

# AI-Rewritten Academic Practices: The Future Direction of Anthropological Research

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**Abstract:** *With the rapid advancement of artificial intelligence technology, the modes of production, social interactions, and knowledge systems in human society are undergoing profound transformations. AI is not only changing the way humans work and live but is also posing new challenges to the research paradigms of the social sciences, particularly anthropology. As a discipline centered on ethnographic fieldwork, anthropology is expanding its focus from studying "humans" to studying "human-AI relations" in order to understand the reproduction of culture and society under technological intervention. Looking ahead, AI technology is also driving anthropology to evolve from a "scholarship of observation" toward a "scholarship of human-AI interaction," prompting scholars to reshape the discipline's understanding of humanity and culture at the intersection of technological rationality and humanistic reflection.*

**Keywords:** *artificial intelligence (AI), anthropology, the age of digital intelligence*

## 1. Introduction of the Problem

In recent years, breakthrough advancements have been made in artificial intelligence technology, particularly with deep learning at its core. From Google's AlphaGo defeating the world Go champion to AlphaFold accurately predicting protein structures, from the widespread application of large language models like ChatGPT to the integration of intelligent robots into daily life, artificial intelligence is rapidly permeating all walks of life. It can be argued that AI and big data technologies, as general-purpose digital technologies, are driving the automation of production processes and the upgrading of industrial structures in human society, while also enhancing production efficiency and the convenience of daily life. However, this technological revolution has also brought unprecedented challenges and uncertainties. For instance, data mining on the internet infringes on privacy, algorithmic decision-making leads to bias and discrimination, digitalization impacts employment structures, and new ethical issues, for which past experiences offer little guidance, frequently arise. In other words, the intelligent age continuously presents new social problems and dilemmas, creating an urgent societal need to explore deeper cultural and value perspectives in academic research to understand the underlying reasons. Against this backdrop, anthropological research faces unprecedented opportunities and challenges.<sup>[1]</sup> On the one hand, as Chen Siyu and Tian Mingxiao point out, new technological tools serve not only as research resources but also have the potential to reshape research itself. Digital technologies facilitate the collection and analysis of large-scale fieldwork data, yet simultaneously transform traditional methods of on-site investigation. On the other hand, the proliferation of artificial intelligence has made the question "What is human?" a pressing issue for the new era. Zhang Xiaojun posits that the "Homo Artificialis"<sup>①</sup> is redefining the essence of humanity. He notes that the standardization, de-culturation, de-subjectivation, and even dehumanization brought about by AI necessitate a shift in anthropological research towards the "human-machine" nexus in many respects.<sup>[2]</sup> This also implies that the analytical paradigms of traditional anthropology need to be updated. As AI increasingly influences humanity, anthropological research must also contemplate how to better safeguard human subjectivity and cultural diversity.

In essence, the impact of artificial intelligence at the level of data processing and algorithms has ushered human society into the age of digital intelligence, or an intelligent society. In this era, individuals can express themselves and participate in society through digital platforms, while intelligent algorithms and robots can also intervene in human daily life in various ways. UNESCO

① virtual subjects centered on intelligence.

notes that digital anthropology is dedicated to understanding what it means to be human in the digital age and how digital behaviors mirror real life.<sup>[3]</sup> Under this understanding, anthropologists must also begin to focus on the emerging issues of the AI era. For example, how do AI-driven social media platforms influence human daily life? What is the impact of digital governance on traditional communities and trust relationships? How can AI technologies be utilized for methodological innovation and for addressing academic ethics in fieldwork? These issues pertain not only to the technology itself but also involve deeper questions of cultural values, social structures, and individual psychology, requiring the engagement and critical reflection of anthropologists.

