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ARTICLE

The Hermeneutic Circle and Virtual Reality: Issues of Transformation

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ABSTRACT
Drawing on the methodology of traditional hermeneutics, the article examines various interpretations of the hermeneutic circle. The introduction presents the concepts of Schleiermacher, Dilthey, Heidegger, and Gadamer, while analyzing the viewpoints of contemporary representatives of digital hermeneutics and their perspectives on the functioning of the hermeneutic circle in digital space. The research aims to identify modifications of the hermeneutic circle as the fundamental method of hermeneutics in virtual reality. Due to the emergence of new objects in the modern world of the Internet and information technologies, such as electronic texts, online communications, digital databases, and various types of artificial intelligence, hermeneutic categories and the hermeneutic circle are influenced by new trends. In order to analyze the processes of interpretation and understanding on the Internet, this article considers the concepts of the hermeneutic circle, as presented by Martin Heidegger and Hans-Georg Gadamer, to be the most applicable in the context of virtual reality. Digital hermeneutics in cyberspace faces challenges such as the elusive whole of the hermeneutic circle and its parts; user anonymity and the uncertainty of pre-understanding; and the blurring of tradition, prejudice, fusion of horizons, anticipation of perfection, and time dimension. In the conclusion, the author points to the heuristic nature of the hermeneutic circle for achieving understanding in electronic communication. Despite the dominant exchange of digital data and messages on the Internet and the proliferation of information

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technologies and digital databases, hermeneutics continues to study social interactions and assert the priority of humanistic values.

KEYWORDS
hermeneutic circle, digital hermeneutics, virtual reality, pre-understanding, fore-conception of completeness, interpretation, understanding, Internet users

Introduction

The 21st century, with global networks, Internet communications, digital space, information technologies, artificial intelligence (AI) development, etc., offers new approaches to reflecting upon our existence, bringing challenges that require modifying the ontological foundation of our being. In the contemporary era, many issues have arisen that are becoming increasingly relevant today, such as how to make sense of the world today, the deeper meanings of human activities, and self-realization in a virtual environment. This is because pre-understanding, as the main condition and fundamental platform of hermeneutic activity, is now not always based on historical traditions and cultural backgrounds. The aim of the article is to analyze the hermeneutic circle in virtual reality and reveal its methodological modification.

According to Christopher Johanson:

> Definitions of virtual worlds are inextricably and inevitably connected to that of virtual reality. Like a linguistic false friend, the terms are mistakenly exchanged even by those who know better. Here is what they share: a sense of being somewhere else for a time, that is, presence. They also share their virtuality, but virtual is itself a fraught term. In vernacular English, virtual is often opposed to the real, and residents of virtual worlds will often refer to their real life outside the virtual world. Such usage ignores the paradox of the very real life lived in the idealized space of the virtual. The more accurate and more technical definition contrasts concrete or actual reality with its virtual counterpart. (Johanson, 2016, p. 111)

Cyberspace is a place where we find ourselves time and again and spend much time every day. In these lines, Johanson shares a common definition and juxtaposes the environment of virtual reality with the real being here and now. However, the author considers that real life and self-actualization in virtual reality should be taken into consideration because this kind of online situation in the process also requires definite ontological characteristics. Moreover, new opportunities for human researchers—namely, computer-mediated writing, information search, advanced technologies for creating knowledge, and electronic databases—presuppose a critical attitude, self-control, and an ethical foundation for working on the Internet. Interpretation and analytical evaluation of information, referring to historical and cultural contexts, are provided by hermeneutic methodology, digital hermeneutics in the 21st century.

Traditionally, hermeneutics, as a methodology of the humanities and social sciences, has always focused on interpretative knowledge, revealing the possibilities and advantages of qualitative research for a deeper understanding of human beings and their social contexts. Classical hermeneutics, in its evolution, shifted from a psychologically oriented philological methodology for the interpretation of written texts by Friedrich Schleiermacher to the methodological foundation of the Humanities (Geisteswissenschaften) by Wilhelm Dilthey. In the 20th century, Heidegger justified the ontological turn of hermeneutic ideas, and in Gadamer's theory, it became philosophical hermeneutics. In Gadamer's theory, the aim is to justify the importance of pre-understanding and the influence of historically effected consciousness on the interpretation of readers or communicators. The philosopher focuses on subject matter and questions as essential hermeneutic categories; consequently, fusion of horizons (a metaphor of understanding) can occur when the reader analyzes their own pre-opinions and prejudices, being open-minded to other ways of thinking (Gadamer, 1960/2004). For Gadamer, a question about the text arises on its own when hermeneutic consciousness is ready to look beyond or out of the text. As Gadamer's hermeneutics states, genuine dialogue is a real co-existence and co-being together in a conversational process.

