possible to teach the deaf child oral speech by means of lipreading, by connecting the different representations of lip movement which accompany speech; in other words, it is possible to teach a child "to hear with his eyes." In

this way, we can successfully teach several languages with the help of

This method of instruction, such as the methods of the alphabet (dactylogy, writing) is possible between the deaf and the consciousness. For us, there was an oral method, which must be planned. However, as soon as you turn the question is a question of social life. In oral speech has produced excessive time, and it usually does not teach in place of speech: it limits voice.

Thus, this approach causes a problem which is favorably resolved. In German schools, where this is the greatest distortions of scientific cruelty and coercion applied to the interest is lost along the way, punishment. Nevertheless, education famous school for the deaf, named in this respect, but the lessons of forcing a pupil to master a difficult wiped the blood from his hand.

This practical side of life in oral speech is unnatural for the child's nature. In this case, Italian, nor a combined method of education can offer the solution. mimicry is eliminated, only then to address the specialists, and then a few years after completion of if oral speech was the condition completely; if they had no need which they first entered school.

In our schools for the deaf. All their instincts and drives become. We have produced a special method beginning, we want to break this practice this forced method turn to atrophy. From this I will not schools. I want only to say that within the narrow framework of is not a question of methods of a angle.

If we [seek to] teach the deaf to sell and to make "surprises"

analysts. A conditional reflex may be formed from the ear just as from the skin, and we can change one analyzer for another, one for another, as a compensation for a given defect. We can see letters. It is important that they should be able to see letters, and that they learn to read, and that they learn to write, and not just to write, and not just by perforating paper with a pen, we must understand the phenomenon. Therefore, the method of measuring the blind, the deaf-mute, and the normal child must be reversed.

Deaf-mute child, psychologically and physically normal child.

Educational approach to a handicapped child, socialization of their personalities. P. Ia. Galton includes this extremely important idea. In the case of a normal child, we perceive only the child's nature and our approaches to them are different, deafness or distortion of taste. We must be "conscious" of health. We notice only defects of areas of wealth which handicapped children could seem, are difficult to dispute, and practice about special education.

Galton, 1869, p. 3. In it we read some of the most important discovery: It is necessary to teach a child, that is, to teach him to walk at all, to give him as much opportunity as possible. All notions are considered absurdities. It seems to me that there are two directions toward illness: orientation toward health and the data from our scientific theory of special education. I could cite some of the accounts of the last congress in the education and well-being of the child come into conflict. The educational system of a blind child, the other toward the education of the deaf-mute, the collision of the two systems occurred in the German position.

Education upon which I am advancing the question of special education is at stake. For the deaf, only the organ for hearing is impaired, the deaf child oral speech by the movements of lip movement which we teach a child "to hear with his eyes." In

this way, we can successfully teach the deaf to speak not only one specific language, but several languages with the help of kinesthetic (motor) sensations evoked during articulation.

This method of instruction (the German method) has all the advantages over other methods, such as the methods of mimicry (the French method), or the method of manual alphabet (dactylography, writing in the air), because such speech makes communication possible between the deaf and the hearing and serves as a tool for developing thought and consciousness. For us, there was no doubt about the fact that it is precisely oral speech, the oral method, which must be placed at the head of the agenda in education for the deaf-mute. However, as soon as you turn to practice, you will immediately see that this particular question is a question of social education as a whole. In practice, it turns out that instruction in oral speech has produced exceedingly deplorable results. This instruction takes up so much time, and it usually does not teach one to build phrases logically but produces pronunciation in place of speech; it limits vocabulary.

Thus, this approach causes an extremely difficult and confused situation, which theoretically is favorably resolved by one method, but in practice produces the opposite results. In German schools, where this method of teaching the deaf-mute oral speech is used, the greatest distortions of scientific pedagogy can be observed. Because of the exceptional cruelty and coercion applied to the child, he successfully learns oral speech, but his personal interest is lost along the way. Mimicry is forbidden in these schools and is cause for punishment. Nevertheless, educators have not found the means to eliminate mimicry. The famous school for the deaf, named after J. Vatter,⁴ is renowned for its outstanding successes in this respect, but the lessons in oral speech are conducted with enormous cruelty. When forcing a pupil to master a difficult sound, the teacher could knock out his tooth and, having wiped the blood from his hand, he would proceed to the next sound.

