

English Education in Chinese Universities with the Appearance of Linguistic AI

Yanfang Zhu

Xi'an Technological University, Xi'an, Shaanxi, China

email: 1326762766@qq.com

Abstract. Linguistic AI has gained significant attention and development worldwide especially with the appearance of ChatGPT. It has caused a stir in Chinese Education circles as well as in other countries. In China, the foreign language community plays a crucial role in embracing and adapting to this emerging technology. This paper employs the methods of bibliometrics to explore the attitudes of the Chinese foreign language community towards language intelligence and their strategies for adaptation. With analysis of related papers in recent years the results show that although most Chinese teachers are wary of this new technology, it is the trend to accept this scientific and technological achievement and seek breakthroughs actively in the game between man and machine to aid foreign language teaching effectively.

Keywords: Linguistic AI; ChatGPT; Adaptation; Chinese teachers

1. Introduction

When the globe have been reeling from the shock of AlphaGo for it beat the world Go Champion several years ago which was seen as a milestone event in the history of artificial intelligence development, now ChatGPT brings this technology to the forefront with its superb text generation capabilities and smooth human-computer interactions. Bill Gates cites its appearance as a liking to the birth of the Internet and the personal computer.

ChatGPT received mixed reviews. Some are concerned about the academic integrity issues raised by ChatGPT and whether it will lead to students relying too much on machines to solve problems without improving their own coping strategies. Chomsky believes that ChatGPT is basically high-tech plagiarism... it is harder to detect plagiarism... the systems absolutely have no value with regard to understanding, anything about language or cognition... [2]

While the opposite side believes ChatGPT is a more advanced learning tool that can help students carries out personalized learning, which is conducive to improving the efficiency and quality of learning. Ethan Mollick, professor of University of Pennsylvania, confirms the advantage of ChatGPT with the hope that students will submit excellent writing by the new technology. Phillip Dawson, director of Deakin University's Digital Research Centre, believes that this is a big moment in developing human capabilities, and with the help of AI tools, future students will be able to do more things. [3]

ChatGPT has been upgraded from the primary stage of grammar or syntax processing of natural language text to the advanced stage of logic, semantic and emotional processing, from the operation of language form shell to the selection and judgment of language content and thought essence, so it has become a huge knowledge processing tool with initial thinking and wisdom. It will certainly have an all-round impact on the education sector which is based on knowledge impartation. Like colleagues in other countries, Chinese educators will also have to face the strong impact of AI and reconstruct the role, status and relationship of teachers and students to meet the social requirement of talents training in the digital age.

2. Research Design

To make a global understanding of Chinese English teachers' attitude and responses to constant evolving linguistic AI, the author sorts out 48 theses published in core journals in China in recent two years with the purpose to answer following questions: What do Chinese teachers think of

linguistic AI? Why there exist different opinions in China? What are Chinese teachers' anticipations of Linguistic AI?

3. Research Analysis

3.1 Challenges for Chinese Teachers. Among those advanced AI language models, which are featured with artificial intelligence technology based on deep learning and has the ability to process natural languages, the language generation ability of ChatGpt is quite excellent, as is shown in the following aspects:

First of all, ChatGpt can not only provide high-quality and authentic language input to learners, but respond properly to various learners from different circumstances. What is more, it qualifies learners to self-assess their language level and identify areas of weaknesses, thereby raising their learning awareness and becoming autonomous learners. For Chinese educators, ChatGpt can cover the shortage of insufficient interaction between teachers and students in traditional teaching, the uneven of teachers, materials and teaching quality from the economically developed eastern provinces to economic less-developed regions in western China.

Aware of the potential educational technology value of ChatGPT such as "convenience and wisdom", Chinese educators have been summarizing the educational concept and teaching theory of the new era of language intelligence and trying to adapt to the transformation of individual learners' knowledge processing and learning paradigm from "fragmented and ergodic" self-thinking processing to "prefabricated and borrowed" machine generation processing state. Not a few of them are reluctant to follow this trend; however, it is a change of new technological philosophy and educational philosophy view that they have to accept.

3.2 Chinese Teachers' Dialectical Thinking of Linguistic AI. In the coming era, teachers who have no clear concept of artificial intelligence will not be replaced by AI, but will be replaced by teachers who know well about it. (Zhang Xuejun, Dong Xiaohui, 2020) [9] With knowledge of foreign languages, it is necessary to understand the working principle of language intelligence ---algorithms--- so as to offer good questions to learners and make effective use of the high-tech.

As explicit as its advantages are, ChatGPTs disadvantages should not be ignored. Nearly all the products of AI can not avoid the issues like compliance of data sources and use, copyright disputes, possible spread of false information, biased problems of generated content, and etc. (Peng qian, Huang kun 2023) [6] For students, they have to risk degrading of their learning ability to rely on the tools to complete homework instead of exerting their own subjective initiative. For some teachers, they may be at risk of losing their jobs for AI language models are superior to human beings whatever in language database, composition, grammar, reading comprehension, instant translation or in real-time interaction.

