## Artificial Intelligence, human intelligence and communication research

The digital revolution has had a major impact on media and its many formats. Before the rise of the internet and electronic devices, most information and content were transmitted through traditional media such as newspapers, magazines, radio and television. However, with the popularization of the internet and mobile devices, new media formats have emerged, transforming the way people consume information and entertainment.

One of the biggest changes was the transition from physical to digital. Newspapers and magazines now have online versions, which can be accessed through computers, tablets and smartphones. This has allowed these media outlets to reach a larger and more diverse audience, in addition to allowing news and content to be updated in real time. ...

In short, the digital revolution has significantly changed media formats, allowing people to consume information and entertainment in new and different ways. This has changed the way companies and individuals communicate, connect and relate.

HE THREE PARAGRAPHS that introduce this **Editorial** are what the artificial intelligence (AI) program ChatGPT returns when asked to "Discuss about changes in media formats and due to the digital revolution." These fragments are convenient to begin this issue of **MATRIZes** for two reasons.

First, because they provocatively suggest issues that the academic world and scientific publishing should face in the coming years, among them: can AI be a co-author of scientific articles – something accepted and already practiced by some (Curtis & ChatGPT, 2023), but denied or criticized by others





(Holden Thorp, 2023; Stokel-Walker, 2023)? Will AI be able to act as a kind of research assistant "in a variety of tasks, including data analysis, literature reviews, and even writing research papers" (Marchandot et al., 2023, para. 2)? Will AI be able to assist scientific editors in proofreading, elaborating better metadata for published works, favoring the dissemination of research (Lund et al. 2023) or even in article evaluations and decisions about what to edit (van Dis et al., 2023)?

Alongside controversial or promising issues related to AI in academic science, publishing, and education, clearly problematic and negative aspects exist, such as the possible harms to scientific transparency ("Tools Such," 2013), the bias of this activity (van Dis et al., 2023), and the inaccurate way current chatbots reference sources (Chen, 2023). This technology can also be used in misconduct practices, such as plagiarism – a topic of concern for educators, in particular (de Vries, 2023), as this will affect the training of students and new researchers. This may even involve curricular changes, given a need that seems to impose itself for an "AI literacy" (Anders, 2023).

One thus observes that AI will have significant impacts on society in general and, in particular, science. At the moment, the social transformations arising from technologies of this type are only glimpsed. Therefore, they pose a series of research questions, as noted by Quintans-Júnior and colleagues (2023) and van Dis and colleagues (2023): who would be responsible for regulating the use of chatbots in science, how would this be done and with what criteria?; How could this action favor equity in research, avoiding risks of accentuating inequalities, as well as relating to the principles of open science? Questions like these may form new lines of research.

Communication can make relevant contributions to this scientific effort. In fact, AI and human intelligence should not be seen as independent, since the former is a product of the latter, so that a constant affirmation of theory and research in communication gains prominence: the social meaning of cultural products is elaborated from uses and appropriations – in a given context of mediations - not always predictable. Understanding and giving ethical and humanistic direction to the practices and research that involve AI will require reflection and investigation. MATRIZes, which has already had the satisfaction of collaborating with discussions of the theme, in an article by Pierre Lévy (2022), hopes to continue to receive and publish studies that deepen the understanding of the subject.

At the same time, AI is not a panacea, because, as noted by Quintans-Júnior and colleagues (2023, para. 2), "its resources are valuable in science, but they cannot replace the researcher's critical and reflective thinking, or their ability

4

to interpret results .... ChatGPT relies on pre-existing content and lacks the analytical capabilities of humans". From this motto, one can reach conclusions about the first point regarding the observations made by the AI that open this **Editorial**, noting that the text generated, although not incorrect or devoid of meaning, is, to some extent, banal and lacking novelty. At the moment, this seems to be the limit of this type of technology when it comes to intellectual creations that require a more rigorous approach.

