VISUALIZATION OF CULTURE: EDUCATIONAL IMPLICATIONS*

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The paper was supported by the Ministry of Education of the Republic of Belarus (Research # GR 20211214).

The authors of the article focus on changes related to education. Education is considered as a communicative construct arising from the process of symbolic interaction between individuals who establish meanings when coordinating their statements. The communicative generation of situations and orders of knowledge is interpreted as educational semiosis. Analyzed is the discourse of modern humanities which are competing with each other in determining the current socio-cultural situation. Highlighted is the research tendency, asserting the point of changing the cultural morphogenesis by means of its visualization processes. Based on this, the hypothesis of a gap between culture and education is put forward. According to this hypothesis, cultural relations are increasingly mediated by figurative participation, while educational practices appeal to verbal and textual forms of the situational mediation. Within the relations between actors in education, this is reflected in the dominance of legitimate (metanarrative) samples, the transmission model of educational knowledge, the communicative preference for orderliness, the desire for unambiguity, the clarity and completeness of logocentric forms of thinking, and so on.

The change of the mediation form in the organization of educational interaction and the transition from the verbocentric order to the ocular-centric one, is suggested as a step in the development of modern education. It must affect the way educational relations (educational communication) function, the way words (speech) and images (vision) are inter-related, the principles of students’ orientation in their attitudes to the sign-symbolic world, their partners in interaction, and to themselves. In the first case, the point is to organize educational communication based on the principles of paradoxicality, paralogicality, and disproportionality of statements and images of the situation. Here the most important educational objective is to make the participants of the educational interaction consider their differences in their interpretations of the world, their styles of utterance, and their discursive positioning. In the second case, the educational objective is the liberalization of vision, which emerges in the course of perceptual work emancipated from the primary procedures of interpretation and comprehension of the visible and relying on the action of the image as the context of the statement. The third case is about worldview constants, radical changes in the position of the educational subject, acquiring the experience of self-detachment in learning. In the final analysis, this provides an opportunity for differentiation and diversification of the worlds of human presence.

Keywords: visualization of culture, orders of culture and education, sign-symbolic mediation of educational relations, educational semiosis, communicative design of educational interaction.

Introduction

In the following text, several presumptions will be used. The first one concerns the situation definition. One of the interpretations of this definition corresponds to the intellectualist interpretation of the definition given by Thomas’s Theorem. According to this interpretation, the situational definition emphasizes meaningfulness, which not only places individuals in the situational center but also enables them to rationally carry out the situational definitions their ability to control the situational definitions they carry out rationally. Thomas also emphasizes the social conditionality of situational definitions because “children are always born in a group of people in which all the general types of situations that might arise have already been defined, and the corresponding rules of behavior have been developed. In this situation, they don’t have the slightest chance to create their own definitions and freely follow their desires” [1, p. 63]. This means that the degree of freedom in the choice of situational definitions corresponds to the discursive resource that the community has at its disposal in each particular historical period.

Agreeing in many respects with the idea of social conditionality, we would also like to clarify the situational-communicative aspect of situational definitions. The social projection may refer to the conventions established in the community, which have an objectified normative status for the actors. In this case, the situational-communicative aspect relates to the rules and regulations functioning in the interaction, which determine the situational drafting characteristic at a particular moment. The solution to the problem of the “relation between the subject of speech and language” presented by Jacques Lacan [2, p. 124] serves as an analogy of the distinction between the social and the situational-communicative aspects. In his interpretation, the relation between the subject of language and that of speech must be established in the course of communication. Here, the language is a “symptom whose meaning must be revealed” [2, p. 90].

The distinction introduced allows us to assume special possibilities of communication in terms of analysis and the definition (redefinition) of the situation. The latter relates to the situation when the coordination of interactors’ statements can make changes in the established linguistic conventions. Coordination does not always contain a scenario of meaningfulness, although it does not exclude it. We just point here to another parameter of the communicative definition of the situation, namely, the mutual adjustment of statements that establish a mutually acceptable interpretation of the interactive conditions through coordination. The comprehension of the situation, which W. Thomas talks about, can be placed in the second tier of interpersonal interaction and can even be completely absent. The educational situation itself is perceived by its participants as a natural state of things.

The second presupposition concerns the specifics of educational reality, which, while subject to the basic definitional rules, has a number of features that distinguish it from the reality of everyday life or other symbolic worlds. First of all, it is about the duality of the educational reality associated with the specific “conditionality” and “unconditionality” of the academic world. “Conditionality” is derived from the cultural mission of education, its extraction from extra-educational socio-cultural practices to select and transmit the socially significant experience to the coming generations. This experience needs special processing or educational recontextualization. From this perspective, the subject “physics” imitates the “practice of physics”, and the university course “philosophy” is an educational expression of the philosophical thought. Based on this, the boundary between education and life is functionally conditioned, defining educational reality as a model of life and provoking criticism of education from a “real life” perspective regarding incomplete conformity of educational models to professional requirements. “Unconditioned” educational reality is related to the fact that in the educational
interaction created by the participants, they reproduce and replicate patterns of behavior and demonstrate and affirm moral or aesthetic values that are meaningful to them, which are primarily related to the ongoing interaction. From this follows the necessity of realization in the analysis of presentism. Orientation at presentist\(^1\) attitudes can be defined as the importance of establishing methodological control over realities that originate outside educational (historical, cultural, and social) genesis.

Finally, the third supposition is related to the idea of symbolic mediation of interaction. This means that the situational variables involved in forming educational reality will primarily include the symbolic mediators used in the interaction, whose status is also largely dependent on the current interaction. In this case, we interpret symbolic mediators instrumentally and as a system-forming principle of the asserted educational order. This is of particular importance for the educational situations adapting to the changing conditions of an individual’s development. In this case, the change of the mediator as a special constitutive action becomes an opportunity for people to redefine educational reality, a new form of their attitude to the signs they use, to other individuals, and to themselves. It is assumed that modern education is largely determined by the emergence of a new powerful player on the cultural scene – the image – which mediates the set of life conditions in action.

