

**Integrating Artificial Intelligence into Anthropology Education and Research:
Pedagogical and Methodological Dynamics**

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ABSTRACT

Artificial intelligence (AI) is increasingly embedded in higher education, including research, transcription, analysis, and academic writing. These developments create distinctive opportunities and challenges for anthropology, a discipline grounded in long-term engagement, interpretive reflexivity, thick description, and ethical accountability to research participants. Unlike fields oriented primarily toward prediction or optimization, anthropology produces knowledge through situated relationships and contextual interpretation. The growing use of AI, particularly large language models (LLMs), therefore raises important questions about how these technologies can be integrated without undermining the discipline's epistemic and ethical commitments. Using an integrative literature review with a structured search and screening process, the study synthesizes 21 sources addressing the pedagogical, methodological, and ethical dimensions of AI in anthropology and related qualitative research. Drawing on this evidence base, the paper conceptualizes AI as a methodological and pedagogical scaffold for enriching anthropology education and research rather than as a substitute for ethnographic practice. It develops an integrative framework for responsible AI use across the anthropological research lifecycle. The framework encompasses five stages of anthropological practice: ethnographic preparation and research design; fieldwork documentation, transcription, and translation; qualitative analysis and thematic development; multimodal interpretation and representation; and scholarly writing and communication. Across these stages, AI is positioned as an assistive resource for documentation, organization, exploratory analysis, and reflexive comparison, while interpretive authority remains with the researcher. The paper also approaches AI as a sociotechnical phenomenon embedded in relations of labor, power, and value extraction, thereby positioning AI itself as a legitimate object of ethnographic inquiry. The paper further proposes pedagogical strategies that prioritize process over product, including transparent documentation of AI use, critical verification of AI-generated outputs, and assessment practices that make interpretive reasoning visible. It concludes that AI can meaningfully enrich anthropology when it expands analytical

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possibilities without displacing contextual interpretation, ethical responsibility, and sustained engagement with research participants and communities.

Keywords: *Artificial Intelligence; Anthropology; Anthropology Education; Ethnographic Research; Large Language Models; Qualitative Research; Research Ethics; AI-Assisted Research; Data Governance; Pedagogy.*

1. INTRODUCTION

Anthropology occupies a distinctive position within the modern university. Its contribution lies not only in the empirical knowledge it produces about social worlds, but also in the epistemological commitments that shape how such knowledge is generated. Anthropological inquiry is grounded in long-term engagement, contextual interpretation, and reflexive awareness of the relationships through which knowledge is produced. Students of anthropology understand that the meaning of any context is not obvious, and situations create categories that are culturally and historically created, and their knowledge stems through sustained interaction with communities rather than rapid extraction. The scholarly etic view shapes anthropology's encounter with AI in ways that differ markedly from disciplines oriented primarily toward formal modelling, optimization or forecasting. Large language models can automate text transcription, carry out translation, enable quick summarization, and produce realistic images that are embedded in research, learning platforms for education, and the process of publication.

In academic circles, the situation has been intensified by the rapid diffusion of AI tools. The tools have attracted scholars and professionals in great numbers since they have the potential to produce texts that are suitable, relevant, and well-written in numerous varieties of writing. However, high competencies of AI can make people forget how it should be used, according to statistics. Also, they do not really know about the real context. This establishes a huge difficulty according to the anthropology perspective i.e., the danger of mixing persuasive writing with serious cultural comprehension and judging probabilities to be actual cultural meanings. Anthropology has never been able to escape such confusions. The specialization in detailed descriptions of the field began as an attempt to counter revitalize approaches. Such differences between surface and actual participation have massive impacts on learning and teaching. When researchers merely summarize AI rather than read it correctly or accept the themes generated by the algorithm as actual discoveries, then anthropology may lose its most important method of perceiving things. It is neither sensible nor practical for anthropologists can dismiss AI at this current time. AI search engines are highly accelerated and can locate information, figures, voice, video recordings, and assist in editing with algorithms. Therefore, neglecting AI may leave anthropology out of the game and students unprepared to operate in this technological world. It is not whether to apply AI, but how to apply it in a manner that appears to remain faithful to the values and beliefs of anthropology about knowledge (Schroeder *et al.*, 2025).

This framework of AI usage does not result in believing that technology will enhance anthropology, and neither does it view it as an obstacle that hinders understanding. Rather, AI is viewed as an assistant tool that aids in analyzing, interpreting, assisting, and record-keeping. It also assists with analyzing work. This perspective is consistent with the long history of anthropology of employing tools that help out in research. The techniques of doing ethnography through participant observation, note-taking, use of software, and recording have evolved. This has been done without removing the burden of the ethnographer to interpret things the way it should be.

