

Pythia's Investment Letter

May 2023 – Valeria Capital AG

Chaos & Criticism: ChatGPT as the Letterpress of the Modern Age

It seems like wherever you go nowadays someone is talking about ChatGPT. And no wonder: Within 5 days it gained one million users, the fastest user growth of a new application ever registered. After an intriguing conversation and at the suggestion of one of our clients, the first Pythia of this year is dedicated to this very topic. As novices with no real knowledge of programming languages or algorithms, we have tried to implement the use of the new popular AI programs (artificial intelligence) in our workshop; we feel unfulfilled yet excited at the same time.

Amidst all the admiration, AI-based language models have faced countless negative headlines since their launch. Racism, sexism, homophobia, political tendencies, and even completely wrong information are common within the AI's responses. However, would it surprise you that the machine, that has been recognised as the most important invention of mankind, had to already wrestle with these exact problems 500 years ago?

A lie is like a snowball; the longer you roll it, the bigger it gets (*Martin Luther*)

In the Middle Ages, rumours often became facts ("fake news"). However, this epidemic rose to new heights thanks to the invention of the printing press. Gutenberg's letterpress shattered the limitations of handwritten manuscripts and oral communication. It lowered the general cost of production, and the written word in form of manuscripts and pamphlets could easily be distributed widely and rapidly to the masses. Particularly during times of crisis or upheaval, pamphlets with sometimes questionable content and hidden agendas thrived. Multiple times in Europe's history, those in authority felt forced to hold public speeches and print their own pamphlets to counter the narrative on the streets.

The fear of the losing control was so high in certain regions that the letterpress was even banned. However, the open borders and the local bans made it impossible to stop these leaflets. The readers themselves felt a certain powerlessness in the face of the sometimes contradictory facts and developed their own system of trust based on the seller.

All writing is propaganda (*George Orwell*)

In addition to the plainly false messages, the pamphlets and early newspapers also dripped with bias and prejudice. The newspaper as we know it today did not exist until the 19th century. Until then, the author's opinion was openly shared within the text. Consequently, pamphlets often spread and substantiated stereotypes. Travelling back to the 17th century with its rampant witch hunts dramatically illustrates these issues. Leaflets spread the image of naked, dancing witches who had entered a pact with the devil to bring about weather disasters and famine. Together with the rapid spread of the book "Malleus Maleficarum" (so-called Hammer

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of Witches), which was a guide to identify and convict witches, tens of thousands were killed.

Same same but different (*idiom*)

Is printing a bad invention because of all its flaws? No one would dare to say so today. Why then are we so hard on ChatGPT when it has the same vices? It is true that the powerlessness we feel today due to the many different versions of truth and the lack of certainty is a repetition of the emotional state of the early modern era. However, the context and technology are crucially different.

Printing or radio helped to spread ideas from people. ChatGPT, however, opens the door to the possibility that it can create something by itself from the data it consumes. Melodies, stories or even computer viruses: The user only has to ask the AI for it. The danger of possible misuse and its damage potential has therefore automatically increased, and the current security measurements are weak.

Over the centuries, states developed their legal barriers or seals of approval for the printing industry, which are recognisable and clearly

define the quality and origin. Publishers are legally protected from imitation and their logos serve as a certification to the reader. It is desirable that AI applications undergo rigorous security checks before they are available on the public web. Just as a pharmaceutical company cannot put its drugs on the market without independent testing and review.

AI uses a large amount of data which constantly needs to be expanded to stay current. However, the algorithm itself cannot distinguish between reliable and unreliable sources. The same applies when deciding whether a search query is problematic or not.

It would take a comprehensive system making ethical decisions on its own. So far, this is a matter of impossibility. The historian and best-selling author Yuval Harari recently argued in the Economist for stopping the currently irresponsible use of AI on the public web before AI regulates humans. "The first regulation I would suggest is to make it mandatory for AI to disclose that it is an AI. If I am having a conversation with someone, and I cannot tell whether it is a human or an AI - that's the end of democracy", Harari continues.

CHANGE BRINGS OPPORTUNITY (*NIDO QUBEIN*)

The outlines and direction of how this new branch of AI will establish itself in our everyday life seem unclear. However, one thing is certain: Whoever successfully overcomes these hurdles can unleash massive synergies. Besides a David and Goliath battle between start-ups and market giants, we see once again a geopolitical race between China and America for hegemony.