This practical side of life is at odds with the method itself. The pedagogues assert that oral speech is unnatural for the deaf-mute; that this method is unnatural, since it contradicts the child's nature. In this case, we are convinced that neither the French, the German, the Italian, nor a combined method can offer a way out of this dilemma, that only the socialization of education can offer the solution. If a child has a need for oral speech, if the need for mimicry is eliminated, only then can we be assured that oral speech will develop. I am forced to address the specialists, and they find that the oral method is better verified by life. Within a few years after completion of school, when the students gather together, it turns out that, if oral speech was the condition for the children's existence, then they mastered this speech completely; if they had no need for oral speech, then they returned to the muteness with which they first entered school.

In our schools for the deaf-mute, everything conflicts with the children's real interests. All their instincts and drives become not our allies in the cause of education, but our enemies. We have produced a special method, which in advance is at odds with the child; before beginning, we want to break the child in order to engraft speech onto his muteness. And in practice this forced method turns out to be unacceptable, by its very nature it dooms speech to atrophy. From this I will not draw the conclusion that oral speech is unsuitable for our schools. I want only to say that not a single issue of special education can be addressed solely within the narrow framework of special education. The question of instruction in oral speech is not a question of methods of articulation. We must approach it from a different, unexpected angle.

If we [seek to] teach the deaf-mute to work [but] if he learns to make Negro rag dolls to sell and to make "surprises" and carry them around to restaurants, offering them to the

guests, this is not vocational education but training to be beggars who find it more convenient to beg for alms with something in their hands. In such a situation, it might be more advantageous for a deaf person than for a speaking person because people will buy more readily from the former. If, however, life demanded oral speech* as an inescapable necessity, and if in general the question of vocational training were posed in normal terms, then one could be assured that the acquisition of oral speech in the schools for the deaf-mute would not pose such a problem. Any method may be carried to an absurdity. This has happened with the oral method in our schools. This question can be correctly resolved only if we pose it in all its breadth, as a question of social education as a whole. This is why it seems to me that all our work should be reexamined from beginning to end.

The question of vocational education for the blind compels us to come to the same conclusions. Labor is presented to children in an artificially prepared form, while the organization and collective components of labor have been excluded; these components are taken on by the seeing for themselves, and the blind person is left to work in isolation. What results can be expected when the pupil is only a laborer, on whose behalf someone else carries out the organizational work and who, not being accustomed to cooperation with others at work, turns into an invalid upon graduation from school? If our school introduced the blind child to industrial and professional labor which included the social and organizational elements, the most valuable educational elements resulting from vocational training for the blind might be totally different. Therefore, it seems to me that maximum orientation toward normal child activity must serve as the point of departure for our reexamination of special education. The entire problem is extremely simple and clear. No one would think of denying the need for special education. It is impossible to say that no special skills are needed by the blind, by the deaf and the mentally retarded. But these special skills and training must be subordinated to general education, to general training. Special education must merge with the overall child activity.

3

Let us turn to mentally retarded children. Even here, the basic problem is the same: the fusion of special and general education. Here, it seems the air is a bit fresher, and new ideas from the public school have already penetrated this area. But even here, the basic problem has remained unsolved up until now, and in this case, the puny calves of special education push out the fatted calves of mainstream education. In order to illustrate, I will dwell on how A. N. Graborov⁵ resolved this question in his book *The Auxiliary School* (1925), the best book we have at our disposal in this area. I will say in advance that here this question has been decided basically in the old way—to the advantage of the fat calves. The author is completely right when he says that methods developed from practical experiences of educating mentally retarded children have significance not only for the auxiliary school, but also for the regular public school. It is so much more important to be able to clearly and distinctly define the fundamental positions of auxiliary education. It is even more important for special education to understand definitively certain fundamental laws of general education. Unfortunately, neither foreign nor Russian literature clearly defines either. Scientific

* "Oral speech" is not a pleonasm for Vygotsky. He writes also about "written speech." The term *speech* must be taken to mean approximately "linguistic communication." See *Volume I: Problems of General Psychology of The Collected Works*. [F.d.]

thought has still not penetrated, and the theory of abnormal development has been completely squared off by the facts. The facts remain incomplete, and defects have been more clearly stated in any doubt, and the author wants to but he is not able to.