Considering the reality of education as a relevant social symbolic formation does not mean abandoning the history of relations, which are often implicitly present in the situational constitution. However, we take the “history of relationships” as a communicative resource to which the participants of the interaction turn, solving their current problems in it. In this case, developing educational conditions appears to be connected with a rhetorical break with the old and the establishment of a new order of interaction, which is never final. Neither is the status of the mediators determining the educational relations ever final.

**On the verbal and visual mediation of the cultural order**

Culture can be represented as an order that is asserted through symbolic domination\(^2\). In this paper, we will partly refer to the description of the order proposed by the Canadian cultural scientist G.M. McLuhan and supported, in particular, by the Polish sociologist P. Sztompka. As Sztompka notes, the dominance of oral, textual, or visual cultures can be observed in different historical periods [4, p. 6]. The first of these eras is dominated by the spoken word, functioning in direct social contact. Writing and printing, replicated by education, mark the modern era with its general accessibility of messages. The differences between these eras and the modern era, from G.M. McLuhan’s point of view, are determined by communication technology, which brings with it a “total change” in the system of cultural mediation [5, p. 63]. The key aspect of cultural mediation produced by communication technology “is the change in scale, speed, or form that it brings to human affairs... [it] defines and controls the scale and form of human association and human action” [Ibid., pp. 11–12] in ways that “abolish temporal and spatial factors” [Ibid., p. 12].

The modern era, constituted by the simultaneous action of communication technology, “a means of communication without a message” [5, p. 11] and the visual image, “a message without a code” [6], becomes, in J.-L. Nancy’s definition, the “world of image efficiency” [7, p. 153]. At the same time, the incredible growth of the visual material, which has appeared over the last two or three decades, means that “it is often difficult to say with certainty what we see when we look at

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\(^1\) Presentism is “the view that only present things and events exist. The past and the future do not exist. To implement this thesis in education, it is necessary to control a language, because temporal forms (past, present and future) are actively used in everyday speech” [3, p. 30].

the world” [8, p. 13]. Polish researchers B. Mazepa-Domagała and T. Wilk, sharing this position, note that “the visual era is developing before our eyes, a new cultural code is being formed, determined by images, the computer and the Internet” [9, p. 89]. They believe that visually dominant culture modifies social reality, generally accepted interpretations, and evaluations. They also believe that it produces a new “set of ways of looking (stare, harassment by means of gaze, contemptuous look) and strategies for creating new (orders of) visibility and modes of vision” [10, p. 55]. First and foremost, these kinds of modifications radically transform the position of the beholder from a passive recipient to an active (engaged) subject of visual culture. This is because the latter is “something in which we take part with the intention of actively contributing to change, rather than simply watching what is happening around” [8, p. 20].

In general, the idea of visual dominance in culture is supported today by many humanities scholars. American cultural scientist N. Mirzoev emphasizes the most radical status of cultural visualization: “Whether we like it or not, the emerging world community consists of visuals” [8, p. 12]. He also defines modern culture as a visual one: “Visual culture includes the things we see, the inherent speculative model of how we should see, and the variants of our behavior as a result of this activity. Visual culture is not simply the sum of everything that has been created for viewing, be that pictures or movies. Visual culture is the relationship between what is observable and the names we give to what we see. It also includes what cannot be seen and what is hidden from view” [Ibid., p. 17]. At the same time, some researchers are more cautious in qualifying the present situation, designating it as transitional. In their presentation, the former order of verbal domination is being diffused but not completely removed. Emphasizing the drama of what is happening, they argue that the image strikes at the dominance of text and words, changing humans’ connections with the world and themselves. The final assertion of visuality will entail a shift in the cultural code, which “is a change in the means by which group identity and the individual’s social identity are created” [11, p. 95]. Transitivity also implies that in the contemporary situation, just as before, the various cultural mediators are engaged in a symbolic struggle with each other.

Let us clarify the essential features of the cultural orders being constructed under such cultural mediators as the printed word and the image.

Much of the contemporary cultural situation, according to McLuhan, is based on the work done through the printed text [5]. Book knowledge is an infinite specialization. It is carried not by people but by sheets of paper. The proliferation of printing created the conditions for widespread mass production, the emergence of narrow professionalism, and major scientific discoveries. It determined a significant complication of human communication and served as the source that gave birth to the mass media. Serial production as an invariant of “print” culture is carried out according to principles of mechanization, unification, and standardization. From the philosophical point of view, mass production and consumption, mass-replication of cultural standards and norms of reality perception are expressions of the primacy of the general over the specific, the

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2 B. Latour analyzed the differences between pre-scientific and scientific cultures and the explosive nature of scientific achievements since the modern age. He associates such progress with the emergence of many new techniques of writing and recording, ways of using paper, printing, signs and diagrams. According to him they “must have certain properties: they must be both movable and immutable, representable, readable and compatible with each other” [12, p. 105–106]. Replicated in unlimited quantities and without distortion through the technology of printing, these techniques provided opportunities for new social mobilization and symbolic power, less dependent on space and time. Despite Latour’s use of the term “visualization”, which should refer back to image culture, we can relate his argument to the text culture, since “image” in given analytical context functions as a form of recording that represents an object “whole and at once” and in a “panoptic way”.

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single over the multiple [13]. The associated thinking and understanding of the world and the individual’s relations with society and oneself are based on the myth of the “Grand narrative” [14].

