

Celebrating 60 Years of ELIZA? Critical Pasts and Futures of AI

Special Issue — Call for Papers

Guest Editors

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In January 1966, mathematician and programmer Joseph Weizenbaum (1923–2008) published an article titled "ELIZA—a computer program for the study of natural language communication between man and machine" in Communications of the ACM (Weizenbaum, 1966). Only a few years after he had been appointed an Associate Professor in the Department of Electrical Engineering at the Massachusetts Institute of Technology (MIT), this article made Weizenbaum internationally renowned as a pioneer of Artificial Intelligence (AI). The ELIZA program described in the article is considered one of the first chatbots, making it an early precursor of ChatGPT and similar programs (Berry, 2023; Floyd, 2023).

Unlike the large language models of today, ELIZA could not generate long texts. It was a chat program that allowed users to interact with it, using text input. Its DOCTOR script simulated a psychotherapy scenario in which the program asked questions and users typed their responses. Then, ELIZA searched the answers for certain keywords and asked follow-up questions based on preconfigured building blocks. It also reformulated the answers into new questions or simply asked users to share more information.

However, ELIZA not only made Weizenbaum famous, but also turned him into a critic of the "Artificial Intelligentsia," as he mockingly referred to his colleagues in AI research like Marvin Minsky, Herbert A. Simon, and John McCarthy. According to Weizenbaum, one event was crucial to this turn: His secretary allegedly asked him to leave the room while she used ELIZA to chat about private matters. "I was startled to see," Weizenbaum (1976) later wrote, "how quickly and how very deeply people conversing with DOCTOR became emotionally involved with the computer and how unequivocally they anthropomorphized it" (p. 6). Apart from the fact that it has not yet been possible to find the secretary to hear her side of the story (Roach, 2024), inconsistencies have emerged in Weizenbaum's accounts over time (Berry & Ciston, 2024).

It is hard to imagine the history of computers and AI without ELIZA. It is regarded as the first program to pass the "Turing Test," the imitation game described by Alan Turing (1950). In the early 1970s, the interaction between ELIZA and PARRY—a chatbot developed by psychiatrist Kenneth Colby mimicking the behavior of a paranoid schizophrenic (Colby et al., 1972)—was the first fully automated chatbot conversation on the ARPANET, the predecessor to the internet (Cerf, 1973).

The phenomenon of people assuming a computer is intelligent simply because they can easily communicate with it became widely known as the "ELIZA effect" (Rheingold, 1985, p. 164).

In addition to its historical significance in computing, ELIZA occupies a central position in various intersecting debates across disciplines that are essential for a deeper, critical understanding of AI today (Baranovska & Höltgen, 2018). To mark the 60th anniversary of Weizenbaum's introduction of ELIZA to the world, we aim to bring together a wide range of contributions for an interdisciplinary special issue.

Individual submissions to the special issue could cover, but are not limited to, the following topics:

- Automating of Psychotherapy. Weizenbaum justified his criticism with the sometimes-exaggerated reactions of psychologists to his chatbot and their idea to automate psychotherapy. But how have psychiatrists, psychologists, and therapists actually used computers and text-based programs in their work over the past few decades? What imaginaries are mobilized and produced in these applications?
- Authoring AI. ELIZA is often regarded as a milestone in the artificial replication of human intelligence, but from a technical standpoint, it is merely a text-based language transformer. What genealogies follow ELIZA, not as a psychotherapist, but as an author and co-pilot in the writing of all kinds of texts? What successes and failures have been celebrated in this history of human-machine interaction?
- Commercializing AI. In the 1980s, the first attempts were made to commercially exploit AI research on a large scale under the label "expert systems." Various text-based programs similar to ELIZA were used during this time. How were these tools received by the industry? What changes did they bring it for employees and workers? What does AI mean for the future of work in factories and offices?
- Anthropomorphizing of AI. Giving a chatbot a human name like ELIZA is not a matter of course. Computer programs do not inherently appear to have human qualities. The efficacy of the "ELIZA effect" is shaped by decisions regarding programming, interface, and application settings. What does this humanization mean for our perception of AI? How does it shape our expectations of such technologies? How does it affect our image of humans?
- Mythologization of AI. For the past 60 years, Weizenbaum has been the primary source of stories about ELIZA. The inconsistencies that have emerged over time raise the question of whether these stories are, to a certain extent, myths. In any case, we should ask ourselves why we are so interested in AI stories in the first place. How have AI myths developed since the 1950s as AI technology progressed? Why are dystopian accounts of AI so particularly successful? And why—of all people—do we listen to the developers of AI when it comes to critically assessing the technologies they have helped build?
- \ Gendering of AI. The original imitation game, which Turing adapted for his test, did not distinguish between humans and machines, but rather between men and women (Wilson, 2010). "When computers were women" has become a catchphrase describing the early days of the computer age (Light, 1999). This gender dimension is also evident in the history of ELIZA, both because of its female name, given by a male programmer, and the gendered narrative of the female secretary who was allegedly deceived by a computer program. How has the gendering of AI, robots, and chatbots evolved since? What can we learn about our society from it? What impact does it have on the use and social consequences of such technologies?