These are only a few minor details, but indications of studies of abnormal development distinguished from psychology of retarded children (but are they in only the emotional, volitional development of the intellect" (in a vague manner in which the question in these few lines, mentioned inconsistency, and weakness. Ancient mental development caused discussion or effort to arrive at a certain motives of a moralistic and egotistical tendencies tend to p

How simple it all is! The vagueness and confusion; the defectology, and it is impossible. Whenever there is a "prevalence" becomes impossible. After this defective child in the classroom (ibid., p. 20). It comes as no educational system, in which the [mainstream] school within a (29). The fundamental understanding English law and American justice suddenly transformed into a nature therefore overflowing with justice approximately true, (that is to because the theory as a whole characterized psychological the implant in him (the child—L.V. And finally, fourth, "it is necessary (ibid.).

The above named necessities Enculturation of the senses and details but the cornerstone. If primary importance, and social fourth, we have not traveled a system with its nursing home atmosphere its naive confidence that the ps

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thought has still not penetrated the barrier between the theory of normal child development and the theory of abnormal development. Until this is accomplished, until accounts have been completely squared off between abnormal pedagogy and general pedagogy, both will remain incomplete, and defectology will inevitably be without principles. This could not have been more clearly stated in Graborov's book. The book is a breath of fresh air without any doubt, and the author wants to keep abreast of the new approach to education—he wants to but he is not able to.

These are only a few minor points, which when carefully reviewed turn out to be not simply details, but indications of the groundlessness which we have just mentioned. In actual studies of abnormal development and its various forms, physical abnormality has been distinguished from psychological abnormality. In the second category, we find mentally retarded children (but are they *physically* healthy?) as well as children "with partial failure in only the emotional, volitional sphere." "In this case you almost always find deficient development of the intellect" (A. N. Graborov, 1925, p. 6). Here you have a model of the vague manner in which the question of moral deficiency has been conceptualized. Precisely in these few lines, mentioned in passing, we find pedagogical negligence, carelessness, inconsistency, and weakness. We also find the weak psychological hypothesis that insufficient mental development causes problems in the emotional-volitional sphere: "In any discussion or effort to arrive at a decision, the struggle among motives is usually insignificant; motives of a moralistic or lawful nature are usually ignored by the subject, and egotistical tendencies tend to prevail" (*ibid.*).

How simple it all is! The trouble is not that the author expresses himself at times with vagueness and confusion; the trouble is, rather, that we have no clear-cut conception of child defectology, and it is impossible to build any pedagogical theory on such fogginess. Whenever there is a "prevalence" of egotistical motives, any approach to child education becomes impossible. After this, we are not surprised by the author's following assertion: "A defective child in the classroom means the breeding ground for contagion within the school" (*ibid.*, p. 20). It comes as no surprise that the German system is partial to an isolated educational system, in which the "auxiliary school makes no attempt to return to the normal [mainstream] school within a certain time period the children entrusted to them" (*ibid.*, p. 29). The fundamental understanding of child defectology, as it is practiced according to English law and American juridical practice, with all types of organic idiosyncrasies, is suddenly transformed into a new pedagogical theory. The pedagogical side of the matter is therefore overflowing with judgmental errors. No, the judgments, taken separately are *approximately* true, (that is to say they are sometimes true but at the same time not true) because the theory as a whole is full of that fundamental groundlessness which has characterized psychological theory. *Third*, the author says that during schooling "we must implant in him [the child—I.V.] firmly established habits of social behavior" (*ibid.*, p. 59). And finally, *fourth*, "it is necessary to adequately orient the child to his surrounding world" (*ibid.*).

The above named necessities come third and fourth. Well, what comes first and second? Enculturation of the senses and psychological medical support. Here again we have not details but the cornerstone. If enculturation of the senses and psychological support are of primary importance, and social habits and orientation to the surrounding world are *third* and *fourth*, we have not traveled a single step from the "classical" system of therapeutic pedagogy with its nursing home atmosphere, with its zealous attention to microscopic illnesses, with its naive confidence that the psychological makeup may be developed, cured, "*brought into*

harmony" and so forth, by *therapeutic* measures without regard for the general development of "habits of social behavior."