The traditional language class is characterized by implanting mode and teachers play a central role in teaching process. With the aid of AI who can help training of listening, speaking, reading and translation skills of learners, teachers will not have to impart language knowledge by themselves but focus on the task of "education". Human beings can only be educated by themselves, and educating people is the starting point and destination of education. (Zhang Xuejun, Dong Xiaohui, 2020) [9] Therefore, teachers need orientate themselves with the influence of the new trend.

Although linguistic AI represented by ChatGPT looks so powerful, its nature should never be ignored: an algorithmic tool. Because language is the carrier of human thought and the tool of communication, the working principle of language intelligent robot is to screen and purify the language options that are considered to be "correct" through model operation in massive language data, which is not a language communication behavior in nature. Moreover, since data is outdated stock corpus related to human beings, what it offers are old "fragments of ideas" without new ideas. Even if the form seems to correctly display the shell of some thoughts, that is, the language and text content, it is the "pseudo-thoughts" that have not been filtered by humanity or the old "thought fragments" are reorganized and listed. Therefore, from the strict sense of human thought and civilization progress, language intelligence will not have the vitality of ideological innovation and

innovative consciousness, because it does not have the thinking and feelings of living human beings after all.

3.3 Chinese Teachers' Responses to the New Trend

The appearance of Linguistic AI like ChatGPT forces Chinese educators to reformulate general guideline of foreign language teaching from language study that has been executed for a long time to refined language application researches to construct a framework system that functions as transitions to all foreign-related professional knowledge. With such transformation the discipline will be integrated into the global education system well and learners will be empowered language ability to participate in global competition.

A possible role for Chinese teachers can be students' companies. Whatever the learner's age, they need proper guidance when encountering problems from the outer world or their personal sloth. Although AI products like ChatGPT would provide answers to any unrestrained questions, we should always make one thing clear: what the machine have been offered are a collection of the current world's mainstream understanding of a certain issue. The machine is a good observer and learner who has been trying to get to the core of human behaviors that are keeping changing with the time even by a event. Therefore, AI products should be treated as learning aids instead of a versatile teacher.

Considering the involvement of ChatGPT, the design of interactions between machines and learners becomes an elementary part. Except the basic function that any kind of knowledge of language will be conveyed to learners when they need explanations, the AI product should also stimulate students' thirst for knowledge, desire to explore and awareness of problems, and train students' expression ability, concept clearance, logical analysis, critical thinking, discourse organization, outlook of the world, life and values, and etc. Especially when ChatGPT offer ambiguous even misleading feedback, it is necessary for teachers to set warnings in advance and provide learners clues to make critical thinking and evaluation. On the basis of individual thinking and collective discussion, when the corpus is rich enough, the teacher can guide the students to select materials and form the text according to certain writing norms. Furthermore, in order to improve their oral ability, debate competitions can be designed based on the above design to train their language output skills.

4. Conclusion

The linguistic AI products represented by ChatGPT have already opened the new era of human-machine interaction, and a novel and virtual "relationship" between "robots" and humans is forming. AI language models have paved the way for super-massive, free-style, personalized and arbitrary real-time human-computer dialogue, which will have an inestimable impact on traditional education and teaching, seriously impact the pattern of China's higher foreign language education, and profoundly affect the future cross-cultural and interlingual communication methods, knowledge blending methods and cultural integration speed. Facing the impact of language intelligence, it is not wise to turn a deaf ear to it but accept this scientific and technological achievement and seek breakthrough actively in the game between man and machine to aid foreign language teaching effectively.

References

- [1] Deng Chaoqun, Opportunities and challenges for college English teaching in the era of artificial intelligence, J. Journal of Hubei University of Economics (Humanities and Social Sciences edition), 2021.
- [2] Information on https://www.thepaper.cn/newsDetail_forward_22066562
- [3] Information on https://mp.weixin.qq.com/s/_pR03FpsxINhUu96USSgrQ

- [4] Jiao Jianli, ChatGPT's Drives of the Digital Transformation of School Education: What to Learn and How to teach in the Age of Artificial Intelligence, J. Distance Education in China, 2023.
- [5] Lutz, C. Digital Inequalities in the Age of Artificial Intelligence and Big Data, J. Human Behavior and Emerging Technologies, 2019.
- [6] Peng Qian, Huang Kun, Change and Risk, N. Xinhua Daily Telegraph, Feb. 14, 2023.
- [7] Stokel-Walker, C. R. Van Noorden. The promise and Peril of Generative AI, J. Nature, 2023.
- [8] Xiang, C. NYU Professors Tell Their Students: Do not Use Chat GPT [EB/OL]. Retrieved from <https://www.vice.com/en/article/n7zxe7/nyu-professors-tell-their-students-do-not-use-chatgpt>, 2023.
- [9] Zhang Xuejun, Dong Xiaohui, Human-machine Symbiosis: The Age of Artificial Intelligence and the Development of Education Spreading Tendency, J. Theoretical Discussion. 2020.
- [10] Zhong Binglin, Shang Junjie, Wang Jianhua, ChatGPT's Challenge to Education, J. Chongqing Higher Education Research, 2023.
- [11] Zhu Guanghui, Wang Xiwen, ChatGPT Operation Mode, Key Technologies and Future Prospects of ChatGPT, J. Journal of Xinjiang Normal University (Philosophy and Social Sciences Edition), 2023.