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Creativity, Artificial Intelligence and (Neo-)Romantic Implicit Religion

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Abstract

Background: The relationship between creativity and generative artificial intelligence (AI) is often reduced to whether a technical system can be creative or how it will transform creative industries. The study is based on the concept of implicit religion, which applies to the relationship between generative artificial intelligence and humans.

Objective: The study identifies two narratives that can be used to explain the relationship between humans and technology in the theoretical field of implicit religion: (Neo-)Romanticism and Enlightenment. (Neo-)Romanticism, emphasising the value of creativity in the process rather than the outcome, can be seen as a form of implicit religion. In contrast, the Enlightenment discourse focuses on traditional AI literacy themes such as understanding the principles of use, knowledge of tools, or the ability to evaluate individual applications in social and ethical practice critically.

Methods: The study uniquely combines small-scale research, which involves in-depth qualitative analysis of a small group of participants, in this case, college students, who provide reflective data from their classroom experiences and creative journals. This is complemented by a theoretical analysis of the phenomenon of implicit religion as it relates to technology. This approach allows a comprehensive exploration of the topic.

Results: The results of the qualitative research show that among the students there is a part of those inclined to the (Neo-)Romantic conception of the relationship between humans and artificial intelligence. This often manifests in rejecting technology, emphasising traditional art, creativity, and the educational process. The results show that reflecting this perspective, strongly connected to emotions and values, in the education process and in complementing conventional AI literacy concepts is necessary.

Conclusion: The study shows that transformation of the economy and society is not just a technical or economic phenomenon but will require a more profound philosophical and cultural reflection that will allow us to leave the binary oppositional relationship between Enlightenment and (Neo-)Romanticism.

Index Terms

Creativity; Generative artificial intelligence; AI; Implicit religion; Small-scale research; College students; Sociology.

1 INTRODUCTION

One of the significant topics strongly reflected in the literature about generative artificial intelligence (AI) is the relationship of generative AI to creativity (Lee, 2022; Magni et al., 2024; Wu et al., 2021). ChatGPT enables the creation of short stories, Midjourney paintings and Suno music (Civit et al., 2024; Cobb, 2023; Helmanto & Dayana, 2024; Johansson, 2023; Mukminin et al., 2024).

Thus, we are faced with the question of how to work with the phenomenon of creativity and how to link it to the topic of artificial intelligence (Azzam, 2009; Lee, 2022; Schober, 2022). The conceptualisation of creativity as such is ambiguous (Al-Ababneh, 2020; Jefferson & Anderson, 2017). Some authors distinguish "little-c versus big-c creativity" (Simonton, 2017), while others focus on emphasising that statistical concepts using generative artificial intelligence to creativity (Goldberg, 2018) per se cannot lead to, or seek to find classes of problems in which creativity is somehow specific (Franceschelli & Musolesi, 2024).

In our study, we attempt to leave the phenomenon of creativity without a clear definition for two reasons. Firstly, we operate with learners' perceptions of creativity, which we define as their subjective understanding and lived experiences of creativity shaped by their narratives and stories. These perceptions may influence their responses. Secondly, given the focus of our study, defining creativity would mean redefining the field for reactions of a certain kind (Špidlík & Rupnik, 2015), which would reduce the interpretative space of the study. For us, creativity will be related to the innovative ability to actively reinterpret the world or be a part of it in a new way (Feyerabend, 2004). Creativity is a complex phenomenon that transcends the boundaries of rationality, emotionality, individual experience, tradition and culture (Damasio, 2018; Johnson, 2017) – it is essentially synthesising and the emergence of novelty.

We have divided this article into two parts. In the first one, we present small-scale research highlighting some aspects of the reflection on creativity and artificial intelligence among university students. We draw on responses from sections of learners who frame their responses in a discursive field that is not commonly reflected upon. This small-scale research has an illustrative rather than a representative purpose, serving to justify our research perspective. However, it would require a more significant number of respondents and a more robust methodology for a more detailed analysis.

In the second part, we will offer an interpretation of the small-scale research in the context of a specific perception of artificial intelligence by considering it a (Neo-)Romantic reflection of an implicit religion with an object of reverence in technology (Heidegger, 1967b; Latzer, 2022). The study shows that technology can fold as a form of implicit religion tending towards a (Neo-)Romanticism understood as a demarcation against a one-sided rationalist discourse (Baker et al., 2002; Damasio, 1994; Zouhar, 2016). One form of this social effect of technology can be related to specific art forms. It will be crucial for our research to show that the orientation of modern thought towards rationality in education, which was crucial for the 20th century (Bělohradský, 2021; Latour, 1993), is insufficient for understanding artificial intelligence and its interaction with humans.

By artificial intelligence, we mean a data structure that performs probabilistic categorisation of elements from a dataset using machine learning, manifested explicitly by generative output – image, text, sound – using an artificial neural network.

Under implicit religion, we will understand the phenomena of secular life that have a sacred character. Implicit religion is not institutionalised but refers to the fact that people experience many phenomena of secular life in an essentially religious way – whether they relate to them through values, actions, metaphors or rituals (Bailey, 2010).[1] This study builds on Latzer's remarks (2022), who pointed out that technology has taken on many of the "divine" characteristics that relate to the conflation of Christian culture with a particular folk superstition, a form of spirituality that was typical of the literary tradition of Romanticism, often thematised in world literature by Goethe and his *Faust* and in Czech literature by, for example, Erben and his poetry collection *Kytice*.

2 SMALL-SCALE RESEARCH AMONG STUDENTS

The aim of small-scale research (Layder, 2012; Saidur et al., 2011) is not to create a rigid, rigorous body of knowledge with a fixed methodology but to map out a particular social-epistemic field in which we operate. Thinking about the relationship between creativity and AI can be done from multiple perspectives. The research probes represent only some illustrative insights that can be subsequently analysed. Both research excursions anchor the following theoretical considerations in reality rather than a representative sample. Even in their possible

[1] Luckmann (1967) spoke of an invisible religion that is determinant for a so-called secularized society. For example, attending religious services is replaced by going to gyms. Even gyms have a community, values, a prescribed diet, exercise days, a trainer – a religious professional. There has been a replacement of going to church with going to the gym.

non-representationality, they point to the presence of a particular way of understanding reality, though, of course, we do not know how strong. This understanding foregrounds inevitable Romantic concept instead of the expected rationalist conception of Enlightenment.