There are three core principles of this arrangement. First, the ability of AI to fine-tune the data of the researcher for organization, presentation, and overall framing of the arguments; however, the ultimate responsibility of careful engagement with the field data and its interpretation rests on the researcher.

Second, transparency is essential. Because AI systems are often opaque in their operation, their use must be documented in ways that allow supervisors, reviewers, and students to understand how conclusions were reached. Third, ethics must be situated and relational. The use of AI introduces new risks related to data circulation, confidentiality, and representation, particularly when working with vulnerable communities or culturally sensitive knowledge. Ethical practice therefore requires ongoing reflection rather than one-time compliance.

A further contribution of this paper is to treat AI itself as a legitimate object of anthropological inquiry. AI systems are no longer unbiased tools but are produced based on a combination of social, technical, and political factors. They are determined by the way individuals work, the objectives of organizations, and the economies that exist. The materials on which these systems are trained are not always treated equally. Similarly, the outputs of these systems are also biased towards the dominant languages and cultures. An anthropological approach to AI allows us to understand the dynamics of power in current knowledge systems. This will help our students understand a clear picture of the problematic aspects of digital technologies, not merely by being aware of how to operate technology. The initial part provides an introduction to the study. The second describes the concepts of the study, demonstrating how AI can be used and assist in ethnographic work rather than replacing traditional methods. The third section discusses what this means for teaching and recommends modification of courses and assessment to promote self-reflection and moral reasoning in interpreting data outside the cultures (Koenecke *et al.*, 2024).

The fourth section is concerned with applying AI along with various ethnographic tasks, such as research planning, data recording, and presentation. The fifth section focuses on the issue of ethics and governance, particularly the fairness of data use and the duty to the individuals participating in the study. The sixth section describes how AI can be implemented in anthropology, such as advising on selecting the most suitable tools and creating policies that facilitate that. Part seven is on the criteria for evaluating the effectiveness of AI in anthropology and the potential downsides or

challenges. The last part is an outlook on how anthropology will evolve as AI becomes more prevalent in our society.

2. LITERATURE REVIEW: CONCEPTUAL FRAMING OF AI AS ENRICHMENT, NOT REPLACEMENT

The question of concern is how AI can improve humanistic practices in ethnographic tasks without undermining the external view. This concern is not purely on the technical aspect of AI. It also entails how anthropogenic knowledge is gathered, evaluated, and ethically managed. Anthropologists should view AI as a helpful tool to their work rather than a substitute for human-centered methods. In doing so, the fundamental values and practices of the discipline remain intact. Anthropology has a history of incorporating new technologies and research methods. The use of field notes, participant observation, transcription software, the usage of cameras, audio recorders, and digital archives have all altered the way ethnography is conducted over time. Moreover, the application of AI to research, teaching, and learning is quite comparable to these historical shifts. Nevertheless, its acceptance has raised pronounced division characterized by conflicting tensions between instrumental enthusiasm and defensive rejection among anthropological purists (Hudson *et al.*, 2023; Jenks, Lowman and Straughn, 2024).

The point is that these tools replaced none of the ethnographic judgement; instead, it facilitates and redistribute labor, alter temporal rhythms of analysis, and raise new ethical questions that may surface (Kuckartz and Rädiker, 2024). AI relates to this origin of methodological mediation, but with a significant difference: it does not merely record or organize data; it actively generates analysis, interpretations, summaries, and classifications. This capacity of generation makes explicit the requirement for clear contours around interpretive authority (Krause-Jensen and Hau, 2025).

Recent studies in qualitative methodology emphasize that AI systems are particularly suited to exploratory and organizational tasks, such as text clustering, identifying candidate patterns, or assisting retrieval in large corpora.² Problems arise when these systems are treated as epistemic authorities rather than heuristic tools (Koencke *et al.*, 2024). In anthropology, where meaning is often context-dependent, ironic, or implicit, algorithmic pattern recognition can flatten ambiguity and favor dominant linguistic forms. The enrichment model therefore insists that AI results be treated as provisional artifacts for human interpretation rather than as self-contained conclusions. The integration of AI into anthropology rests on three fundamental commitments. The first component is interpretive primacy. The anthropological interpretation incorporates such things as self-understanding, judgment, responsibility, as well as taking an ethical stand and accountability to the communities involved. These are critical aspects that cannot be left in the hands of automated systems (Longkumer, 2025).