All types of digital objects bring new demands to the functioning of hermeneutics in cyberspace. In this regard, Jared Bielby and Matthew Kelly (2016) emphasize the significance of the hermeneutic approach in cyber communication and research inquiry in information science:

> The digital world creates the conditions in which a number of critical factors coalesce (power, equity, virtuality, ecology, truthfulness) that require us to look at how we evaluate, how we understand the relationship of technologies and values, communicative interaction, and more fundamental questions of sociological and philosophical inquiry. In all of these questions that focus on how we create, use, organize, interpret, disseminate and store information, we need to understand the qualities of interaction and the relationships between the various expressions—social, human and contemporary—of information culture. This type of inquiry brings to a more general focus these issues that cross disciplinary boundaries and, we believe, serves to reveal the human quality of information science, of library culture and of the challenges that are involved in defining the issues that impact our digital working and social existence. (Bielby & Kelly, 2016, pp. 11–12)

The authors' view underlines the importance of interpretative approaches to information technologies and social interactions in cyberspace. Dissemination actions, ethical aspects, and library culture are all challenges in our contemporary life; therefore, the authors write about the human quality of information science. Bielby and Kelly (2016) focus on the importance of historical, political, and private concerns; these factors impact individuals' lives and are intrinsically and dynamically interactive with the technological realities. No doubt their considerations relate to the hermeneutic aspects of the virtual communication process.

One of the first scholars to devote research to the issue of understanding in the new digital reality was Rafael Capurro (1996).

> A hermeneutics of information science should also embrace the construction and transmission of messages by particularly taking into account the question of the media, as has indeed been done since Plato's criticisms of writing. In our present situation we are looking particularly for the new hermeneutic questions which arise in an electronically networked world. (Capurro, 1996)

Capurro has developed his hermeneutic approach and presented a new theoretical framework. His theory of communication became known as "angeletics." As the concept of information is quite ambiguous, he has underlined the concept of message in order to concentrate on the aspect of transmission of meaning. He has tried to describe the structures and developments of various message phenomena in history. However, as the scholar points out, the Internet has an impact on all levels of society and on the self-understanding of human beings (Capurro, 2010). The question of understanding also becomes the foundational question; therefore, according to Capurro, communication is, at its core, a matter of hermeneutics (Capurro, 1996). It means that users' digitally determined experiences should be rethought existentially and justified in the framework of contemporary challenges, i.e., hermeneutics in the virtual realm. In his inquiry, Capurro emphasizes that digital hermeneutics should be regarded as the encounter between hermeneutics and digital technology, particularly the Internet. His theory is preferably oriented toward the Internet and the social significance of hermeneutic interpretation of knowledge, because digital hermeneutics studies digital codes more than the social construction of meanings.

Vasyukov and Shulga (2024) have brought attention to digital technologies and their adjustment to the ways we perceive virtual reality around us. The authors define digital hermeneutics as the general problematization of the supposed homology between (social) reality and its digital representations. Contemporary research in digital hermeneutics is not merely an interpretation of meanings but presents a theory of messages according to Capurro's point of view. The authors agree with Capurro's "angeletics," the new form of hermeneutics, which presupposes new types of interpretation and understanding, and leads to a change in the general traditional themes of hermeneutics. Vasyukov and Shulga define information exchange in a virtual environment as a vast multidimensional territory of digital systems interacting with each other. This new perception is bound to raise an ontological problem, what Vattimo calls a "weak ontology" (Vasyukov & Shulga, 2024, p. 117). The authors underline not only the ways of communication, but also objects produced by digital technologies, as the issues of ontology and cognition are becoming more and more relevant these days.

Research inquiries of Mallery et al. (1986) highlighted their position towards digital hermeneutics and hermeneutically oriented research in connection with AI. The scholars present a computational model of semantic perception and propose an approach to natural-language semantics. They connect lexical-interpretive semantics

with hermeneutics because it is based on the individual effective histories of language users (Mallery et al, 1986, p. 23). As we can see, the scholars concentrate their attention on the fundamental foundations of human existence, and they stress the importance of natural words as they are. Mallery et al. (1986) were among the first to reveal the correlation between hermeneutics and AI issues; their point of view is based on Hiedegger's theory of Dasein and his fundamental ontology of language. Having analyzed the work of scholars such as Dreyfus, Winograd, Flores, and Bateman, the authors elaborate on an innovative approach to AI investigations. Taking into consideration the specific intentional structure of communicative situations, they propose a theory where hermeneutics suggests an orientation in the design of AI systems with an understanding of social worlds.

Winograd and Flores (1987) introduced the categories "thrownness," "blindness," and "breakdown." "Thrownness" denotes that people are thrown into the situation of everyday life and rarely have time to reflect upon alternative courses of action. Some actions make people blind to the life stories of different people, leading to a kind of "breakdown," which can take the form of depression and irrational actions. Applying this to AI and successfully operating expert systems, Winograd and Flores recommend not being "thrown" into situations, where they can consequently "break down." Winograd and Flores (1987) add that the expert-system programmer introduces his own "blindness" or preconceptions into his program. The category of "thrownness", on the one hand, involves Internet users in a hermeneutic situation with possibilities for interpretation, while, on the other hand, it distances itself from the fusion of horizons, which is explained by Winograd and Flores with the category of "breakdown." The category of "blindness" can be used in pre-understanding if an expert-system programmer has the intention of developing his own projects from one to the next. The authors develop some additional fundamentals of human existence in digital environments, which are an extension of Heidegger's and Gadamer's hermeneutic categories, and new categories that reflect the very idea of a new reality.

