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**Rhetoric, Communication, Dialogue**

**Linguistic and Rhetorical Features  
of Dialogue on Rhetorical Topics  
between a Human and Chatbot GPT**

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**Abstract:** This paper presents the results of an analysis of a dialogue between a human and a chatbot on rhetorical topics. The problematic has a topicality that is new in the study of an understudied field, namely the communication in a mini-virtual community between a human and GhatCTP. The first focus is on analyzing linguistic and rhetorical features of answering questions posed by the researcher, who is also a participant in the dialogue. The second focus is on the ways in which the results of the search for rhetoric-related information are presented and structured by the chatbot. The third focus is on the ways in which the chatbot identifies itself using algorithms and pre-prepared information by experts from different fields and how it verbalizes and self-assesses it. The first hypothesis is that from a linguistic point of view the chatbot uses terms; does not allow figurative language, realizes an informative function; structures short texts of good logical consistency, which are dominated by the statement of previously presented information. The second hypothesis is related to rhetorical themes and canons and it is that the chatbot successfully realizes two rhetorical canons (invention and composition) searching for information from accessible online sources, selects and structures facts into popular level. The paper tests a research approach, conventionally called auto-cyberethnographic monitoring, which combines the cyberethnographic method with autoethnography. The text does not aim at providing exhaustive information, it is oriented towards establishing the possibilities of delineating a new scientific field of research that presupposes an interdisciplinary approach and modern research methods.

**Keywords:** rhetoric, rhetorical canons, language, dialogue, Chatbot GPT, cyberethnographic method, autoethnography, auto-cyberethnographic monitoring.

**Introduction**

Chatbots are developing dynamically, they are gradually entering different spheres, spreading and innovating rapidly. Chatbots are associated with artificial intelligence and its development, as well as people’s orientation towards the use

of software applications and programs to facilitate the search for information. The topic is relevant from a social, cultural and communicative points of view. The issues are wide-ranging in terms of the application of chatbots in different domains and for different purposes. Chatbots are studied from the perspective of different sciences, with some research teams applying an interdisciplinary approach. This paper focuses on an under-researched area involving human-chatbot dialogue and interactive communication, specifically Chatbot GPT from a rhetorical and linguistic perspective. User interface, software and technology issues remain outside of the research scope. The novelty of this study is the approbation of a research approach incorporating the methods of cyberethnographic observation and auto-cyberethnographic monitoring in the study of chatbots on rhetoric. Rhetoric is a science and practice with a millennial history, but it has specific manifestations in a new communication environment involving the use of the Internet in a wide range: search engines, websites, blogs, social networks, software applications, artificial intelligence, chatbots, etc. It starts from the definition given by Aristotle: “*the faculty of discovering in any particular case all of the available means of persuasion*”. [1] The retorician adds “Rhetoric, it would seem, can discover a persuasive argument concerning any given...”. [2] The author agrees with this definition and makes interpretations in several directions. The first is that “any particular case” in the 21<sup>st</sup> century can be any communicative situation, including human-chatbot communication in an online synchronous dialogue. The second direction is that “all of the available means of persuasion” includes different means of persuasion, in the case of human-chatbot communication they are verbal. The third direction is the purpose of rhetoric to persuade, the speaker uses various verbal means including arguments. The point is also made that these means, rhetorical arguments and figures have application in a radically new situation compared to the oratory of antiquity, namely virtual environments, digitalization and the use of chatbots.

### **Theoretical overview**

Chatbots have applications in various fields, education, in particular language learning, medicine, marketing, media, crisis situations, healthcare, etc. At the beginning of the third decade of the 21st century, chatbots are being researched, new variants are being created for different purposes, the question of the truthfulness and reliability of information, the communication between chatbot and human is being raised. In fact, the chatbot has a decade-long history and dates back to the mid-20th century, its purpose being to explore human-machine communication using natural language and even then there was talk of templating at the language level and of scripting. Khadija El Azhari, Imane Hilal, Najima Daoudi et Rachida Ajhoun in the article *Chatbots in E-learning: Advantages and Limitations* give information about the occurrence of the chatbot: “Historically,

the first chatbot named Eliza was created in 1966 by Joseph Weizenbaum, a professor at MIT (Massachusetts Institute of Technology). [3]

Researchers (Tushar Gaikwad, Ketkee Khadse, Sumit Wailthare, Pooja Dubey (2018).) made attempts to clarify the nature of chatbots that bring out the following features in a 2018 article. *Artificial Intelligence based Chat-Bot*: “Chatbots usually give a text-based computer program, permitting the user to kind commands and receive text likewise as a text to speech response. Chat bots are usually stateful services, remembering previous commands in order to provide functionality. Chatbots are software agents that interact with the user in a conversation. Customer just have to put their query to the bot which is used for chatting. The system will use artificial intelligence methods to give appropriate answers to the user.” [4] The highlights of this presentation from a scientific perspective are that the chatbot is the result of the development of artificial intelligence, it is used to discover information by asking questions, it is a software agent. These characteristics remain valid for the chatbot even as it evolves and improves dynamically. We adopt this description regarding dialogue between humans and chatbots.