² Corpora expressed the entire works of an author or complete body of writing on a specific subject

Even though AI can generate new constructs or identify trends at a high level, it is unable to make a judgment between the alternative interpretations, based on the connections in a real-life context. The implication of maintaining interpretive primacy is therefore the need to make clear educational and methodological decisions that place it under ethnographic reasoning. The second one is transparency. AI systems tend to operate in a manner that can be difficult to comprehend, where the outputs are based on ambiguous and unfamiliar processes (Porsdam Mann *et al.*, 2024).

In anthropology, where ethical accountability is highly valued and transparency is a major concept, the lack of clarity may damage trust. Thus, transparency implies a clear explanation of the aim of the research, the source of the data, and the way it is verified. Not only does this documentation fulfill institutional requirements, but it also allows the readers to evaluate the circumstances in which knowledge is produced. The third component is ethical grounding. Ethical choices in anthropology are not merely a question of rule-following; they are relationships, changes in the fieldwork, responsibility, and ethical positioning. The use of AI raises a greater number of ethical concerns, including information that is not tied to the local context, unclear analysis, and interpretations that lack a solid ethnographic basis. The enrichment model is also favored by viewing AI as a sociotechnical construct. AI systems generate knowledge by using machine learning and rely on unevenly created data assets, which are institutionally privileged, and do not necessarily align with the key values of anthropology (Resnik and Hosseini, 2025; Sobo *et al.*, 2024).

3. METHODOLOGY

3.1 Research Design

The research methodology is based on secondary research through a qualitative desk review of existing literature regarding AI applications and their usage in academic pursuits, especially in anthropology and research, current emerging debates, and the ethical and pedagogical concerns for its integration, using a systematic and integrative review approach. An integrative literature review was conducted using a structured search and screening procedure, with PRISMA 2020 used to transparently report study identification and selection.

The methodological design is built upon:

1. analyzing existing literature/research
2. identification of gaps and limitations based on current trends
3. building arguments based on concept and logic
4. convincing proposal for ethical integration of AI in Anthropology

Methodology for integrative reviews allows a more blended synthesis of empirical studies, methodological papers, conceptual scholarship, pedagogical case reports, and

expert opinion while maintaining rigor in searching, appraisal, analysis, and synthesis (Whittemore and Knafl, 2005; Torraco, 2016; Suthumdilok et al., 2026).

The review aims to be interpretative, developing an integrated framework of convergent findings and domains of tension, risk, and prescriptive ethics on the advanced integration of AI in anthropology education and research. A systematic review was undertaken, comprising several stages, firstly by defining the problem and searching the relevant literature, secondly by screening the identified papers against pre-defined inclusion criteria, and finally by assessing the quality of available evidence. A broader synthesis was then undertaken based on the relevant findings. To increase the transparency of this process, the PRISMA 2020 guidelines were followed for how to identify and select sources in a review (Page et al., 2021).

3.2. Sources of Information

The search for extracting data was conducted through Scopus, Google Scholar, Springer, Elsevier, Sci-Hub, Web of Science, PubMed, JSTOR, EBSCOhost, and various other peer-reviewed journals. The search includes references from the period of 2005 to 2026, while the topic-related data has spanned from 2016 to 2026 – the majority of which has been extracted from the literature of the year ranging from 2020 to 2026.

3.3. Strategy for Research & Review Process

It was based on search terms organized into four focus areas: AI Technologies, Anthropology, ethnographic research, education, academic/intellectual ethics, and governance. The key terms included were anthropology, teaching, pedagogy, academics, fieldwork, coding, AI, language models, data sovereignty, bias, and ethnography. The terms were combined using Boolean operators to keep the search focused and, at the same time, allow recent work across the target subject to be rooted out.

Title and abstract screening against the eligibility criteria was conducted, followed by full-text review of potentially relevant studies. We screened reference lists and citations as well to identify additional sources. The final synthesis incorporated 21 sources currently represented in the evidence base.

3.4. Limitations

The review has certain limitations, including sourcing data from English sources due to issues related to translations. Google Scholar rankings may switch over time, and the rapidly evolving AI mechanics mean that the study becomes outdated quickly. Furthermore, as the review is conducted by a single author, some selection and interpretation biases may have occurred.

However, clear criteria, peer reviews for feedback, structured extraction, source checking, and transparent reporting were ensured to reduce this risk as much as possible.