Quite the contrary. And so we move on to the second aspect about this quote. The text that opens this issue of the journal, **The Future of Books**, by John B. Thompson, has as a background a questioning similar to what was done to ChatGPT. However, a researcher who uses human intelligence and their theoretical and methodological wit of a mature investigator achieves, of course, better results: new knowledge, innovative knowledge, even counterintuitive pieces of knowledge. Thus, the author's data and discussions show that, despite the disruptive potential of the digital revolution, the book publishing industry has done remarkably well, including the "old-fashioned" print book sector.

The **Dossier** section of this issue continues with the article **Adaptation as Expanded Fiction in Contemporary Series**, by Marcio Serelle, which discusses how contemporary serial fiction makes adaptations that bear new characteristics, which bring it closer to contemporary sensibilities and conditions of reception. **In Media(tization) Studies we Love Metaphors**, by Carlos A. Scolari, addresses the metaphors and models used in the long history of mass communication studies, discussing the risks and benefits of metaphorical arguments in a type discussion also related to human creativity and innovative reflections.

Addressing a burning social issue, the next text of the section, **Imagery of Abortion and Medial Communication**, by Florence Dravet, chooses to discuss the theme from a different lens, that is, abortion as an aesthetic experience in which a flow of medial communication is interrupted, allowing the author to show how mediality takes place in the female body. Closing the **Dossier** of this issue, the article **Cinema Novo and 20th Century Avant-Garde Music**, by Luíza Alvim, maps and discusses the use of avant-garde music in films by Brazilian filmmakers Glauber Rocha, Walter Lima Júnior and Joaquim Pedro de Andrade, pointing out the role of phonographic production of the time for the choice of this type of sound.

Maria Immacolata Vassallo de Lopes and the 30 Years of Center for Telenovela Studies at USP: A Journey Narrated by Teleficcion is the title of the Interview conducted by Marcel Antonio Verrumo, Lourdes Ana Pereira Silva and Renata Pinheiro Loyola. In it, the researcher recalls the trajectory of



the creation of the first center for the study of *telenovelas* in Brazil, the CPTV, in 1992, discussing the mishaps and achievements related to the constitution of the collection and research on the subject. She also recalls the intertwining between her personal history, marked by a strong interest in the object, and academic trajectory, as a researcher who has sought to investigate and theorize the subject for decades.

The Agenda section opens with the article Notes on the Role of Immersive Sound in Contemporary Cinema by Rodrigo Carrero, which conducts a conceptual review of the idea of immersion in cinema, describing and discussing some of the main stylistic tools used by sound designers to build or reinforce the sense of sensory immersion through sound. Next, Milena Freire de Oliveira-Cruz and Laura Wottrich, in the article Gender Inequalities in the Scientific Subfield of Communication: The Glass Ceiling in the Backyard, start from a mapping of Graduate Programs in Communication, Research Productivity Grants and scientific entities and journals to address gender inequalities in the scientific subfield of communication in Brazil, suggesting the existence of the glass ceiling, which has also been identified in other research areas. In Theorizing with Grounded Theory: A Methodological Pathway for Communication Research, Francisco Leite discusses the methodological guidelines of grounded theory, emphasizing the potential it offers for the edification of communication research.

In the subsequent texts, Conrado Moreira Mendes and Geane Carvalho Alzamora, in the article Logics of the Propagation of Information and Disinformation in the Context of the Covid-19 Pandemic: A Semiotic Approach, present the results of a research on the dynamics of propagation and construction of meaning of texts in the context of the COVID-19, pandemic, whereas Cláudia da Silva Pereira, in Disputes and Impasses in the Media Representations of Skateboarder Rayssa Leal, conducts an interpretive content analysis of journalistic articles about skateboarder Rayssa Leal before, during and after the 2020 Olympics, discussing the process of subjectivation that is established through representations.

Life stories, memories, subjectivities and imagination are aspects discussed in the following work of the section: Memories, Metaphores and Imagination in Oral Life Story Narratives, authored by Barbara Heller, Teresa Cristina da Costa Neves, Priscila Ferreira Perazzo and Ana Paula Goulart. In the article, the authors discuss the imaginative character of narratives of life stories, combining theoretical review and case study, considering mental images as media that convey memories. The article From Statistics to Data: Orderings of Life in Cities, by Adriana Lima de Oliveira, Lucas de Vasconcelos Teixeira and Tânia Márcia Cesar Holf, addresses issues related to cities, consumption and ways of life, discussing the

transformations of the ordering of consumption from the changes that took place in the shift from the modern city to the postmodern one.