What is qualitatively different about the image as a dominant cultural order? In the humanities studies, the image is usually presented in many ways: as a mental construction localized in human memory, as a graphical image (drawing, sculpture, photography, television or Internet message, advertising, etc.), as an optical projection of an object, as a perceptual (sensational) phenomenon and as a verbal sign (metaphor, description) [15]. An image is something through which a person interacts with the world. In many cases, it is “something more than a product of perception. It appears as a result of individual or collective symbolization” [16, p. 22]. In socially oriented studies, the image is interpreted not as an object of art but as a “socio-cultural fact” (“a visual event”) that regulates the relationship between visual and social spaces [Ibid., p. 21]. According to Witold Kawecki, images solve a dual problem: cognition of reality and its construction. But more significantly, images create the social world as a system of classifications, which is achieved through the functioning of images to legitimize the social order being created. At the same time, images also act as a basis for social consolidation, formation of social ties and local communities, and as means of control and power (through iconic coercion, leading to differentiation of social categories and determination of the subordinate position between categories) [17]. The production of the social matter mediated by images is such that it “will often and unpredictably change, using formats that may seem meaningless to older generations”, [8, p. 72] stripping the vitality of myths about socio-cultural continuity and the value of experience cumulation.

Researchers are also recording the emergence of the visual knowledge phenomenon. This corresponds to how experience, literacy, skills, and abilities are created and practiced through language, words, and visual forms of expression and representation [18, p. 116]. According to the interpretation of this type of knowledge, the visualizations do not support linguistic and textual practices but rather substitute them. Therefore, the focus is on the contexts and ways of “institutionalization” and “use” of visual products. It is believed that in contemporary culture, the image plays not only the role of an expressive medium but also becomes a carrier of both contents and (which may be even more important) a special, simultaneous cohesion of messages. The image changes not only the form of knowledge but also the way in which it is appropriated. It is accompanied by the dissolution of the previous forms of social use of knowledge, particularly by blurring the boundary between special knowledge and generally accepted knowledge. The latter comes at the expense of the devaluation of sacred knowledge, the mass dissemination of which threatens the loss of privilege and power.

When we talk about the visual richness of culture, it is impossible not to touch upon the phenomenon of digitalization. The latter has radically changed the semiotic relation in the process of semiosis by forming the relocation of the signifier and the signified. The common word usage usually involves a semiotic model of representation that appeals to the “trace” metaphor. In this metaphor, the “good” signifier reflects the essence of the signified, embodied in a concept. But in the digital world, the opposite relationship takes place. It is related to the constructive ability of the digital message to create an artificial reality: the signifier can dictate the parameters of the signified. The effect of the constructive action of the signifier was designated by the French philosopher J. Baudrillard with the term “hyper-reality”, indicating the replacement of the so-

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1 We believe that in some cases it is necessary to control the use of the term “vision,” avoiding its excessive psychologization. Thus, when discussing the problems of the impact of cultural images it would be more correct to use such terms as “visual artifact” or “image”. Regarding the latter, it is appropriate to cite W. Mitchell’s point of view: “A picture is a material object, an object that can be burned or broken. A vision is something that arises in an image and survives its destruction - in memory, narrative, copies, and traces on other media” [19, p. 10].

2 The image functions “as a visual metaphor” that connects heterogeneous elements in an “inexpressible” way... It is almost a “total sign” (symbolic, iconic, and indexical, indicating a clearly recognizable event) in a form that can be grasped in a single glance [20, p. 122].
called reality with signs of reality. According to Baudrillard, the media is “a kind of genetic code that sets the transformation of the real into the hyper-real, just as another code, the micromolecular one, sets the transition of the representational sphere of meaning into the genetic sphere of the programmed signal” [21, p. 56].

The emergence of hyper-reality in culture leads to a crisis of representation and an aggravation of the perceived reality’s boundaries. In our opinion, the diffusion of boundaries is aptly captured by the term “(un)distributed imagery”. Supporters of this version are referring to a change in the modality of human reception that problematizes the principles of its identification. According to the Russian philosopher I.N. Inishev, the images arising in human contact with the world “are not so much visual as tactile; in perception, we rely more on contact senses, such as smell and touch, than on distant ones, such as sight and hearing. They cannot be characterized by focusing on the traditional division between external and internal spheres, reality and fantasy” [22, p. 33]. The aforementioned cultural scientist N. Mirzoev produces a more radical classification of the inherent human world view. According to him, “the ability to see is a system of sensual reactions of the whole body, not just the eye” [8, p. 20]. Meanwhile, referring to corporeality as a source of orientation in dynamic reality is fraught with absolutizing subjective experience; ignoring its objective mediation by constructive cultural elements and disorientation, with all the ensuing consequences.

The above reconstructions can be seen as an example of descriptions of the symbolic opposition between figurative and verbally oriented humanitarian practices. They also serve as a representation of the ambiguous situation in scholars’ understanding of visualization processes. The differences in situational definitions created by the humanities result in differences in the preference of mechanisms and ways of responding to the image of the state of affairs, including appeals to current and projected educational practices.

**On semiosis of culture and semiosis of education**

It is generally accepted that one or another version of the cultural order is a condition for structuring the contents and forms of education. Of course, this does not signify a direct projection of cultural relations into the space of education. While being a specific symbolic region, the latter may both establish the relations of relevance with culture and enter into controversial relationships with it. In the latter case, we are talking about education participation in culture either as a mechanism of the preservation of cultural trends or as a change factor. B. Bernstein outlines the social mechanism of education’s participation in cultural dynamics. He points out that the basis of changes in culture is created by transformations in social relations (in this case, the interaction between the participants of educational space can be a variant of such relations), which should find their expression in the changing ways of the statement (speech practices) [11]. In other words, education can be understood as a specific, discursively formed way of social relations with a current cultural situation.

A question arises whether one can state that education today is sensitive to the visualization of culture or even transmits a visually dominant cultural order? The answer to this question can be obtained by turning to descriptions of what happens with the image in education.