4. DISCUSSION & RESULTS: PEDAGOGICAL DYNAMICS IN ANTHROPOLOGY EDUCATION

AI has become a focal point of debate in higher education because it intersects with anxieties about learning, labor, and trust. Concerns about plagiarism, deskilling³, and assessment integrity often dominate institutional responses. Anthropology enters this debate with distinct resources and vulnerabilities. Its pedagogical practices already emphasize process, reflexivity, and situated reasoning, but these practices are labor-intensive and difficult to standardize. AI therefore appears both as a potential threat to ethnographic learning and as a catalyst for pedagogical renewal.

Anthropological pedagogy has long prioritized learning how to think rather than what to reproduce. Students are trained to observe, listen attentively, contextualize claims, and reflect on their positionality. These skills are not easily outsourced to AI, but they can be eroded if students or researchers come to rely solely on automated synthesis in place of sustained engagement. The pedagogical challenge is to integrate AI in ways that reinforce, rather than undermine, ethnographic habits of mind.

A growing body of teaching experiments within anthropology suggests a shift away from policing towards process-oriented approaches. Rather than attempting to detect AI use, instructors focus on making learning processes visible and accountable. This aligns with anthropology's existing assessment culture, which values field journals, reflexive essays, and iterative drafts.

AI is not an official replacement. It is only a single component of a list of carefully planned and documented approaches. A set of five essential teaching skills contributes to a solid foundation for applying AI in anthropology teaching and research. Developing critical thinking is one of these skills. It is a skill that teaches students to doubt what looks like credible results and to verify evidence themselves rather than simply accepting whatever they are told. The other one is paying attention to the local area, i.e., being more attentive to the specific symbols, meanings, and situations of a place, instead of allowing AI to automatically apply standard categories. The clarity of how methods work means knowing the boundaries of AI and applying it only to certain, well-checked parts of research.

4.1 Curriculum design: Integrating artificial intelligence into the sequence of methods

³ Deskilling means great reliance on tools such as AI systems, to an extent that one loses the ability to think, write, or conduct research independently.

AI should be integrated as an all-encompassing element within anthropology curricula, promoting its role as a subject of critical engagement rather than a specialized technical skill taught in isolation. Regarding the structuring of the curriculum, AI should be regarded as an overall component of anthropological courses.

Introductory courses should equip students to use AI in ways that support and refine fieldwork rather than replace ethnographic practice. Students should be trained in the use of AI prompting systems to generate summaries of foundational anthropological texts and to critically analyze those summaries for omissions, misrepresentations, and shifts in emphasis. This exercise demonstrates that summarization is an interpretive act shaped by assumptions about relevance and coherence towards field research.

In research methods courses, AI can support reflexive instrument design. Students can generate multiple versions of interview guides using artificial intelligence and then critically evaluate them. Attention is paid to how questions frame social reality, embed power relations, and presuppose particular forms of knowledge. By treating AI outputs as drafts for critique, instructors reinforce the idea that research instruments are theoretical and ethical artefacts.

Advanced methods courses can incorporate AI within qualitative analysis training. Dual-track coding exercises operationalize the emic and etic distinction. Students first construct an emic codebook through close reading and contextual memoing. They then compare this with codes suggested by AI features within qualitative analysis software. Discrepancies become sites of discussion about metaphor, irony, silence, and salience.

4.2 Teaching artificial intelligence as an ethnographic object

Anthropology's analytical strength lies in its capacity to render the familiar strange. AI is often presented to students as a seamless convenience, obscuring the social relations that sustain it. Treating artificial intelligence as an ethnographic object counters this invisibility. Students can conduct small-scale ethnographies of AI use in everyday settings, such as study practices, workplace automation, or accessibility technologies. These projects reveal how AI is embedded in norms, expectations, and inequalities.

Such exercises also allow instructors to introduce critical perspectives on data extraction and digital labour. Training datasets frequently draw on linguistic and cultural materials produced without consent or compensation. For anthropology students, analyzing these processes reinforces connections between contemporary technologies and longer histories of extraction and colonial knowledge production. AI thus becomes a site for applying anthropological theories of power, labor, and value.