Since that time, "digital hermeneutics" has acquired broad meanings and interpretations; therefore, the academic audience has provided new modes of research. Thus, in their analysis of scientific literature on the subject, Romele et al. (2020) introduce a variety of authors including van Zundert, Osterlund, Gerbaudo, van den Acker, etc. Van Zundert points out the particular nature of digital hermeneutics and the humanistic influence on the digital world. For Osterlund, digital hermeneutics focuses more on the details of specific system technologies. Gerbaudo proposes a "data hermeneutics," and van den Acker refers to digital hermeneutics as "the encounter of hermeneutics and web technology," which is also defined by the scholar as a link between human interpretation and the web application of what has been interpreted (as cited in Romele et al., 2020). On the one hand, the authors try to preserve the qualitative and humanistic characteristics of hermeneutics, while on the other hand, in their research, the technological aspect is considered of primary importance. "Data hermeneutics" cannot represent hermeneutic ideas due to its limited connection with historically affected consciousness, fusion of horizons, and other hermeneutic categories. Considering different views, Romele et al. (2020)

suggest their position on participating in debates on digital hermeneutics and its new perspectives in the information era. First, the authors take apart ontology from the methodology of digital hermeneutics by stressing the importance of Heidegger's existential hermeneutics; second, they highlight the difference between data-oriented and text-oriented types of digital hermeneutics; third, according to the objects under use and investigation, they distinguish quantitative and qualitative methods within digital hermeneutics. Quantitative aspects engage with all sorts of databases and objects in digital forms, but qualitative methods deal with social experience, narratives, life stories, and knowledge creation of Internet communities. Romele et al. (2020) take a multidisciplinary approach to elucidate specific features on both sides: machine interpretation opens new horizons for classical hermeneutics. Meanwhile, interpretational machines implicitly represent a fundamental shift in consciousness.

The quantitative aspect of digital hermeneutics is discussed in Volodin's inquiry (2025), which is applied to the methodology of historical research. The author considers the process of information transition from a historical source to formalized data through digital hermeneutics emphasizing that this process is not just a technical operation, but a deeply methodological act of abstraction. Though Volodin underlines the indispensable role of the historian-researcher in the era of AI, nevertheless he concentrates his attention on algorithms and digital tools such as DBMS, GIS, NLP, and RAG systems (Volodin, 2025, pp. 98–99). We argue and continue to rely on qualitative methods as the predominant approach in 21st-century hermeneutics. In contrast to data digital hermeneutics, social digital hermeneutics has a specific orientation towards social actions with social meanings and psychological states. Our subjective experiences should impact activities in cyberspace; therefore, our position highlights the social character of digital hermeneutics and strengthens the role of the inner world in internet interactions.

Under the term "digital hermeneutics," Romele (2020) presupposes three aspects: one of them is based on Ricoeur's concept of "narrative identity," which is built on the paradigm of the printed book. Second, although digital hermeneutics is universal, it has its weaknesses because it neglects the contexts of production and reception. He then introduces the term "digital trace," which is not an accurate expression of human inner life but is the result of complex digital processing and the interpretation processes of multimedia. In his investigation of digital hermeneutics, Romele has undertaken a sort of "ontological turn," taking into account our dealings with interpretational machines. The author introduces the concept of "emagination," arguing that human schematizations are always externalized in technologies, and human imagination finds an analogue in the digital dynamics of articulation between databases and algorithms. Romele (2020) argues that there are differences between the emagination of humans and interpretational machines; therefore, both words and digital technologies participate in the framing of our worldviews or world pictures (Romele, 2020).

As for scientific literature, there are various points of view on the contemporary situation in the field. Digital humanities researchers divide hermeneutics in a virtual environment into two kinds: data hermeneutics and text-oriented hermeneutics with

qualitative methods. In this regard, we can see a modified hermeneutic methodology: dialogue is very often replaced by the transmission of messages intentionality, and interpretation is replaced by thrownness with a possible outcome in breakdown, the scholarly attention shifts from historically effected consciousness to information culture. New types of interpretation are applied to data and technologies, which highlight comprehension instead of understanding. Recent researchers intend to digitalize imagination in the environment of machines, signals, numerals, etc.

Can we fully recognize revolutionary changes in the complex, computer-mediated comprehension of texts and human beings' inner worlds? To some extent, interpretation is accomplished in rapid progression, but in this case, it does not possess human feelings; it can only be referred to instrumental practice. Nevertheless, scientific literature today generates various ideas and concepts. Among them, we can find engaging and heuristic perspectives enhancing the human presence in a digitalized world.

Theoretical Framework and Methodology

For understanding texts, speech communication, human behavior, cultural phenomena and other meaningful objects in hermeneutic methodology, the hermeneutic circle is used. The basic idea of the hermeneutic circle is interpretational activity, moving from the text's constituent parts to the whole and then back to its parts in order to extend the hypotheses and preliminary expectations. The relations of each part to the whole text and vice versa allow the interpreter to comprehend the deeper meaning and significance of the text. The very idea of the hermeneutic circle originated in Ancient Greece with classical rhetoric, according to which our assumptions are modified in the process of understanding and corrected by new knowledge. Gadamer (1960/2004) analyzes the circular procedure of interpretation in the history of philosophy and refers to Schleiermacher's contribution, which highlighted the psychological aspect and methodological significance of the hermeneutic circle. On the final stage of the cycling movement, Schleiermacher added the original idea of divination into the author's inner world and his state of mind as an act of comprehension. Gadamer also underlines historical contexts in Dilthey's theory of understanding, based on the historical essence of individual experience itself (Gadamer, 1960/2004).