Our perspective – which we believe will also allow an original interpretation of this phenomenon – reflects on our experiences with students in two elective courses taught at a Czech university. Both courses are specific because they do not have learners from one faculty or year. Thus, they glimpse a broader group of respondents, albeit – given the small and poorly controlled sample – with an unknown degree of representativeness. However, our study is not a quantitative but a qualitative insight. We seek to show that the discourse of a rational approach to AI education (Eguchi et al., 2021; Lin et al., 2021; Mertala et al., 2022) has broken down and is not sustainable unless re-reflected.

We conducted our first small survey of students in the university's core course in the autumn semester of 2024. The number of responses we received via Mentimeter was 43, representing over 90% of the students present. The learners are undergraduate students from across the university, so they have no specific faculty background or ethos that would significantly bias the data. Most are in their first year of study. Given their distribution and level of study, their entire time at university is linked to the era of generative artificial intelligence, leading them to redefine some elements of their professional training and identity. To rate the statements, learners used a scale from 1 to 5. Thus, values higher than 2.5 indicate more likely agreement.

According to the learners, using AI does not bring novelty and originality (2.2 points is the lowest score in our survey). The learners perceive AI (concerning the subsequent discussion) as a means to achieve statistical mediocrity and banality, albeit better than the average human can develop. However, it poses the question of what such a form of banality might be good for. The two most agreeable answers also illustrate this: artificial intelligence allows us to produce more creative outputs and better-quality outputs than if we do not work with it, but these are not fundamentally significant outputs. Surprising to us is the response on tastefulness (2.9), which tends more towards agreement. The issue of tastefulness would deserve separate research in the context of AI; for us, the illustratively declared sentiment related to our research sample is more relevant.

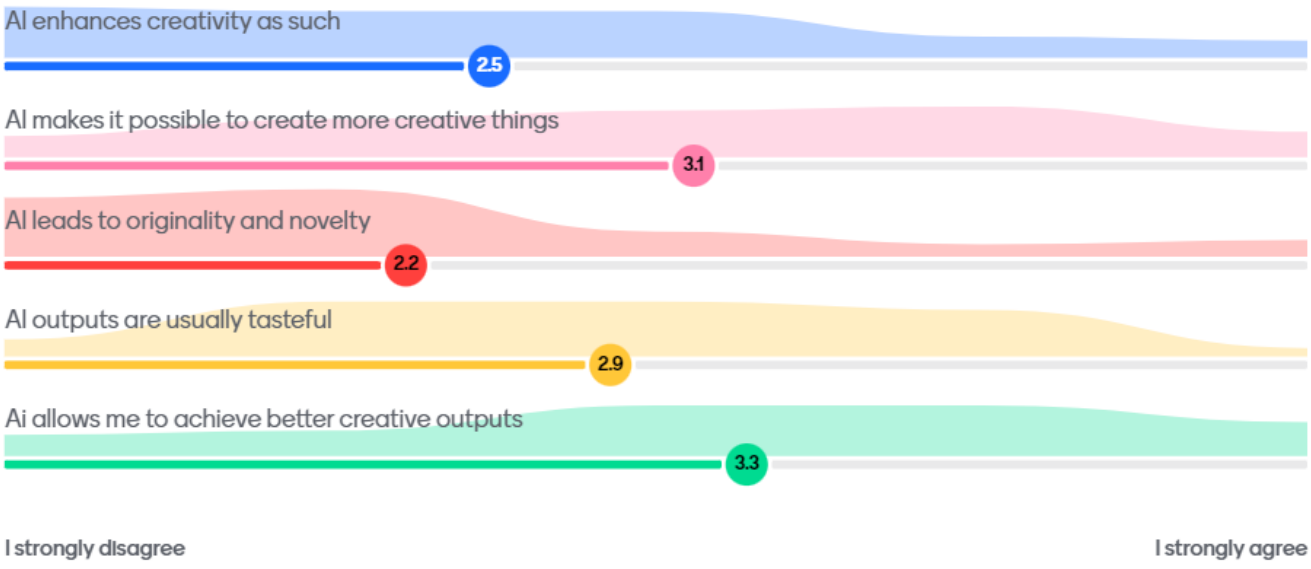

Figure 1. *Data from 43 respondents who expressed how much they agreed with statements.*

We also asked students what professions they thought AI would replace – translators, programmers, graphic designers and accountants. The first three professions are interesting because they are fields that we traditionally associate with a certain level of creativity. Thus, it is typical for students to be, on the one hand, not entirely pessimistic that AI can positively affect creativity and the quality of outputs. On the other hand, they perceive those professions with certain creative traits as at risk. Among professions not at risk, the students mentioned doctors, teachers, psychologists and athletes, professions characterised by working with certain human limitations or, more broadly, ensuring health in a broader social-somatic-spiritual-psychological dimension.

These data show some consistency with scholarly studies in this area (Frey & Osborne, 2017; Oschinski, 2023; Zarifhonarvar, 2024) while also illustrating inevitable general concept of how students think about the changing world in the context of generative AI development.

Regarding opinions on how and whether AI can foster creativity, 36 learners responded in a wordlist in which they could write up to three concepts (60 responses in total, or about 1.7 concepts per respondent). If we look at the responses, we can see three basic categories of answers for our research sample (which does not preclude that more extensive research would allow the identification of more discursive approaches):

a) Sceptical – AI will not support creativity itself in any way.
b) Inspirational – can provide inspiration, a new perspective or specific bug work.
c) Feedback – can provide feedback on an idea, which can speed up and streamline the creative cycle.

Our small-scale research probe thus illustrates an exciting level of the relationship between AI and creativity as understood by learners. In their world, it is a tool among tools and likely has a relatively lower degree of novelty or radical transformation than if we had conducted such research two years ago. We can see some (healthy) scepticism in it, showing that creativity is a human domain and that the human element is the critical thing that determines creativity. It is not the output or the quality of the production, nor the creative occupations, but it is a specific form of humanity. Therefore, the artist is not at the level of gallery products but much more in a particular conceptual field of performativity and uniqueness. The quality does not lie in the parameters of the output but seems to lie much more on the plane of precisely human thinking.

