Conference Paper

Artificial Intelligence as a Culturological Problem

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Abstract

The article poses the question of cultural interpretation of artificial intelligence. It is revealed that in relation to artificial intelligence in modern culture there are at least two conflicting strategies. The first strategy is based on the idea of the superiority of artificial intelligence over the human intellect, and as a response serves as a breeding ground for the ideas of techno-apocalypse. The second strategy, which arose and developed within the framework of the Soviet Information Society project, sees in artificial intelligence the possibility of building a more perfect and just society.

Keywords: information society, artificial intelligence, induction of artificial intelligence, cultural problem, intercultural space

1. Introduction

The artificial intelligence (AI) discourse still falls beyond the scope of culturologists, being firmly lodged in an interdisciplinary space of computer sciences. Two main trends in interpreting AI – one of them based on the idea that artificial systems should not try to copy biological systems in their structure and functioning (John McCarthy), and the opposing biocomputing paradigm (William McCulloch) – were born within the field of computer engineers and software designers. However, according to L.A.Zaks, “Our era is an era of dissolving borders, of bringing together the diverse, and of using a common ground to exchange our differences.” [1, c. 26] By separating AI issues from the culture of information society, we force them into a dead end inevitably leading to a narrowing perspective, with researchers concentrating on individual tasks only – even if these tasks are as important as the question of ‘what goes on inside the neural networks?’

An intellect – that is, the part of an intellect that provides a basis for an individual experience as a historically conditioned apriori – is always culturally determined. By introducing the AI theme into the field of cultural research, we can step back from the technocentrism and actualism (primarily regarding the issue of AI medium) and begin...
to see the long-term trends. Our starting point would be a simple idea formulated by R. Niebuhr regarding the historicity of Jesus Christ: “Regardless of how important was a question, once widely discussed, of whether Jesus was a real historical person, and another problem of whether New Testament evidence may be considered an actual description of real historical events, these issues we don’t consider of primary importance. For the Jesus of New Testament lives in our real history, which determines our faith and our actions, which we remember and which we inhabit” [2, p. 19].

2. Enculturating Artificial Intelligence

Applying it to our issue, it may be quite possible that AI development will never surpass technological limitations, and that the available solutions will be able to reproduce only some features of the AI. However, this is not of paramount concern. AI exists already because it exists in culture, which reacts to AI and constructs its own relations both to and from the AI, as if it already existed. Such an approach will allow us to pinpoint long-term trends in AI research that started long before the emergence of a suitable term to describe an intellect non-human and human at the same time.

The fact that we should react quickly, and that there is no more time to postpone this process, is confirmed by an answer, widely discussed on the Internet, provided by a Microsoft moderator in reply to the question asked by a user “how could he disable automatic updates completely since he did not need this feature due to the limited 32Gb amount of internal memory, most of which was already occupied by Windows 10 OS. The community’s official moderator (that is, an American corporate employee) answered that such an action was illegal and could result in Microsoft suing the users” [3]. Even though we should not take this blatant proclamation of the moderators too seriously, since the perspectives of Microsoft actually suing Windows 10 users are slim, what is important here is the apparently existing belief, at least among a part of the IT community, that the right to update (that is, to develop) software takes priority over the rights of the paying users to use the product as they see fit. This brings home a reality of the situation which previously only featured in sci-fi – that is, software ceases to become a tool and becomes a goal, while the users become only a tool in the development and evolution of the software products. Telemetry reports harvested without our knowledge, automatic updates and other activities of the systems that today possess only some AI qualities, are not controlled by humans – rather, humans are the ones being controlled. Remembering the famous Ray Bradbury’s story “I Sing
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...we can say that now we are dealing with the Electronic Grandmother in reverse.

The relevance of cultural approach to the AI research is also increased by the spreading symbiotic relationships between the users and the global software systems. On the one hand, public opinion tends to believe that an electronic judge may be more efficient than a real judge if a case under consideration does not require interpretation of the law. Or an electronic doctor may turn out to be a better diagnostician. Electronic services helping us to choose consumer goods in online stores have long proven their efficiency. The same process happened in tourism, hospitality and transportation industries. In these areas excluding human element seems possible and may be even necessary.

But there is another side. S.A. Demchinkov has analyzed two increasingly popular Yandex services: ‘Yandex. Autopoet’ and ‘Yandex. Referats’. On the one hand, ‘Yandex. Autopoet’ utilizes millions of search requests to generate metrically perfect absurd poems. On the other hand, S.A. Demchinkov believes that the ‘Yandex. Referats’ service is just another generator of pseudo-scientific papers. Based on the high concentration of terminology, idioms, names and titles of research papers used in a specific research field, it produced semantically anomalous texts that, unlike Chomsky’s classical semantic anomalies (colorless green ideas sleep furiously), may look meaningful at a cursory ‘surface’ glance – or if viewed by a non-specialist [4, p. 23]. Even though a service providing various rhymes for poets does not logically follow from the development of services for choosing passenger tickets and such, still such a service definitely becomes a part of a general cultural situation surrounding our modern interactions with the AI.

We see that this interaction is far from perfect; it is unbalanced and uncontrollable; and it provides us with the existential and civilizational challenges. This is a glance from the contemporary culture at the processes that develop within this culture. By focusing on the long-term trends in interaction between culture and AI during the cybernetics era (also in the USSR), we can discover interesting options if not for solving the aforementioned problems, then at least for interpreting them.

3. The Case of Soviet ‘Electronic’

Whatever we may think about the significance of first Russian cyberneticists, Soviet children’s author E.S. Velistov managed to successfully arouse public interest – or, at
least, the interest of the young Soviet audience – in the issues surrounding human-AI interaction by writing a novella titled ‘Electronic Boy from the Portmanteau’. This work of literature was analyzed in depth, based on the philosophical and anthropological interpretation of cybernetic scientism, by S.F.Denisov in his book *Scientism in Metaphysics* [5].

Let us pinpoint some crucial ideas. Soviet AI project – and its possible medium – could and should have been correlated to the project of a new communist person. Electronic boy is a Soviet socialist robot, and his creator Professor Gromov is a Soviet socialist professor. The students around Electronic are Soviet kids studying in a specialized mathematical school that educates future programmers and engineers, the designers and creators of computational machines. Their education is hardly perfect – for example, poetry interests Electronic only as one of the information sources that is 0.5 bits more efficient than the spoken language [6, p. 130]. However, within the narrative, humans successfully interact with the machine, building together a world where every Soviet kid would want to live, and doing it without any ideological pressure.

### 4. Conclusions

In our opinion, E.S.Velistov’s novella, and especially a three-part movie based on this novella, were so popular precisely because they presented an AI that was proportional to the principles of human development and upbringing. E.S.Velistov’s interpretation of Isaac Asimov lost its relevance with the crash of the Soviet informational society project. However, it may be extracted from the cultural heritage of that age as a possible alternative route to AI enculturation. If we compare it to the prevailing modern trend to develop AI for AI’s sake, which mostly engenders such cultural reactions as irrational fears and alienation (techno-Apocalypse, rise of the machines), then maybe we can find the new meanings and perspectives for humans and for the culture in general.

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References


