

# ORIENTATION STRATEGIES AT APPARATGEIST ERA: DISTRIBUTED COGNITION AND ROMANTIC IDEALS OF EDUCATION

Fedor KOROCHKIN <sup>1,\*</sup>  | Polina VASINEVA <sup>1</sup> 

<sup>1</sup> Institute of Philosophy, Herzen State Pedagogical University, Saint Petersburg, Russia

\* *Correspondence*

Fedor KOROCHKIN, 48 Moika Embankment, Institute of Philosophy, St. Petersburg, 191186, Russia  
E-mail: fedkor@gmail.com

*Abstract:* In this article, we examine digitalization in its relation to the problems of educational philosophy. We argue that the set of changes that have taken place in recent decades, referred to as the Apparatchest era, has led to the necessity of rethinking education in terms of an orientational perspective. We will show how the philosophical notion of orientation relates to the digital transformation of space and the emergence of hybrid space on the one hand and to the German Romantic ideas about the essence of education on the other. However, we do not intend to take a comprehensive look at all Romantic ideas about Bildung: the involvement of education in politics and social structure, the emphasis on aesthetic issues, etc., may also find interpretations in today's conditions, but the main focus of our research is on the problem of orientation in education and the realization of this goal on the basis of Romantic ideals. In doing so, we intend to pay special attention to specifically Early German Romanticism as having defined the non-classical vector of the development of the intellectual tradition in general and the later Romantic ideas in particular. Finally, we investigate how in the concept of distributed cognition, one can find opportunities for the implementation of the orienting function of education, corresponding to the Romantic notions.

*Keywords:* Romanticism, emerging media, geomedial, Apparatchest, education, orientation, spatial turn, Bildung.

## Introduction

Despite the implicit presence of the theme of orientation in the history of thought since Antiquity, it is fair to assume that a focused conversation about the de facto philosophical meaning of this

concept begins with Immanuel Kant. In his essay "On the First Ground of the Distinction of Regions in Space", published in 1768, the German thinker addresses the problem of orientation, noting the almost inseparable connection of this process with spatial problematics. An a priori ability

to distinguish the sides of one's own body essentially forms the basis of orientation in geographical space. The ability to distinguish what is on one side from what is on the other, multiplied by the fundamental impossibility of two sides occupying the same space at the same time, according to Kant, is supplemented by experience. Experience allows us to register features of the world around us, such as the mutual arrangement of the stars or the direction in which the sun rises. The task of orientation becomes the correlation of distinguishing the sides of one's body and the spatial features of a place.

Immanuel Kant gave a clear definition of the process of orientation only 18 years after he first addressed this problem. In "What Does It Mean to Orient Oneself in Thinking?" (Kant, 1998, pp. 4-5), he writes: "In the proper meaning of the word, to orient, oneself means to use a given direction (when we divide the horizon into four of them) in order to find the others - literally, to find the sunrise. Now, if I see the sun in the sky and know it is now midday, then I know how to find south, west, north, and east. For this, however, I also need the feeling of a difference in my own subject, namely, the difference between my right and left hands. I call this a feeling because these two sides outwardly display no designatable difference in intuition. If I did not have this faculty of distinguishing, without the need of any difference in the objects, between moving from left to right and right to left and moving in the opposite direction and thereby determining a priori a difference in the position of the objects, then in describing a circle I would not know whether west was right or left of the southernmost point of the horizon, or whether I should complete the circle by moving north and east and thus back to the south". Orientation is thus a necessary condition for the possibility of any kind of movement.

Along with the primary spatial orientation, Kant distinguishes the mathematical orientation (which, in fact, is also spatial) and the logical orientation, i.e. the orientation in thinking: "By analogy, one can easily guess that it will be a concern of pure reason to guide its use when it wants to leave familiar objects (of experience) behind, extending itself beyond all the bounds of experience and finding no object of intuition at all, but merely space for intuition; for then it is no longer in a position to bring its judgments under a determinate maxim according to objective

grounds of cognition, but solely to bring its judgments under a determinate maxim according to a subjective ground of differentiation in the determination of its own faculty of judgment" (Kant, 1998, pp. 5-6). In other words, just as in geographical space, orientation is a necessary condition for the possibility of constructing routes and following them, so in thinking, it becomes a condition for the action of pure reason. Following Kant's logic further, we find that without orientation, the activity of practical reason is also impossible - judgments about freedom and morality will always be partly the result of orientation in its practical (in the Kantian sense) dimension.