In another course that we taught in the spring of 2024, we focused on creative techniques and creative thinking. This was an online course which, in contrast to the dominant discourse of how creative writing, creative techniques or mind maps are taught, emphasised working with technique; students can work with non-technical forms but use different tools to connect their creativity to technique. One of the seven modules was explicitly linked to the theme of AI and creativity[2]. One of the course outcomes was to keep a creative diary[3] for ten days and then reflect on it. What was notable in our research was that learners made minimal use of technical means to enable creativity (except when they wanted to "make the task easier") and instead showed some return to "traditional forms" of creative practice so that in their reflections they included phrases such as:

> *Even after the course, they will write poems every day.*
>
> *I have learned to list three positive things of the day and will stick with it.*
>
> *Creativity got me through the whole semester.*
>
> *I discovered that I like to paint.*

This study does not aim at a detailed qualitative analysis of participants' responses. However, we believe that it does show a specific phenomenon – namely, the idea of art and creativity as a counterpoint to the domain of rationality. Art, creativity, emotion, a certain disjointedness and imperfection are elements that not only allow us to "get through the semester" but – at least for some of the learners – create the specific narrative of (Neo-)Romanticism that is the subject of the analysis in the second part of this study.

Our aim in these two small empirical examples was not to offer a robust research analysis but to show that there is a specific discourse of a poetic or (Neo-) Romantic approach to technology amongst learners, a desire not just to be part of a performance competition against technology, but more to question their humanity, a new humanity (Latour, 2018). In the following chapter, we will try to show that technology is linked to a discourse of a form of

[2] The data come from reflective, creative journals conducted by 143 students across the university in the spring of 2024 as part of the Creative Information Work course. Again, this is not a specific sample. The majority were from the Faculty of Arts (113), with ten each from the Faculty of Computer Science and the Faculty of Economics. The remaining students (10) came from other faculties of Masaryk University.

[3] The creative journal contains daily tasks where learners try different creative processes. The first five days are in a fixed format so that they gain experience with different creativity-related techniques. In the second five days, they choose techniques more autonomously. The journal aims to reflectively teach them methods of working creatively with information and to adjust their approach to creativity. As we will emphasise repeatedly in the text, creativity is not an art for us but a particular cognitive complex process that constitutes novelty in a specific context or situation. It is not possible to associate it directly with art, however easy such a shortcut may be for students. Creativity does not have to be art-centred and in the context of our study, it usually is not.

Enlightenment, which prefigures the dominant approach in education (Šíp, 2019). Against this stands the notion of Romanticism as a particular specific self-definition: a Romanticism that gradually becomes an implicit religion.

Figure 2. *Free responses of learners (36 respondents) to how AI can help them with creativity. The answers are in Czech and Slovak, the languages in which the research was conducted.*

3 (NEO-)ROMANTICISM AS A FORM OF IMPLICIT RELIGION

The concept of implicit religion (Bailey, 1990, 2010) allows the analysis of specific structures of human behaviour in modern society, for which, on the one hand, the dimension of emancipation from religion and religious structures is essential (Bělohradský, 1997, 2021). However, this emancipation does not fully co-occur because modernity emancipation is not completed (Latour, 1993). In this field of thought, we can work with the concepts of invisible religion (Besecke, 2005; Luckmann, 1967) or, more broadly, with a specific notion of religious reference to a particular group of social and cultural phenomena, which are then interpreted religiously (Latzer, 2022), albeit with the question of the presence of transcendental entities (Heidegger, 1944; Purser, 2019). In this section, therefore, we will attempt to offer an interpretive framework for the outcomes of our research probes, arguing that (Neo-)Romanticism has become a form of implicit religion that has a strong influence on the perception of the information revolution (Mathews, 2000; Robertson, 1990; Webster, 2014) by a section of society, which in turn is reflected in their relationship with generative AI. As we have seen, this relationship is not an explicit rejection but rather a certain distance or not very optimistic conceptualisation.

Historically, Romanticism emerged as an artistic (more broadly, intellectual and aesthetic) reaction to the one-sidedness of the Enlightenment. The emergence of modern society and science, the rapid development of industry and scientific disciplines, brought with it the phenomena of both economic and scientific change and the transformation of society as a whole. The idea that the disenchantment of nature and the cult of reason would bring happiness to man and lead to the development of society as a whole, according to Arendt (2006), has not been confirmed. For her, the cult of reason represents re-evolution (the prefix "re-" refers to retroactivity, just as revocation is an appeal to a particular convention), a decadent form of development.

Romanticism at the end of the 18th century thus represented a certain balance between three critical social movements. The first was a one-sided emphasis on reason and a rejection of emotion as animalistic, uncultured or inappropriate. At the same time, modern research clearly shows that pure rationality or intelligence without emotion has little meaning (Damasio, 1994, 2018) and leads to ethically and socially extremely problematic phenomena (Bauman, 2007). The second moment was the creation of a gap between nature and technology; technology became the defining element of society and man became the outcast of nature, and this relation to technology, or as Heidegger argued, being in the tow of technology (Heidegger, 1967b), represented a significant moment of

disruption of a specific social agreement about who man is to be. Last but not least, thirdly, the Enlightenment was an emancipation, a breaking away from all that is traditional, fixed and certain; it was carried out by social perception of Descartesian scepticism on a scale that Descartes certainly had not intended (Baker et al., 2002; Descartes & Cottingham, 1996) – the Enlightenment focused on the individual and the questioning of certainties.

The Enlightenment thus created a binary oppositional mental structure, the other end of which was filled by Romanticism (Chaplin & Faflak, 2011; Stuhlemer, 2017) and their interaction would lead to the formation of a never-finished modernity (Latour, 1993, 2021) because the natural world in this binary oppositional (Šíp, 2019) structure, while it can be understood, is at the same time doomed to failure (Kahneman, 2011) and failures, it is not a source of an adequate account of the world. Nevertheless, one can agree with Latour (2018) that we need a radically new worldview concept.