According to the Polish researcher T. Szkudlarek, the orders of modern culture and education do not coincide. While the semiosis of the former is steadily and universally shifting towards visualization, education remains text-centered. Schkudlarek notes that “educational intervention can refer to the fundamental relation between the orality, the writing and the visualization of culture. Each of these codes requires certain competencies that can arise spontaneously from interaction with cultural texts as well as being the subject of specialized learning technology. For
some reason, the European school has become almost one-dimensional, focused on the writing technology” [23, p. 138]. In this context, the “visual turn” of culture can be a challenge to existing educational practices as well as an indication of pedagogical choices. That is, the word has a symbolic advantage in education today, producing a specific recontextualization of the image: the latter only accompanies the word, illustrates its meanings, reveals in its functioning the priority participation of the rules determining the connection between the word and thinking. There is, however, a problem with this connectivity. In education oriented at the transmission of cultural standards, it means not only the unity of word and thought but mainly what we see by means of thought. It is an ordered thought, striving for unambiguity and clarity, consistent and complete, oriented at the unity of its own referent and running from uncertainty.

The monopoly of thought is known to belong, first of all, to teachers or to their representative tools (textbooks, manuals, and educational curricula). Given this fact, the image in education is already overinterpreted, and the process of perception is normalized in accordance with legitimate verbal samples. In this case, it is predetermined in its illustrative position and the students’ perception as a form set for transmission “from above”. “Positivism and logical empiricism underlying it have produced an image of knowledge independent of its creator and possessor, hence objective knowledge whose content relies on “bare facts” [24, p. 26]. It is not about the evil will of the teacher, but about the contextualization of the cultural order by the education order, pedagogical behavior prescriptions, according to which the teacher’s word should have a form that is convenient for transmission and acquisition. It is a form of thought subordinated to logic. Because of logic’s claim to be universal, this form can be seen as an instance of social control. The students do not participate in its production; at best, they only consciously comprehend it. The students, due to their status, are already excluded from the process of thought production and are forced to use someone else’s product.

The situation is no better when it comes to educational content directly aimed at the creative development of students, their introduction to the world of artistic forms, and thus to creating images. According to Professor D. Klus-Stańska’s research, there is a serious didactic deformation, even in art education designed to develop a creative approach [25]. As a result, it is hard to rely on art objects in visual education. In other words, the mechanical introduction of art objects into the educational process cannot solve the problem of the image position in education not only because of the marginality of such experiences in teaching but also because this experience is recontextualized following the logocentric and normative order.

In psychological terms, from a student’s perspective, the issue of an image in learning is often viewed as a problem of apperception, that is, the dependence of perception on the attitudes at work in the experience. For analytical purposes, we need to divide the inner space of perception into perception and apperception. Apperception, in this case, will reveal what in psychology is commonly called “representation”. Firstly, representation is determined by processes in memory and governs the organizational order of perception. The representation (secondary image), which is thought to be primarily related to the word, will give form to a person’s vision (primary image). The image of primary perception will to a lesser extent be absorbed by the word. Rather the image set formed in experience, generalized by thought in representation (which may include past experience, with memories, speech skills of the perceiver, as well as physical theories learned by them) [26, p. 73], will provide a stable form to the work of perception.

Secondly, apperceptive experience, according to the adherents of the verbalist version of world reception, is not exclusively a personal achievement, as it might seem at first glance. In addition to the stereotyping of an individual’s actions, its configuration includes the effects of the communicative contract, educational investments, and mass-media inclusions. From this
perspective, the individuals cease to be the owners of their experience, becoming the agent of introjected verbal forms, which they tend to identify with themselves; and the position of the image, in this case, turns out to be fatally dependent on representationally oriented forms of communication and the reification consequences of their educational use.

Here we would like to make an important methodological remark concerning the limitations on applying mental predicates in this description. The point is that the appeal to mental grounding, however justified it may seem, turns out to be connected with a subject-centered ideology that fixes the researcher’s and practitioner’s look on the “inner world” of the individual. It shifts communicative processes, speech practices, and discursive forms, i.e. important mediation objects that can only provide educational change. Mentalism requires the individual or group consciousness to be introduced as a point of reference, while the pedagogical objective is to objectify the “symbolic metabolism” of educational relations. From this point of view, even when we talk about the content of experience, we do not refer to the presence of some relatively independent elements and their systems. What we mean is the fact that there are no special psychological objects in consciousness until thought or interaction bring them to life in this or that form.

Both the perception and the apperception figures act as a symbolic resource of educational communication. Psychological agents of the resource serve as actors invited to the stage, whose actions are subordinated to communicative and rhetorical objectives and rules. In this regard, collective memory in “pre-electronic” communities was related to “embodiment” incorporation (as pointed out in M. Foucault’s research on the disciplinary construction of the body). However, with changing communication technology, it is subject to the “recording” of inscription in the subject’s mind. Discipline is replaced by semiotics, whereas the subject’s body loses in some way its “pedagogical materiality”: its real physicality, previously disciplined in detail and normalized by “body training”, becomes a sign among signs, and stylistic creation reveals itself as an indicator of individuality, simulating itself [23, p. 111].

Educational contextualization of image rhetoric

This section deals with the issue related to the conditions of designing a learning situation in which the participants’ attention is focused on a visual artifact as a material of their transformative activity. This formulation of the issue once again refers to that of the relationship between culture and education. Cultural historians who are critical of cultural visualization insist on its more complex definition in their descriptions of the contemporary situation. In particular, the Dutch culture scholar M. Bal calls the supporters of cultural visualization “visual essentialists” who seek to “protect their territory from other media and semiotic systems” [27, p. 213]. She believes that the autonomization of the visual artifact is contrary to the “nature of things”. Bal associates the positions of “pure” visualists with “uncritical assumptions” coming from “art historians who have turned into “enthusiasts” of visual culture [Ibid., p. 224].