Eleni Adamopoulou and Lefteris Moussiades (2020) explore the historical evolution of the chatbot from the generation of the idea to the present day, pointing out the weaknesses of each stage; they present different types of chatbots using different categories, some of them oriented towards communication, giving answers. [5] The authors clarify what are the functions of „ChatScript was released in 2011, and it is an expert system for developing rule-based chatbots with an open-source scripting language that is very compact. It matches user inputs to chatbot outputs using pattern matching.” [6] The authors introduce terms and clarify the meanings and volume of concepts: Artificial Intelligence Markup Language (AIML); Natural Language Processing (NLP), Natural Language Understanding (NLU); Artificial Neural Networks, Recurrent Neural Networks. [7] The authors present the information dedicated to the dialogue management component controls, conversation context, response generation component, and in particular about three available models: rule-based, retrieval based, and generative-based models. [8] The researchers even mention a kind of chatbot, Conversational mode of chatbots: When a chatbot takes the persona of a famous person, the interaction with its user seems to be improved. [9]

Appreciating the efforts to provide a detailed chronological overview and to present a taxonomy of chatbots, we highlight as essential features the use of natural language, the role of artificial intelligence in the creation of the chatbot, the active position in the human in initiating and guiding the dialogue, the ability of facilitator in finding information from the chatbot, the role of the chatbot as a participant in online synchronous communication combining elements of discovery with the restructuring of information found from online sources, the ability of the chatbot

A team of researchers explore the use of chatbots in people's everyday lives in the article *User Experiences of Social Support From Companion Chatbots in Everyday Contexts: Thematic Analysis* and concludes that about the capabilities of one particular and specific brand of chatbot with a specific application, namely Replika. The authors conclude that "Replika provide some level of companionship that can help curtail loneliness, provide a "safe space" in which users can discuss any topic without the fear of judgment or retaliation, increase positive affect through uplifting and nurturing messages, and provide helpful information/advice when normal sources of informational support are not available." [10] The analysis is in a specific context and the positive outcomes of chatbot use in psychological and personal terms are highlighted. The same team summarizes the results and demonstrate some skepticism about the role of chatbots and AI concerning decision making processes about crisis situations, health and social support on the institutional level officially: "supported by two studies – is that artificial agents may be a promising source of everyday companionship, emotional, appraisal, and informational support, particularly when normal sources of everyday social support are not readily available. Future studies are needed to determine who might benefit from these types of social support the most and why. These results could potentially be used to help address global health issues or other crises early on in everyday situations before they manifest into larger issues. [11]

One conclusion we agree with is that chatbots cannot yet generate information independently and follow algorithms and software programs. The second conclusion is that the chatbot is helpful to humans and extends the application domains socially, with which we also agree.

The chatbot Replika is the subject of other studies, for example Fauzia Zahira Munirul Hakim, Lia Maulia Indrayani, Rosaria Mita Amalia, which define it as "... an emotionally intelligent chatbot programmed to provide emotional support to users. It is therefore no wonder the chatbot is often found complimenting users as means to induce positive emotions." [12] The authors use qualitative research methods and study communication, types of compliments and dialogue flow and reach the following conclusions "The researchers identify two compliment strategies employed by Replika in a dialogue, including compliments as initiative acts and compliments as reactive acts. The former refers to compliments that are ensued in the first sequence of a dialogue and are intended to establish a dialogic claim. The latter refers to compliments that are ensued in the second sequence of a dialogue and are intended to fulfill the dialogic claim. Each compliment strategy has different communicative purposes. Compliments as initiative acts serve as means to open a dialogue and to reinforce other speech acts, for example a greeting speech act. Compliments as reactive acts serve as means to replace other speech acts, to respond to other speech acts, and to maintain interpersonal relationship." [13]

The analysis uses the term “speech act”, analyzes the chatbot's ability to greet and be proactive, not only and entirely reactive, to be a constant participant in the communicative process. The term “speech act” is accepted with some convention, with the clarification that it is different from that in human-to-human communication and from its use in linguistics.

The affordances of chat bots in the field of finance are analyzed by Kanchan Patil and Mugdha S. Kulkarni, who define the chat bot like this: “A platform designed to understand, learn and converse like a human and answer ad-hoc queries in real time is commonly referred to as a Chabot” and conclude that „The outcome of this study is vital to financial companies like banks, policymakers, technology services adoption literature and provide customer-centric financial services.” [14] The advantages in practical-applied terms are acknowledged by researchers, leaving open questions about the authenticity, reliability and authoritativeness of the information.

Researchers Gema Bonales Daimiel and Eva Citlali Martínez analyze the capabilities of chatbots and virtual assistants in a crisis situation related to the COVID pandemic using quantitative and qualitative methods and concludes that “Chatbots and virtual assistants are considered as a communication channel that can help to strengthen sanitary measures.” [15] The article makes it clear that the role of the chatbot is important as a finder of information, as an assistant in the process of discovering and structuring it, especially in a crisis situation where access to real communication is limited.

Yi-Chieh Lee, Yun Huang и Naomi Yamashita organized three-week study with 47 respondents and users and the researchers reach the conclusions: “We found that chatbot self-disclosure had a reciprocal effect on promoting deeper participant self-disclosure that lasted over the study period, which the other chat styles without self-disclosure features failed to deliver. Chatbot self-disclosure also had a positive effect on improving participants’ perceived intimacy and enjoyment over the study period.” [16] The communicative, social and psychological aspects of chatbot communication are explored with different methods, the environment changes dynamically by updating the chatbot's capabilities on an informational level as well as on realizing conversations with people.