The information revolution and the development of technology, linked to both the internet (Webster & Blom, 2020) and now artificial intelligence (Bory, 2019; Coeckelbergh & Gunkel, 2023), are heavily technically oriented and, in principle, create a field strikingly similar to the Enlightenment in its many historical transformations (Arendt, 1973, 2006). We can therefore expect that alongside the technologically oriented narrative of revolution affecting all areas of human life, there will be a (Neo-)Romantic narrative that asks whether these technological approaches correspond to what we would expect from humanity in its fullness, whether the emphasis on performance, innovation and excellence represents a set of genuinely relevant values (Booch et al., 2021). From this perspective, we might judge that learners will look for as many ways to use technology to work and study more effectively, or at least to make it easier. However, we do not see such an attitude in the data; instead, it seems to turn to a form of slowness and a specifically human approach to creativity. The latter is not so much part of the economic discourse as a deep humanistic value. Research data show that learners do not need to be productive and efficient. They want to be human, differentiated from resources or machines.

This approach is manifested in Friedman's concept of a flat world – technology will develop competence in people who behave rationally, making them rich. Friedman marginalised all the problems of the globalised world by saying that it is a rebellion against the flattening of the world, a fundamentalist old-fashionedness (Friedman, 2005). The key to success, he argued, is primarily technical education, which will make it possible to provide for all human wants and needs in a technicized way. This ethos of thought, also linked to the end of history (Fukuyama, 2006) was crucial to the essential notion of education and the development of technology in the 20th century. People think of themselves as rational in their decision-making (Kahneman, 2011) and see technology as a manifestation of logic and rationality. Technology embodies the myth that man thinks rationally and logically (P. Feyerabend, 1993).

However, this position does not mean that the concept of the Enlightenment and its associated understanding of the world as a rational structure is unproductive or abandoned. Its relevance can easily be glimpsed in evidence-based approaches in various sectors of human activity where it appears as a powerful argument for public debate (Larsen et al., 2019). Whether artificial intelligence, for example, should be part of public policy or scientific knowledge is debatable but has its proponents (Aboelmaged et al., 2024; Dillon & Schaffer-Goddard, 2023). In general, the whole process of shaping the social sciences (as opposed to the humanities) as empirical disciplines shows to some extent that linking evidence and decision-making is powerful (Badmus et al., 2024). Such an approach can reduce the impact of bias on decision-making (Booch et al., 2021; Kahneman, 2011), reduce human error or make the entire decision-making process more transparent.

At the same time, logic is the basis of technology; all computing today is built on logic circuits and microchips (LaMeres, 2023), which petrifies the notion that logic can be (and is) the source of progress of society and development of culture (Heidegger, 1967b, 2013a). The ability to argue and think logically can be considered a commonly recognised aspect of human thinking (Kahneman, 2011; Lakoff, 1990). At the same time, it represents an essential component of the possibility of interpersonal understanding. Logic and rationality create a specific layer of abstraction that enables intersubjectivity, moving towards the possibility of understanding (Gallese & Cuccio, 2015; Levinas, 2020; Ricœur, 2016). In the context of Kant (1999), we can say that logical thinking is the guarantor (in the context of the Enlightenment) of social progress and peace, or, to Kuhn (1996), the source of the possibility of practising science and the associated social environment that we call modern society. Kahneman (2011) argued that decision-making linked to emotions leads to graceful conclusions that negatively affect human lives. In the discourse context, the Enlightenment approach can be seen as a concept that leads to a practically better and more successful life.

Contemporary (Neo-)Romanticism differs (at least in the context of Central Europe) from its older conception (Novalis, Goethe, Fichte) mainly in that the everyday basis of the "great catechisms" has disappeared (Bělohradský, 2021), especially at the religious level, to which one could relate – in both positive and negative senses. The absence of a religious basis on the plane of institutionalised religions leads to the formation of those above implicit or invisible religions or to the concept pointed out by Latzer (2022), i.e., to a certain divinisation of technology, towards or away from which one can again lean. According to Latzer, technology has assumed the role of religion, and the reservation against this socio-technical implicit religion has – for the reasons given above – the character of an implicitly religious Romanticism, which is sometimes manifested by the discussion of humanism in the context of artificial intelligence in the form of a rejection of transhumanist notions (Lollini, 2022; Magni et al., 2024). Our research shows this aspect in a certain scepticism about whether AI can seem to foster creativity. The learners believe in the existence of a human who, by his or her disenchantment standing outside rational categories, can achieve specifically creative feats. Technology is not human; it is not creative; it judges.

Thus, a part of society is looking for ways to return to the ideal of humanity, as we can see in the responses of students who want to write poems and paint. Their answers do not speak of doing such activities with quality or to a high standard. However, in some ways, they accentuate the fact that art, as art, is a "useless activity", referring to the concept of homo ludens – one is human where one plays, where the activity has an end in itself, not in the result. Such a conception is essential to reflect on the learners' responses – it is the activity that has value, not the outcome. Artificial intelligence can thus only inspire one's work, the activity of thinking as attunement (Heidegger, 1944, 1976), to self-discovery. Technology is not something into which our research respondents want to be dragged (Heidegger, 1967b); it is not a source of governance (Bridle, 2018), but it is an element that shapes a society in which it is possible to question in a specific way the human being, his or her existence and role in the world (Chardin, 1964).

As in economics, handmade products have found their specific group of customers, not because they are better or cheaper, but because they are unique and have a unique story behind them (Hejdánek, 1997), so working with AI in relation to creativity also has a dimension of this modality. The crucial role in judging creativity will not be individual atomic judgments of quality (which students say will grow in interaction with AI) but in story and context. It will be to create this story, to emphasise the importance of humanity in creativity, thinking and art, as in procedural acts, not at the level of partial outcomes, thus representing a fundamental implicitly religious structure that relates to the individual's identity.

When Floridi, in his technicist, rational and critical conception of the world, spoke of identity as something that is created by onlife (Floridi, 2011, 2014), he created a preconception of a double understanding: an Enlightenment one that will emphasise the possibilities of technology in extending and conceptualising such an identity, and a (neo-)romantic one that will respect this onlife character, but at the same time will search again for ways to accentuate the real, authentic world of direct sensory experience.

We do not see incompetence or ignorance in the learners in the other data. It is not a flight from technology (Thoreau & Searls, 2009) but a search for authenticity (Heidegger, 1967a) and a certain slowing down. The relationship between AI and creativity in this insight field presents an exciting opportunity with many possibilities that a part of society does not share. When Matějčková talked about resignation (Matějčková, 2022) or the declining attractiveness of emancipation and power (Matějčková, 2023), she moved into the view of society in just such a field. While postmodernity was a performance flight, the fluidity of society and liberalism (Bauman, 2013b; Bauman & Donskis, 2016), transmodernism in our view, is not a leaning back towards solidity and conservatism (Bauman, 2013a; Matějčková, 2023), but a manifestation of the unfinished modernity associated with Romanticism, not conservatism, per se.