Without entering into a direct discussion with M. Bal and supporters of her position, a boundary between cultural and educational points of view must be drawn. This demarcation is necessary to highlight the reality of education as a relatively autonomous cultural and social region, subject to specific rules and forms of self-organization. The categorical system used by A. Schütz to describe “sub-worlds” or “finite fields of meanings” is quite applicable to it. The necessity of

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1 Sub-world in the interpretation of A. Schütz implies “(1) a specific tension of consciousness, namely, wakefulness arising from full attention to life; (2) a specific epoché, namely, abstention from doubt; (3) a prevailing form of spontaneous activity, namely, work (a meaningful spontaneous activity that is project-based and characterized by the intention to accomplish the projected state of affairs through bodily movements embedded in the external world); (4) a specific form of experience of the oneself (the working self as a holistic self); (5) a specific form of sociality (the shared intersubjective world of communication and social action); (6) a specific temporal perspective (standard time, originating in the intersection of durée and cosmic time as the universal temporal structure of the intersubjective world)” [28, pp. 424–425].
such education specification is conditioned by the problems it solves, which can be oriented to
cultural trends of different kinds (relic, topical, and futuristic). By solving them, education
organizes symbolic conditions corresponding to them, and immanent learning programs are
implemented. In this context, highlighting the figurative version of the learning situation and the
learning objective is a specific educational construction designed to differentiate students’ sign-
symbolic orientation in a dynamically changing cultural semiosis. It is for this purpose that visual
relations are idealized as opposed to intellectual-thought constructions. The descriptions that
provide the implementation of visual educational constructions are extracted from cultural
descriptions.

An example of such constructions is the theory and practice of Elkonin’s/Davydov’s
developmental education. The structure of this psychological and pedagogical system is based on
differentiation and idealization of “reasoning” and “rational” thinking. “Reasoning thinking,
which is based on visual images\(^1\), can be called empirical thinking. Rational thinking, internally
connected with the study of the nature of its basis – with the study of concepts, it is advisable to
call it theoretical” [29, p. 62]. Empirical thinking is a mental form that an individual acquires in
everyday life to support it. Theoretical thinking appears in the course of historical development
and is associated with the triumph of science. In a dynamic situation, reasoning thinking, focused
on the generalization of object signs, is faced with an unsolvable problem – giving unity to
diversity because “empirical generalization does not highlight the essential features of the object
itself, as well as the internal relationship of its sides. It does not provide the distinction of the
phenomenon and the essence in the process of cognition” [Ibid., p. 71]. Only theoretical thinking
built on the modeling principle created by modern science can solve this essential problem. Thus,
the opposition of the discursive (every day) and reasonable (theoretical) is used by Davydov and
his followers as a constitutive of learning situations, providing both the content of learning and its
dynamics with the help of the hyper-value of “rational thinking”. Within this concept, visual
thinking occupies a subordinate position in intellectual consciousness, is deprived of abstraction
ability, and is associated with an everyday worldview.

From the perspective of pedagogical constructivism, it would be entirely wrong to regard the
opposition of mind and reason as the “truth” of thinking. We interpret V.V. Davydov’s theory of
generalization as an exclusively educational construct based on the ideology of hierarchical
discourse. In other words, both “discursive” thinking and “reasonable” thinking arise, function,
and are maintained under specially constructed educational conditions. Beyond them, the
vocabulary of discursiveness/reasonableness either makes no sense, or the meaning of these
categories requires separate clarification.

In Davydov’s construct, the conscious mind was attributed only to an emotional function and
the empirical generalization associated with it. This form of abstraction was given the meaning of
imperfect thinking, whose concepts are not such in the full sense of the word. The intellectualist
legend\(^2\), with the help of which the developmental of V.V. Davydov’s teaching provides the
mental development of schoolchildren, in one way or another marginalizes other possibilities of
mental activity, for example, the strategies of visual thinking.

The conditionality of Davydov’s construct may be emphasized by the point made by the
German philosopher H. Arendt, who noted the ability of imaginative thinking to perform

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\(^1\) Authors’ underlining.
\(^2\) The intellectualist legend, according to the American psychologist Gilbert Ryle, is the absolutization of reflective thinking. According to this
legend, “not only do we often think before acting, but we also think in order to act correctly... And yet the general assumption that an action
performed intelligently requires prior judgment on the corresponding statements sounds implausible. It accounts for cases when, for lack of better
reasoning, it is assumed that the required thinking may proceed very rapidly and completely unnoticed by the acting subject. I intend to prove that
the intellectualist legend is false and that when we describe an action as intelligent, it does not entail a description of the double operation of
deliberation and execution” [30, p. 38].
operations of abstraction. According to her, “the ability of the mind to operate with the invisible is required even for ordinary experience in order to recognize a dog as a dog regardless of the way the four-legged animal presents itself to us. This means that we must be able to “contemplate”, in the Kantian sense, the general character of an object that is not perceived by our senses. Kant uses the term “monogram” for such models – pure abstractions – and Chinese hieroglyphs are perhaps monograms, so to speak. In other words, what is “abstract” and invisible for us is symbolically real and given in hieroglyphs for the Chinese, for instance, the image of two joined hands to denote the concept of friendship. They think in images rather than in words. And such thinking in images always remains “real” and cannot become discursive, constructing a series of concepts, nor can it give an account of itself” [31, p. 103].

In the design of an educational situation that we suggest, visual material (a photograph, an advertisement, etc.) is not considered as a supplement to a narrative. Instead, it is regarded as the one with an independent status of a non-verbal message, whose identification and interpretation may constitute the subject matter of learning activities. As the basis for structuring, we rely on the experience of visual analysis implemented by R. Barthes in the pedagogical context. In his presentation, R. Barthes uses the term “vision”, which has a justified reason related to the intermediate status of the visual artifact, which is rather difficult to localize within the external and internal boundaries. Due to the nature of its perception, it simultaneously appears in two forms, making it possible to gain access to both representational and perceptual structures in the course of work with it. At the same time, when studying R. Barthes’s research experience, we intend to make a certain modification in the terms he used. Instead of the word “vision”, in many cases we will use the terms “image”, “visual artifact”, and “symbolic visual construction”. While dealing with these terms, we will not support the mental process, which in L.M. Vekker’s words, is “tragically invisible” [32, p. 15]. We will rather focus on the position of visual artifact, assigning certain intentionality to it and ability to program the perception of its user. In designing this analytical aspect, we followed the methodological pattern of W.J.T. Mitchell.