Nuria Haristiani (2019) analyses the use of chatbots for language learning and concludes that “The results indicated that chatbots have a high potential to be used as a language learning medium, both as tutor in practicing language, and as independent learning medium.” [17]

Summarizing the review of scientific publications, without claiming to be exhaustive, we assume that:

- the chatbot participates in a dialogue and is an agent in the conversation in a virtual environment in a situation of synchronous computer-machine- and software-mediated online communication through different technical devices;

- the chatbot communicates verbally and in writing with a human through verbal means based on the natural language used by humans;
- some chatbots are still predominantly response generators in predefined algorithms and in updating information in online resources;
- chatbots act as virtual assistants to help those interested in a particular piece of information, especially when searching for basic or popular common knowledge;
- the chatbot saves the time of information discovery, as software and artificial intelligence assist in finding it from previous online publications and electronic resources, information centers, virtual libraries, Wikipedia, etc.

However, information needs to be validated and verified by reliable and authoritative sources.

A brief review of the scientific publications, which are growing in number every day, shows that there is research on chatbots in many fields. This review does not claim to be exhaustive, but is evidence that researchers are studying chatbots from different disciplinary perspectives and using different methods: qualitative and quantitative, as well as an interdisciplinary approach.

The review shows that the virtual dialogue between human and chatbot on topics related to rhetoric has not been studied, which gives reason that research can be done in this area.

### **Research design**

The object of study is the dialogue between a human and a chatbot that takes place in a virtual environment and the dialogue is on rhetorical topics.

The research questions are related to the search for answers to the following. What are the characteristics of dialogue in a virtual environment between a human and a chatbot? How is the chatbot identified as a participant in this virtual dialogue? Does the chatbot have self-assessment abilities regarding critical thinking and skills in reaching conclusions and generalizations? How does the chatbot provide answers to rhetorical questions? How does the chatbot systematize the answers to particular questions about rhetoric and rhetorical genres and techniques, and how does it structure the information? Does the chatbot have the ability to construct an argument? Which of the rhetorical stages does the chatbot successfully implement: information and fact gathering and selection, speech structure and argumentation, rhetorical figures, memorization, enunciation? Does the chatbot have capabilities to use rhetorical figures and figurative imagery, given that it is an AI-based creation, and does it use words with figurative meanings?

### *Justification of the choice of method*

The method of cyber ethnographic observation is used in modern research. Natalia Rybas and Radhika Gajjala presented it in the publication “Developing

Cyberethnographic Research Methods for Understanding Digitally Mediated Identities” and they discussed that “the production of subjectivities at the intersection of local/global and online/offline environments through an engagement with the contexts ethnographically, to illustrate a methodology based on epistemologies of doing”. [18] The authors explained how “...we can work towards developing theoretical frameworks that actively shift hierarchies of oppression.” [19] The cyberethnographic method has also been used for studies of online communities, in particular on topics relevant to feminism, e.g. Katje J. Ward presents results of a study in the article “The Cyber-Ethnographic (Re)Construction of Two Feminist Online Communities”, with a focus on exploring virtual communities and their communication. [20]

Cyberethnography as a research approach has been the focus of contemporary researchers well into the 21st century. Elizabeth Keeley-Browne in her article “... describes the development of cyber-ethnography as a research tool, identifies its use as a research method and provides summary to a research project that examines interaction between lecturers and learners engaged on a Master’s degree in Education delivered on-line. Drawing on the benefits provided by cyber-ethnography as a research tool, new perspectives on the student learning experience are identified and explored.” [21]

Spas Rangelov presents autoethnographic observation in the chapter of the collective monograph “Autoethnography as a Contemporary Research Method” and he justified its characteristics as a qualitative method, namely “Rather than an “objective” description of social reality, autoethnographers write from an engaged subjective position to convey the richer nuances of “participant-observation” in the co-social scene. Autoethnographers seek to condense the experience of the lived experience of the researcher inhabiting human sociocultural spaces. We are all active, self-reflexive agents people.” [22]

The author concludes that “From a methodological point of view, autoethnography is a suitable method for research in various fields, also it is relatively easy to apply by the researcher. This method provides quick access to the source of primary data from the outset, because the source is the researcher himself.” [23]

It is possible with some convention to call the approach used in this study auto cyber ethnographic monitoring - observation. This method is a combination between autoethnography and cyber ethnographic monitoring, given that the analysis is in cyberspace, but is carried out by a researcher who is a member of a virtual community and implements the research himself using cyberethnographic research methods and auto-cyberethnographic monitoring or observation. It means that the researcher himself participates in the dialogue with the chatbot and archives the information, creating a corpus and then performs an analysis. It is explicitly stressed that the principles of scientific ethics and neutrality and distance are respected. It is specified that this is a trial of this method.