Inasmuch as our system resolves the main issue of any educational program in defectology,—namely the interaction between general and special education—it is reflected in a basic view of the problem. Must we medically treat the defect "in a handicapped child," concentrating three-fourths of his education on the correction of this defect, or must we develop the enormous deposits and deep layers of psychological health within the child? "All work is of a compensatory, corrective nature," says the author (*ibid.*, p. 60); and with that statement the core of his system is revealed. Other approaches, such as the biogenetic point of view, "the discipline of the natural causes" (*ibid.*, pp. 64, 72), concur totally with this statement. And the same could be said of the vague phraseology which accompanies attempts to define the "final" goal for "vocational education" as "harmonious development," and so forth (*ibid.*, p. 77). One asks oneself: Are these details which the editor inadvertently left in, or are they essential elements of a theory doomed to scientific and pedagogical groundlessness inasmuch as they represent a system of education without a precise point of departure? For a resolution one turns, of course, not to comments made in passing, but to those chapters which elaborate on the question, where there is to be found a system of "exercises in psychological orthopedy" (a psychological support system) (*ibid.*, Chapter 14) with its classic "lessons in silence" and, along the same lines, *Egyptian labor** for children, senseless, burdensome, synthetic and futile. I have selected a few items as examples:

Exercise #1... On the count of one, two, three, complete silence is to be established. The end of the exercise is signaled by the teacher's rap on the table. Repeat 3 or 4 times, hold to the count of 10, then 15, 20, 30 seconds. The pupil who does not hold out (who turns around, begins to talk, etc.), has to continue on an individual basis or in groups of 2–3 people. The class follows...

Exercise #2. On command silence is established. The teacher gives one of the pupils a task which must be executed as quietly as possible. After each exercise is completed, a 20–30 second rest follows, then discussion. The number of exercises equals the number of pupils in the class... Examples: 1) Misha, going up to the board, takes chalk and puts it on the table. Then, he is to take his seat quietly, and so forth. Quiet

And so on and so on. In another exercise: "hold the position you have assumed as long as possible" (*ibid.*, pp. 158–159).

Give each child a thin book with a hard cover or a small board of an appropriate size, which must be held horizontally. On this plane he must hold a piece of chalk, or even better, a small stick whittled out of wood about 10–12 cm. in length and about 1–1.5 cm. in diameter. The slightest movement will topple this stick over. In the first position, a child stands, with his heels together, toes apart, and holds the small board in both hands; another pupil sets the stick on it {they should take a photograph!—L.V.}...

Exercise #4: the same exercises ... only without spreading the feet: toes together" (*ibid.*, p. 159).

* Slave labor. The reference is, apparently, Biblical; to *Exodus*. The italics are Vygotsky's. [Transl. Ed.]

One can say without a vestige of doubt that the result of these exercises is striking. The translations, although they are not perfect, are my little friend, but this man's

Moreover, all the exercises constitute similar nonsense: carrying a dish full of water, carrying letters, comparing tables, strength of smells. Who can't turn a normal child into a mentally retarded child? *mechanisms of behavior, psychology, sharp teeth of life's intricate mechanisms, little mice of our neighbor*" in repeated frequently in the course of these exercises constitute "the" (*ibid.*, p. 59), then it becomes clear that an auxiliary school 180 degrees of 10–12 cm. length and 1–1.5 cm. attempt to educate the retarded

This is not the place for a system in psychological support and social conduct. However, one can be conducted without command mechanism of play, would such an excellent educational method observe silence, but which must be upon command or lessons in psychology illustrates the overall description of the old, therapeutic system and the mean in the education of mental retardation of the old theory and digressions embarrassing to repeat these exercises about the direct benefit of acquisition tenfold to a retarded child. What contact with girls? What will be for him besides intensify his "appropriate exercise of satisfaction." "You cannot give a child enough reverse should be true ... Suffering comes afterward, and that's all

No, it is impossible to create alone, just as it is impossible to create. "goal of education is to create a manifestation of a creative mind for the handicapped child demonstrate outdated as-old-as-Adam system of the senses, and second of a

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One can say without a vestige of polemical fervor or exaggeration that the senselessness of these exercises is striking and by far exceeds the nonsense of the old German book of translations, although they are both in the same category: “Do you play the violin?” “No, my little friend, but this man’s aunt is going abroad.” The exact same senselessness.