## **2. The Anthropological Turn in the Age of Digital Intelligence**

### ***2.1 The Rise of Digital Anthropology and Technological Anthropology***

Since the beginning of the 21st century, the concepts of "digital anthropology" and "technological anthropology" have gradually emerged within the global anthropological community. Digital anthropology posits that digital technology has become an inseparable part of human experience and that the traditional research paradigm, which focuses narrowly on small-scale ethnic groups, needs to be expanded to include the examination of all societies, particularly digitized ones. As Miller argues, digital anthropology is a field that constantly utilizes developments to raise larger normative and ethical arguments, rather than merely observing and explaining the consequences of technological change.<sup>[4]</sup> In other words, anthropological research is no longer confined to rural societies or specific spatiotemporal contexts but must examine every cultural practice and interaction of people in the digital age.

From this perspective, the object of study in anthropology has shifted; in addition to traditional community and cultural studies, it now includes online communities, network platforms, algorithmic systems, and even virtual personas. For example, researchers have begun to focus on cultural practices within online fields such as social media groups, esports subcultures, and intelligent customer service bots.<sup>[5]</sup> Concurrently, anthropology has also undergone a methodological shift. Netnography has become a crucial research method in the digital age. Netnography refers to an online fieldwork method that employs ethnographic techniques to study virtual communities and cyberculture.<sup>[6]</sup> Of course, most scholars generally emphasize that netnography, like traditional fieldwork, requires long-term immersion in the network to conduct fieldwork. For instance, Professor Bu Yumei points out that researchers cannot merely log into an online community occasionally; they must continuously participate deeply in the online field for over six months to produce a detailed netnography.<sup>[7]</sup> Sun Xinru argues that netnography is not an entirely new method but rather an extension of traditional ethnography into the digital realm.<sup>[8]</sup> In the online context, researchers can access the field anytime and anywhere, and may even become deeply involved participants in fieldwork. This requires anthropologists to pay attention to the unique sense of place and differing modes of participation in cyberspace, in order to avoid the emergence of bias and discrimination caused by algorithmic decisions.

Furthermore, the development of technological tools has further expanded the methodological repertoire of anthropological research. In the age of digital intelligence, scholars are attempting to integrate artificial intelligence and big data analytics into ethnographic research. Mi Shuxian points out that AI technology and big data analysis can automatically mine, preprocess, and code the vast amounts of text in netnography, thus enabling the scientific processing of large datasets.<sup>[9]</sup> Zhao Xudong emphasizes that in the fieldwork of the digital intelligence era, attention should be paid to the dimension of cultural transformation, uncovering the deep schemas and motivations beneath online phenomena.<sup>[10]</sup> This implies that when conducting online fieldwork, researchers cannot rely solely on qualitative observation; they can also utilize AI learning algorithms to extract themes and identify patterns. However, it is important to note that online data often come with timestamps and are produced dynamically. Researchers should clearly define the temporal aspect of their research questions and avoid isolating data from their social context for interpretation. In summary, over the past five years, research related to digital anthropology and technological anthropology has flourished. This is evidenced internationally not only by academic journals and institutions focusing on fieldwork in the digital age—such as UNESCO's Digital Anthropology project and the online resources of the American Anthropological Association—but also by scholars proposing new directions like AI design anthropology, which emphasizes integrating anthropological disciplinary perspectives into AI product development.<sup>[11]</sup> Domestically, scholars from institutions such as Tsinghua University, Fudan University, Xiamen University, and Nanjing Normal University have begun to explore new issues arising from

technological change from local perspectives. For example, Chen Siyu and Tian Mingxiao note that in the context of the intelligent age, fieldwork, as a crucial method in the humanities and social sciences, highlights the advantages of interpersonal engagement and empathy even more compared to AI research.<sup>[1]</sup> Concurrently, some scholars argue that when utilizing AI for auxiliary analysis, it is essential to maintain the effective application of on-site experience and critical thinking.<sup>[12]</sup> From this, it is evident that both international and domestic scholarly discourse emphasizes that digital technology has not rendered anthropology obsolete. On the contrary, it has spurred new theoretical reflections and methodological innovations. In comparison, international research has focused earlier on topics such as the metaverse, platform labor, and algorithmic governance, while domestic research places greater emphasis on the inheritance of ethnographic traditions and humanistic concerns.