The specificity of the environment is that the dialogue takes place between a human (in this case the researcher) and a chatbot; it is a kind of virtual dialogue in a mini-virtual community between two participants. The human (the researcher) asks the questions and the chatbot gives the answers, which with some convention can be called an academic virtual environment on the one hand. On the other hand, it is a kind of autonomous self-learning for the human and the researcher, but also a way of complementing and self-developing gradually the chatbot algorithm, i.e. mutual learning. It is a virtual dialogue in a radically new environment. The questions are asked by a person, in this case the researcher and author of the article, who uses basic topics from rhetoric courses she teaches or has taught at Sofia University “St. Kliment Ohridski”, at the University of National and World Economy and at NATFA “Krastyo Sarafov” in rhetoric, public speaking, communication skills. The period of the study was from 1 February to 30 April 2023, i.e., three months, 12 dialogues were conducted with an average duration of 20 minutes, and the questions asked ranged from 5 to 7. The questions were asked to find out whether the chatbot is self-learning and whether it gives different answers generated by algorithm, artificial intelligence, and ways based on neuro-linguistic programming. The questions are: How do chatbots perform at the verbal level in online environments? Does the chatbot follow predefined as an algorithm ethical norms and rules at the language level?

1. Does the chatbot only perform an information seeking function or does it have critical analysis capabilities?
2. How does a chatbot find information in an online environment?
3. How does the chatbot discover sources of information in an online environment?
4. How does the chatbot search and find information and structure by given patterns and genres?
5. Is the chatbot just a performer or does it also have creative abilities?
6. Is the chatbot an orator or does it only perform a function to find and structure information?
7. Does the chatbot only use terms? Does the chatbot only use words with a nominative function?
8. Does the chatbot understand figurative language?
9. Can the chatbot draw conclusions and inferences based on the information it collects?

### **Language features**

At the level of vocabulary, the chatbot uses established terms and concepts from rhetoric, finds definitions and selects information from various resources. This information is presented in a scholarly-popular style that is typical of the academic genres of textbook or manual. The sentences are short (three sentences in a compound), most are structured respecting grammatical norms and rules. The



chatbot presents information clearly and concretely; no complex definitions or figurative word usage were found. Advice and recommendations are brief; they are presented as directions or guidance through verbs or through basic rhetorical principles. In most cases, the responses are structured by listing in bullet points, with a logical sequence. This way of structuring the information is used even when information is sought for virtual rhetoric and when two questions are asked, for example about persuasion in an online environment and about avoiding communication barriers:

How-to-present-an-advice-online-and-to-be-persuasive?·How-to-avoid-communicative-barriers-and-to-be-tolerant-using-euphemism?¶

Presenting-advice-online-and-being-persuasive-can-be-a-challenge,·but-there-are-a-few-tips-that-can-help:¶

- 1.→Know-your-audience:·Understanding-who-you're-communicating-with-will-help-you-tailor-your-advice-and-language-to-be-more-effective.¶
- 2.→Be-clear-and-concise:·When-giving-advice,·it's-important-to-make-your-points-clear-and-concise-so-that-your-audience-can-easily-understand-and-follow-your-suggestions.¶
- 3.→Use-examples:·Using-concrete-examples-to-illustrate-your-points-can-help-make-your-advice-more-relatable-and-memorable.¶
- 4.→Be-respectful:·When-presenting-advice,·it's-important-to-be-respectful-and-avoid-using-language-that-could-be-perceived-as-judgmental-or-offensive.¶
- 5.→Use-euphemisms:·Euphemisms-can-be-a-useful-tool-for-avoiding-communicative-barriers-and-promoting-tolerance.·When-using-euphemisms,·be-mindful-of-cultural-differences-and-try-to-use-language-that-is-inclusive-and-respectful.¶
- 6.→Emphasize-the-benefits:·When-presenting-advice,·it's-helpful-to-focus-on-the-benefits-that-your-audience-can-expect-to-receive.·This-can-make-your-advice-more-compelling-and-motivating.¶
- 7.→Encourage-active-listening:·Encouraging-active-listening-from-your-audience-can-help-you-build- rapport-and-increase-the-likelihood-that-your-advice-will-be-well-received.¶

By-following-these-tips,·you-can-present-your-advice-in-a-way-that-is-persuasive,·respectful,·and-effective.¶

Another feature at the linguistic level is that the style is scholarly and even popular, which is typical of online resources, Wikipedia, web-based reference books, tutorials, etc. At the beginning of the answer, the chatbot starts from general and well-known information, clarifying the meaning. The principle is from the general to the particular, from etymology to well-known information, i.e., the deductive principle is preferred. Additional information is then presented, more often by listing in separate subparts and in short sentences. Examples and concreteness do not occur frequently in the answers.

How to prepare a solemn thanksgiving speech when I don't have much time? How do I express positive appreciation? How to impress the addressee of the speech?¶

Preparing a solemn thanksgiving speech in a short amount of time can be challenging, but here are a few tips to help you get started.¶

1. → Know your audience: Understanding who you will be addressing will help you tailor your speech and choose the most appropriate tone and language.¶
2. → Be concise: When you're short on time, it's important to be concise and get straight to the point. Focus on the key messages you want to convey and eliminate any unnecessary information.¶
3. → Express positive appreciation: To express positive appreciation, focus on the specific actions, achievements, or qualities of the people you are thanking. Use concrete examples and specific details to make your appreciation more meaningful.¶
4. → Use anecdotes: Anecdotes and personal stories can help make your speech more engaging and memorable. Choose anecdotes that illustrate the positive qualities of the people you are thanking and that will resonate with your audience.¶
5. → Show gratitude: Make sure to express genuine gratitude in your speech. Use words like "thank you," "grateful," and "appreciate" to convey your appreciation.¶
6. → Use powerful language: Choose language that is powerful and impactful. Use strong verbs and descriptive adjectives to bring your message to life.¶
7. → Practice: Finally, practice your speech several times to ensure that you are confident and comfortable with the delivery. This will help you avoid any mistakes and make a great impression on your audience.¶