Moreover, all the exercises in psychological support and the cultivation of the senses constitute similar nonsense: one must learn to finish as quickly as possible the tasks of carrying a dish full of water, threading beads, throwing rings, unstringing beads, tracing letters, comparing tables, striking an expressive pose, studying smells, comparing the strength of smells. Who can be reared from all of this? Does this not sooner transform a normal child into a mentally retarded child rather than develop in the retarded child those *mechanisms of behavior, psychology, and personality which have not yet meshed with the sharp teeth of life’s intricate gears*? How does this all differ from “the sharp teeth of the little mice of our neighbor” in the French primer? If you bear in mind that “each exercise is repeated frequently in the course of a series of lessons” (*ibid.*, p. 157), and that precisely these exercises constitute “the first and second place” among the school’s priorities (*ibid.*, p. 59), then it becomes clear that until we dispense with pre-scientific pedagogy and turn the auxiliary school 180 degrees on its axis, we will develop *nothing* with our conical stick (of 10–12 cm. length and 1–1.5 cm. in diameter) on a thin board and will achieve nothing in our attempt to educate the retarded child, but instead only force him into greater retardation.

This is not the place for a full development of all the positive possibilities for exercises in psychological support and sensorimotor control at play, at work activity, and in a child’s social conduct. However, one cannot help but mention that these same lessons in silence, if conducted without commands and with meaning, regulated by real need, and by the mechanism of play, would suddenly lose the character of Egyptian torture and would serve as an excellent educational means. The argument is not whether or not to teach a child to observe silence, but which means to employ to this end. Do we need lessons in obedience upon command or lessons in purposeful, meaningful silence? This frequently cited example illustrates the overall description of the difference between the two different systems: the old, therapeutic system and the new social pedagogy. And what does segregation of the sexes mean in the education of mentally retarded children other than a harsh retreat into the recesses of the old theory and digression into its isolated positions (A. N. Graborov, 1925)? It is embarrassing to repeat these absurd truths about the pointless separation of the sexes and about the direct benefit of acquainting boys and girls with each other, as if these truths applied tenfold to a retarded child. Where, if not in school, will a retarded boy have real human contact with girls? What will seclusion in his already *extremely barren and meager life* do for him besides intensify his instinctual drives? And all the wise reasoning about the “appropriate exercise of satisfaction” will not save the theory at its most vulnerable point. “You cannot give a child candy and then use it as an incentive to do something right. The reverse should be true ... Suffering precedes pleasure” (*ibid.*, p. 100). As a result the candy comes afterward, and that’s all there is to it.

No, it is impossible to construct a theory and system of education on good intentions alone, just as it is impossible to build a house on sand. If we begin to say as well that the “goal of education is to create a harmonious education,” and by harmony we mean “the manifestation of a creative individuality,” etc., we will create *nothing*. The new pedagogy for the handicapped child demands, first of all, a courageous and decisive rejection of the outdated as-old-as-Adam systems, with lessons in silence, beads, orthopedy and cultivation of the senses, and second of all, a disciplined, sober, and conscientious assessment of the

real goals of social education for such a child. These are the necessary and unavoidable prerequisites for the long-overdue and slow-in-coming revolutionary reform of [the education for] handicapped children. For all their freshness, such books as that by A. N. Graborov have come only halfway. From these examples, it is clearly seen that the special problems—such as teaching speech to deaf-mute children, training blind children in vocations, establishing sensorimotor control among the mentally retarded, and, indeed all questions of special education—can be answered only on the basis of social education as a whole. It is impossible to decide them in isolation.

4

It appears to me that the development of our school represents an extremely outdated form of education in comparison with the practice of the West Europeans and the Americans. We are a good ten years behind in comparison with the techniques and devices of the West European schools, and it would seem to us that it is necessary to be on an equal footing with them. But, there are two answers to the question of what constitutes success in Europe and America. On the one hand, this success includes features which we need to cultivate in our schools, and on the other hand, these steps were taken in precisely a direction which we must categorically reject. For example, the achievements by the Germans in the area of work with the blind have caused quite a sensation around the world. (I dwell on this aspect, because it is elucidated in S. S. Golovin's book.⁶) The work is connected with the name of P. Perls.⁷ and the results can be formulated in one phrase: the introduction of the blind into heavy industry on the basis of real, very successful experience.

For the first time in the history of mankind, the blind have begun to work with complex machinery, and this experiment has proved very fruitful. The Berlin Commission on the Investigation of Professions Suitable for the Blind recognized 122 professions beyond of that narrow circle of professions set aside for the blind (blind musicians, choristers, craftsmen and the helpless), the greater part of which are connected with jobs in heavy industry.