4.3 Assessment and academic integrity: moving from policing to process

Concerns about academic integrity have driven many institutional responses to AI. Detection tools and surveillance-based assessment regimes have proliferated, often with limited effectiveness and significant equity implications. Anthropology offers an alternative grounded in process-oriented assessment⁴. Assignments that require documentation of research decisions, analytic memos, and reflexive commentary make learning visible and reduce incentives for unacknowledged outsourcing. For example, students may be required to submit statements detailing their use of AI alongside their assignments. Such statements should specify which AI tools were used, how they were employed, and how outputs were verified. Instead of punishing the use of AI, the evaluation should focus on wisdom, transparency, and ethical thinking. This method connects academic honesty with responsible behavior, instead of limiting the use of new tools and technologies.

5. METHODOLOGICAL DYNAMICS IN ANTHROPOLOGICAL RESEARCH

Anthropological practices are not a uniform set of tools, but a collection of practices shaped by how we conceptualize knowledge, the moral relationships we establish, and the circumstances under which we work. Involvement of AI in this field is not only a matter of introducing a new technology but also transforms the process of creating, cognizing, and organizing ethnographic knowledge. Thus, the introduction of AI in our practices requires more than technical guidance. It requires us to reflect on how AI can assist ethnographic work and where it could confuse or distort our interpretation of things. This is what makes anthropology so special in how it analyses things. This section examines the role of AI in various components of anthropological studies. It underscores the fact that the value of automation will not be found in the automation, but in the manner in which individuals will relate with information that AI gives out.

5.1 Ethnographic setting and research design

Researchers take time before any fieldwork can begin to prepare themselves by reading existing literature, learning about arguments around the ideas, coming up with research questions, and formulating how they will be conducted. These tasks can be assisted with the help of AI, which assists in processing large amounts of information and identifying recurring themes or arguments. To younger students and new researchers, this may facilitate entry into complex research fields. However, the reliance on AI in literature reviews has problems. Such systems usually pay attention to the most frequently mentioned and linguistically dominant sources that may strengthen existing power structures. This can be quite severe in anthropology, in which theories have strong links to history and political outlooks. Thus, during the initial phases of the research process, we should be cautious when using AI and question what it is presenting to us.

⁴ Process oriented assessment: An evaluative approach that documents the use of reflexivity over final products alone.

A pedagogically effective practice is the structured evidence check. Researchers generate an artificial intelligence summary of a conceptual debate and then annotate it by locating the sources that purportedly support each claim. Errors and omissions are documented and discussed. This practice transforms AI from an authority into an object of methodological training, reinforcing epistemic vigilance⁵ and the centrality of primary reading. AI can also assist in refining research questions by generating alternative framings. When used reflexively, these alternatives can help researchers recognize implicit assumptions or unexplored dimensions of a topic. The value lies not in adopting algorithmic suggestions wholesale, but in using them to provoke reflection on theoretical positioning and scope.

5.2 Fieldwork documentation, transcription, and translation

Fieldwork documentation is a core site of anthropological interpretation. Decisions about what to record, how to transcribe speech, and how to translate meaning across languages are inseparable from analytic judgement. AI tools for automatic speech recognition (ASR)⁶ and machine translation offer clear practical benefits, particularly in projects involving large volumes of audio data or multilingual contexts. They can reduce the mechanical burden of transcription and make materials searchable more quickly.

Yet recent research demonstrates that speech-to-text systems can introduce hallucinated phrases.⁷, misattribute speakers or systematically misrecognize accents and dialects associated with marginalized populations. Such errors are not random; they reflect training data biases and optimization priorities. In ethnography, where participants' words carry ethical and analytic significance, these distortions constitute a serious risk of misrepresentation.

Anthropological transcription has never been a neutral process. Choices about representing pauses, overlaps, tone, and emotion shape how speech is interpreted. AI can assist with a first-pass transcription, but human revision is essential. Verification protocols should include listening back to recordings, cross-checking with fieldnotes, and, where appropriate, consulting participants about interpretive ambiguities. Translation presents similar challenges, as machine translation offers only limited capacity to capture culturally specific idioms, humor, and affect, all of which require human interpretive effort. AI should therefore be integrated into documentation workflows as an assistive layer rather than as a replacement for ethnographic

⁵ Epistemic vigilance: A disciplined stance of critical scrutiny towards knowledge claims, particularly those generated through automated systems.

⁶ Automatic speech recognition (ASR) converts speech into text. Accuracy varies by language variety, accent, and recording conditions; anthropology should treat ASR output as a draft requiring verification.

⁷ Speech to text hallucination: The insertion of plausible but inaccurate words or phrases by automatic speech recognition systems.

listening. Departments and supervisors have a responsibility to articulate verification standards and to discourage uncritical reliance on automated outputs.