This significant difference will lead to the need to rethink some phenomena with economic change (Hui et al., 2023; Zarifhonarvar, 2024) or education (Baidoo-Anu & Owusu Ansah, 2023), but perhaps will lead to a sharpened need to create an entirely new socio-cultural narrative that allows reframing the relationship between technology and rationalist reduction (Aoki & Greiner, 2020). Learners share concerns about their disciplines, but these concerns do not lead to purely rational strategies. Losing employability is not as valuable to them as their freedom from the pull of technology.

So, if we think about the relationship between artificial intelligence and creativity, we can say that beyond the limits of technical (Cobb, 2023), the limits are also cultural and religious. Artificial intelligence can be an appealing form of

escape from society, a means of putting aside humanity and its limits, but this is where the (Neo-)Romantic perspective we have analysed can be valuable, however much we believe that it must be the aim of modern philosophy and sociology to formulate a programme of modernity that can leave behind this binary oppositional structure of its own.

It is necessary to highlight some essential features of the relationship between creativity and Romanticism. Firstly, art here is imperfect; mistakes are not something to be eliminated but a phenomenon of humanity. At the same time, as we can see in Goethe, man desires a form of deification (Faust), even though it is evident that it does not lead to happiness. Creativity leads to happiness in Faust, which replaces immortality. Faust represents a specific founding work of the entire Romantic tradition, integrating the values of Christian Europe and the need to step outside the rationalist reductionism of the Enlightenment.

Creativity is integrated into the stream of Romanticism through its relationship to a form of Christian spirituality that defines itself against the cult of reason associated with the French Revolution (Arendt, 2006). Humans are called to create and to be creative (Catholic Review, 2024) in an imperfect and, in a sense, irrational feeld. Creativity in the Christian concept is based on the first chapters of Genesis (Gn 1), in which man is understood as the image of God – the Creator. At the same time, it retains the Old Testament concept of a certain opposition to rationality, which leads to self-reliance (Ex 17:10n; 1Pe 21:17). However, the theme of creativity itself as a fundamental element in thinking about Christianity only developed fully in the 20th century, again as a response to the transformations of modern society. Man comes to know the truth through relationality (Buber, 2017) and trust in God (R 4:2), not of himself, by his will and rationality (Gn 3). This idea is then integrally present in Faust above and the entire Romantic tradition.

This discourse will create space for understanding one's fallibility, in the context of the Enlightenment, not as something to be eliminated but as an element belonging to humanity as such. The turn of attention to mistakes, to one's limitations and boundaries, as a formative element of the human being, has been particularly evident in recent years, returning to the Romantic notion of the "torn hero" as an archetypal human model. However, perhaps we can see a shift in that the ideal is not to be torn to the point of death, to die young, but rather a learned form of resignation (Matějčková, 2022) and appeasement. The question after the meaning of a given activity (Heidegger, 2013b; Matějčková, 2022), or the demarcation of space for work and play, implicitly stands over considering the difference between man and machine. Mortality represents the basic thought structure evident in phenomenologists, which is simultaneously understood as culmen et fons relating to creativity. Creativity is not an art; it is a humanism shaped by movement.

This is the opposite of Floridi's thinking, emphasising that the boundaries between man and machine are blurred (Floridi, 2014, 2015). Perhaps the religious dimension of reasoning allows them to proceed in the opposite direction to that which Floridi carefully rationally and empirically constructed (Floridi, 2013, 2019). For Floridi's understanding – fundamentally anchored in the rationalist and realist traditions – the boundaries of humanity and technology are blurred (Harnad, 2001) precisely because the actions appear similar (Floridi, 2023).

Implicit religion and Romanticism allow man a free rebellion that is impossible in logic (Bauman, 2007). Herein lies its fundamental influence on the creativity that expects freedom and the new search for humanity. We can agree with Bauman that logic is not ethical and that humanity (Bauman, 2007) and ethics can only be developed when we do not live in the inevitability of rational procedures and judgments (Bauman & Donskis, 2016). Heidegger also held this view (Heidegger, 1967b, 2000); for him, poetry was the highest form of thought (along with philosophy) (Heidegger, 1944, 2006).

It seems that for economic practice, it will be necessary to look for models of education and integration of artificial intelligence into corporate processes that follow three structures that are generally not emphasised:

a) Working with AI is not primarily rational. As much as it is a technique, interaction with generative systems entails a power of affective and attitudinal structures to which education concepts must adapt. We believe that, for example, working with reflection on experiences, journaling and conducting personal interviews will be an increasingly powerful tool for education instead of conventional lectures and training.
b) It seems that for many users, working with AI will involve some form of implicit religion, and the role of company policies or technical support, for example, will have to be adapted to this. Rational and unambiguous procedures will not be effective.

c) The advent of artificial intelligence seems to accentuate the development of a new humanist phenomenon – people will think more clearly about their humanity as a counterpoint to artificial technology. One of the essential manifestations of this definition will be the increasing importance of creativity in everyday life and working with one's limits, manifested, for example, in the area of well-being (Dai et al., 2020; JRC-CEU, 2022).

4 CONCLUSION

The study did not aim to claim that all students have such an approach to AI but saw it as essential to disrupt the dominant technocratic discourse that thinks of the relationship between technology and creativity as a kind of mechanical process. When describing the impact of technology on society (Cetindamar et al., 2022; Lou et al., 2023; Oschinski, 2023), we implicitly expect a simple implementation scheme that aims to overcome organisational or technical barriers. However, the situation is not constructed for a part of society, so there is no alternative (Bauman & Donskis, 2016). Their work outputs are not the critical value, which lies in the processuality and humanity (Cerny, 2023). Suppose we want to think more deeply about the relationship between artificial intelligence and creative industries. In that case, it is necessary to complement the technicist conception by seeking new social interpretative frameworks that allow us to cross the moat between Enlightenment and (Neo-)Romanticism. In this respect, philosophy seems to be a critical factor in socio-economic change (Latour, 1993, 2018, 2021).