The return to the theme of orientation in philosophy has been most notable in the late 20<sup>th</sup> and early 21<sup>st</sup> centuries, primarily through the efforts of Werner Stegmaier. In 2008 the contemporary German thinker published a work entitled *Philosophy of Orientation*. The publication became a starting point for the development of modern research in this field. It is no coincidence that the issue of orientation, initiated by the philosopher Immanuel Kant, who taught and researched geography, has been revisited precisely in recent decades, that is, after the spatial turn. Spatial problematics has moved to one of the central positions of humanities research and philosophy. And among the most significant reasons for this move are radical shifts in the content of understanding of space itself and the basic spatial categories. We are referring here to the formation of the so-called hybrid (Kluitenberg, 2006) space, the process of inseparable connection of virtual and real. Changes in the content of key orientational concepts lead to the need to reconsider the problem of orientation as such, which is reflected in the works of Stegmaier.

## Orientation and Cognition

Following Kant, Stegmaier (2008) argues that orientation is the primary condition for any active action. Thus one must be oriented before he/she can determine anything. It is the lack of orientation, the disorientation, that prompts the attempt to define. In this way, orientation is not only a condition but also a goal of the theoretical-cognitive process.

It is Stegmaier (2008) who focuses on the fact that orientation is necessary not only in geogra-

phical space but also in human interaction, communication, morality, politics, business, religion and education (p. 15). Orientation implies the ultimate situationality of the world - like Heraclitus' river, into which one cannot enter twice; one cannot be in the same cognitive situation twice. Orientation begins to be seen as an ever-present process accompanying the experience of living everyday life.

Here Stegmaier points out the duality of the process of orientation: Orientation always ends with orientation. The subject's constantly expanding image of the world, even facing previously familiar phenomena, will partly process them in a new way but still rely on previously gained experience, i.e., on previous orientations and orientations. The source of orientation is the subject him/herself, and he/she, in a certain sense, turns out to be a condition of this process and its goal.

### Apparateist and Emerging Media

In the middle of the past decade, Klaus Schwab (2016), founder and president of the World Economic Forum in Davos, released his book "The Fourth Industrial Revolution". It was the result of years of expert talk about the transition to Industry 4.0, characterized by the involvement of AI in basic production practices, as well as global changes in the specifics of technological communication, leading to a fundamental reinvention of market strategies. Indeed, the largest cab services today do not have a single car. The leaders of the tourist real estate market are companies that do not rent a single room of their own - market dominance is increasingly less determined by material resource operations and is moving exclusively to the sphere of social-intellectual management.

However, the most important thing is not the economic consequences of the anticipated onset of the Fourth Industrial Revolution. Against the backdrop of market processes, a revolution in the content of humanitarian practices is also unfolding. The integration of convergent media into everyday practices significantly expands the role of communicative processes, which now have an ontological status. A global network permeated by communications surrounds the subject, becoming an integral element of being. "Entering" the Internet is no longer a purposefully volitional

act. The integration of AI into everyday processes, as well as the ubiquity of mobile and personal communication technologies (PCTs), have played a decisive role in changing the content of cognitive practices. Almost a decade and a half before Schwab, the enormous role of PCTs, beyond the merely technological, was documented by James E. Katz and M. Aakhus (2002), who proclaimed the theory of Apparateist, which literally means "spirit of machines" (pp. 301-318). The theory, which remains a focus of the scientific community, is designed to examine the relationship between humans and modern technology and the cultural, social, and other consequences that result from it.

An extremely important characteristic of the Apparateist era is not only the static presence of PCTs and the specifics of people's interaction with them but the inherent constant change and dynamism of media space. A popular approach in recent years to defining modern media as emerging media also points to the ongoing dynamics of change in the digital environment. "After two decades of new media evolution, the update of a generation of new media occurs in such a short time that redefines what constitutes "new media". Even the newest media start to age right after their birth. While we can continue to use the term "new media" to refer to any media recently come into being, we consider "emerging media" a more appropriate term for the newly developed media devices and the communication channels using digital technology and more or less adapted from the old media" (Li, 2015, p. 3).

Juliet Floyd and James E. Katz (2016) emphasize even more the speed and inclusiveness of emerging media in their Introduction to Philosophy of Emerging Media: Understanding, Appreciation, Application (first published in 2015). However, the authors not only emphasize the very speed and pervasiveness of the new patterns of cognition and action but also capture the anthropological question both in terms of the dichotomy of human-machine and human-human: "Emergence ... also cover here the remarkable speed and increase in delivery and amalgamation of speech and thought and deed. ...Nowadays, the fabric of an individual's daily life is tracked, recorded, and analyzed. ...As digital devices become increasingly embedded inside everyday objects, we speak increasingly of an "Internet of things" as well as of "trolls": humans with ha-

tred, contempt, and political agendas hiding within the darkness of the Internet we have built, ready to pop out and shame, stalk, and mass around the delivery of sheer firepower and murderousness to targeted groups and individuals. Here emergence lies less in the problem of the difference between human and machine and more in the concept of the human being itself" (Floyd & Katz, 2016, p. 3).

