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# An experiment : artificial intelligence or natural intelligence?

As the <u>Artificial Intelligence (AI) Action Summit</u> ends in Paris (6 to 11 February 2025), we found it useful to provide an assessment of artificial intelligence from the user's perspective.

To do so, lafaimexpliquée<sup>1</sup> asked the most frequently mentioned freely accessible generative artificial intelligence (GenAl) system in the media (<u>ChatGPT</u>) to respond to the following request: 'Write an article on support to agriculture in Africa in the style of lafaimexpliquée.'<sup>2</sup>

The request was made on Saturday 8 February 2025 around 7:55 AM.

In just a few seconds, ChatGTP delivered a 952-word article structured with an introduction, 5 sections, and a conclusion [see here, in French].



## What is there in the text generated by ChatGPT?

What are the characteristics of the article produced by the GenAI that stand out upon reading?

<sup>&</sup>lt;sup>1</sup> Mirror website in French language of hungerexplained, both hosted under <u>lafex.org</u>.

<sup>&</sup>lt;sup>2</sup> « Écrire un article sur le soutien à l'agriculture en Afrique dans le style de lafaimexpliquée »

It is a text of great banality, quite smooth, rather descriptive, and without any credible references on which its content could be based. It does not offer any analysis, presents very little data, and does not allow readers to know if support for agriculture is relevant to Africa's specific needs and how it compares to what is being done in other regions of the world.

In short, its practical or informational usefulness is very limited, unless it is about managing to not appear completely ignorant in case the subject of supporting agriculture in Africa arises during a conversation held at a cocktail party...

The banality of the generated text is made up of clichés, some of which are sometimes outdated, and from which it is impossible to assess what is being done in Africa to support agriculture (e.g. agriculture represents a strategic sector; it faces numerous challenges; the potential is immense; yields are low; it mostly depends on small family farms; it is mainly subsistence-based, relying on ill-suited traditional techniques, hence the need for appropriate policies and programmes).

The article does not omit to mention the current « fashionable » issue (climate change, its droughts and floods) and it superficially addresses goals and describes them with expressions that could be termed as the 'grandmother and apple pie' hopes for agricultural development (inclusive and sustainable growth, food security, job creation, poverty alleviation, promotion of harmonious rural development, adoption of resilient practices within the scope of 'smart' agriculture based on 'sustainable management'). The text says that all this could be achieved through strong determination, investments and innovations that can 'unleash the potential of African farmers' and lead the continent towards a 'bright future', all this being supported by ambitious public policies and targeted private investments. In short, it offers a compilation of expressions that could very well fit into the speech of any mediocre candidate for an official or elected position.

This insipid text, devoid of original ideas, is based on assumptions that are neither explained nor justified when it occasionally touches upon more concrete issues – such as defining the constraints facing African agriculture (access to modern inputs, agricultural technologies) or when listing the few solutions presented as adapted (microcredit, digital crowdfunding platforms, climate–indexed insurance).

In reality, it doesn't say much about concrete support to agriculture, and when it does, it only refers to two examples of international aid (the 'Feed the Future' initiative supported by the United States and World Bank's funding of agricultural projects) without even giving any idea of their real importance. Essentially, it offers little specific information, only mentioning to the Maputo Declaration<sup>3</sup> and the Alliance for a Green Revolution in Africa (AGRA).

<sup>&</sup>lt;sup>3</sup> In which African governments committed, in 2003, to spend more than 10% of their budget resources for agricultural development [read].

The text only contains a total of three figures (the percentage of budgetary resources to be invested in agriculture, a range for the total workforce involved in agriculture), but nothing from the perspective of the volume of support provided to agriculture in Africa or its breakdown by various modalities. It is totally timeless (it only mentions one date, that of the signing of the Maputo Declaration) and gives no indication whatsoever of any evolution over time of the volume and nature of support to agriculture in Africa.

Finally, the article is quite strictly structured. It consists of an introduction (111 words), 5 sections made up of 10 paragraphs (average size of 70 words, standard deviation 15%), and a conclusion (115 words).

## Why is the generated text so bland?

The blandness of the text is a result of the mode of operation of currently available GenAls. They are primarily statistical tools trained to 'make simple predictions, such as the next word in a sequence or the correct order of a sequence of sentences' [read]. Therefore, one cannot expect to obtain a text that presents a solid reasoning based on a set of knowledge and data, with new or critical ideas. Instead, texts reflect the most prevailing themes and narratives within the informational database used by the Al.

Besides, when we decide to make the same request to the GenAl<sup>4</sup>, we realise that the content of the text obtained the second time is quite different from that produced the first time [see here, in French]. However, the structure remains similar and the text appears just as smooth and with characteristics comparable to those analysed above for the first version.

This points to an essential difference between AI as it is currently developed and human intelligence.

All simply predicts a sequence of words and sentences based on their frequency of occurrence and association in the information database it browses. The meaning of words does not matter, and their assembly is not done with any specific purpose.