5.3 Artificial intelligence-assisted qualitative coding and thematic exploration

Qualitative coding is often presented as a technical procedure, but in anthropology it is fundamentally an interpretive practice. Codes are analytic lenses that foreground certain dimensions of experience while backgrounding others. Artificial intelligence features within qualitative analysis software increasingly offer automated coding, theme suggestion, and summarization. These features can be useful for navigating large datasets, but they also risk privileging surface-level regularities over contextual significance.

AI systems are particularly adept at identifying frequent lexical patterns. However, ethnographic insight often resides in what is infrequent, contradictory, or implicit. Irony, metaphor, and silence are important to the ways anthropologists learn about cultures, but they do not necessarily display themselves with mere pattern recognition. AI-generated ideas about the themes that should be viewed as potential initial steps. However, they are to be verified and more validated with the further examination of the real circumstances and material under study. Real researchers visit the sources, seek out examples that counter such ideas, and how they make them mean. In this continuous process, people will ensure the bond between people and their cultures remains strong. Not only this, but it also prevents people from rushing to conclusions too quickly.

5.4 Computational ethnography and comprehensive cultural analysis

The use of AI allows anthropologists to engage with large-scale cultural materials that were previously difficult to analyze, including social media discourse, platform archives, and massive text collections. Hybrid approaches that combine ethnography and computational techniques, grounded in ethnographic sensitivity, enable researchers to identify patterns while providing contextual interpretations grounded in ethical practices. Computational ethnography does not replace participant observation or fieldwork, but rather extends the scope of ethnographic research into digital environments. While computational modeling can identify groups within massive text collections, interpreting these patterns requires contextual knowledge and ethnographic engagement. Similarly, network analysis can map relational structures, but understanding their significance requires careful attention to social history and power relations within communities. For students, computational ethnography offers a bridge between classical anthropological methods and digitally supported research, reinforcing the principle that the scope of analysis does not negate the need for contextual understanding. Ethical considerations are of particular importance in this area, because making materials available to the public does not imply ethical neutrality.

5.5 Multimodal interpretation and representation

Anthropological evidence increasingly extends beyond text to include images, audio, video, and digital artefacts. Multimodal ethnography recognizes that meaning is produced through sensory and embodied practices that cannot be fully captured in written transcripts. AI can assist with indexing, tagging, and accessibility, such as generating draft captions or identifying segments within large audio-visual archives. However, automated representations often misidentify speakers, flatten cultural nuance, or erase contextual cues. In visual and auditory materials, misrepresentation can have reputational and ethical consequences. Anthropological interpretation requires thick description that situates multimodal materials within social, historical, and relational contexts.

AI can support the organization of multimodal archives, but interpretive narration remains a human responsibility. Ethical review processes should consider how AI-mediated representations circulate and how participants are portrayed.

5.6 Scholarly writing and communication

Scholarly writing in anthropology is both a mode of communication and a site of analysis. Arguments are refined through writing, and voice is integral to ethnographic representation. AI tools can support writing by improving clarity, suggesting alternative structures, or identifying gaps in argumentation. Used responsibly, such support can be particularly valuable for scholars writing in a second language.

However, writing is also where anthropological interpretation crystallizes.⁸ Delegating substantive writing to AI risks eroding authorial responsibility and obscuring analytic labor. A responsible norm treats AI as an editorial assistant rather than an author. Substantive use should be disclosed, and authors remain accountable for claims, interpretations, and ethical representations.

6. GOVERNANCE, RESEARCH ETHICS, AND DATA JUSTICE

Integrating AI into anthropological education, research, and pedagogical and methodological practices cannot be treated as a purely technical matter. Indeed, it raises fundamental questions about responsibility, ethics, governance, and justice. Ethical obligations in anthropology extend beyond institutional compliance to include accountability to research participants, communities, and the public at large. AI is altering our perception of ethics by influencing the way data is processed, stored, modified, and exchanged, in many instances not clearly even to those who study or use it. In anthropology, ethics has always been concerned with obtaining appropriate consent, maintaining confidentiality of information, and preventing harm. However, AI introduces new types of risks that complicate the implementation of such old ideas. Field-collected data may now be transmitted to external servers; it may be stored on business websites or utilized in other forms that extend beyond the initial project. Moreover, the algorithm mechanism can conceal how data is transformed into

⁸ Anthropological interpretation crystallizes means understanding clearly emerges from the analysis.

information, and it is difficult to say who is to blame in case of a mistake or misunderstanding. This all implies that ethics must be regarded as something that is continually occurring as time passes, rather than something done in a hasty step initially. Ethical governance of AI in anthropology must therefore be grounded in disciplinary values rather than imported wholesale from fields with different epistemic assumptions.