## 2.2 *Virtual Ethnography and Research Ethics*

Alongside the rise of netnography, research methods and ethical issues have garnered significant attention. Digital technologies have made online communities important arenas for self-expression, but virtual ethnography also faces controversies regarding methodological definition and ethical norms.<sup>[13]</sup> For instance, researchers must consider informed consent and privacy protection in online environments. In actual online research, many members of online groups may be unaware of the researcher's observations and cannot provide explicit consent as they might in face-to-face fieldwork, posing challenges to the practice of academic ethics. Furthermore, the uncontrollability of algorithmic platforms can also interfere with the fieldwork setting; for example, platform recommendation algorithms amplifying or suppressing discussion topics can affect the completeness of the data researchers can obtain. Internationally, there is growing concern regarding AI and data ethics. For example, the Department of Anthropology at the University of Cambridge has issued a manifesto on the use of generative AI in academic writing. The manifesto states that large language models have been trained on a vast corpus of creative works without permission, a practice akin to the "uncompensated extraction" of literary and academic resources, running counter to the academic culture of respecting others' labor and norms of citation. When using generative AI in academic writing, opaque text generation may also obscure the sources of original information, thereby violating academic integrity. Additionally, the environmental cost of the massive energy consumption required to use AI models represents a new ethical consideration.<sup>[14]</sup> Therefore, these discussions serve as a reminder that when conducting research with technological assistance, we must adhere to the ethical principle of "maximizing benefits and minimizing harm," ensuring compliance in data processing and transparency in the research process.

Domestic academic circles are also actively exploring ethical norms for digital ethnography. For instance, in June 2025, the School of Basic Medical Sciences at Chongqing Medical University, the School of Basic Medical Sciences at Cheeloo College of Medicine, Shandong University, and the Medical Ethics Branch of the Chinese Medical Association jointly released the Expert Consensus on Ethical Requirements for Generative Artificial Intelligence-Assisted Academic Paper Writing (hereinafter referred to as the Consensus). The Consensus, guided by the core concepts of technology for good and integrity, proposes "six ethical principles"<sup>①</sup>. It emphasizes that authors are fully responsible for the entire research process, must publicly disclose the use of AI, and strictly adhere to academic integrity and authorship norms to prevent academic fraud.<sup>[15]</sup> The introduction of this guideline also signifies that China is constructing an ethical framework for academic writing in the age of artificial intelligence, providing action guidance for researchers in the humanities and social sciences. In summary, anthropological research in the age of digital intelligence is undergoing a dual transformation in both methods and ethics. In the future, anthropological research must, while harnessing the efficiency brought by new technologies, persistently scrutinize their value orientations and ethical implications, seeking a balance between global perspectives and local practices.

## 3. The Future of AI Anthropology

Influenced by the era of artificial intelligence, AI is not only regarded as an object of academic inquiry but also, as a transformative assistive tool and collaborative partner, is propelling anthropology into a new phase of development. Looking ahead, the concept of AI anthropology will likely be proposed by anthropologists studying artificial intelligence, emerging as a new sub-discipline within

① including author responsibility, transparent disclosure, academic integrity, fairness and justice, data compliance, and social responsibility.

the field. Consequently, the future of AI anthropology will be a process of continuous dialogue and mutual shaping between technological rationality and humanistic spirit, requiring us to embrace the dividends of technology while maintaining a profound reflection on human values and cultural complexity.

### ***3.1 The Transformation of Fieldwork Methods***

The advent of artificial intelligence is driving a transformation in anthropological and ethnographic fieldwork research methods. For instance, the introduction of automated digital ethnography represents a significant innovation in fieldwork approaches. This method automatically collects online interaction data from social media, forums, and other sources through web crawlers and employs natural language processing and computer vision techniques to analyze texts, images, and videos.<sup>[16]</sup> This research approach can substantially enhance research efficiency and scale, enabling anthropologists to capture subtle cultural cues within massive datasets and providing deeper, more comprehensive social insights for anthropological research. Of course, automated digital ethnography also brings a series of potential issues, such as data privacy and security, differences between human and AI thinking, and cultural sensitivity. It also requires us to maintain human judgment while relying on algorithmic analysis and to engage in critical reflection on the results produced by AI.