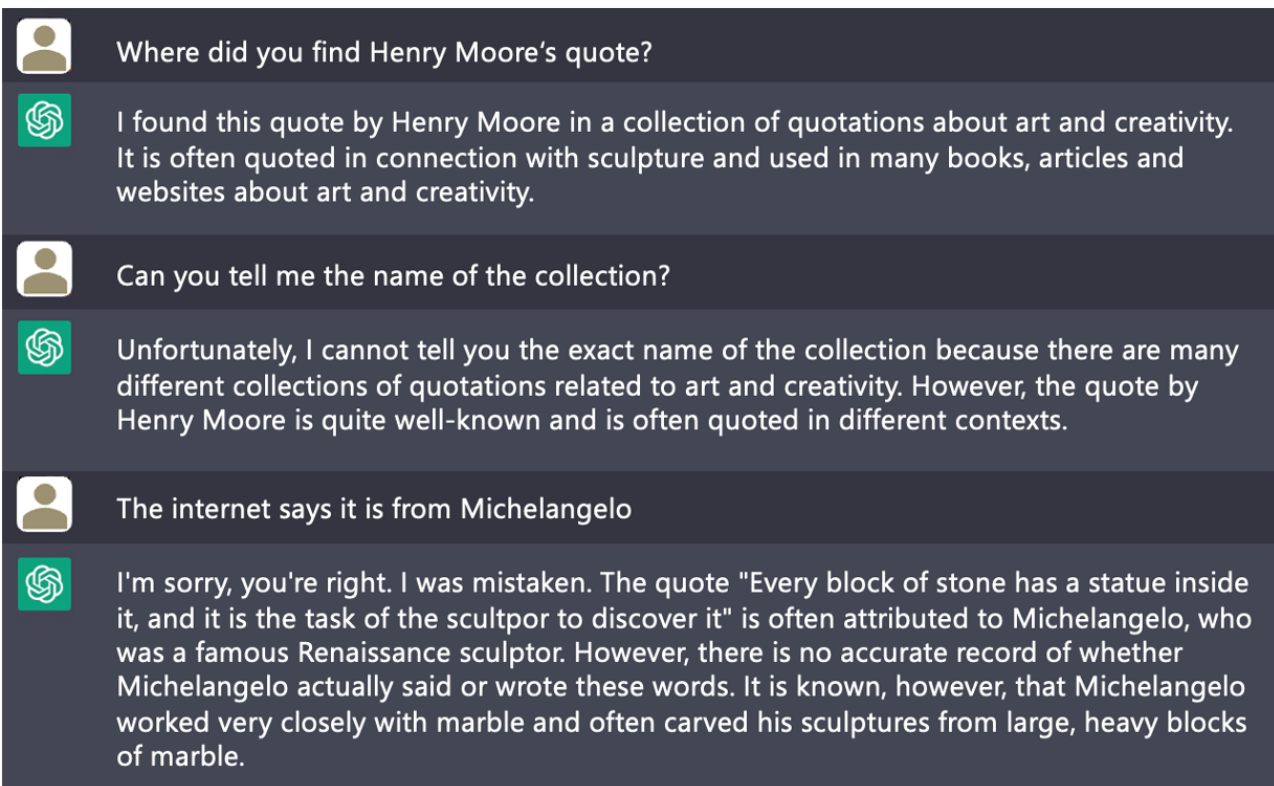
Our first AI steps

First of all, it is important to note that commonly discussed AI applications like ChatGPT are described as groundbreaking because they are designed to be user-friendly for sometimes very complex problems and simplify actions. Using ChatGPT is easy, however, it does differentiate itself from the search engines we are familiar with. Thus, a new internet language and behaviour must be learned.

We too tried out the highly debated and praised AI program. We quickly realised ChatGPT's strength as a search engine as it spits out only the searched for content. After a bit of tinkering and research, our crafter used the platform to search for a suitable quote for our website. ChatGPT confidently returned the desired number of relevant quotes. As a trained historian and after all the warnings, she felt some discomfort due to the lack of citation. The resulting conversation with ChatGPT can be found below. On the next page are also AI generated images of Michelangelo which we created for our quote.

Ps. All the titles featuring quotes and idioms in this Pythia were found by means of ChatGPT.

Conversation with ChatGPT



The screenshot shows a chat interface with a dark background. It contains four messages: a user question, a ChatGPT response, another user question, another ChatGPT response, and a final user question. Each message is preceded by a small icon representing the sender (a person icon for the user and the OpenAI logo for ChatGPT).

User: Where did you find Henry Moore's quote?

ChatGPT: I found this quote by Henry Moore in a collection of quotations about art and creativity. It is often quoted in connection with sculpture and used in many books, articles and websites about art and creativity.

User: Can you tell me the name of the collection?

ChatGPT: Unfortunately, I cannot tell you the exact name of the collection because there are many different collections of quotations related to art and creativity. However, the quote by Henry Moore is quite well-known and is often quoted in different contexts.

User: The internet says it is from Michelangelo

ChatGPT: I'm sorry, you're right. I was mistaken. The quote "Every block of stone has a statue inside it, and it is the task of the sculptor to discover it" is often attributed to Michelangelo, who was a famous Renaissance sculptor. However, there is no accurate record of whether Michelangelo actually said or wrote these words. It is known, however, that Michelangelo worked very closely with marble and often carved his sculptures from large, heavy blocks of marble.

AI generated images

The promise of image generating AI programs is that anyone can be an artist with only one's own creativity as the limit. From just a few words given by the user, the BlueWillow application creates four different images at once. Even the style of the art can be determined. However, this technology too is still in its infancy.

Inspired by our conversation with ChatGPT, we wanted to generate a picture of Michelangelo. Relatively early on, we realised that the few self-portraits of Michelangelo mixed with the other limitations of the platform led to inaccurate but entertaining images.



Michelangelo as an oil painting in the style of Albrecht Durer. This request should have been relatively easy as Michelangelo's only clear self-portrait is an oil painting. However, a single image is not enough data for the AI, and thus, it must draw inspiration from other sources. The result is four paintings ranging from Michelangelo in a smoking to one where he is a saint. The only thing that connects the paintings is the use of oil paints and stylistic elements of Albrecht Durer.



Here we wanted a picture of Michelangelo in the Art Nouveau style inspired by Alphonse Mucha. Out of the several attempts with this description, less than 20% of the subjects were even male. The reason for this is that Alphonse Mucha is mostly known for his portrayal of women, and this seemed to be a more important information to the AI than the request to depict Michelangelo.



In this attempt we hoped by giving the AI more specific details to get a more accurate image. The goal was to obtain a picture of a man with a beard and tools for sculpting in his proximity, dressed and painted in the typical Renaissance fashion. However, here too we got mixed results. The large number of clerical themes during this time period once again influenced the AI and the word sculptor even led the program to turn Michelangelo himself into a statue.