In light of the recent advances in AI and robotics, these topics are now more pressing than ever. While generative AI and other new technologies promise revolutionary progress, they also pose unpredictable risks to our society. Against this backdrop, this special issue aims to explore what, if anything, is worth celebrating 60 years after ELIZA.

Submissions

The Weizenbaum Journal of the Digital Society (WJDS) is a peer-reviewed open access journal dedicated to research on the conditions, forms, and consequences of the digital transformation of society. Founded in 2021, the WJDS is a resource for an academic public and aims to promote high-quality research from inter- and transdisciplinary perspectives.

The submission process consists of two stages:

- 1. Interested authors who would like to contribute to the special issue are invited to first submit an abstract of the planned contribution (up to 500 words, incl. references) via email to <a href="wighted-
- 2. The complete manuscripts must then be submitted using the WJDS manuscript management system by April 6, 2026. We invite submissions that fit any of the WJDS formats: Research papers (5,000—10,000 words), Extended papers (>10,000 words), and Voices (up to 2,500 words) (all incl. references). Manuscripts should be prepared in accordance with the WJDS guidelines: https://ojs.weizenbaum-institut.de/index.php/wjds/about/submissions. During submission, please indicate that the contribution is meant for the special issue on "Celebrating 60 years of ELIZA?" and which disciplines are mainly addressed in your paper. Submitted manuscripts will undergo double-blind peer review. Authors will receive feedback on the results of the review process by July 6, 2026.

For inquiries about the special issue, please contact the guest editors (christian.strippel@weizenbaum-institut.de; magnus.rust@unibas.ch).

Key Dates

- Abstract submission deadline: November 17, 2025
- Invitation of full papers: December 1, 2025
- Full Paper submission deadline: April 6, 2026
- Notification of acceptance and reviews available: July 6, 2026
- Paper revision deadline: October 5, 2026
- Issue release: November-December 2026

References

Baranovska, M., & Höltgen, S. (Eds.). (2018). Hello, I'm ELIZA: Fünfzig Jahre Gespräche mit Computern [Hello, I'm ELIZA: Fifty years of conversations with computers]. Projekt Verlag.

Berry, D. M. (2023). The limits of computation: Joseph Weizenbaum and the ELIZA chatbot. Weizenbaum Journal of the Digital Society, 3(3). $\underline{\text{https://doi.org/10.34669/WI.WJDS/3.3.2}}$

Berry, D. M., & Ciston, S. (2024, March 20). Weizenbaum's secretary. In D. M. Berry, S. Ciston, A. C. Hay, M. C. Marino, P. Millican, A. I. Schwarz, J. Shrager, & P. Weil (eds), *ELIZA archaeology project*. https://sites.google.com/view/elizaarchaeology/blog/3-weizenbaums-secretary

Cerf, V. (1972, January 21). PARRY encounters the DOCTOR. RFC 439. https://doi.org/10.17487/RFC0439

Colby, K. M., Hilf, F. D., Weber, S., & Kraemer, H. C. (1972). Turing-like indistinguishability tests for the validation of a computer simulation of paranoid processes. *Artificial Intelligence*, 3, 199–221. https://doi.org/10.1016/0004-3702(72)90049-5

Floyd, C. (2023). From Joseph Weizenbaum to ChatGPT: Critical encounters with dazzling AI technology. Weizenbaum Journal of the Digital Society, 3(3). https://doi.org/10.34669/WI.WJDS/3.3.3

Light, J. S. (1999). When computers were women. Technology and Culture, 40(3), 455-483.

Roach, R. (2024, March 22). My search for the mysterious missing secretary who shaped chatbot history. *The Conversation*. https://theconversation.com/my-search-for-the-mysterious-missing-secretary-who-shaped-chatbot-history-225602

Turing, A. M. (1950). Computing machinery and intelligence. Mind, 49, 433–460.

Weizenbaum, J. (1966). ELIZA—a computer program for the study of natural language communication between man and machine. Communications of the ACM, 9(1), 36-45.

Weizenbaum, J. (1976). Computer power and human reason: From judgment to calculation. W. H. Freeman & Co.

Wilson, E. A. (2010). Affect and artificial intelligence. University of Washington Press.