Furthermore, beyond automated tools, new technologies like Virtual Reality (VR) and Augmented Reality (AR) are also being explored for use in anthropological fieldwork. Scholars can enter simulated environments through VR devices and interact immersively with community members in distant locations, making virtual fieldwork possible.<sup>[17]</sup> For example, some research institutions have begun to utilize AI as a field assistant; AI technology can collect data within specific communities, answer certain research questions for anthropologists, and even act as a participant in the study when necessary. These innovative fieldwork models indicate that the boundaries of future anthropological fieldwork will be continuously expanded by AI technology. As domestic scholars also argue: "In the information society, when we can obtain massive amounts of social data without leaving home, immersive fieldwork can become an 'oasis' in an accelerating society. Relying on fieldwork, we can understand society and ourselves with greater depth and authenticity".<sup>[1]</sup> Therefore, even as the form of fieldwork methods changes, core elements such as participant observation and shared practice remain indispensable cornerstones of anthropological research.

### ***3.2 The Transformation of Anthropological Objects of Study and Perspectives***

Entering the era of artificial intelligence, the object of anthropological study has expanded from the traditional focus on distant lands to encompass the digital world and technological ecosystems intimately connected to our daily lives.<sup>[18]</sup> It is evident that a growing number of anthropologists have begun to study the cultural implications embedded within AI systems, algorithms, and digital platforms. For instance, as mentioned in a lecture by Zhang Shaozeng for the Future Anthropologist project, Beth Singler researches the religious imagination surrounding AI, exploring why people tend to deify AI. Stefan Helmreich studies the gender encoding of AI voice assistants, investigating why AI voices are predominantly female. Dominique Boullier focuses on the reorganization of human behavior in algorithmic societies, and so on.<sup>[19]</sup> These studies demonstrate that AI technology itself and the algorithms underlying it have become new "fields," requiring an anthropological perspective to interpret their socio-cultural impacts. In other words, artificial intelligence serves both as a research tool and an object of study. Researchers can directly explore the societal impacts of AI technology through human-computer interaction. This also implies that anthropologists in the age of AI must understand how AI is designed, used, and operates within social development.

Simultaneously, new forms of communities and cultural practices in cyberspace have increasingly become focal points for anthropological inquiry. Scholars like Daniel Miller point out that digital anthropology examines the consequences of the rise of digital technologies for diverse populations, seeking to understand how these technologies shape contemporary human behavior and identity. For example, a large number of rural-to-urban migrant workers in China effectively "live on social media" after moving to cities; they regard QQ and WeChat as crucial means of integrating into urban life, spending most of their leisure time on these platforms, thereby achieving identification with modern urban consumer culture.<sup>[4]</sup> This phenomenon illustrates that the "field" in contemporary anthropology is no longer merely physical space but includes various virtual communities and the lived world of human-machine co-existence. In summary, the object of anthropological study in the AI era has expanded from traditional material culture and group practices to encompass new domains such as

digital technology itself, algorithmic societies, and human-computer interaction. This also requires anthropologists to redefine concepts of the "other" and "fieldwork," attempting to incorporate algorithms, data, and virtual environments into their research purview, thereby further enriching the topics and methods of anthropological research.