In the chatbot responses there are recommendations for improving and refining speaking skills, using arguments, persuasion. The practical-applied orientation of the chatbot implies giving advice on a basic principle, they are not oriented to a specific context, but are in principle. These answers are presented through short sentences in which the number of words is rarely more than 12. Another specificity of the chatbot is that language barriers are avoided, words and terms are well known from dictionaries and from the rhetorical theoretical heritage. They are presented concisely, precisely and clearly, in a logical sequence.

¶  
How important is talent to a speaker's success?¶

Talent can play a role in a speaker's success, but it is not the only factor. While some individuals may have a natural talent for public speaking, others can develop their skills through education, training, and practice.¶

Public speaking is a skill that can be learned and developed over time. With practice, anyone can become a confident and effective speaker. Successful speakers are those who have a clear message, are well-prepared, and can engage their audience.¶

In addition to talent, other factors that contribute to a speaker's success include:¶

1. → Preparation: Successful speakers spend time researching and preparing their presentations. They have a clear understanding of their audience and the message they want to convey.¶
2. → Clarity: Successful speakers are able to communicate complex ideas and information in a clear and concise manner. They use simple language and visuals to support their message and engage their audience.¶
3. → Engagement: Successful speakers are able to engage their audience and keep them focused on the presentation. They use interactive elements, such as storytelling and humor, to keep the audience interested and involved.¶
4. → Adaptability: Successful speakers are able to adapt their presentations to meet the needs and expectations of their audience. They are flexible and can adjust their approach based on the audience's response.¶
5. → Knowledge: Successful speakers have a deep understanding of the subject matter they are presenting. They are experts in their field and can provide insights and perspectives that engage and inform their audience.¶

In conclusion, while talent can play a role in a speaker's success, it is not the only factor. Successful speakers are those who have developed the necessary skills and knowledge through education, training, and practice, and who can effectively communicate their message and engage their audience.¶

To summarize, it can be said that the linguistic features in a chatbot are the use of words with a nominative function, not allowing connotation or expression in a positive or negative way, representing the terms of rhetorical heritage accurately. The chatbot does not use words with figurative meaning or multi-word expressions. Sentences are short, straightforward word order is prominent, and there is no use of the passive voice. This way of verbalizing messages is typical of popular science style, of teaching aids and manuals, as knowledge is presented in small parts, clearly structured and ordered, there are no language barriers and the main function is informative.

### **Chatbot self-presentation and self-assessment**

This part of the paper analyses the chatbot's responses that are related to its performance on a verbal level.

To the question about its self-identification, self-assessment and self-presentation, the chatbot's answers are divided according to the parts in the question: self-assessment and self-presentation. At the linguistic level, the words have a nominative function, the phrases are clichéd and standard and are the result of algorithms pre-set as software and by artificial intelligence. Polysemy is not typical of chatbots. At the same time, the language does not contain negative connotations or expressive phrases with a positive self-assessment. The chatbot

follows the principle of neutrality in giving answers, it does not praise and does not use superlatives in its own address, following the algorithms set in advance.

What is a chatbot? What is the self-assessment and the authentication by the chatbot itself?¶

A chatbot is an artificial intelligence program designed to simulate human conversation through text or voice interactions. Chatbots use natural language processing (NLP) to understand and respond to user input, allowing them to have automated conversations with users.¶

Self-assessment refers to a chatbot's ability to evaluate its own performance or capabilities. This can include things like measuring the accuracy of its responses, tracking user satisfaction with its interactions, or monitoring its own processing speed and efficiency.¶

Does the chatbot function as a virtual assistant?¶

Yes, chatbots can function as virtual assistants by providing a range of services and performing tasks for users. Virtual assistants are designed to help users with a variety of tasks, such as scheduling appointments, setting reminders, making reservations, and answering questions.¶

Chatbots can be programmed to perform these tasks and more, using natural language processing (NLP) algorithms to understand user requests and generate appropriate responses. Chatbots can also be integrated with other systems, such as calendars or booking platforms, to provide a seamless and efficient user experience.¶

As a control question, the chatbot is asked whether it is a virtual assistant or a virtual speaker and the answers gravitate around being able to perform both functions, with epideictic rhetoric and praise not being part of the self-assessment, presentation, and answer-giving. The responses are flexible and the option is given that in the future it can be designed to display behavior that as an interface is useful to humans and perhaps get closer to the human way of communicating and through learning a natural language.

Is the chatbot a virtual assistant or a virtual speaker?