In other words, the highest form of labor (polytechnical skills and social, organizational experience) turned out to be absolutely suitable for the blind. Nothing needs to be said about the colossal value such a statement has for pedagogy. It is tantamount to the notion that it is possible to overcome this handicap by granting the blind full entry into the labor force.

One must take into consideration that this experiment involved those who became blind during the war and that we must expect to encounter some difficulties when we turn to those who were born blind. Yet there is no doubt that theoretically and practically, this experience, on the whole, can be applied to those born blind. Let us note two important principles which serve as the basis of assumption for this work. The first is that the blind will work side by side with the seeing. In no job will the blind work by themselves, alone in isolation. They will definitely work together in cooperation with the seeing. Such a system of cooperation has been worked out so that it is easier to apply it to the blind. The second principle is that the blind are not to specialize in one machine or job alone. For pedagogical reasons, they are to transfer from one division of machinery to another; they are to switch from one machine to another because general polytechnical fundamentals are needed for participation in production as a conscientious worker. I will not begin to cite passages. I suggest, however, reading those sections from Golovin's work where he lists the machines on which the blind are to work: presses, punching presses, cutting machines, threading machines, drills, electric

lathes, and so forth. Hence, the labor industry.

This is the healthy and positive direction which I have already referred to. I say that in all countries up until now the course which is at its very core primitive education differs from that of the modern direction, the use of new pedagogical methods; it should be swung around 180 degrees about how this path will be realized. Social pedagogy, on the basis of what is contained, I allow myself simply to take as a guiding principle for overcoming an abnormality and orient itself to a lesser degree toward the norm and the child's overall health.

What constitutes our radical change? Only the fact that there it is a question of *social education*. There it is a question of crime and begging. It is extremely important from the point of view. We often hear assertions about special education as for social disadaptation *in truth*. The question of educating the blind has a background mainly because more people were born blind in the years of the Revolution. Now the attention.

are the necessary and unavoidable revolutionary reform of [the educational] books as that by A. N. Graborov. It is clearly seen that the special problems—teaching blind children in vocations, establishing, and, indeed all questions of social education as a whole. It is

represents an extremely outdated West Europeans and the Americans. The techniques and devices of the West are necessary to be on an equal footing with what constitutes success in Europe and what we need to cultivate in our country. Precisely a direction which we must learn from the Germans in the area of work with the blind. (I dwell on this aspect, because it is connected with the name of P. Perls.⁷ The introduction of the blind into heavy

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Technical skills and social, organizational skills of the blind. Nothing needs to be said about this is tantamount to the notion that it is necessary to have full entry into the labor force.

First involved those who became blind. The difficulties when we turn to those who are blind. Technically and practically, this experience, suggest two important principles which must be followed. First is that the blind will work side by side with themselves, alone in isolation. They are to be working. Such a system of cooperation is necessary for the blind. The second principle is that the blind are to work alone. For pedagogical reasons, they are to work together; they are to switch from one task to another. The fundamentals are needed for participation in the labor force. I suggest, however, to cite passages. I suggest, however, to cite the machines on which the blind work, threading machines, drills, electric

lathes, and so forth. Hence, the labor of the blind turns out to be fully suitable for heavy industry.

This is the healthy and positive side of European and American special pedagogy to which I have already referred. This aspect we must adopt for our special schools. But I must say that in all countries up until now, these accomplishments have been directed along a course which is at its very core profoundly alien to us. You know how sharply our social education differs from that of the Americans and the Germans. According to our general direction, the use of new pedagogical technology must proceed along a completely different path; it should be swung around 180 degrees. I shall not begin now to comment concretely about how this path will be realized, because I would have to repeat the truisms of overall social pedagogy, on the basis of which our system of social education is constructed and contained. I allow myself simply to make the following points: There is only one essential guiding principle for overcoming and compensating for the various defects—pedagogy must orient itself to a lesser degree toward deficiency and illness and to a greater degree toward the norm and the child's overall health.

What constitutes our radical divergence from the West with respect to this question? Only the fact that there it is a question of *social welfare*, whereas for us it is a question of *social education*. There it is a question of charity for invalids and social insurance against crime and begging. It is extremely difficult to get rid of the philanthropic, invalid-oriented point of view. We often hear assertions that biogenetic cases are of interest not as much for special education as for social disdain. The way the question was posed amounts to a *radical untruth*. The question of educating handicapped children has until now been kept in the background mainly because more pressing questions demanded our attention during the first years of the Revolution. Now the time has come to bring the question before wide public attention.