

ChatGPT focuses on Grammar and GPT

The AI tool ChatGPT analyzes text on the basis of natural language processing (**NLP**) and robotics, i.e. generative language models like **GPT-3** or **GPT-4**, respectively. The text generator continues an incomplete sequence of words with a new word that occurs most frequently in the environment of the given sequence of words in large training sets. ChatGPT is a question/answer system that is perfectly trained on the grammar of a language and writes excellent prose, but cannot understand the content of a text (see Eduard Kaeser, "Chat GPT: Der Roboter schreibt nicht, er schwafelt", NZZ, 26.12.2022).

ChatGPT requires extensive training. It deals with the relative positioning of groups of a few words. It is like studying individual pieces of a puzzle while completely missing the story the whole picture tells. It is a playful tool, but it can give nonsensical answers and has a large bias (distortion of reality, false conclusions). This is because grammar has very little to do with the meaning of a text.

InfoCodex focuses on content recognition

InfoCodex requires no training because the knowledge is contained in its large universal linguistic database with more than 4 million words/phrases in five languages, clustered into about 1 million semantic clouds. It is machine-readable and bigger than the Historical Oxford Thesaurus of the English Language that is considered the largest thesaurus in the world.

InfoCodex focuses on the recognition of the content of the analyzed documents and can gain new insights from it. The latter aspect has been successfully proven in a benchmark test. Unlike ChatGP, Infocodex requires no training. This remarkable capability is achieved through a unique combination:

Linguistic Database + *Self-Organizing Neural Networks* + *Mathematical Statistics*
 Experience/Knowledge Intelligence (AI) Big Data/Evaluation

Strength and Weaknesses of the Two Approaches

Criterion	ChatGPT	InfoCodex	
• prominence	high; currently a hype	low	strong points
• question/answering system,	yes	no	of ChatGPT
• generating professional prose	yes	no	
• reliability	low; nonsensical answers	high	strong points of InfoCodex
• training with pertinent documents required	yes	no	
• analysis of text, recognition of benefits	no	yes	
• bias (distortion of reality, false conclusions)	large	low	
• detection of hidden facts, early recognition of trends	no	yes	

First and foremost, InfoCodex requires no training with large document collections and can be applied *immediately in new and unfamiliar situations*.

Second, ChatGPT can only combine existing ideas but never capture new ones, whereas InfoCodex is able to discover *new relationships (hidden facts)* by analyzing large amounts of literature, i.e., by analyzing the "whole forest" rather than just many small groups of trees in isolation. This ability was demonstrated in comprehensive benchmarks.

- **ChatGPT is a tool for conversational dialogs and creating grammatically correct prose.**
- **InfoCodex is a tool for reliable analysis and evaluation of text documents.**