The **Book Review** section that closes this issue of **MATRIZes** is composed of **Communication and Narrative Theories**, by Larissa Conceição dos Santos, in which she presents the book *Diccionario de Teorias Narrativas 2: Narratología, Cine, Videojuegos, Medios*, edited and organized by the Spanish Lorenzo Vilches Manterola, whose entries bring to light not only fundamental concepts of contemporary narrative theories, but also applications and methodologies that suggest dialogue with communication studies.

We conclude this **Editorial** wishing that a human reader appreciates this issue and that they use their specific intelligence, capable of generating new reflections and knowledge.  $\overline{\mathbf{M}}$ 

Maria Ignes Carlos Magno Richard Romancini

## REFERENCES

- Anders, B. A. (2023). Is using ChatGPT cheating, plagiarism, both, neither, or forward thinking? *Patterns*, *4*(3), 100694. https://doi.org/10.1016/j.patter.2023.100694
- Chen, T.-J. (2023). ChatGPT and other artificial intelligence applications speed up scientific writing. *Journal of the Chinese Medical Association*, 86(4), 351-353. https://doi.org/10.1097/JCMA.00000000000000000
- Curtis, N., & ChatGPT. (2023). To ChatGPT or not to ChatGPT? The impact of Artificial Intelligence on academic publishing. *The Pediatric Infectious Disease Journal*, 42(4), 275. http://doi.org/10.1097/INF.0000000000003852
- de Vries, W. (2023). Como (no) combatir el fraude académico: Lecciones internacionales. *Revista Mexicana de Investigacion Educativa*, 28(97), 637-650. https://bit.ly/3KOn01x
- Holden Thorp, H. (2023). ChatGPT is fun, but not an author. *Science*, 6630(379), 313. https://doi.org/10.1126/science.adg7879
- Lévy, P. (2022). IEML: rumo a uma mudança de paradigma na Inteligência Artificial. *MATRIZes*, *16*(1), 11-34. https://doi.org/10.11606/issn.1982-8160.v16i1p11-34
- Lund, B. D., Wang, T., Mannuru, N. R., Nie, B., Shimray, S., & Wang, Z. (2023). ChatGPT and a new academic reality: Artificial Intelligence-written research papers and the ethics of the large language models in scholarly publishing. *Journal of Association for Information Science and Technology*, 74, 570-581. https://doi.org/10.1002/asi.24750



- Marchandot, B., Matsushita, K., Carmona, A., Trimaille, A., & Morel, O. (2023). ChatGPT: The next frontier in academic writing for cardiologists or a pandora's box of ethical dilemmas. *European Heart Journal Open*, *3*(2), oead007. https://doi.org/10.1093/ehjopen/oead007
- Quintans-Júnior, L. J., Gurgel, R. Q., Araújo, A. A. de S., Correia, D., & Martins-Filho, P. R. (2023). ChatGPT: The new panacea of the academic world. *Revista da Sociedade Brasileira de Medicina Tropical*, *56*, e0060-2023. https://doi.org/10.1590/0037-8682-0060-2023
- Stokel-Walker, C. (2023). ChatGPT listed as author on research papers: Many scientists disapprove. *Nature*, *613*, 620-621. https://doi.org/10.1038/d41586-023-00107-z
- Tools such as ChatGPT threaten transparent science; here are our ground rules for their use [editorial]. (2013). *Nature*, *613*(7945), 612. https://doi.org/10.1038/d41586-023-00191-1
- van Dis, E. A. M., Bollen, J., van Rooij, R., Zuidema, W. & Bocktin, C. L. (2023). Chat GPT: Five priorities for research. *Nature*, *614*(7947), 224-226. https://doi.org/10.1038/d41586-023-00288-7