6.1 Informed consent for artificial intelligence mediated workflows

Informed consent in anthropology has always been more than a signed form. It is a relational process that unfolds over time as research goals, methods, and relationships evolve. AI-mediated workflows require consent practices that explicitly address how data will be processed, transformed, and stored.

Participants should be informed if AI will be used for transcription, translation, coding assistance, summarization, or analysis. They should also be told whether their data will remain on local devices, institutional servers, or external cloud-based platforms. Because AI tools and policies change rapidly, consent should be framed as ongoing rather than final. The participants must be allowed to ask questions, replace terminology, and to avoid processing by AI where feasible. These activities are relevant in the learning of student projects. They help out students know that ethical research implies consideration of the impact of technology. Departments can contribute through providing additional forms where they directly discuss AI and also persuade the researchers to modify the language depending on local circumstances and the concerns of the people involved.

6.2 Confidentiality and security in design

Ethnography confidentiality is not just a matter of anonymization.⁹ The content of the story, how people talk, and the background information can easily tell who you are, even without mentioning their real name. AI introduces additional confidentiality risks, particularly when data are processed by external platforms that retain inputs or use them for model improvement.

Security by design requires selecting tools and workflows that minimize unnecessary exposure of sensitive data. Where possible, departments should favor local processing or institutionally governed environments. Encryption, controlled access, and careful data management practices are essential. Researchers should avoid consumer-grade platforms that lack clear guarantees regarding data retention and reuse, especially when working with vulnerable populations.

Supervisors and departments have a responsibility to articulate minimum security standards and to ensure that students understand the ethical implications of tool

⁹anonymisation is the practice of disguising identity of people, communities, or locations to protect their privacy and safety in research.

choice. Confidentiality should be treated as an infrastructural concern rather than an individual burden.

6.3 Indigenous data sovereignty, community rights, and benefit sharing

Research involving Indigenous communities or culturally sensitive knowledge stresses particular focused attention to indigenous data sovereignty that respects governance and the right of Indigenous peoples to have a say in the collection, its ownership, access, and subsequent usage of data that relate to them. AI poses significant challenges to these rights, as data incorporated into computational systems may be difficult to retrieve, restrict, or contextualize.

Anthropological use of AI in such contexts must align with community expectations and governance frameworks. This may involve using local or community-approved tools, restricting data circulation, or engaging in collective decision-making about analysis and representation. Benefit sharing with communities should be carefully considered not only in terms of outputs and control over knowledge production but also in terms of capacity building. In the case of student research, close supervision and guidelines are necessary. AI analysis may not be appropriate in every project, particularly when no one in the community approves a project, or there is no proper governance. Ethical training involves teaching students to become aware of these boundaries.

6.4 Algorithmic bias, hallucination, and epistemic damage

It is no secret that the biases in AI systems are a reflection of those in the training data. However, in anthropology, the greater danger could be cognitive damage - altering how participants articulate their meanings, experiences, and voices on AI generalizations. Language models have the potential to generalize, generate references, or drive well-known categories that lack local information. Speech recognition systems may distort patterns of speech that are associated with marginalized groups. Such errors are not simply technical, but they alter the perspective of social realities and their descriptions, potentially increasing inequality and silencing certain voices. Due to that, anthropology has a responsibility to compare the outcomes of AI to fieldwork observations and recordings and be transparent about the unknowns. It is important to remain humble and accountable in the interpretation. Educationally, students need to be made more cognizant of digital reality by being exposed to actual instances of AI errors and bias to ensure they are more critical thinkers. Students get to understand that being a skeptic and verifying facts are good morals and not indicators of badness with technology.

6.5 Auditability, documentation, and disclosure

A large ethical problem in AI is uncertainty. To address this, anthropology programs may establish transparent documentation systems to monitor the usage of tools, their environments, and checking of results. This will contribute to adequate supervision

and allow reviewers and readers to assess the research approaches. This exchange of information is becoming increasingly relevant in academic writing. Knowing whether one uses AI for checks or analysis can help determine the level of transparency required. The tradition of self-reflection in anthropology prepares it quite adequately to devise powerful disclosure rules aimed at accountability rather than scolding.