### Educational Practices in Hybrid Space

The subject in the Apparateist era is at the intersection of "real" and "virtual" spaces regardless of his/her will, social position, or values. The spatial nature of the close integration of emerging media and humanitarian practices has been the subject of urban studies by Scott McQuire, professor of media communications at the University of Melbourne. The most significant changes in urban space have allowed the scholar to speak of the advent of the era of "geomedia," that is, the inseparable unity of topos, events, communication and technology. "The key point I want to draw out in this context is that ubiquity is not just about the capacity to do the same thing – such as watch television - in a new place, but involves a profound transformation of social practice," McQuire (2017) writes (p. 3).

Talking about the existence of some independent "virtual" as well as about the independence of "real" space is inadequate to the current state of the urban environment and even more so to the prospects of its development. It is not quite correct to talk about "augmented" reality because "augmentation" implies the possibility of disconnection, which is completely unimaginable in the conditions of the 21st-century city. In urbanism and media studies, the space that combines the features of "real" and "virtual" is now increasingly referred to as "hybrid". McQuire uses urban space to show that digital communications and emerging media are constantly involved in processes of orientation (though he does not use the term).

It is also important that the development of technology and the habit of its ubiquity increasingly dissolve it into the fabric of everyday life, which relegates it to the periphery of attention as something to be taken for granted, but its influence only grows in this background. From the

point of view of philosophical perception, it is an orientation that is the central category encompassing all iterations of hybrid space. In this case, in a situation of constant change in the media environment and forms of communication, orientation, being directly aimed at positioning the individual, that is, at the ability to know and act in new conditions, proves to be the most reliable goal of the educational process. Educational practices are given not only a shell in the form of technological innovations (such as interactive whiteboards and distance learning courses) but also the opportunity for unprecedentedly deep integration of material and the sociocultural sphere.

Thus, integral and primary to education in the Apparateist era becomes the ability to teach orientation and self-education in a changing environment. In terms of educational theory and specific disciplinary approaches, there are concepts for the development of what can be considered a guiding vector in education. However, the construction of fundamental educational strategies should be found most effective when it is rooted in philosophical experience. The focus on self-education and the involvement of figurative categories in discovering the world directly correlates with the notions of education characteristic of Romanticism.

### Romantic Ideals of Education in the Context of Orientation

An investigation of the educational ideas of the Romantics is a challenging task from a philosophical point of view. Despite the pronounced presence of the theme of *Bildung* in Romanticism, especially in *Frühromantik*, there is no at all explicit understanding of exactly how the Romantics intended to realize their ideas. Frederic C. Beiser (2003), in his book "The Romantic Imperative: The Concept of Early German Romanticism": "The romantic philosophy of education ends with a paradox. ...There was nothing more important to the romantics than *Bildung*, the education of humanity. This was the central theme and goal of their ethics, aesthetics, and politics. But, from a more practical perspective, there seems to be nothing less important to the romantics than education. When it comes to concrete suggestions about how to educate humanity -

about what specific institutional arrangements are to be made - the romantics fell silent” (p. 105).

A similar idea is found in David Halpin (2006) of the University of London, a scholar of British Romanticism, who notes, however, that the indications in Romantic work of what education should be are fruitful material for present-day efforts in this direction: “Although the Romantics devoted little of their enormous creative energies to the practical concerns of schooling, some of the ideas behind their writings tacitly embody progressive ideas about education that can provide now a source of inspiration in thinking imaginatively about the form and content of educational reform” (p. 342).

Education in the worldview of Early German Romanticism is mainly understood as self-education, which is thought of in the Romantic worldview as a path, a journey. This is the path of the hero’s self-determination, on which he/she meets fellow travellers who help the hero in the way of self-education and the formation of an integral personality. The personality for the Romantics is not initially set but emerges in the process of acquiring his/her own self, in other words, through self-education and self-establishment, where the supreme goal of education is “mastering one’s transcendental self - the I of my own self” (Novalis, 2014, p. 91).

In Romanticism, the concept of the path is one of the fundamental ones that are important for understanding the very essence of the Romantic worldview. The image of a traveller is ideal for the hero of a romantic work, as it is a prototype of a person who is in a spiritual search, walking along the path of self-education and self-determination.