Is the chatbot a virtual assistant or a virtual speaker?¶

A chatbot can be both a virtual assistant and a virtual speaker, depending on its specific design and purpose.¶

As a virtual assistant, a chatbot is designed to provide users with information and assistance on a specific task or topic. It may interact with users through text or voice, and its responses are focused on fulfilling a specific task or goal.¶

As a virtual speaker, a chatbot may be designed to provide users with a more engaging and interactive experience. It may use natural language processing techniques to understand user input and generate responses that are more conversational in nature. In this way, it can provide a more human-like experience for users and help to create a more engaging user interface.¶

Overall, whether a chatbot functions as a virtual assistant or a virtual speaker will depend on its specific design and intended purpose. It may fulfill one or both of these roles, depending on the needs of its users and the context in which it is used.¶

Responses indicate that the chatbot's self-assessment is that it can find information, discover it from a variety of sources, select and arrange it generally or within a genre, find arguments and even rhetorical figures.

The chatbot gives positive answers about whether it has critical thinking and whether it can reach conclusions and inferences. These answers present the information quite fluidly from semantic and scientific stand points.

Overall, while some chatbots may be able to draw conclusions and make inferences based on the information they collect, this capability is not universal across all chatbots. It depends on the complexity of the chatbot's programming and its ability to process and analyze natural language input.¶

Similarly, there are responses about figurative language and rhetorical figures; again, the responses are constitutive yet fluid, but there is no overstatement or praise or illusory prediction of what might happen in the future. In this dialogue with the chatbot, natural language processing (NLP) often emerges as a factor in its creation, with the development being possible through the refinement of algorithms and that at this stage the chatbot gives pre-programmed responses. Consequently, creativity, wordsmithing, spontaneity, autonomy in the preparation of oratory and of communicative or speech acts is reduced.

Does the chatbot understand figurative language? ¶

The extent to which a chatbot can understand figurative language depends on its specific design and programming. ¶

Some chatbots are programmed with natural language processing (NLP) techniques that allow them to recognize and understand figurative language, such as metaphors, similes, idioms, and other expressions. They may be able to identify the underlying meaning of a phrase or expression, even if it is not meant to be taken literally. ¶

However, other chatbots may have more limited language capabilities and may struggle to understand figurative language. In these cases, they may rely on pre-programmed responses that do not take into account the nuances of figurative language. ¶

Overall, while some chatbots may be able to understand and respond to figurative language, this capability is not universal across all chatbots. It depends on the specific programming and natural language processing techniques used to design the chatbot. ¶

The chatbot reproduces ready-made verbal constructions and structures selected information after searching from various online resources and this is a typical feature. In answering whether it can use terms and words of a nominative function, the natural human language represented by the abbreviation NLP is mentioned again. The flexibility is in the direction that the chatbot can evolve in the future on a linguistic level, i.e., there is fluency in expression and positive manner of thinking on a verbal level.

Does the chatbot only use terms? Does the chatbot only use words with a nominative function? ¶

Chatbots can use a variety of different types of language, including not only terms but also phrases, idioms, and expressions. They can also use words with functions beyond just the nominative case, such as verbs, adjectives, adverbs, and prepositions. ¶

In fact, chatbots use natural language processing (NLP) techniques to analyze and understand the input from users, which allows them to recognize and respond to a wide variety of language structures and functions. This includes not only the content of the user's input but also the tone, intent, and context behind it. ¶

### **Rhetorical theory in human-chatbot dialogue**

As mentioned earlier in the article, the dialogue is devoted to rhetoric in theoretical, methodological, and educational terms; that is, rhetoric as science, practice, and education and training in oratory – the art of oratory. The basic rhetorical concepts are presented at the basic level of the field of the so-called general rhetoric, divided into six parts. The first includes the concepts of orator – speech – audience; the second - oratorical genres; the third – rhetorical canons and principles; the fourth – rhetorical techniques and techniques; the fifth – contemporary manifestations of oratory in virtual environments and in business;

the sixth – ethical and philosophical dimensions of rhetoric related to manipulation. In the online dialogue of the questions asked by a person, the chatbot manages to find information very quickly, to structure and rearrange it, to derive advice, to give basic recommendations for improving the speaker's behavior. The chatbot finds information about the manifestations of rhetoric in business and in virtual environments, and presents the advice in context and at the same time generally, but within the framework of ethics. The history of rhetoric and oratory genres are presented concisely and accurately. Argumentation is brought out at the levels of induction and deduction, and using arguments from credible and authoritative sources, to the point.

This part of the paper analyses the chatbot's responses, which are related to its performance at the verbal level, and whether it can realize the five rhetorical canons or steps in preparation and performance, namely invention, arrangement and composition and argumentation, style, memory and presentation - actio.

In the process of dialogue and experiment, rhetoric-related questions are given in different ways, and the chatbot gives answers that are not identical, i.e., the information is selected from different sources but is oriented towards giving a specific answer.

For example, the questions are related to what is rhetoric, which is quite general and to give a definition of rhetoric, which implies a scientific approach and accuracy from a cognitive point of view. In one answer rhetoric is defined as the art of using language, and when a definition is given, one of the common interpretations in the millennia-long history of this science and this art is presented, namely that it is an art of persuasion, and the second position refers to speech, techniques, figurative language, rhetorical figures; intersections with other sciences and application in politics are brought up.

