The E-truth. Changes in the Perception of Truth under the Impact of Cyberspace

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Abstract: *The changes regarding the perception of reality under the impact of the development of information technologies also determined the conceptual rethinking of the truth. In this article we briefly follow the limits of the epistemic integration of the cyberspace, the need to develop new methodological perspectives and introduce a new concept of synthesis: the e-truth. It is viewed from the perspective of seeking truth in relation to data processing, computational simulation, AI and VR development. This research must be performed from the perspective of the epistemic-ontic correspondence using a positivist methodology correlated to the cyberspace (e-positivism). Finally, we briefly review the construction of the e-truth within the context of the pandemic caused by Covid 19.*

Keywords: *e-truth, e-positivism, post-truth, cyberspace, COVID-19.*

Introduction

The "truth" represented a cultural fascination being a central element for human thinking, inciting debates, developing theories, claiming wide areas from epistemology to metaphysics, from theology to science. This concept represented a marker of reality, as it was summed up by Aristotle's formula from Metafizica 1011b25: "to say of what is that it is not, or of what is not that it is, is false, while to say of what is that it is, and of what is not that it is not, is true" (Barnes, 1995, p. 3438). The theory of correspondence in its primary form, *adaequatio rei et intellectus*, shows that there is an overlap between existence and thought, which is called truth. This simple perspective gives truth an aura that dominates knowledge in general and science in particular. But any critical step exponentially amplifies the problems of ontology and epistemology by introducing new variables such as: language - e.g. (Kermit Scott, 1966), limits of correspondence (Herzberger, 1975) - degrees of correspondence (Botezatu, 1981) - deflationary perspectives (Horwich 2010; Engel (2019), - adaptation to reality (Tarski, 1944), relativization (Boghossian, 2006), new realities (McIntyre, 2018) etc.

The theory of correspondence remains the key landmark in the problematization of truth because it connects two levels: the ontic, through reality, and the epistemic, through knowledge. That is why any change in the perception of reality, any extension of it, any change in the tools by which we know the world determines changes in the way we relate to the truth. That is why we can see rapid changes in theorizing the truth today. One of the unique changes that occurred in the epistemology and ontology is based on the emergence of a new reality, the virtual one, developed by following the expansion of information technologies. This new reality also requires a reconsideration of the problem of truth by adapting it to new ontologies. We called this new type of truth e-truth to emphasize its characteristics, which are closely related to the cyberspace.

Cyberspace and epistemological changes

The concept of "reality" requires a high level of complexity. The problems derived from its use within the context of knowledge highlighted the epistemic limits of man. In the face of the metaphysical ideal and through which we can develop a system of knowledge that accurately reproduces existence we can only introduce relative terms such as "appearance", accept the imperfection of correspondence and hope for a

gradual improvement (Rescher 2018). Even according to the new type of acceptance of the knowledge-reality relationship, the optimism associated with positivism and realism is still part of everyday activity in a deflationary-epistemic attitude according to the scientific practice.

The development of information technologies has exponentially increased the complexity of the idea of "reality" by introducing a new level: cyberspace and virtual reality. They have parallelly developed on multiple levels: data processing and storage, communication, robotics, entertainment, etc. Step by step the technology developed while becoming familiar, inserting itself in everyday life and eventually becoming ubiquitous. From an ontological point of view, we are not only talking about the reality of some artefacts, but also about a new type of intelligence, i.e. the Artificial Intelligence (AI), and of a new space, i.e. cyberspace. Initially seen as a pure human construct, the virtual space transformed itself under the impact of AI and provided the emergence of socio-bio-physical existence. With the development of the Augmented Reality (AR) and Virtual Reality (VR), (Tom Dieck et al., 2021), one of the criteria for separating the socio-bio-physical from the virtual existence, i.e. immersion, disappears. To this, new technologies of mass communication that offer a space in which man immerses himself by replacing ordinary social reality are added.

However, if from an ontic point of view, the differences can still be highlighted, from an epistemological point of view they become indistinguishable. For example, computer simulation not only provides data but builds possible alternative realities. Although there are still uncertainties about the degree of similarity (Morrison, 2015, Primiero, 2014; Symons & Alvarado, 2019), the role in scientific development, (Durán & Formanek 2018; Weisberg 2010; Weisberg, 2013) and the social impact (Symons & Alvarado, 2016) cannot be denied. Today, software development, computational modelling and reality analysis through Big Data, make today's science dependent on the cyberspace. Under these significant conditions, the viability and veracity of scientific data and the way in which they can be verified become relevant. Methodological adaptations and changes are needed under the impact of new realities. This is why a current of thinking inspired by scientific positivism has developed, which we call e-positivism. It adapts the idea of reality by introducing the specific elements of the cyberspace, keeping the deflationary attitudes and the methodological foundations.