The ontological nature of the path for the Romantic worldview is expressed in the fact that life, education, and scientific knowledge begin to be understood by the Romantics as a path, a road. *Bildungsroman*, so favoured by the Romantics, often adopts the form of the travel novel. Thus, in Romanticism, *Bildungsroman* and *Reise-Roman* complement each other. The journey becomes a metaphor for education and transformation. Thus, the protagonist of Novalis’ novel “Heinrich von Ofterdingen” throughout the entire work seems to make a journey from Thuringia to Augsburg, but in fact, takes a path of formation, the search for his self, his identity.

Despite the fact that spatiality as such does not fall into the focus of attention of the Romantics in this context, the metaphor of the path itself vividly demonstrates the correspondence of their ideas with Kant’s ideas of orientation as a precursor of any action, also rising in the 18<sup>th</sup> century.

In addition, we believe it is important to emphasize that the Romantics assigned a tremendous role to the concept of freedom. For them, *Bildung* is impossible without the free choices and free decisions of the individual. Education cannot be adequate by relying only on the reproduction of existing cultural norms and traditions, nor can it be imposed by the state. In this attitude to freedom of decision, one can see a connection between the classical ideals of antiquity and the needs of modern educational practice (Beiser, 2003, p. 29).

The idea of free self-education is also connected to another romantic ideal of education - the idea of self-realization and self-manifestation as a way to achieve human perfection, the highest goal. And if education is thought of as a path, then navigation and orientation in space (and not only geographically, but also in the space of values, the space of culture, the space of communication) for the movement along this path of self-realization becomes a process that corresponds to the Romantic idea to the highest degree.

### Distributed Cognition in Its Correspondence with Romantic Ideas

A variant of explication of the orientation approach to education with regard to Romantic ideals can be found in the integration of distributed technologies into educational practices. There are several approaches to the understanding of distributed cognition, but here, following Lada Shipovalova (2019), we will define it in relation to three other closest concepts.

Thus, first of all, we can talk about the problem of the extended mind. The basic idea of this concept is essentially connected to McLuhan’s notion of media as an extension of the human being. If we can talk about acoustic systems as a kind of extension of the human voice and about video cameras as an extension of the human eye, then it is fair to say that digital and media platforms allow the man to expand the possibilities

of consciousness. The idea of the integration of digital tools as expanding the limitations of bodily limits is also one of the attributive elements of the concept of distributed cognition, but the idea of distributed cognition turns out to be much broader, including a whole range of social aspects, not only technological ones.

This aspect brings distributed cognition closer to another concept, situational cognition. According to this approach, cognition involves not only the human brain in particular and the body in general. While remaining exposed to bodily practices, cognition is also influenced by the environment, both natural and cultural and social. Recalling the similarities between modern educational trajectories and situationalist attitudes, we can see the overlap in this point as well: each cognitive act turns out to be unique even if the external conditions seem to coincide. The uniqueness of the combination of the subject's individuality and the situation ensures the uniqueness of the cognitive act. Situational cognition is distinguished from distributed cognition by the setting of some semantic distinction between cognition proper and the influence of the environment; that is, the world around, including society, is what forms the variant conditions, but cognition itself is understood as a personal process.

Finally, a third related concept, collective cognition, assumes that the social environment not only passively influences cognitive acts but also emphasizes the necessary participation of the collective in this process, as well as the distribution of functions among the participants of such a collective. Collective cognition, however, is not characterized by the assumption that the collective can be understood more broadly than just a group of people, including, for example, digital platforms and neural networks in a formal sense as equals.

Thus, the situational uniqueness of cognitive acts, the integration of digital platforms, and the collective nature of cognition with the division of tasks within a group are three features that together form a functional idea of the content of the concept of distributed cognition. However, let us add another extremely important characteristic to this list. Like distributed networks and other terms from the IT industry, distributed cognition is bound to have the attribute of decentralized cognition. Collective cognition, for ex-

ample, does not necessarily imply that there should not be a "team captain" - the division of tasks is purely delegation, while in a distributed situation, centres can appear and disappear, shifting from one group member to another, depending on the circumstances.

The most promising for the integration of methods based on the concept of distributed cognition is the form of work in small groups. Students receive a common group task that requires a significant amount of work, demonstration of knowledge, skills and abilities, characteristic of several competencies at once (or corresponding to several indicators of competence mastering), besides necessarily implying search, processing and storage of information with the use of digital technologies. "Roles" within a small group can be assigned by a teacher or spontaneously formed by the group itself. The second option is the most preferable because it induces higher horizontal responsibility - the students are involved in the common task and perform tasks for the sake of it, not for the sake of getting a grade from the teacher. The teacher, in this case, does not act as a taskmaster who sets the conditions and evaluates the degree of their fulfilment but as an orientation mentor who helps students find their bearings in the information space while searching for the necessary theoretical data and applying them in practice.