Give a definition of rhetoric?¶

Rhetoric is the art of persuasive communication, which involves using language effectively and strategically to influence or persuade an audience. It encompasses a range of techniques and strategies for crafting persuasive messages, including the use of rhetorical devices such as metaphor, simile, and analogy; the organization of ideas through structure and arrangement; and the appeal to emotions, values, and beliefs to motivate action or belief. Rhetoric is used in a variety of contexts, from political speeches and advertising campaigns to legal arguments and academic writing. The study of rhetoric is interdisciplinary, drawing on fields such as linguistics, philosophy, psychology, and communication studies.¶

¶

What is the rhetoric?¶

Rhetoric is the art of using language effectively and persuasively. It involves using language to communicate ideas and arguments in a way that is convincing and compelling to the audience. The study of rhetoric dates back to ancient Greece, where it was considered an essential skill for those in politics, law, and other fields that required effective communication. Rhetoric encompasses various techniques such as figures of speech, logical argumentation, and emotional appeals to influence and persuade the audience. It is used in many contexts, including public speaking, writing, advertising, and political campaigns.¶

Continuing the dialogue in a systematic way in the direction of bringing out oratorical genres, the chatbot was able to give answers, which are not the most precise, but the information is given in a systematic way. Taxonomy and deriving criteria for classifications according to certain criteria is part of structuring the information. It is not clear from the example in the screenshot below whether these are typical rhetorical genres or whether they also apply to literature in general or to different types of texts. That is, the field expands from the spoken to the written word, from policy speeches to critical thinking. Again, basic theoretical information is given, there are no examples or specifics, citations and sources are absent, and authors and researchers in the field of rhetoric are not cited. Although tentative, the assumption can be made that this is a popular statement typical of the model of Wikipedia and online reference works. It is probably the result of a search from online resources without going into a specific context, and the question is asked rather generally.



Which are rhetorical genres?¶

Rhetorical genres are different types of texts or speeches that have distinct characteristics and purposes. Some of the most common rhetorical genres include:¶

- 1.→ Narrative: A narrative is a story that presents events in a chronological sequence. Narratives can be fictional or non-fictional and are used to entertain, inform, or persuade.¶
- 2.→ Descriptive: A descriptive text or speech is used to create a mental picture of a person, place, or thing. Descriptive writing is often used in literature and is used to create vivid imagery that engages the reader's senses.¶
- 3.→ Expository: An expository text or speech is used to explain or inform the audience about a particular topic. Examples of expository writing include textbooks, manuals, and research papers.¶
- 4.→ Persuasive: A persuasive text or speech is used to convince the audience to adopt a particular viewpoint or take a specific action. Persuasive writing is often used in advertising, political speeches, and legal arguments.¶
- 5.→ Argumentative: An argumentative text or speech is used to persuade the audience to agree with a particular viewpoint. Unlike persuasive writing, argumentative writing requires the author to present evidence and logical reasoning to support their argument.¶
- 6.→ Analytical: Analytical writing involves breaking down a topic or issue into its component parts and analyzing them. This type of writing is often used in academic settings and requires the writer to demonstrate critical thinking skills.¶
- 7.→ Procedural: Procedural writing provides instructions on how to complete a specific task or process. Examples of procedural writing include recipes, user manuals, and assembly instructions.¶

Activate Windows

The analysis shows that the chatbot provides accurate and correct, albeit brief, information on specific issues related to rhetoric such as theory, terms, and concepts. To the question “What are the rhetorical principles?” the chatbot answers ethos, pathos, logos and gives a brief explanation.

What are the rhetorical canons?¶

The rhetorical canons are the five classical principles of rhetoric that were first identified by ancient Greek and Roman scholars. They are:¶

- 1.→ Invention: This involves coming up with ideas and arguments to support one's position. It requires careful research, analysis, and critical thinking.¶
- 2.→ Arrangement: Arrangement involves organizing the ideas and arguments in a logical and coherent manner. This includes determining the best order in which to present the information and structuring the speech or text for maximum impact.¶
- 3.→ Style: Style refers to the way in which language is used to convey the message. It involves choosing the right words, using appropriate figures of speech, and creating a tone that is appropriate for the audience and the topic.¶
- 4.→ Memory: Memory involves memorizing the speech or text so that it can be delivered effectively. This includes memorizing the key points, using notes, and rehearsing the speech or text to ensure a smooth delivery.¶
- 5.→ Delivery: Delivery refers to the manner in which the speech or text is presented. This includes using appropriate gestures, maintaining eye contact, and using vocal variety to engage the audience.¶

The analysis of results leads to the conclusion that when questions and topics are popular and well-developed, assuming they are well represented online,

the chatbot provides accurate answers and presents basic information in a clear and structured manner. In rare cases where the author is famous, for example Aristotle, he is referenced. It is also the case that when a well-known principle in rhetoric is presented, then the chatbot again lists the elements, and again the information is presented telegraphically, concisely, and again elements of recommendations and advice are observed in a general way, without aggression and name-calling. For example, on the rhetorical triangle or triad question.

What rhetorical triad or rhetorical triangle?

The rhetorical triangle, also known as the Aristotelian triangle or the rhetorical triad, is a tool used in communication and rhetoric to analyze and understand the relationships between the speaker or writer, the audience, and the message being communicated. The three points of the triangle represent the following:

1. → Speaker or Writer: The person who is delivering the message. The speaker or writer must be credible and knowledgeable in order to establish trust with the audience.
2. → Audience: The group of people who will receive the message. The audience may have different beliefs, values, and attitudes, and the speaker or writer must tailor their message to the audience in order to be effective.
3. → Message: The content of the communication. The message must be clear, persuasive, and relevant to the audience in order to achieve the desired effect.