Our interpretations suggest that for educational and practical implementation of AI tools, it will be necessary to move away from a purely rationalistic conception that views AI as a productivity-enhancing tool that only parametrically transforms selected workflows. Such a conception, as some authors have shown, runs into its principled limits and, about the inner experience of working with these tools and the social perception of the phenomenon, we need to follow a much more "Romantic" conception that balances the rational context with emotional, heuristic, self-experiential elements. It is not unreasonable to expect that the development of AI will unsettle employees and students, challenging how their identities are constituted (Bauman, 2013b; Floridi, 2011), which may harm their well-being (JRC-CEU, 2022; Nazareno & Schiff, 2021).

Our conceptual framework allowed us to view student and employee behaviour from a broader perspective that understands religion (Besecke, 2005; Latzer, 2022; Luckmann, 1967) in a broad sociological sense (Berger & Luckmann, 1967), allowing us to think through strategies for changing the work environment in which employees or learners feel comfortable while still achieving desired outcomes (Dai et al., 2020; Inkster et al., 2018).

ADDITIONAL INFORMATION AND DECLARATIONS

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REFERENCES

Aboelmaged, M., Bani-Melhem, S., Ahmad Al-Hawari, M., & Ahmad, I. (2024). Conversational AI Chatbots in library research: An integrative review and future research agenda. *Journal of Librarianship and Information Science*, (in press). https://doi.org/10.1177/09610006231224440

Al-Ababneh, M. (2020). The Concept of Creativity: Definitions and Theories. *International Journal of Tourism & Hotel Business Management*, 2(1), 245–249.

Aoki, B. Y., & Greiner, C. (2020). Affective market in Japan: A study on Gatebox and loving relationships with characters. *Comunicacao*, 17(49), 295–322. https://doi.org/10.18568/CMC.V17I49.2152

Arendt, H. (1973). *The Origins of Totalitarianism*. Harcourt Brace Jovanovich.

Arendt, H. (2006). *On revolution*. Penguin Books.

Azzam, A. M. (2009). Why creativity now? A conversation with Sir Ken Robinson. *Educational Leadership*, 67(1), 22–26.

Badmus, O., Rajput, S., Arogundade, J., & Williams, M. (2024). AI-driven business analytics and decision making. *World Journal of Advanced Research and Reviews*, 24, 616–633. https://doi.org/10.30574/wjarr.2024.24.1.3093

Baidoo-Anu, D., & Ansah, L. O. (2023). Education in the Era of Generative Artificial Intelligence (AI): Understanding the potential benefits of ChatGPT in promoting teaching and learning. *Journal of AI*, 7(1), 52–62. https://doi.org/10.61969/jai.1337500

Bailey, E. (1990). The Implicit Religion of Contemporary Society: Some Studies and Reflections. *Social Compass*, 37(4), 483–497. https://doi.org/10.1177/003776890037004006

Bailey, E. (2010). Implicit Religion. *Religion*, 40(4), 271–278. https://doi.org/10.1016/j.religion.2010.07.002

Baker, G. P., Baker, G., & Morris, K. J. (2002). *Descartes' dualism*. Psychology Press.

Bauman, Z. (2007). *Modernity and the Holocaust (Reprint)*. Polity Press.

Bauman, Z. (2013a). *Liquid modernity*. John Wiley & Sons.

Bauman, Z. (2013b). *The Individualized Society*. John Wiley & Sons.

Bauman, Z., & Donskis, L. (2016). *Liquid Evil*. John Wiley & Sons.

Bělohradský, V. (1997). *Mezi světy & mezisvěty: Filosofické dialogy*. Votobia.

Bělohradský, V. (2021). *Čas pléthokracie: Když části jsou větší než celky a světový duch spadl z koně*. Nakladatelství 65. pole.

Berger, P. L., & Luckmann, T. (1967). *The social construction of reality*. Anchor Books.

Besecke, K. (2005). Seeing invisible religion: Religion as a societal conversation about transcendent meaning. *Sociological Theory*, 23(2), 179–196.

Booch, G., Fabiano, F., Horesh, L., Kate, K., Lenchner, J., Linck, N., & Srivastava, B. (2021). Thinking fast and slow in AI. In *Proceedings of the The Thirty-Fifth AAAI Conference on Artificial Intelligence (AAAI-21),* (pp. 15042–15046). AAAI.

Bory, P. (2019). Deep new: The shifting narratives of artificial intelligence from Deep Blue to AlphaGo. *Convergence*, 25(4), 627–642. https://doi.org/10.1177/1354856519829679

Bridle, J. (2018). *New dark age: Technology and the end of the future*. Verso Books.

Buber, M. (2017). *Ich und Du (17. Aufl).* Gütersloher Verl.-Haus.

Catholic Review. (2024, January 12). Renew the world with creativity, bold dreams, pope tells young people. *Catholic Review*. https://catholicreview.org/renew-the-world-with-creativity-bold-dreams-pope-tells-young-people/

Cerny, M. (2023). Filozofie edukace jako reflexe společnosti: Analýza krize modernity v románech Murakamiho a Houellebecqa. *Pedagogická orientace*, 33(2), Article 2. https://doi.org/10.5817/PedOr2023-2-244

Cetindamar, D., Kitto, K., Wu, M., Zhang, Y., Abedin, B., & Knight, S. (2022). Explicating AI literacy of employees at digital workplaces. *IEEE Transactions on Engineering Management*, 71, 810–823. https://doi.org/10.1109/tem.2021.3138503

Chaplin, S., & Faflak, J. (2011). *The Romanticism Handbook*. A&C Black.

Chardin, P. T. de. (1964). *Le phénomène humain*. Éditions du Seuil.

Civit, M., Drai-Zerbib, V., Lizcano, D., & Escalona, M. J. (2024). SunoCaps: A novel dataset of text-prompt based AI-generated music with emotion annotations. *Data in Brief*, 55, 110743. https://doi.org/10.1016/j.dib.2024.110743

Cobb, P. J. (2023). Large Language Models and Generative AI, Oh My!: Archaeology in the Time of ChatGPT, Midjourney, and Beyond. *Advances in Archaeological Practice*, 11(3), 363–369. https://doi.org/10.1017/aap.2023.20

Coeckelbergh, M., & Gunkel, D. J. (2023). ChatGPT: deconstructing the debate and moving it forward. *AI & Society*, 39(5), 2221–2231. https://doi.org/10.1007/s00146-023-01710-4

Dai, Y., Chai, C.-S., Lin, P.-Y., Jong, M. S.-Y., Guo, Y., & Qin, J. (2020). Promoting Students' Well-Being by Developing Their Readiness for the Artificial Intelligence Age. *Sustainability*, 12(16), 6597. https://doi.org/10.3390/su12166597

Damasio, A. R. (1994). *Descartes' error: Emotion, reason, and the human brain*. Putnam.