In Heidegger's theory, attention is drawn to pre-understanding as an essential condition of discerning the text's idea. The so-called fore-structure of understanding not only clarifies the subject matter but also provides insight into historical background, traditions, and personal views. Gadamer, in his book *Truth and Method*, underlines Heidegger's contribution and emphasizes projects and initial meaning in the reader's mind before they completely finish the dialogue with the text:

> A person who is trying to understand a text is always projecting. He projects a meaning for the text as a whole as soon as some initial meaning emerges in the text. Again, the initial meaning emerges only because he is reading the text with particular expectations in regard to a certain meaning. Working out

> this fore-projection, which is constantly revized in terms of what emerges as he penetrates into the meaning, is understanding what is there. This description is, of course, a rough abbreviation of the whole. The process that Heidegger describes is that every revision of the fore-projection is capable of projecting before itself a new projection of meaning; rival projects can emerge side by side until it becomes clearer what the unity of meaning is; interpretation begins with fore-conceptions that are replaced by more suitable ones. This constant process of new projection constitutes the movement of understanding and interpretation. (Gadamer, 1960/2004, p. 269)

Heidegger shifted the central concern from hermeneutic techniques and interpretive art to ontological foundations and existential hermeneutics. He based his new approach to the hermeneutic circle on the idea that it is not only a cyclical movement among parts and wholes. Rather, it is primarily a movement from one project to another and from one preconception to the next, correcting expectations each time. Adopting and developing Heidegger's approach, Gadamer clarifies the importance and heuristic value of prejudice (Vorurteil). Prejudice constitutes the historical foundation of an individual's being, and its legitimacy is proven by authority and tradition. In a critical framework of Schleiermacher's viewpoint Gadamer considers the hermeneutic circle as having neither a subjective nor objective nature but consisting of two interacting kinds of movement: tradition and interpretation. He writes:

> The anticipation of meaning that governs our understanding of a text is not an act of subjectivity but proceeds from the commonality that binds us to the tradition. But this commonality is constantly being formed in our relation to tradition. Tradition is not simply a permanent precondition; rather, we produce it ourselves inasmuch as we understand and participate in the evolution of tradition, and hence further determine it ourselves. Thus, the circle of understanding is not a "methodological" circle but describes an element of the ontological structure of understanding. The circle, which is fundamental to all understanding, has a further hermeneutic implication which I call the "fore-conception of completeness." (Gadamer, 1960/2004, pp. 292–293)

Then, Gadamer, stressing the importance of Heidegger's ontological turn, points out the essence of temporal distance and question, the constituent elements of the ontologically explained hermeneutic circle. Historical understanding presupposes a time difference and a certain questioning horizon, which Gadamer defines as "the Principle of History Effect." Questionable prejudices should be asked from that historical horizon in order to enter the hermeneutic circle (Gadamer, 1960/2004). Gadamer strengthened the ontological status of the hermeneutic circle and suggested further perspectives for hermeneutic inquiry. Such an approach has ontological premises and epistemological implications, according to which the interpreter or interlocutors can guide the understanding process, focusing more on their own expectations and background. The hermeneutic circle, in Heidegger's and Gadamer's variants, proposes an evolutionary perspective for hermeneutic methodology.

In the era of the Internet and information technologies, the academic audience asks how great changes in our lives are reflected in hermeneutic methodology, and whether the hermeneutic circle can still lead interpretation to facilitate understanding. However, most of the debates around the hermeneutic circle are concerned with the predominance of digital data, the peculiarities of online communication, and encoding and decoding with technics. What is a hermeneutic circle today, and what modifications has it already acquired? In this investigation, the hermeneutic circle is represented both as an object of research and a methodological approach; the inquiry is also accomplished on the basis of a comparative method, comparing the traditional hermeneutic circle and its functioning in virtual reality.

Statement of the Problem and Discussion: "Fusion" or "Linking"

What is a "whole" on the Internet? This question requires investigation, as cyberspace lacks the limitations and boundaries found in printed texts or a collection of works by the same author. Consequently, it is impossible to encompass the whole and therefore, its parts. For instance, an online conversation may have no ending, and a complete digital text can have a very obscure shape and form. To clarify meaning, Internet users may not engage in a circular interpretive procedure but move from one message to another, trying to grasp ideas from digital speech fragments. Capurro writes:

> Today this circle is characterized by the hybridization of the digital at all levels of human existence and self-appraisal. Societies in the twenty-first century are looking for the "right way" to get into the digital *network*. This means that the *hermeneutic circle*, as a key metaphor of philosophic hermeneutics, should be reinterpreted as a *hermeneutic network*.
>
> And this leads to a change of another core idea of hermeneutics, namely the Gadamerian "fusion of horizons" (Gadamer 1975, p. 284). It is not only a "fusion" but a "linking" that characterizes the relationship between the messengers of the digital network that need to call each other through what system theory calls the "meaning offer." (Capurro, 2010)

"Fusion of horizons" in classical hermeneutics implies a qualitative approach to understanding the meaning, but "linking" shifts the idea of understanding towards a more quantitative approach based on the interpretation of "meaning offer" rather than the development of projects and the fore-conception of completeness. Capurro (2010) stresses the tremendous modifications of the hermeneutic circle in the field of digital hermeneutics research. Furthermore, Capurro suggests a new theoretical framework for defining the hermeneutic circle, presenting it as an angeletic circle or hermeneutic network. This framework encompasses a sender, a messenger, messages, and a receiver (Kelly & Bielby, 2016). According to Capurro (2010), in digital hermeneutics, the angeletic circle is considered the main method of understanding on the Internet. Interpreters in digital hermeneutics are unsure of the whole and its parts; the accumulation of messages often lacks logical sequence, as meaning is lost

in time. Online discourse communities can interrupt the communication process, time and again returning to the conversation and continuing to discuss the subject matter.