Truth in cyberspace: the e-truth

The ontological truth and epistemological changes under the impact of the development of cyberspace raise the issue of truth. Starting from the idea of the connection between thought and reality, as the key stake on the truth, it is necessary to identify the criteria on the basis of which it retains its validity. Therefore, following the steps of what we have called e-positivism, a series of rules must be established depending on the level of immersion in the cyberspace and the autonomy of AI. Starting from the computational analysis of data and ending with the most complex forms of virtual reality, combined with artificial intelligence each step must develop its own system of evaluation and control so that the outcomes have a high degree of plausibility. Let's summarize some examples. In the case of data analysis by systematizing automated programs, the initial algorithm is lost sight of and, thus, any inadequacy of the initial inputs determines the uncertain results. Also, any virtual model carries within it the limits of the initial program and therefore the correspondence with reality is limited. New media-specific communication must have rules other than those of traditional media. Fake news is so easily to be spreaded and multiply and therefore evaluating the sources must be done according to new criteria. In the case of artificial intelligence, this can always have initial or developed errors along the way. Self-learning and self-control are limited even in the case of creating superintelligence, the evolution of AI is done in the absence of complete information and predictability which implies risky conditions, Mainzer (2020). The new context does not relativize the truth but, on the contrary, introduces it into a better logically and algorithmically structured world. That is why the e-truth is easy to be followed and identified within the limits of one's own cyberspace. The errors occur during the transfer between the two realities having as source the differences of level, the degree of complexity, errors regarding the input, etc. Under these conditions, the solutions to avoid errors and their consequences consist in constantly monitoring the way in which virtual reality integrates and adapts to existential constraints.

Some considerations to new-media info-obesity: post-truth vs. e-truth

Based on the information explosion, a perspective on truth has developed from post-fashion, in accordance with the principles of postmodernity: post-truth (McIntyre, 2018). Following the media and new media phenomena, the means of mass manipulation specific to new technologies are highlighted. The possibility of amplifying information increases the persuasive efficiency of "fake news with the appearance of

truth". Despite the fact that everything seems to be extremely new, in fact they are the same manipulative techniques developed throughout history which we find systematized and theorized even in the classical sophistication of ancient Greece. Technological novelty does not bring a logical or epistemic novelty. That is why decreeing a new epistemology, in order to relativize knowledge to the ability to spread information, is not a solution, but on the contrary an amplification of the problem. The development of evaluating the methods (not control) of information is a desirable solution, so the source tools of the problem contain the solution. The e-truth is an alternative that offers conceptual support adapted to the new technological context.

Conclusions: The truth, Covid 19 and the invisible war

The pandemic, which has not yet ended, has had the greatest socio-economic impact of the last century. Faced with a lack of information, in a world where the need for information is imperative, the authorities developed a real persuasive system to motivate actions to limit the disease. We make a synthesis of the most relevant and obvious support constructions for the transmission of the official "truth". As following this approach the role of information technology was fundamental we can talk about what we called e-truth. First of all, the official decisions were made on the basis of statistical processing and computer simulations. It was possible to observe the differences between the reproduction number RO (with simulations from 2.2-2.3 to 5.7) and the real reproduction number Re (with much smaller figures). Official channels have been built to transmit the information used in the ongoing war with alternative "truths" based on the media, especially new media. The construction of a scenario specific to war situations, an unconventional, invisible war with an atypical "enemy". The effect was to establish states of alert and necessity with the imposition of restrictive measures. To these, the simulations regarding the development of treatment and vaccine, medical communication, the initial fight on medical resources (protective masks, protective suits, devices for mechanical ventilation, etc.) are added. All took place as a simulated and disguised dynamics of truth, strategically motivated. The aim was to keep a high degree of truthfulness according to the information held without affecting the fight against Covid-19.

However, there were many errors (for example: WHO statements about the role of the mask in preventing the virus, the negative effect on the patient of ibuprofen use) and unexplained decisions (closing shops earlier leads to an increase in the number of people per hour, limiting access to

created congestion during the period when access was allowed, restricting traffic in certain time slots that allowed to travel in safer conditions because the number of people on the street was much smaller). Some errors were corrected by returns, other decisions were kept for strategic reasons related to the context of invisible war rather than disease. Following the construction of the truth and the search for the truthfulness of the information, effective solutions for the future can be identified. These are not epistemological in nature, but are related to public policies with an epistemic impact. Therefore, to sum up, we can state that the thematic focus of resources should not turn all researchers into experts in virology and epidemiology. The identification of experts must be rigorous and broad in accordance with the complex field and real interdisciplinary implications: doctors, statisticians - mathematicians, sociologists, psychosociologists, biologists, chemists, pharmacists, experts in public policy, ethics, sociology, etc. Decisions should not be made one-way and the strategic communication should be done professionally with communication experts bypassing the imperative of forced military language. We must not forget the well-being of the population and the effects that public policies have on people. In making these decisions, psychologists and psychosociologists are needed to avoid the post-traumatic effects. In conclusion, we must emphasize the key element related to the "truth" and the search for truth in relation to the new technologies: training the population, applying specific methods to lifelong learning and continuing education trends.

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