ChatGPT and Other LLMs: Are we in the age of Quasi-Truth?

Edison Spina, Mario Magalhães e Marcel Simonette

Introduction

Would you follow a text that sounds like a repetition of tautologies present in various sources or is part of common sense? Would you base on bibliographical references without ensuring whether they are authentic, whether the authors and works exist or were published? Would you trust a spreadsheet that, while calculating, generates some false numbers that seem to be correct?

More and more information is available in various forms and media: texts, images, videos, or data that seem authentic and correct. However, far beyond the fake news forged by individuals, Information is being generated by systems, algorithms, and artificial intelligence technologies created to seem... "intelligent."

People can easily believe the information. It is "quasi-truth". Most information is, but not all. It seems generated with intelligence and culture. It convinces by its form and presentation.

The Age of Quasi-Truth

It is possible to state that we have entered the age of quasi-truth. An age in which information, regardless of form or medium, is plentiful, available, and easy to access. Information is seemingly authentic but often contradictory. Sources, even if declared, can also be forged in form and style of writing and presentation, and following writing styles of famous writers or journalists.

Significant effort is required to validate what is true and what is forged, depending on prior or direct knowledge, access to already validated information, and consensus interpretations among validators. However, the excess of sources, the intricate network of potential references, and the lack of legitimacy of both the generators and the validation processes impose low reliability on information and help keep its consumers uninterested or ill-informed, who find relative comfort in being unconcerned about these problems.

Society faces this challenge on a large scale.

How did we get to this situation?

In the early days of society, nature represented the truth, and the gods, unquestionably, were forces of nature that harmoniously determined everything. This view is well represented in Greek, particularly Aristotelian philosophy.

Uncertainty of information becomes an answer to problems unsolved by the Enlightenment

The evolution of society led to organized, dogmatic, faith-based religions. The truth thus clearly established determined corollaries that were easy to understand and apply.

With the Enlightenment, the truth was determined by well-controlled processes of explaining events. The belief was that if something were not understood and clarified, it would only take more knowledge to establish the truth. Nevertheless, the elements that continued to generate doubts needed to be verified. Premises and theories were formulated and confirmed by the community, with replicability and validation of results.

From the certainty of the truth of the Enlightenment concepts, scientists such as Newton accomplished their entire development of theories. However, some

problems became too difficult to be understood using the known scientific practices. Some issues became over-complicated. And the theories and their premises became questioned.

The understanding and incorporation of uncertainty in knowledge make possible remarkable advances made by several thinkers like Gödel and Heisenberg at the beginning of the 20th century. Uncertainty of information becomes an answer to problems unsolved by the Enlightenment. The admission of doubt was the great conceptual victory of this phase. New logic has been developed to include the information, and the denial of the fact, and the uncertainty about the fact, as part of the solution of problems and models.

At the same time, although limited worldwide by communication media, the availability reaches global dimensions. The press, newspapers, and later, radio and television, spread

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to most of the population. And what they report is tacitly accepted as truth.

In the last decades of the Twentieth Century, a new challenge, a consumer truth that seems unnecessary to validate or complicated to check, accommodates doubts and is thus easily consumed. In this concept, mass communication becomes a fundamental part of the creation of narratives accommodating facts that are difficult to explain, omitted, or unknown to meet specific unexpressed interests.

The generation of narratives is the basis of post-truth. The narrative built a posteriori to consume the information as a truthful version instead of delving deeper in search of the generating facts. Post-truth generates disinfected versions of concepts that are not convenient or desired for any of the parties involved directly or not. The suppression of the truth, to be verified through a true story, but which contains the convenient biases for diffusion and profusion.

The quasi-truth comes to be an unexpected evolution in communicating information through its generation of discourses or narratives with the aid of technology resources, mainly with Artificial Intelligence. The narratives are built with the apparent support of references, historical concepts, application logic, and well-structured support in a very palatable text and unquestionable form, creating a seeming truth.

The construction of quasi-truths

The quasi-true texts and narratives creation results from a logical process, not from intelligence with some semantic concept. It is a statistical composition from succession analysis of similar words in massive bases of texts transformed into mathematical representations independent of their semantics.

They are texts or narratives that form a frivolous quasi-truth, devoid of semantic interpretation, which gains meaning either because it reflects the tautologies of greater frequency or brings together words that form concepts that would probabilistically appear in similar texts. When questioned, find no genuine or formal support. Form becomes fundamental to impose an apparent conceptual structure.

The solutions available today include a final layer of filter or criticism to prevent the texts generated from including controversial or illicit subjects. These filters reflect the bias of those who control them. The texts automatically generated by these algorithms, with words or sequences of words from the entire history of texts available and even creating apparent theoretical references, are superficial and lead to a large number of consumers eager for easy and palatable explanations, with convenient biases for the intended narrative that bet on the consumer's comfort space.

Quasi-truth can take a group of citizens to believe appropriately polarized facts on any subject, and the power or politics will take care of prevailing, according to the rules of the AI "thinking" rule makers. Machine learning easily surpasses creative and investigative Learning in volume, speed, and availability. Citizen

comfort will be the big supporter of the growth of quasi-truth.

Living with the reality of quasi-truth

An example of one such system is OpenAI's ChatGPT - a system using AI solutions based on LLM (Large Language Models) with an associated filter layer capable of dialoguing with users naturally.

ChatGPT is a product aimed at the general public which does not rely on prior knowledge but can understand and maintain context in a dialogue. Using simple methods, it answers questions and provides clear answers in natural language. The answers are from the Internet content used to train the system.

There is no real learning in the system. It aims at creating knowledge and experiences that supply the solution capable of solving the problems in their various semantic contexts: technical, human, work, or leisure. The system does not know the semantic load and its contexts. An accumulation of related statistics is made in building maps representing presences, similarities, and proximities or temperature (a measure of impact or frequency of the word in the map sets) of words. There is no development of problem-solving competence as there is no accumulation of experience. There is training based on the cumulation of similar or related text fragments.

The system relies on global knowledge. It is organized according to guidelines drawn up by statistical models and their parameters. In the past, with Wikipedia, entries could have their texts written by anyone and contain any bias without necessarily being corrected or monitored. The models with a low level of coordination or curation provide the embedded information. The directives used in the AI mechanism are not traceable or controllable. Unknown elements create these directives. And they can polarize responses according to their beliefs or interests. There are billions of directives cataloged in the system. There is no known or possible way to ensure that their answers ability does not depend only on concepts with the higher occurrence, without explanations and fundamentals. Or what would be more dangerous - the concepts created to control the narrative. There are no reliable references for any information made available. Control of the process does not exist. Or it is so distributed that it cannot be attributed to anyone.

It is possible to use AI to retrieve even reliable information, but knowing how to ask and trust the "opinion" of the obtained result will increasingly become an art.

It is not enough to ask but provide the AI systems with the context and the right question. It is not enough to receive the answer. It is necessary to be able to doubt and question what is received.

Is society in general and individuals in particular prepared?

Edison Spina *is the Academic Coordinator at CEST.*

Mario Magalhães *is a researcher at CEST.*

Marcel Simonette *is a researcher at CEST.*

This article is a result of the authors´ ascertainment and analysis, without compulsory reflecting CEST opinion.