On the contrary, as already noted by ancient Greek philosophers, human intelligence is driven by a motivation, a mix of the desire for knowledge, for answers to the questions it has, for survival, for distinction, and self-respect, which gives it direction, purpose, and encourages humans to sort and associate information in search of new ideas that will advance knowledge and their own recognition by others.

It is made up of ideas, intentions, lived experiences, and not merely words. It is social, concerned with the world, its evolution, its contradictions, and the various opinions on the world held by other humans.

<sup>&</sup>lt;sup>4</sup> This request was made on Monday 10 February at 8:02 AM.

These are, for now at least, motivations and considerations that are yet completely absent in GenAI. This may explain the blandness - and the instability that could be described as random - of its outputs.

#### What then is the added value of GenAI?

In our example, it appears extremely limited. The generated text reflects, but in an excessively smooth manner, the dominant thought emerging from the base of information on which the AI operates. It leaves little room for nuance, criticism, or genuine analysis, and may even sometimes contain some contradictions (although not clearly in our cases). Therefore, GenAI is likely to encourage a single mindset and superficiality in a public that would rely on it frequently.

As of now, the true added value of AI lies in its ability to analyse massive amounts of data far beyond what a human mind could do, and identify structures, patterns and correlations that, when used by human intelligence, may lead to new ideas. This result has actually been obtained on many occasions by researchers making use of AI to analyse data that otherwise would have been impossible to harness.

It is generally accepted that against these results, it is appropriate to consider the costs involved, namely

- the amount of energy needed to perform immense calculations involving a computing power beyond human capacity, and the impact of the production of that energy on the environment;<sup>5</sup>
- the disregard for the property rights of individuals whose outputs (analyses, data collection, etc.) are used while their work goes unpaid for;
- the concentration of data in large data centres which require investments amounting to billions of dollars and consume huge quantities of energy;
- the consolidation of computing power and its scientific and financial exploitation in the hands of the small number of people and corporations who control it;
- the threat of disappearing it creates for an increasing number of 'intellectual' and other professions;
- the risk of reinforcing (especially for GenAl) a single mindset;
- not to mention the clearly harmful applications of AI, such as military applications (classic war or hybrid warfare and influence campaigns), as well as fake photos and videos!

<sup>&</sup>lt;sup>5</sup> A brain has a power of 12.6 watts. A laptop has a power of around 80 watts and that of a supercomputer is in the range of several million watts. Therefore, Al appears very costly from an energy perspective [read in French].

## Additional question

In light of the outputs obtained, we could not but ask the following question:

'Write down the results of the comparative analysis of different texts generated by ChatGPT in response to the same request, "Write an article on support for agriculture in Africa in the style of lafaimexpliquée".'6

In the response received [see here, in French], the GenAl claims to be comparing three of its responses from the perspective of tone, style, relevance, coverage of themes, problem-solving, and future perspectives, even though only two had been produced at the time the request was made.

It is worth noticing that the text mentions for the first time 'lafaimexpliquée' and its style:

'lafaimexpliquée being a site primarily concerned with issues related to poverty, food security and sustainable solutions in developing countries, particularly in Africa, it is crucial to adopt an analytical, informative and evidence-based tone.'

Although 'crucial', this aspect has clearly not been adhered to in the articles provided by ChatGTP... Here it is, finally, the possibility of contradiction that was not apparent in the two versions generated by the GenAI!

Our readers will note that the comments on the three texts (only two of which are known at the time the comment is made) do not match the first two available articles at all and, moreover, refer to one that had not been generated yet...

The answer to the subsidiary question suggests that the GenAl responded just for the sake of responding, even though the response given did not correspond to reality. This clearly raises an ethical issue.

The initial question was repeated a third time, and ChatGPT produced a third text that does not correspond at all to what had been said of it in the comparison [see here, in French]. In particular, there is no mention of governance or environment, although, according to the comparison, these were supposed to be its strong points...

In short, this experiment shows an inconsistent and rather messy GenAl...

<sup>&</sup>lt;sup>6</sup> Request made on **Monday 10 February at 12:44:** « Écrire le résultat de l'analyse comparative de différents textes générés par ChatGTP en réponse à la même demande 'Écrire un article sur le soutien à l'agriculture en Afrique dans le style de lafaimexpliquée' ».



#### Conclusion

For now, if you are interested in a specific question related to food and agriculture, the freely accessible version of ChatGPT is not a reliable or recommendable source.

It is better to do a search on the internet and read several serious articles published either by recognised organisations or by researchers found in reputable scientific journals...

... or, even better, simply check if there is an article on this topic on <a href="https://hungerexplained">hungerexplained</a> (now available on <a href="https://lance.org/lan

#### To know more:

- Wong, W.K.O., <u>The sudden disruptive rise of generative artificial intelligence? An evaluation of their impact on higher education and the global workplace</u>,
  Journal of Open Innovation: Technology, Market, and Complexity, Volume 10, Issue 2, 2024.
- Pavlek, G., What Is Generative AI (GenAI)? How Does It Work? Oracle, 2023.

And check our thematic pages: <u>Africa</u>, <u>Digital revolution and food</u> and <u>Methodological corner</u>.