Nonetheless, classical hermeneutics can still propose a heuristic idea for interpreting a "whole" on the Internet. It is closely connected to the person's intentions for entering into virtual actions, such as sharing opinions or searching for more information on the web. Then, this person or virtual mask not only looks for data and numerals, but also for interpreted information that has been evaluated by experts or professionals, because this information can reflect the mindset and energy of the source. Even data systems or cloud services need to be understood; therefore, in some cases "linking" can return to "fusion" but this time in different circumstances, angeletics can include "fusion of horizons" in future as the result of rethinking the communication of messages.

Online Interpersonal Communication

Interpersonal communication on the Internet presupposes specific ontological characteristics and hermeneutic interpretation. In virtual interpersonal communication, it is possible to meet the expectations, but it cannot be hermeneutically estimated, as there is no evidence of sincere and true mind participation in the dialogue. But the conversation does not unveil historical horizons with national customs, heritage, and traditions, or a national world outlook in general, so that the interlocutors cannot place themselves in the other's position; they cannot evaluate the other person's nature. The horizon of anticipation does not give them the opportunity to go beyond their false prejudices, to look at the subject matter from another angle of vision.

The circle consists of the whole and its parts and develops the process of extraction of information and obtaining meaning from digital resources or chat groups in internet communities. It has also been transformed by the actions of using techniques in the digital network, no longer a dialectic unity because anticipation in the hermeneutic sense of the word does not lead to understanding of ourselves, but to obtaining more information and knowledge (Boldonova, 2024, p. 5). If Gadamer's genuine dialogue is based on the fusion of horizons in understanding, in virtual conversations, comprehension is very often replaced by the amount of acquired information.

Fore-projection development within the circular structure of interrupted dialogues or fragmented communication is a challenging task, as the fusion of horizons is not always achieved, and communication can often be in vain. This is the relevant hermeneutic problem of the 21st century. People have forgotten how to communicate effectively with one another. Instead of Gadamer's "genuine conversation," there is often trivial chatting with short and frequently meaningless replicas and striving for consensus in digital hermeneutics becomes optional. Can we judge the shared meaning in the fusion of horizons? In the age of social media, in the multifaceted, global, and unpredictable Internet, achieving understanding becomes ephemeral and elusive. In virtual networks, initial meaning projection is a tough undertaking because of plenty of other rival messages and different pre-judgments or prejudices with positive and negative values. It goes without saying that the personality of a human being on

the Internet, especially the "self" aspect, the problem of identity and self-realization, offers different perspectives and insights. Chernavin (2021) considers a person as the human creator and the subject of social existence as the main characteristic and source of development of the digital society. Being the main subject of all actions and processes, the human being pursues their identity and human features. Although a virtual environment poses a challenge to representing a personality, nevertheless, communicators challenge only the webs, messages and knowledge. Barbara Morsello (2016) presents cross-research experiences and tries to answer the question of what technologies of the self can help to enhance digital subjectivity, to improve the relationship between people and the self. In her inquiry, she argues that the numerous areas of daily digitized life extend the meaning of what is human, bringing more risks and opportunities to solve problems in many fields such as medicine, communication, mobility, and new media, etc. (Morsello, 2016). According to the scholar's opinion, digital society hides the possibilities for human development: subjectivity, identity and self are among them. Subjectivity vs digitalization, identity vs adaptability, self vs anonymity—all these justify the idea that the further progress goes, the stronger the resistance of humanity is.

As the Internet possesses unlimited space for communication, complicated cultural contexts of users' openness to the meaning of other individuals are much more important, and it can guide interpretation. The same point of view is expressed by Vasyukov and Shulga (2024). They consider that the ways of understanding are under the influence of network structures that constrain and filter the data. The authors emphasize that digital hermeneutics brings great change to the range of traditional hermeneutic themes. In this regard, they highlight another area of research—self-understanding and understanding of the world (Vasyukov & Shulga, 2024). Vasyukov and Shulga point out the complexity of hermeneutic methodology in the 21st century. It is worth agreeing with the scholars that digital hermeneutics goes beyond the classical task of philosophical hermeneutics and reveals its own hidden dimension in the form of angeletics; moreover, digital hermeneutics implies multidisciplinary approaches and envelops a great number of different issues.

Reading Electronic Texts

It is generally assumed that now that we are used to reading texts in electronic variants, it is more comfortable to get them from online resources; e-texts are easy to store and are always available. These circumstances cause a transformation of textual communication, computer-mediated reading practice and digital forms of literature functioning on the Internet, leading to the loss of tradition.