### ***3.3 The Evolution of Academic Paper Writing***

In the current era, generative artificial intelligence has also begun to influence academic writing and knowledge production models. On the one hand, generative AI can assist researchers in more quickly organizing literature and drafting initial manuscripts. On the other hand, AI technology is also prone to misuse in academic paper writing. For example, some scholars point out that certain large language models are trained on vast amounts of academic literature and creative content without permission. If researchers use these models to generate academic text without attribution, it may effectively infringe upon the rights of the original authors and violate academic norms of citation and acknowledgment<sup>[16]</sup>. In response to the above challenges, corresponding norms are being established both domestically and internationally. Internationally, the manifesto from the University of Cambridge's Department of Anthropology emphasizes that introducing generative AI into teaching and research should first involve assessing its impact on core academic values, rather than pursuing efficiency alone<sup>[15]</sup>. Domestically, institutions such as the Chinese Medical Ethics Society released the Expert Consensus on Ethical Requirements for Generative Artificial Intelligence-Assisted Academic Paper Writing in 2025, emphasizing that authors should be responsible for their papers, publicly disclose AI involvement, and ensure academic integrity and authorship rights.<sup>[20]</sup> This consensus covers aspects such as topic selection and design, data management, literature citation, and authorship of results and proposes six principles including openness and transparency, providing actionable guidelines for academia. It is foreseeable that in the future, academic journals and research institutions will gradually establish systems such as AI use statements and ethical review processes to ensure artificial intelligence becomes a tool that assists rather than replaces research thinking and writing. For anthropological research specifically, the transformation in academic writing methods also touches upon the disciplinary characteristics of anthropology. Anthropological papers typically value the detailed descriptions of fieldwork and the cultural context of the research subjects. Their argumentation often has a narrative quality, requiring rich examples and support from deep social theory. While automatically generated text might improve efficiency in drafting and translation, anthropologists must maintain their understanding of first-hand fieldwork materials and the authenticity of the textual narrative. This implies that in the academic writing of anthropological research, researchers should use AI tools critically.

## **4. Conclusion**

The era of artificial intelligence is shaping the current state and future direction of anthropological research. In today's AI era, as human society is being reshaped by AI technology, anthropology must broaden its horizons by focusing on emerging research objects, novel research methods, and new research ethics from the perspectives of digital anthropology and the anthropology of technology.<sup>[21]</sup> In the future, as AI technology further evolves, anthropological research will likely adopt new models of human-computer collaboration: fieldwork may become partially automated and multimodal; scholars will study identities co-constructed by humans and machines; and they will balance the use of AI tools with the safeguarding of values in academic writing. Based on the preceding discussion, it is preliminarily suggested that future research in AI anthropology could develop in the following directions:

First, strengthen interdisciplinary collaboration. Anthropologists need to collaborate with fields such as computer science, data science, and cognitive science to jointly develop new tools and analytical methods suitable for ethnography that are capable of processing large volumes of digital data while maintaining cultural sensitivity. Second, enhance technological and ethical literacy. Researchers need to acquire basic knowledge of AI algorithms and big data analytics while steadfastly upholding humanistic concerns to ensure that technological applications align with social ethics and disciplinary values. Third, focus on social equity and inclusion. Anthropology should assess the differential impacts of AI technologies on various groups and advocate for inclusive policies to prevent technology from exacerbating social inequalities. Fourth, continue to strengthen the on-site presence and reflexivity of fieldwork. Even in a digitalized context, being physically present, experiencing culture firsthand, and conducting in-depth interviews remain irreplaceable. This is the fundamental method of anthropology,

encapsulated in Fei Xiaotong's principle of "seeking knowledge from facts": only by examining phenomena within the entire world from which they originate can anthropology produce insightful interpretations. In summary, the AI era brings new theoretical topics and methodological tools to anthropology, presenting both challenges and opportunities. Against this backdrop, anthropology should proactively embrace change by critically examining the reshaping of culture and society by artificial intelligence, leveraging new technologies to expand research capabilities, and steadfastly maintaining its inquiry into individuals and society. Only in this way can anthropology continue to play a crucial role in the future digital and intelligent society.