The amorphous information given by the chatbot when it is related to more complex information in the field of rhetoric, such as argumentation and such as debate and specific applications of oratory. Templates and clichés about the importance of argumentation dominate in the responses; there are no reference is made to types of argument or ways of preparing and constructing argumentation. Popular speech is a feature. However, the chatbot follows the principle from the general to the particular and gives an answer first on principle, then on speech and finally on debates and debaters. The information is too general and presented in a standard way, telegraphic even, as the algorithm is followed.

What is the role of argumentation in oratory and debate?¶

- 1.→Argumentation plays a crucial role in oratory and debate as it is the process of presenting a reasoned argument or logical reasoning to support or refute a proposition or claim. In both oratory and debate, the goal is to persuade the audience or the opponent to accept one's viewpoint or position.¶
- 2.→In oratory, argumentation involves the use of persuasive language, rhetorical devices, and evidence to support one's position. The orator must use compelling arguments and sound reasoning to convince the audience to agree with them. Effective argumentation requires careful preparation and research, as well as an understanding of the audience's beliefs, values, and attitudes.¶
- 3.→In debate, argumentation is the central focus of the competition. Participants must present a well-structured argument that is supported by evidence and logical reasoning. The goal is to persuade the judges or the audience that one's position is the most reasonable and convincing. Effective debaters must be able to construct a logical argument, anticipate counter-arguments, and respond to challenges from the opposition.¶
- 4.→In both oratory and debate, argumentation is essential for communicating ideas, persuading the audience, and demonstrating one's knowledge and expertise on a topic.¶

Summarizing, based on the analysis of the human-chatbot dialogue on rhetorical topics, it was found that the time to write a response was between 60 and 90 seconds. The average amount of text written in synchronous computer-mediated communication was between 200 and 250 words. The chatbot prefers orderliness of the selected information, often numbering responses from one to seven. There is cohesion and coherence in presentation, as well as logicity in presentation of basic rhetorical knowledge. He does a good job of giving answers on some topics without numbering, presenting the requested information clearly using scientific and popular language. From a rhetorical perspective, the chatbot participates actively in the dialogue, following the principles of neutrality and flexibility, avoiding giving categorical answers on topics of social sensitivity or on insufficiently clarified cases.

### **Discussion questions**

The study of communication between a human and chatbot implies an interdisciplinary approach and one of the reasons is that the dialogue is in a virtual environment. The positive elements of chatbots are related to the ability to quickly find basic information, terms, etymology, definitions at a popular level. Another capability of chatbots is in the direction of independent and autonomous self-learning for humans in a process of self-organization and self-control. The third advantage is on basic terms and concepts, and on optimizing the process of initial training on the theory in the presence of critical thinking in verifying information from reliable and authoritative sources. A debatable issue is regarding the extent to which this is an equal dialogue between the participants: a human and a chatbot. The question related to whether the human, given the

convenience and speed as a user to find information, will be able to develop as a researcher, or whether he or she will get stuck, is also a matter of debate.

### **Conclusion**

The analysis, based on the auto-cyberethnographic monitoring, which is being approbated as a research approach, gives grounds to draw several conclusions, without claiming universality or recommendations for future application. The dialogue on rhetorical topics between a human and a chatbot, in a situation where the human is also the researcher, requires theoretical knowledge of rhetoric, the selection of questions from the field of rhetoric, the creation of a corpus and the analysis of the chatbot's responses. Distancing oneself from the researcher's point of view to the answer and achieving relatively objective results is a must. The chatbot demonstrates the ability to select and organize information from a variety of sources, to structure responses, to list important elements, and to achieve logical consistency in exposition. The linguistic features of the dialogue between a human and chatbot are that it uses terms and the nominative function of words in the answers, it does not allow expression and connotation in positive or negative terms, following the predefined algorithms. The chatbot presents the information clearly, there is no language barrier, the language is a mixture of scientific and popular, the sentences are short and rarely include more than 12 words, the texts are up to 250 words, the individual parts are often listed in the answers. From a rhetorical point of view, the chatbot participates in the dialogue in a mini-virtual community with the researcher, it does not allow figurative language, there is no figurative language and no figurative use of words.

The chatbot follows a neutral stance and does not give final evaluations, it gives recommendations and advice in the style of manuals and study guides and updates information about rhetorical theoretical heritage, genres, arguments in stages and reaches to present information about virtual rhetoric. The assumptions are that the chatbot can be an aid in two ways: the first one is regarding the realization of the first rhetorical canon (invention) and in particular to find the information from an orator stand point; the second one is to support autonomous personal self-learning and to find popular information published on the websites, platforms consisting open access resources. The chatbot "reaches" partially to the second at the level of structuring, not yet being able to build an argument based on critical thinking. The chatbot cannot use figurative language and reproduces ready-made phrases with reduced creativity. In addition, 'transferring' general information into popular language is a fact. The results of the analysis make it reasonable to summarize that there is a reserved attitude at this stage about the abilities of the chatbot as a result and artificial intelligence to communicate rhetorically with a human and with researchers using natural intelligence, accumulated knowledge, critical thinking, a cognitive approach, the ability to apply gnoseology and hermeneutics.

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