> There are certain costs associated with this form of creative practice—among them that cycles of technological development and obsolescence are such that many works produced using "cutting-edge" technologies or experimental methods are fragile from a preservation standpoint. Many works of e-lit have already been lost to changes in the underlying codebase of existing platforms

> with updates that render obsolete works produced in earlier versions of software, to the complete loss of platforms, to the exigencies of storage media, and like problems. Works that are published on the Web, for example, are not replicated in the same way as printed artefacts. If the original website is hacked or neglected, the entire work can be destroyed. Other strains on the practice of digital writing include the fact that, outside of academia, there are few paths to economic success from the production of e-lit. Although there is now some market for apps developed for tablets and mobile devices, few authors have actually made a living solely through the production of works of e-lit. (Rettberg, 2016, p. 132)

Rettberg (2016) emphasizes one of the most essential disadvantages of electronic literature, when virtual texts depend on information technologies and Internet platforms. The author discusses an ontological problem of verbal existence and preserving what is written. Besides that, this implies a hermeneutic issue. The objects of interpretation and understanding are changing under the influence of programs and applications such as Large Language Model (LLM), Function Block Diagram (FBD), or ChatGPT[1]. Tradition, as an integral part of historical hermeneutical consciousness, does not affect the reflection process of Internet users, because the text itself can disappear, and digital space does not guarantee the appropriate circumstances for tradition development.

Therefore, the hermeneutic circle does not encompass the understanding process in its previous form and classic status. Interpretating and translating digital texts on different platforms has become popular in recent times. On the surface, it appears more convenient for Internet users, as it only takes a few seconds to generate a pre-made translation or interpretation of a text. For instance, the ChatGPT program provides reliable and understandable interpretations of electronic texts at different levels of complexity. However, an analysis from a hermeneutic perspective reveals that programs like ChatGPT cannot replace human intelligence and professional expertise. The interpretation of a text requires additional interpretation and oversight by an individual. This leads to a hermeneutic problem arising from the discrepancy between the machine and human mind. This discrepancy is evident in the difference between machine interpretation and human comprehension, which is influenced by prejudices, projects, and preconceptions of completeness.

Van de Ven and van Nuenen (2022) explain the circular procedure of interpretation by combining close reading, as the part, and distant reading, as the whole of the hermeneutic circle. In Digital Hermeneutics university classes, students are tasked with analyzing Reddit[2] messages based on their topics and specific language. The goal is to study how analytical methods can be used to explore data and formulate research questions. The students using computational methods to discover larger patterns and themes across posts conclude that they need close reading to get some

[1] A generative AI chatbot developed by OpenAI, an American AI public benefit corporation headquartered in San Francisco, USA.

[2] Reddit is a proprietary American social news website, news aggregator, forum and social media platform. It is operated by Reddit, Inc., based in San Francisco, USA. https://www.reddit.com

more details and to expand their knowledge by searching for additional information on other platforms (van de Ven & van Nuenen, 2022). In this instance, the process of interpretation takes place in cyberspace, and the interactive relationship between the two types of reading reminds us of the circular nature of the understanding process. This practically oriented case from education and the involvement of university students illustrates the variety of possibilities for interpreting the hermeneutic circle itself. Moving within the hermeneutic circle between close reading and distant reading in this example can be regarded not only as an illustration of the circle's part in romantic hermeneutics, but also as elements of Gadamer's variant of the hermeneutic circle. Close reading leads to a fore-conception of completeness, which is further realized in distant reading, but nobody knows whether hermeneutic fusion of horizons can be achieved or not.

The projects *Pushkin <Tsifrovoi>* [Pushkin Digital][3], *Tolstoy Digital*[4], *Digital Dostoevsky*[5], *Dickens in the Digital Age* (Curry, 2021), and *The Digital Yoknapatawpha Project*[6] about W. Faulkner's books, etc., illustrate the importance of electronic texts and the level of availability of classical literature online. The Internet environment reflects the attention of the younger generation; reading digitalized literary works presents an advantage in the situation. Among the factors influencing the perception of classical literature in the digital era, Valeeva (2025) highlights the accessibility and convenience of digital formats, the interactivity and visualization of content, personalized recommendations, networking, and the adaptation of classical works. However, when comparing textual communication with printed literature, the conversation with the e-text does not unveil historical horizons, national customs, heritage, traditions, or a national world outlook in general. The horizon of anticipation does not give the opportunity to go beyond their false prejudices, to look at the subject matter from another angle of vision. The hermeneutic circle changes its depth from the endless rounding development of the interpretational process to a simple movement within a circle.

Pre-Understanding and the Problem of Intentionality

If Heidegger discusses the existential foundation of the hermeneutic circle, which is based on historically determined structures of prior understanding and achieved through anticipation and reflection on prejudices, Winograd (1980) suggests a set of stored schemas as an alternative pre-understanding background for digital hermeneutics. Computer implementation provides basic platforms in digital form instead of historically affected consciousness. The background itself is closely connected to the digital realm. Although there are schemas instead of narrative forms, personal life stories, and references to literary and cultural content, hermeneutic inquiries today should consider these new objects of interpretation.