A key issue in analyzing the effects of an image is the specification of the latter and defining the particular features of the constitution when it is involved in learning situations. It is considered that a word, unlike an image, is conditional in its essence. The relationship between a word and its meaning involves its decoding and subsequent interpretation. In this instance, there is nothing in common between the signifier and the signified, at least in verbal-significant rather than iconic cultures. R. Barthes, speaking of the image, points out an important feature of its perception: it is perceived (and understood) immediately and literally, appearing to the viewer as a message without a code, and in the case of photography, the image “carries its meaning with it” [6].

It should be noted that the term “code” is usually attributed to the designation of an information set, which, as a linguistic convention, presents its referent in a compressed and alienly expressed form. The code is subject to decoding and presupposes the corresponding competence; it is impossible to decode a text expressed by signs unknown to the reader. In our

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1 Mitchell seeks to analyze images as vital entities that have not only a semiotic nature but also living features. This kind of assumption, he believes, is not mystical, but is based on the observation of the human behavior who react to images as if they were living beings. With regard to the reception of images the scientist records the effect of “double consciousness”, which consists in the simultaneous presence, on the one hand, of a naive and even superstitious attitude to the image, and, on the other hand, in maintaining a sober, skeptical and critical attitude toward it [33, p. 7].

2 The term “word” is used in this text very conventionally. It is a kind of synecdoche, denoting all that R. Barthes calls “the products of the imaginary in language”: “a word as a special unit, as a certain magical monad; speech as a tool or means of expressing thought; writing as a transliteration of spoken language; a phrase as a logical, self-contained measure of language; even language breaks, language failures (when seen as a primary, spontaneous, pragmatic force) should be included here” [34, 488]. The image in educational work is influenced not so much by semantics as by the syntax of language, primarily pedagogical language with its desire to function as a complete whole, because “A teacher is a person who knows how to finish his/her phrases” [Ibid., p. 504].
understanding, it is not so much the code’s essence that matters but its functional composition. This was pointed out by B. Bernstein in his well-known work “Class, Codes and Control: The structuring of pedagogic discourse”. In his interpretation, the code’s functionality is that it selects and integrates relevant meanings, separates irrelevant or illegitimate ones, regulates the rules of their implementation, excludes or silences irrelevant forms, assigns contexts, and makes a selection of inappropriate ones [35, p. 41]. The code functions as a distributive mechanism organizing receptive material and is compulsory with respect to the constitution of its user.

We will take into account the fact that the code, according to Bernstein, is related to the order of verbal functioning and does not concern the dispositive functions of images, the parsing of the action of which has its own specifications. R. Barthes draws attention to this in his research. In his interpretation, the image is usually not a code and thus does not conceal anything, nor does it have any depth. The educational clarification that follows from the denial of the code features of the image is related to the requirement of superficial analysis. That is, to analyze the image at the literal perception level and, to a certain extent, trust the eye without trusting the word (thought) that hurry to define the visual (which is conditioned by our training in a particular form of vision). Historically, changes in thinking dictate the meaning of the perceived. Having undergone appropriate training in acts of socialization, we “perceive the world not only through what we see but also through what we think and cognize, what each visual sensation tells us, what fragment of the world the eye brings in through the analysis of visual data, generalization and reconsideration” [36, p. 14]. Metaphorically, this visual level of training is “glasses” through which we see without seeing the glasses themselves. Detecting the verbal composition of “glasses” while perceiving symbolic visual constructions can act as a problem to be solved by students in the course of visual training.

In his work “The Rhetoric of The Image” Barthes, while discussing the issue of image iconicity, no longer refers to it as a message but as a sign without a code [6, p. 301]. A question, however, is whether it is legitimate to ascribe the status of a sign to the image? From what position is the image perceived as a sign? What are the conditions for distinguishing figurative forms and the educational consequences of the distinctions established? In his paper, Barthes focuses on the analysis of the drawing, which is a special type of image. Drawing, unlike photography, does not conceal but emphasizes its constructability. The constructability of drawing “manifests itself on three levels: first, to reproduce any object or scene using drawing means to carry out a series of transformations that follow certain rules; drawing a copy has no eternal “nature”: the codes underlying these or those transformations are historically changeable (this particularly concerns the laws of perspective); the process of drawing (coding) itself presupposes the differentiation of the significant and insignificant elements in an object: drawing is unable to reproduce the entire object; it is usually about the entire object. In other words, since there are no drawings without a style, the denotative level of any drawing is expressed less distinctly than the denotative level of photography; finally, the mastery of drawing, like the mastery of any code, requires training” [Ibid., p. 309].

It follows from the above that not all images act as a code, and their distinction may constitute the first and foremost objective of the students’ orientation in the process of visual learning. The

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1 Analyzing the codes of communication, B. Bernstein distinguishes two forms: limited and extended ones. The limited code levels out individual differences and “presents an utterance in a rigid form that, even when it is complex, allows the speaker and the listener to anticipate precisely and without difficulty all the words that will be used and, as a result, all the structure of the utterance” [11, p. 95]. Expanded code facilitates the processing and verbal transmission of an individual’s unique experience. Unlike the limited code, it does not treat the conditions of the listeners as self-evident, since the speakers must adapt their language to them as well as to the individual peculiarities of the listeners. To the extent that the restricted code simplifies the construction and symbolic exchange that become common property, so much does the extended code simplify the verbal construction and symbolic exchange of individualized symbols” [Ibid., pp. 100–101].
focus on images in the process of teaching, in which constructability is in place, creates the
opportunity for students to reconstruct and analyze the connotative content of the images and
their impact on the position of the individual(s) perceiving the image. In turn, the manifestation
of anthropological preconditions, the experiential input of connotative reconstructions will
overcome the naturalism of students’ visual perception and create conditions for students to work
with their visual perspective. The specific of coded images like drawings makes them readable by
models close to those guided by written texts. Their status can be considered a transitional visual
form from connotative artifacts (painting) to denotative ones (photography).