Damasio, A. R. (2018). *The strange order of things: Life, feeling, and the making of the cultures*. Pantheon Books.

Descartes, R., & Cottingham, J. (Eds.). (1996). *Descartes: Meditations on First Philosophy: With Selections from the Objections and Replies*. Cambridge University Press.

Dillon, S., & Schaffer-Goddard, J. (2023). What AI researchers read: The role of literature in artificial intelligence research. *Interdisciplinary Science Reviews*, 48(1), 15–42. https://doi.org/10.1080/03080188.2022.2079214

Eguchi, A., Okada, H., & Muto, Y. (2021). Contextualizing AI Education for K-12 Students to Enhance Their Learning of AI Literacy Through Culturally Responsive Approaches. *KI - Künstliche Intelligenz*, 35(2), 153–161. https://doi.org/10.1007/s13218-021-00737-3

Feyerabend, P. (1993). *Against Method*. Verso.

Feyerabend, P. (2004). *Věda jako umění*. Ježek.

Floridi, L. (2011). The Construction of Personal Identities Online. *Minds And Machines*, 21(4), 477–479. https://doi.org/10.1007/s11023-011-9254-y

Floridi, L. (2013). *The Ethics of Information.* Oxford University Press.

Floridi, L. (2014). *The fourth revolution: How the infosphere is reshaping human reality*. Oxford University Press.

Floridi, L. (Ed.). (2015). *The Onlife Manifesto: Being Human in a Hyperconnected Era*. Springer.

Floridi, L. (2019). Establishing the rules for building trustworthy AI. *Nature Machine Intelligence*, 1(6), 261–262. https://doi.org/10.1038/s42256-019-0055-y

Floridi, L. (2023). AI as agency without intelligence: On ChatGPT, large language models, and other generative models. *Philosophy & Technology*, 36(1), Article 15. https://doi.org/10.1007/s13347-023-00621-y

Franceschelli, G., & Musolesi, M. (2024). On the Creativity of Large Language Models (arXiv:2304.00008). *arXiv*. https://doi.org/10.48550/arXiv.2304.00008

Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerisation? *Technological Forecasting and Social Change*, 114, 254–280. https://doi.org/10.1016/j.techfore.2016.08.019

Friedman, T. L. (2005). *The World is Flat: A Brief History of the Twenty-first Century*. Farrar.

Fukuyama, F. (2006). *The end of history and the last man* (1st Free Press trade pbk. ed). Free Press.

Gallese, V., & Cuccio, V. (2015). The Paradigmatic Body: Embodied Simulation, Intersubjectivity, the Bodily Self, and Language. In T. Metzinger & Windt (Eds.), *Open Mind* (pp. 1–23). MIND Group. https://doi.org/10.15502/9783958570269

Goldberg, E. (2018). *Creativity: The Human Brain in the Age of Innovation*. Oxford University Press.

Harnad, S. (2001). *What's wrong and right about Searle's Chinese Room argument? In Essays on Searle's Chinese room argument*. Oxford University Press.

Heidegger, M. (1944). *Erläuterungen zu Hölderlins Dichtung*. Klostermann.

Heidegger, M. (1967a). *Being and Time*. Blackwell.

Heidegger, M. (1967b). *Die Frage nach der Technik ; Wissenschaft und Besinnung ; Überwindung der Metaphysik ; Wer ist Nietzsches Zarathustra?*. Neske.

Heidegger, M. (1976). *What Is Called Thinking?*. HarperCollins.

Heidegger, M. (2000). *O humanismu*. Ježek.

Heidegger, M. (2006). *Básnicky bydlí člověk*. Oikoymenh.

Heidegger, M. (2013a). *Martin Heidegger: Rozhovory k osmdesátým narozeninám*. Oikoymenh.

Heidegger, M. (2013b). *Už jenom nějaký Bůh nás může zachránit*. Oikoymenh.

Hejdánek, L. (1997). *Nepředmětnost v myšlení a ve skutečnosti*. Oikoymenh.

Helmanto, F., & Dayana, Y. F. (2024). The Development of Musicalization Poetry assisted by Artificial Intelligence. *Foremost Journal*, 5(2), Article 2. https://doi.org/10.33592/foremost.v5i2.5131

Hui, X., Reshef, O., & Zhou, L. (2023). *The Short-Term Effects of Generative Artificial Intelligence on Employment: Evidence from an Online Labor Market* . https://doi.org/10.2139/ssrn.4527336

Inkster, B., Sarda, S., & Subramanian, V. (2018). An Empathy-Driven, Conversational Artificial Intelligence Agent (Wysa) for Digital Mental Well-Being: Real-World Data Evaluation Mixed-Methods Study. *JMIR mHealth and uHealth*, 6(11), e12106. https://doi.org/10.2196/12106

Jefferson, M., & Anderson, M. (2017). *Transforming schools: Creativity, critical reflection, communication, collaboration*. Bloomsbury Publishing.

Johansson, I.-R. (2023). A Tale of Two Texts, a Robot, and Authorship: A Comparison Between a Human-Written and a ChatGPT-Generated Text. https://urn.kb.se/resolve?urn=urn:nbn:se:mau:diva-60674

Johnson, M. (2017). *Embodied Mind, Meaning, and Reason*. University of Chicago Press.

JRC - CEU. (2022). Council conclusions on supporting well-being in digital education. https://joint-research-centre.ec.europa.eu/scientific-activities-z/education-and-training/well-being-education_en

Kahneman, D. (2011). *Thinking, Fast and Slow*. Farrar, Strauss and Giroux.

Kant, I. (1999). *K věčnému míru. O obecném rčení: Je-li něco správné v teorii, nemusí se to ještě hodit pro praxi*. Oikoymenh.