7. POLICY RECOMMENDATIONS FOR PRACTICAL APPLICATIONS: TOOLS, WORKFLOWS, AND MANAGEMENT POLICY

Applying AI to anthropological studies requires not just a technological workaround but common reference points, guidelines, and automated tools. Departments need to establish principles rather than set rules so that they can be flexible without losing sight of ethics. At best, a responsible implementation would consist of a text recording and writing down system, quality analysis software access, and consent and disclosure forms relating to AI implementation. The selection of the tools must take into consideration factors such as the sensitivity of the data, where the processing is done, length of data stored, ability to trace the results, and equitable access by the students. Departments are capable of assisting teachers and students with the assistance of those sessions that are devoted to verification, record-keeping, and moral thought, but not technical skills. Reviewing policies should be done frequently in order to adapt to new technology and institutional developments.

8. LIMITATIONS, RESTRICTIONS AND EVALUATION CRITERIA

The application of AI must be judged against the anthropology centered benchmarks rather than depending on the quality of the technological advancement. The clarity of the methods, the quality of the reasoning, the capacity of the students to identify AI mistakes, and their skills to manage sensitive information are considered to be crucial factors. Experiments regarding large language models applied in qualitative studies demonstrate inconsistent findings and a persistent bias, at least in the interpretation of stories by underrepresented groups. These problems show that human judgment and thought are required. Moreover, other challenges are posed by the rapid transformations of the tools and policies. Anthropology programs do not have to teach students about specific platforms but instead work to teach practices that are applicable to various disciplines, such as verification, documentation, and critical thinking. These are not restricted to a certain technology.

Furthermore, artificial intelligence can really be powerful as its potential for deviating the pedagogic and research tools of anthropology; it also brings vital methodological, ethical, and epistemological issues. Generative AI, for example, can create information that sounds plausible but is incorrect or even entirely made up, so-called “hallucinations.” This raises an immediate worry about the authenticity of knowledge provided by AI and the requirement for independent verification of its outputs (Zhao et al., 2026). This problem is more apparent in qualitative research, where the methodological rigor depends less on finding patterns in data. It also depends upon

context, reflexivity, interpretation, and majorly continuing engagement with participants. This article on using AI to conduct qualitative research has consistently highlighted the ethical, methodological, and epistemological dilemmas arising from the integration of generative AI into qualitative analysis.

Similarly, in emerging discussions about generative AI and reflexive thematic analysis, another question is raised around whether automating systems for the identification and organization of themes can also reflect the interpretative processes that qualitative researchers must make sense of people's accounts. This is pretty important for anthropology, because ethnographic knowledge is locally situated to a culture. It emerges from the relationships among researchers, participants, and communities; it does not merely derive from the textual data amenable to ingestion by an AI system.

Yet the issues are bigger than this one about whether AI can assess information fairly. They also concern ethics and power, and whose knowledge gets represented in the first place. Because AI systems are trained on large but uneven corpora of digital knowledge, they can privilege dominant language, cultural assumptions, and established modes of knowledge production, thus marginalizing Indigenous and locally situated ways of knowing. This is why recent work in decolonial scholarship has highlighted the need for an increased focus on issues of AI sovereignty, epistemic justice, and the power relations embedded within human-made artificial intelligence tech (Mbah and Jarvis, 2026; Nemorin and Bonami, 2026; Sethy, 2026).

It depends if anthropology, which has its own legacy of colonialism and is still wrestling with how to rethink knowledge production, finds these questions particularly pressing. Thus, the ethical use of AI in anthropology cannot simply be good stewardship of technology. That also means questioning whose knowledge is being projected, whose voices are excluded, what happens to the data from participants, and who ultimately has to say in interpreting and defining that knowledge. AI is better conceived as a methodological and pedagogical support rather than human interpretation. Its outputs still require checking, questioning, and contextualizing within the cultural and ethical frames. And most importantly, the last responsibility for meaning-making should be with the researcher and the communities whose knowledge it represents.

9. CONCLUSION

AI can enhance anthropological study and research when employed as a method, and not as a substitute for fieldwork. In the right view, AI can broaden the analysis, decrease the workload, and assist in the comparison of ideas on a more in-depth level. However, in the absence of appropriate supervision, it may undermine trust, accountability, and relationships that form the core of anthropology. By focusing on interpretation, transparency, and ethical context, AI can be utilized by anthropology in a way that will not undermine but strengthen its values in scholarly terms. By doing

so, the field can keep up with technology and provide a critical perspective on the cultural and political implications of AI. Anthropology must take the use of AI as a form of research and study in a serious manner, or risk falling behind other disciplines of human study and research.

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