At the same time, we realize that a rigid attribution of one or another visual form to a certain
status can lead to “overnaturality” and erase the practical context. The latter presupposes a focus on
L. Wittgenstein’s assumption, according to which “a judgment acquires meaning only in its
use” [37, p. 133]. This also applies to the status of the image. Thus, a picture, which has all the
objective characteristics of a message without a code, turns into a sign through a simple rhetorical
device in educational communication. The teacher, informing the students that, looking at the
picture, they did not notice something significant in it, encourages them to look closely at the
image. This transforms the nature of its bearing in the educational interaction. The image now
acts as a signed form to be decoded. Here, the image can be perceived as a code, but in other
learning situations, it might not be, depending on the nature of its use.

When we look at a picture, even though we are aware that we have the picture in our hands,
we do not doubt for a second that there is no gap between the image and the depicted subject. In
other words, the identity of the objects portrayed and what they are in real life. In such cases
where we have a photographic compilation or a photographer’s artwork, the representation of
reality takes on the characteristics of an analogy or a code. Code features reveal imitation in
conventionality, which involves a certain detachment of the spectator (according to Barthes), a
distancing from the artifact. Imitation denotes singling out a phenomenon, considering both the
“represented” and its construction. As for the photography, it means its transformative analysis
performed by students. Imitation concerns the realization of students’ deconstructive actions on
the surface of the picture; the detection of the constructive photographic elements. These include
frame, the focus of the picture, the play of light and shadow, foreground and background, thematic
choice, technical mediation (wide angle or portrait lens), etc. By completing the deconstructive
task, the students find themselves in a special research position contrasting from that of a “naive”
viewer who perceives a photograph as a copy of the real world.

When discussing the issue of the educational analysis of images, one cannot ignore the work
of R. Barthes, who developed a specific means of image analysis that differs from linguistic
categories and emphasizes the nature of the performative action of the image.

In one of his recent works, “Camera Lucida: Reflections on Photography”, Barthes uses two
categories to emphasize the images’ intensiveness and the peculiarity of their effects on the
spectator. The first of them, called a stadium, refers to a type of photographic image oriented at
“inform, represent, take by surprise, signify, or arouse desire” [38, p. 47]. The “stadium” activates
the experience of the recipients of the image, making them co-participate in what is depicted. “It
is due to the stadium that I am interested in many photographs, be that because I perceive them as
political testimonies, or because I consider them as good historical paintings; in these figures,

\[1\] The point is about the cultural conditioning of the experience of individual and group perception of artifacts. In the first respect, according to
N. Mirzoev, “Our rational understanding of the world is formed by what we already know or think we know” [8, p. 82]. In the second respect, it is
informed by collective experience, by what we share with others. The perceiver sees the picture in a certain state and assumes that anyone who
stares at it, unless, of course, he is mentally challenged, will see the same thing. N. Mirzoev emphasizes that “vision is our common property, it
is a public resource, which, nevertheless, can be useful to us in our personal needs” [Ibid., 107].
facial expressions, gestures, scenery, and actions, I participate as a person of culture” [Ibid., p. 44].

The second category, which Barthes referred to as punctum, “means, among other things: a bite, a hole, a spot, a small cut, as well as a roll of the dice” [Ibid., p. 45]. The function of the punctum image is different. Barth writes about the trauma inflicted on the viewer by photography and its expansiveness. But it is not about the one that strikes the imagination; it is about the one that puts an experience in motion and transforms it. It is not the trauma itself that is the key to the transformation, but the potential of the image in “revealing what has been hidden so reliably that the actor himself has ignored it or kept it in the unconscious” [Ibid., p. 53]. The difference in the rhetorical potential of images lies not in their content but in the nature of their connection to the spectator’s experience, their ability to affect change in his relationship with himself. Explaining the action of the punctum, This is what Barth writes, “to give examples of the punctum means in some way to open one’s soul” [Ibid., p. 69]. From this perspective, the type of change produced by an image transforming the experience of the perceiving individual can reasonably be called educational. Michel Foucault may have alluded to this when distinguishing pedagogy engaged in the transmission of legitimate content from psychagogy associated with the transmission of truth, “which is not at all aimed at acquiring certain skills, etc., but whose point is to change the very experience of the student’s existence” [39, p. 441]

On changes in educational semiosis and academic relationships

Assuming the mismatch of cultural and educational orders, a question arises what can be done to make the latter a source of constructive cultural and learning dynamics. Returning to the mechanism of cultural transformation proposed by B. Bernstein, one can state that the changes produced in education should simultaneously concern two interrelated planes; social relations (or, more narrowly, communication) and the ways of connecting words (speech) and images (vision).

First of all, it is necessary to liberalize vision, which at the level of the students means the ability to build a statement and behavior while relying on various kinds of images (graphic, optical, perceptual, mental, and verbal). In this situation, the image acts in the fundamental function, creating a context for the statement. For learning practice, this means cultivating a communicative gap and suspending verbal definitions, primarily in terms of their communicative productivity. As a result of the reorganization of speech-thought activity, speech and behavior become a condition for thought, rather than the other way round. A student acquires the experience of “gripping” the visual object with the gaze, paying attention to the details and forming its construction as a whole, reducing the attitude to the hierarchical relations between the image elements. Therefore, the description and interpretation of the visual object come after the process of perception.