Kuhn, T. S. (1996). *The structure of scientific revolutions* (3rd ed). University of Chicago Press.

Lakoff, G. (1990). *Women, fire, and dangerous things: What categories reveal about the mind*. University of Chicago press.

LaMeres, B. J. (2023). *Introduction to Logic Circuits & Logic Design with VHDL*. Springer Nature.

Larsen, C. M., Terkelsen, A. S., Carlsen, A.-M. F., & Kristensen, H. K. (2019). Methods for teaching evidence-based practice: A scoping review. *BMC Medical Education*, 19(1), 259. https://doi.org/10.1186/s12909-019-1681-0

Latour, B. (1993). *We have never been modern*. Harvard University Press.

Latour, B. (2018). *Down to earth: Politics in the new climatic regime (English edition).* Polity Press.

Latour, B. (2021). *After lockdown: A metamorphosis*. Polity Press.

Latzer, M. (2022). The Digital Trinity—Controllable Human Evolution—Implicit Everyday Religion: Characteristics of the Socio-Technical Transformation of Digitalization. *KZfSS Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 74(S1), 331–354. https://doi.org/10.1007/s11577-022-00841-8

Lee, H.-K. (2022). Rethinking creativity: Creative industries, AI and everyday creativity. *Media, Culture & Society*, 44(3), 601–612. https://doi.org/10.1177/01634437221077009

Levinas, E. (2020). *Totalita a nekonečno*. Oikoymenh.

Lin, C.-H., Yu, C.-C., Shin, P.-K., & Wu, L. Y. (2021). STEM based Artificial Intelligence Learning in General Education for Non-Engineering Undergraduate Students. *Educational Technology & Society*, 24(24), 224–237.

Lollini, M. (2022). Time of the End? More-Than-Human Humanism and Artificial Intelligence. *Humanist Studies & the Digital Age*, 7(1), 1–30. https://doi.org/10.5399/uo/hsda/7.1.3

Lou, B., Sun, H., & Sun, T. (2023). GPTs and Labor Markets in the Developing Economy: Evidence from China (SSRN Scholarly Paper 4426461). https://doi.org/10.2139/ssrn.4426461

Luckmann, T. (1967). *The invisible religion*. Macmillan.

Magni, D., Del Gaudio, G., Papa, A., & Della Corte, V. (2024). Digital humanism and artificial intelligence: The role of emotions beyond the human–machine interaction in Society 5.0. *Journal of Management History*, 30(2), 195–218. https://doi.org/10.1108/JMH-12-2022-0084

Matějčková, T. (2022). *Kdo tu mluvil o vítězství?*. Nakladatelství Karolinum.

Matějčková, T. (2023). *Bůh je mrtev. Nic není dovoleno*. Echo Media.

Mathews, J. T. (2000). The Information Revolution. *Foreign Policy*, 119, 63–65. https://doi.org/10.2307/1149529

Mertala, P., Fagerlund, J., & Calderon, O. (2022). Finnish 5th and 6th grade students' pre-instructional conceptions of artificial intelligence (AI) and their implications for AI literacy education. *Computers and Education: Artificial Intelligence*, 3, 100095. https://doi.org/10.1016/j.caeai.2022.100095

Mukminin, M. S., Putra, L. D., Muhhit, A. A., & Tenis, A. B. (2024). Personification Language Style in The Poem Created by ChatGPT. *Journal of Education and Contemporary Linguistics*, 1(2), Article 2.

Nazareno, L., & Schiff, D. S. (2021). The impact of automation and artificial intelligence on worker well-being. *Technology in Society*, 67, 101679. https://doi.org/10.1016/j.techsoc.2021.101679

Oschinski, M. (2023, August 14). Assessing the Impact of Artificial Intelligence on Germany's Labor Market: Insights from a ChatGPT Analysis [MPRA Paper]. https://mpra.ub.uni-muenchen.de/118300/

Purser, R. (2019). *McMindfulness: How mindfulness became the new capitalist spirituality*. Repeater.

Ricœur, P. (2016). *O sobě samém jako o jiném*. Oikoymenh.

Robertson, D. S. (1990). The Information Revolution. *Communication Research*, 17(2), 235–254. https://doi.org/10.1177/009365090017002005

Schober, R. (2022). Passing the Turing Test? AI Generated Poetry and Posthuman Creativity. In H. Nagl-Docekal & W. Zacharasiewicz (Ed.), *Artificial Intelligence and Human Enhancement: Affirmative and Critical Approaches in the Humanities*, (pp. 151-166). De Gruyter. https://doi.org/10.1515/9783110770216-009

Simonton, D.K. (2017). Big-C Versus Little-c Creativity: Definitions, Implications, and Inherent Educational Contradictions. In Beghetto, R., Sriraman, B. (eds) *Creative Contradictions in Education. Creativity Theory and Action in Education*, (pp. 3–19). Springer. https://doi.org/10.1007/978-3-319-21924-0_1

Šíp, R. (2019). *Proč školství a jeho aktéři selhávají*. Masarykova univerzita.

Špidlík, T., & Rupnik, M. I. (2015). *Integrální poznání: Symbol jako nejdokonalejší výpověď*. Refugium Velehrad-Roma, s.r.o.

Stuhlemer, J. (2017). *Romanticism as a Transition to Modernity: The Romantic Period in Literature as a Transitional Phase*. GRIN Verlag.

Thoreau, H. D., & Searls, D. (2009). *The journal, 1837–1861*. New York Review Books.

Webster, F. (2014). *Theories of the information society*. Routledge.

Webster, F., & Blom, R. (Eds.). (2020). *The information society reader*. Routledge.

Wu, Z., Ji, D., Yu, K., Zeng, X., Wu, D., Shidujaman, M. (2021). AI Creativity and the Human-AI Co-creation Model. In Kurosu, M. (eds) *Human-Computer Interaction. Theory, Methods and Tools*, (pp. 171–190). Springer. https://doi.org/10.1007/978-3-030-78462-1_13

Zarifhonarvar, A. (2024). Economics of ChatGPT: A labor market view on the occupational impact of artificial intelligence. *Journal of Electronic Business & Digital Economics*, 3(2), 100–116. https://doi.org/10.1108/JEBDE-10-2023-0021

Zouhar, J. (2016). Racionalita a každodennost. *Studia philosophica*, 63(2), 7–16.

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