From the description of the model, we can see that here we face both the creation of conditions for self-realization and the constantly supported need to orient and reorient oneself in new conditions. In addition, the complicity of other cognitive is crucial, which corresponds to the fellow travellers that the romantic hero encounters along the way. Finally, distributed cognition implies the participation of digital platforms in cognition, which is organically consistent with the Apparageist era. In brainstorming, we can enlist the help of search engines, we use digital devices to enhance our memory and analysis capabilities, and we engage intelligent voice assistants, that is, AI, to solve some situational tasks - to search, translate, record, and so on.

## Conclusion

So, we have established several key points describing the characteristics of the Apparageist

era, their impact on teaching and learning, and the possibility of a return to Romantic ideals of education in this context:

1. We are dealing with the ubiquitous spread of digitalization thanks to the development of mobile technology and broadband. The constant improvement of usability, intuitiveness of UI and organic UX leads to the fact that by increasing its influence, technology is becoming less and less visible.
2. The speed of the emergence of technology and new types of media is unprecedented. The involvement of neural network algorithms in this process also accelerates it and makes it very difficult to fix the situation as it is, which has led to the need for a global reorientation of education toward the formation of competence for self-education.
3. These processes take place against the background of the intensification of spatial issues not only at the level of ideas about the spatial turn but also at the level of analysis of humanitarian and social practices at almost all levels.
4. Orientation thus becomes one of the central concepts in the optics of humanities research, including the philosophy of education. This occurs both because of the unprecedented importance of spatiality and because of the ontological direction of orientation to existence under conditions of change.
5. The philosophical basis for orienting educational practices in the present can be found in the ideas of Romanticism, especially the Early German Romantics. Despite the lack of clear, practical guidelines, the ideas of self-education and education as a path correlate with both spatiality and the theme of orientation.
6. Taking into account the concept of distributed cognition in educational practices is one of the approaches that most fully allows the implementation of the researched points, combining the emphasis on self-education and the integration of modern communicative and technological components.

The issue of the correlation between modern education and the Romantic ideals of *Bildung* is fruitful for research not only in terms of orientation strategies but also individual subjects focusing on the development of imagination and imaginative and sensual cognition in education. In addition, it is promising to investigate the ade-

quacy of Romantic ideas to contemporary social issues and educational policy. However, the theme of orientation turns out to be central in assembling a substantive vertical of contemporary philosophical challenges, contemporary educational challenges, and a wide range of interdisciplinary research studying emergency media as well as Apparatgeist.

## References

- Beiser, F. C. (2003). *The romantic imperative: The concept of early german romanticism*. United Kingdom: Harvard University Press.
- Floyd, J., & Katz, J. E. (Eds.). (2016). *Philosophy of emerging media: Understanding, appreciation, application*. United Kingdom: Oxford University Press.
- Halpin, D. (2006). *Why a Romantic conception of education matters*. Oxford Review of Education. doi: 10.1080/03054980600775615
- Kant, I. (1998). *Religion within the boundaries of mere reason: And other writings*. Kiribati: Cambridge University Press.
- Katz, J. E., & Aakhus, M. A. (2002). Conclusion: Making meaning of mobiles – a theory of Apparatgeist. *Perpetual Contact*. doi:10.1017/CBO978051148947-1.023
- Kluitenberg, E. (Ed.) (2006). *Hybrid space: How wireless media mobilize public space*. Rotterdam.
- Li, X. (2015). *Emerging media: Uses and dynamics*. The United Kingdom, Taylor & Francis.
- McQuire, S. (2017). *Geomedia: Networked cities and the future of public space*. John Wiley & Sons.
- Novalis (2014). *Fragmenty* (Fragments, in Russian). Saint-Petersburg: Vladimir Dahl.
- Schwab, K. (2016). *Die Vierte industrielle revolution*. Germany: Pantheon.
- Shipovalova, L. V. (2019). *Raspredelennoe poznanie - analitika i problematizaciya koncepta* (Distributed cognition - analytics and problematization of the concept, in Russian). The Digital Scholar: Philosopher's Lab. doi: 10.5840/dspl2-0192460

Stegmaier, W. (2008). *Philosophie der Orientierung*. Berlin, New York: Walter de Gruyter.

Warf, B., & Arias, S. (Ed.). (2008). *The spatial turn: Interdisciplinary perspectives*. Taylor & Francis.