Secondly, when implementing the educational communicative form of learning, the focus should shift from the implicit and explicit objectives of achieving synchronization of behavior and establishing a consensus of meanings to cultivating forms that generate differences in interaction. It is not a matter of presenting a different spectrum of opinions in a learning interaction, but rather a clash of interpretations of perceived artifacts, utterance styles, and discursive positioning. This requires a particular communicative disposition. The other person, in this case, is qualitatively different, unassumed in the act of communication. In this situation, educational communication acquires paradoxical and paralogical features and mutual disproportionality [14, p. 13].
However, one clarification should be made. When discussing “interdimensionality”, Lyotard interprets it as pre-existing differential fact. This is not the way we understand things. From our perspective, modern education is largely a product of industrialization and the construction of national communities whose success depends on the solidarity of the people functioning within them. In this context, pedagogical systems were constructed as machines of social unity production. Textual practices also served this purpose. The homogenization of people and materials was the essence of J. Gutenberg’s cultural program and a source of wealth and power unknown to any other era or technology [5, p. 159].

Given this, along with the developing experience of solidarity, a promising task for education becomes the creation of isolatory conditions, participation in incommensurable worlds, and the acquisition of the ability not to assimilate the other person. We are not talking about the functioning of education in the overabundance of the multiple worlds of human presence that Lyotard talks about. We are discussing education in a situation of diversity deficiency, the significance of overcoming the negations that education reacts to, and the absence of a “common denominator”.

Parality is not a natural state of affairs, but a demanded practical establishment. Communicative learning strategies can be oriented towards finding common ground and leveling differences. But they can also be constructed within a logic of contradiction, qualitative specificity, and determined by communicative and practical contexts. In the first case, the interaction relies on the assumption of common linguistic code and the message’s fundamental translatability.

In the second case, the interaction relies on the premise of non-transportability, the difference of codes, and direct untranslatability of statements. According to J.M. Lotman’s theory of communication, these strategic orientations can be traced to the history of humanity. The first strategy is characteristic of the 18th-19th century European culture, and “it determined our habitual scientific ideas, particularly the identification of the act of receiving and exchanging information” [40, p. 176].

The second strategy, in his opinion, is currently intensifying in the context of globalization and intense intercultural communication. The differentiation of communicative relationships and connections (textual and visual self-organization) in teaching requires a revision of communicative functions. Its traditional interpretation is oriented, in terms of formal logic, at the model of conjunction. We should discuss mastering the forms of understanding and actions that prioritize disjunctive models and switching from one mode of consciousness to another. The relationship between a cultural artifact (text, image) and other individuals is now the focus of a disjunctive communicative, educational model. This relationship is characterized by the establishment of distance between the position of the individual perceiving these phenomena and the phenomena themselves. Distance has the character of defamiliarization [41].

Non-attribution to the other person becomes a prerequisite for self-acceptance; the opportunity to see oneself not as a naturally shared position with other participants in interaction, but as a specific and relational discursive construct, or position related to a specific situation in the processes of educational semiosis. The experience of suspension of the other person is intrinsically connected with the experience of self-suspension and potentially may cause self-transformation; transformation in education is possible only through a specific discursive conflict of heterogeneous and ontologically incompatible discourses, which find their limits only in counterversive conditions. As a result, “the student becomes a boundary-breaking subject, capable of understanding the others in his own categories, and of creating boundary orders where new identities can emerge within existing configurations of power and accessible cultural domains” [42, p. 51].
Thirdly, moving the image to the central position in the establishment of the educational order is consistent with the transformation of the pedagogical position and the teacher’s role in the interactions of learning situations. The latter, operating according to the rules of educational praxis, are not so much involved in the struggle for truth as they are constituted as acts of self-determination in real educational circumstances, caring about the measure of their own effectiveness [43]. In this context, the pedagogical position corresponds to that of a mediator between relations of utterance, the interaction of signs and images, communicative processes, and connections. They constitute the main focus of the mediator’s work, taking the psychological variables of the participants out of the bracket of interaction.

The key point of this positional transformation is a shift in pedagogical priorities: from ensuring the assimilation of cultural content to organizing students’ analysis of their experience of relations with culture (sign, image) unfolding in the space of social relations. This results in a cultural content finding its discursive conditionality: “knowledge becomes not so much a process whose properties may be discovered by us, but a subject of socially constructed collective consciousness expressed in permanently mobile and ideologically rich discourses” [44, p. 92].

The transitional situation in education, in this case, corresponds with the inspiration of the symbolic struggle of cultural mediators, which, outside the procedures of its objectification will be realized in implicit and possibly destructive forms. Objectification of the circumstances of symbolic struggle in communication makes it possible to control self-reference and self-deconstruction processes, supporting the linguistic, visual, and communicative sensitivity of interaction participants to the educational semiosis.

**Conclusion**

Our discussion of the conditions and possibilities of educational change, which correspond primarily to the differentiation and diversification of the worlds of human presence, was based on the rhetoric of the visible and the conceivable, the sensually given and the mentally conceivable. This distinction had a pedagogical rather than an ontological sense. The need for such boundaries and cross-border experiences of language and image in education becomes important in terms of young people’s readiness to live in a multicultural world.

This world is consumed by reified cultural boundaries, revealing the discursive, historical-cultural, and political conditioning of such boundaries. The latter is especially important due to the increasing massification of education. Bureaucratization is inevitable under these circumstances. It creates a powerful homogenizing tendency that directs pedagogical practice toward standards and institutional control rather than free association, individual expression, free social creativity, and non-determined development. The automation and absolutization of verbal and textual mediation forms in education turn out to be the key semiotic condition for the traditional educational reproduction, which prevents the mutually facilitative relationship between education and other cultural and social areas.

Appealing to the resource of visuality as a form of pedagogical conditionality, there can emerge a new type of social agreement, capable of producing processes and phenomena that are either rigidly marginalized or inverted in traditional education. The visual re-symbolization of educational relations enables us to look at the possibility of educational change with a certain optimism.

**References**


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