[3] https://pushkin.digital

[4] https://tolstoy.ru/projects/tolstoy-digital/

[5] https://digitaldostoevsky.com

[6] https://faulkner.iath.virginia.edu

In fact, according to the newly introduced discipline "Angeletics" the hermeneutic circle can now be replaced by a hermeneutic network, as in the cyberworld, the main content is produced in messages and codes. As we understand the Capurrian framework, the key idea is to comprehend how "a message produces changes in both the emissary and the receptor. According to Capurro, a message has two dimensions: one is information, and the other is intentionality" (Mallery et al., 1986). That intentionality is the very subject of hermeneutic reflection on the Internet; it proves human engagement in the digital space. That is why Capurro's variant of the hermeneutic circle in a digital environment combines the two approaches, stressing the significance of hermeneutic understanding of subjectivity behind information and computational devices. In comparison with printed text reading, tradition in virtual reality is an inconstant variable, not a history. Instead, traditions of technological development and upgrading are predominant in these cases. The existential foundations of the hermeneutic circle are changing their characteristics, as the Internet offers modifications of tradition, pre-assumptions, and prejudices; all these elements of historically effected consciousness are becoming unstable.

A hermeneutic vision can be found in the research of Lucas D. Introna (1993), who writes about pre-understanding in terms of possibilities to enlarge computational tools and digital methods. In this regard, he argues that prejudices are present on the Internet, because they reflect intentions, decision-making processes, actions, and many other phenomena. Introna connects hermeneutics to information theory, applying the interpretation process to understanding digital data, where meaningful information is the result of the interest of both interlocutors (Introna, 1993). Pre-understanding, as the prerequisite condition of the hermeneutic circle, is revealed in Introna's view through digital perspectives, electronic networks, and primarily the technical characteristics of information. When an individual's pre-judgments are engaged with technological processes to express interpretation, it breaks the tradition of human historicity, but this idea realizes the contemporary concept of hybridization of digital and non-digital ontology. Interpreters of the digital age think less about their own prejudices because of the tremendous mass of information and the variety of ideological clichés.

The desire to understand online interlocutors is embedded in several conditions of understanding; among them are commonality, subject matter, and temporal distance. In cyberspace, interconnected subjectivity may not always be achieved. The real faces behind avatars and true-to-life stories can be illusions. Due to the identification problem, commonality and the fusion of horizons may not be shared in these cases. Printed letters are powerful tools compared to virtual writing and can be more reliable, serving as one of the arguments for true interpretation. The same content in subject matter can be destroyed by other messages and streams of information from different channels and sources, shifting the horizon of questioning due to the uncertainty of hermeneutic situations and understanding conditions.

Virtual reality has a significant impact on our perception of time. For interpreters, it is difficult to engage with tradition, as they rarely reflect on past events and historical contexts. This is because the Internet creates a parallel time dimension that is separate

from the linear timeline of traditional hermeneutics. Digital hermeneutics, on the other hand, deals with non-linear time, which is more suitable for virtual reality. As a result, users' or avatars' attitudes towards the past and future are changing in virtual spaces. Today, the hermeneutic foundation on the Internet is referred to as simulations in cyberspace. Simultaneous or parallel time dimensions, both in the digital environment and in reality, create the hermeneutic circle functioning with double characteristics. Instead of the unity of tradition and interpretation in the hermeneutic circle, there can be information in the memory content, the interpretation of oneself within the digital time model and simultaneously their physical existence in real astronomical time. Therefore, prejudices and fore-conceptions do exist in users' minds. However, they do not lead to complete understanding or interpretation.

Conclusion

The psychological turn of Schleiermacher, the historical and methodological turn of Dilthey, the ontological turn of Heidegger, and the philosophical turn of Gadamer—all of these have contributed to hermeneutics in their own way and have helped to elucidate its essential values and conceptual essence for the humanities. In the world of digital communication, it is not the whole structure or its parts that are central, but rather the category of projects as conceived by Heidegger that takes on special significance in cyberspace. This is because in this new environment, the focus is on the individual's experience and understanding of the world.

Fore-conception of completeness in Gadamer's variant of the hermeneutic circle is also still relevant in the digital age; fore-judgements and projecting of meanings are the real motive power in interpretation, whereas other hermeneutic categories are not realized in the proper sense. The virtual world poses new challenges for the functioning of the hermeneutic circle, as there are many new objects for hermeneutic analysis, such as schemas, digital databases, social media platforms, etc. Nevertheless, human intentionality behind codes and messages is still the source not only of social information but also of social meanings; consequently, it is worthy of a hermeneutic approach.

The so-called angeletic circle of the hermeneutic network enlarges the scope of interactions and the number of participants, though narrowing the depth of subject matter and comprehension of meaning. Despite modification of its parts, in a new ontological context, the hermeneutic circle encloses the role of historical tradition and the essence of pre-conceptions in all types of activities on the Internet. The hermeneutic circle, as a qualitative method, guides Internet users towards digital humanism, deeper meanings, and emotional disclosure, reminding them of historically effected consciousness. It helps us solve the problem of self-identification and self-realization in an era of virtual anonymity, and it emphasizes the significance of social experience for successful communication.