## References

- [1] Chen Siyu, Tian Mingxiao. *The AI Era Calls Even More for the Humanistic Significance of Fieldwork* [N]. *China Social Sciences Daily*, July 2, 2025, p.6.
- [2] Zhang Xiaojun. *Cognitive Anthropological Reflections on "Artificial Homo"* [J]. *People's Forum · Academic Frontiers*, 2023, (24): 67–79.
- [3] UNESCO, "Digital Anthropology", available at: <https://www.unesco.org/en/digital-anthropology>.
- [4] Daniel Miller, "Digital anthropology", available at: <https://www.anthroencyclopedia.com/entry/digital-anthropology>.
- [5] Wu Nan. *Decoding Virtual Fieldwork in the Digital Age* [N]. *China Social Sciences Daily*, July 9, 2025, p.1.
- [6] Guo Jianbin, Zhang Wei. "Ethnography" and "Netnography": *Changes and Continuities* [J]. *Nanjing Social Sciences*, 2017, (05): 95–102.
- [7] Bu Yumei. *An Analysis and Reflection on Fieldwork in Netnography* [J]. *Ethnic Studies*, 2020, (02): 69–85+143.
- [8] Sun Xinru. *Online and Offline: Methods, Practice, and Narration of Netnography* [J]. *Journalism & Communication Research*, 2017, 24(11): 34–48+127.
- [9] Mi Shuxian. *Individual Image Construction on Douyin and Its Resonance with Social Values: On the Possibility of Writing a Micro-Life Ethnography of Douyin* [J]. *Journal of Ethnology*, 2019, 10(04): 54–61+115–117.
- [10] Zhao Xudong. *The Coming Era of WeChat Ethnography: Anthropologists' Awareness of Cultural Transformation* [J]. *Exploration and Free Views*, 2017, (05): 4–14.
- [11] Tunstall, Elizabeth. "Decolonizing Design Innovation: Design Anthropology, Critical Anthropology, and Indigenous Knowledge", In "Design Anthropology Theory and Practice" [N]. edited by Wendy Gunn, Ton Otto, and Rachel Charlotte Smith, London: Bloomsbury, 2013, pp.232–50.
- [12] Sun Xiulin. *Fieldwork in the Age of Artificial Intelligence* [J]. *New Horizons*, 2025, (05): 69–77.
- [13] Zhang Na. *The Practice and Reflection on Virtual Ethnography Methods in China* [J]. *Journal of Sun Yat-sen University (Social Science Edition)*, 2015, 55(04): 143–150.
- [14] Dr. Ella McPherson & Prof. Matei Candea, 'AI and scholarship: a manifesto', available at: <https://www.cam.ac.uk/stories/ai-and-scholarship-manifesto>.
- [15] Buyouquan, Y., Cao, Y., Chang, Z., et al. *Expert consensus on ethical requirements for generative AI-assisted academic writing* [J]. *Chinese Journal of Biochemistry and Molecular Biology*, 2025, 41(6): 826–832.
- [16] Azimuth Labs, 'Automated Digital Ethnography: Revolutionizing Anthropological Research', available at: <https://azimuthlabs.io/future-perspectives-and-trends>.
- [17] Zhang, J. *Virtual worlds from the perspective of digital anthropology: Research methods and theoretical issues* [J]. *Journal of the University of Chinese Academy of Social Sciences*, 2025, 45(7): 56–72+141+145.
- [18] Qiu, Z. *The era of change in sociology under digitalization* [J]. *China Social Sciences Evaluation*, 2024, (2): 64–76+158-159.
- [19] Zhang S.Z., 'How Anthropological Methods Can Break the AI "Black Box"', published July 25, 2025, available at: <https://news.qq.com/rain/a/20250725A04N7U00>.
- [20] 'Expert Consensus on Ethical Requirements for Generative Artificial Intelligence-Assisted Academic Paper Writing' Officially Released, available at: <http://www.sxmu.edu.cn/rwxy/info/1079/3247.htm>.
- [21] Roanne Voorst & Tanja Ahlin. "Key points for an ethnography of AI: an approach towards crucial data" [J]. *Humanities and Social Sciences Communications*, 2024, 11(1): 1-5.