In the era of digital technology and AI, the hermeneutic circle remains the basic foundation of understanding. It is not the messages that are produced, but the individuals who create them, that determine the content and meaning. In the

information environment, humans cannot survive in virtual reality without reflecting on universal, cultural, historical, social, and ethnic values. Moreover, the Internet has introduced a new system of values, but cyberethics alone is not enough to provide a comprehensive framework for ethical behavior in the virtual world. Here, hermeneutic principles offer assistance by reminding people of the 21st-century's worldview and the value foundations of society. Digital hermeneutics today faces challenges from advanced technologies, further development of hermeneutic categories, and the hermeneutic circle itself, which is generally assumed as a fundamental philosophical issue, requiring in-depth research.

References

Bielby, J., & Kelly, M. (2016). Information cultures in the digital age: A Festschrift in honor of Rafael Capurro. In M. Kelly & J. Bielby (Eds.), *Information cultures in the digital age* (pp. 1–28). Springer. https://doi.org/10.1007/978-3-658-14681-8_1

Boldonova, I. (2024). Hermeneutics of interpersonal communication on the Internet. *Scientific Discussion*, *86*, 3–6. https://doi.org/10.5281/zenodo.10793007

Capurro, R. (1996). On the genealogy of information. In K. Kornwachs & K. Jacoby (Eds.), *Information. New questions to a multidisciplinary concept* (pp. 259–270). Akademie Verlag. https://doi.org/10.1006/iilr.2000.0137

Capurro, R. (2010). Digital hermeneutics: An outline. *AI & Society*, *25*(1), 35–42. https://doi.org/10.1007/s00146-009-0255-9

Chernavin, Yu. A. (2021). Tsifrovoe obshchestvo: Teoreticheskie kontury skladyvaiushcheisia paradigmy [Digital society: Theoretical outlines of the emerging paradigm]. *Digital Sociology*, *4*(2), 4–12. https://doi.org/10.26425/2658-347X-2021-4-2-4-12

Curry, E. (2021, May 6). *Dickens in the digital age*. Victoria and Albert Museum. https://www.vam.ac.uk/blog/museum-life/dickens-in-the-digital-age

Gadamer, H.-G. (2004). *Truth and method* (2nd ed., rev.; J. Weinsheimer & D. G. Marshall, Trans.). Continuum. (Originally published in German 1960)

Introna, L. D. (1993). Information: A hermeneutic perspective. In E. A. Whitley (Ed.), *Proceedings of the First European Conference on Information Systems, ECIS 1993, Henley-on-Thames, United Kingdom, March 29–30, 1993* (pp. 171–179). Operational Research Society.

Johanson, C. (2016). Making virtual worlds. In S. Schreibman, R. Siemens, & J. Unsworth (Eds.), *A new companion to digital humanities* (pp. 110–126). John Wiley. https://doi.org/10.1002/9781118680605.ch8

Mallery, J. C., Hurwitz, R., & Duffy, G. (1986). *Hermeneutics: From textual explication to computer understanding?* [AI Memo No. 871]. Massachusetts Institute of Technology. https://dl.acm.org/doi/book/10.5555/888759

Morsello, B. (2016). Digitalization of life—How technology redefine the self in the global context. *EASST Review*, 35(4), 94–97.

Rettberg, S. (2016). Electronic literature as digital humanities. In S. Schreibman, R. Siemens, & J. Unsworth (Eds.), *A new companion to digital humanities* (pp. 127–136). John Wiley. https://doi.org/10.1002/9781118680605.ch9

Romele, A. (2020). Digital hermeneutics as hermeneutics of the self. *Discipline Filosofiche*, *30*(2), 187–203. https://doi.org/10.1400/280037

Romele, A., Severo M., & Furia, P. (2020). Digital hermeneutics: From interpreting with machines to interpretational machines. *AI & Society*, *35*(1), 73–86. https://doi.org/10.1007/s00146-018-0856-2

Valeeva, G. V. (2025). Russkaia klassicheskaia literatura v epokhu tsifrovizatsii: Innovatsionnye formaty transliatsii i osobennosti vospriiatiia [Russian classical literature in the era of digitalization: Innovative transmission formats and peculiarities of perception]. *Gumanitarnye Vedomosti TGPU im. L. N. Tolstogo*, *4*, 49–59. https://doi.org/10.22405/2304-4772-2025-4-49-59

van de Ven, I., & van Nuenen, T. (2022). Digital hermeneutics: Scaled readings of online depression discourses. *Medical Humanities*, *48*(3), 335–346. https://doi.org/10.1136/medhum-2020-012104

Vasyukov, V. L., & Shulga, E. N. (2024). Tsifrovaia ontologiia i tsifrovaia germenevtika [Digital ontology and digital hermeneutics]. *Voprosy filosofii*, *4*, 116–125. https://doi.org/10.21146/0042-8744-2024-4-116-125

Volodin, A. Yu. (2025). Tsifrovaia germenevtika istoricheskogo istochnika: Formalizatsiia kak tolkovanie [Digital hermeneutics of historical source: Formalization as interpretation]. *Perm University Herald. History*, *2*, 87–100. https://doi.org/10.17072/2219-3111-2025-2-87-100

Winograd, T. (1980). What does it mean to understand natural language? *Cognitive Science*, *4*(3), 209–241. https://doi.org/10.1207/s15516709cog0403_1

Winograd, T., & Flores, F. (1987). On understanding computers and cognition: A new foundation for design [A response to the reviews]. *Artificial Intelligence*, *31*(2), 250–261. https://doi.org/10.1016/0004-3702(87)90026-9