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Generative AI and Socio-Technological Advancements: What Now for Anthropology?

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Rewinding back to the beginning of our (Natalie Djohari and Gavin Weston) academic lives as undergraduates in the latter parts of the 1990's, it was clear from the mixture of enthusiasm and scepticism that anthropology was in two minds about our changing relationship with information technology. The clash of affordances, annoyances and incremental creep into everyday practices across so many different socio-technical spaces often made it hard to grasp the bigger picture about the changes the world and anthropology were experiencing. And yet we recognised that we were already transforming, becoming cyborgs (Downey et al., 1995; Harraway, 2010). Anthropologists may have been "among the earliest to take an interest in computing" (McCarty, 2020, p.210) with Margaret Mead and Gregory Bateson among anthropologists in the 1960's seeking new pathways in cybernetics as a space for cross-disciplinary endeavour, but this was just one stream within a broad array of changes that were impacting anthropology and the wider world we were trying to understand and explain.

In 1996, Gustav Houtman and David Zeitlyn wrote an exceptionally prescient piece for *Anthropology Today* where they gathered this multiplicity of streams together to make a case for how IT was, and how it was going to, reshape anthropology:

> "To suggest that information technology (IT) – the branch of technology concerned with the dissemination, processing, and storage of information, especially by means of computers - might yet significantly shape the discipline attracts the accusation of technological reductionism. […] There is considerable literature on particular roles for IT in anthropology, but very little of it focuses on the broad implications for the discipline." (Houtman & Zeitlyn, 1996, p.1).

They noted how technological change was already shifting what was possible methodologically, from the digitisation of our data though digital photography and video/audio recordings, through to modelling and coding of larger (now we would say 'big') data sets changing the *scale* of what we were capable of analysing. They foresaw how increasingly portable technologies reshaped how people communicate, blurring the lines of personhood that shape what it means to be human. Social networks were globalising through online communities, democratising representation by offering groups opportunities for "proactively framing their own identity on the Internet" (Houtman & Zeitlyn, 1996, p.1). It was beginning to change how we publish, what we publish, who could access such outputs and from where, and who could challenge those representations.

> "Thus, IT affects anthropology more substantially than simply changing the way we acquire, record, transmit, publish and collaborate over data; it has the potential to alter the way we think, and the discipline must follow" (Houtman & Zeitlyn 1996, p.2).

Teaching, being so much of what anthropologists do and how we communicate our knowledge, has likewise been adapting to technological change for a long time. From printed and photocopied course outlines and readings to online learning platforms. From specific, compartmentalised units about digital ethnography to becoming inseparable from everyday ethnographic practices, shaping new generations for whom it became just how the world 'is'. The world changed and the language we used to describe it allowed us to better unpack the social elements of what we were seeing and doing. It was not a decision we could choose to make: people's relationship to technology changed and anthropology as a discipline had to adjust if we wanted to understand and contribute to the world pivoting around us.

The 'crisis' of Artificial Intelligence is just a new(ish) chapter in the ebb and flow of anthropology's relationships with the technological. Mariella Combi was writing about an anthropological approach to AI back in 1992 (Combi, 1992), but since then the need for a more nuanced understanding of AI, generative AI, neural networks, machine learning and other constituent parts have made for a tidal wave of change that is crashing through the way we produce anthropological knowledge and how we teach. Again, there is a mixture of embrace, trepidation and resistance. Drawing on Trouillot, Nick Seaver has referred to our disciplinary double bind as the 'analog slot', by which he means:

> "our position within an inherited field of significance that exceeds the discipline and has been integral in shaping it. Let's call it the analog slot: a position nominally opposed to the digital, but which depends on it for coherence. The analog slot is full of the wild and distinctively human remainders that computing can supposedly never consume: our sensitivity to context, our passions and affects, our openness to serendipity and chance, our canny navigation of the cultural field that uncanny algorithms ape but never attain" (Seaver, 2018, p.380).

There is always the danger that technology will leave us behind, leaving us in an Arthur-C-Clarkian position where technology becomes indistinguishable from magic. Gell noted many moons ago that, "Magic haunts technical activity like a shadow" (Gell, 1992, p.15) and for those of us who discover a new use, a new misuse or a whole new set of possibilities being opened up, it is hard not to use the language of tricks and wizardry. What used to take us a day in the library, Google Scholar can now achieve in seconds. Generative AI can now easily be prompted to explain Mary Douglas' notions of purity and profanity through a rap in the style of Eminem in the same amount of time. So, what is it that we can learn, teaching alongside magic that thinks?

What we are arguing for here is a spirit of openness to new discoveries and with a calm acceptance that many aspects are entirely out of our control. First, for clarity, we need to separate AI more broadly from generative AI specifically. Google, Google Scholar, spellcheck, Grammarly, library databases, YouTube or Spotify playlists all incorporate AI, often so much part of our daily lives that we don't see their algorithmic underpinnings. Artificial Intelligence is just computers stepping in to do tasks that previously required human intelligence. These tools now do so many of our daily tasks faster and more thoroughly than we could ever hope to, making it impractical to strip students of these tools. But generative AI – that part where artificial intelligence is stepping into creative areas, generating new content in the form of text, images or other outputs such as music – this is trickier terrain in educational contexts because it further blurs the boundary between the human and the artificial. Where does the student's work end and ChatGPT begin? Can we, and should we, create generative-AI proofed assessments? How do we make assessments 'fair' for those students not using generative AI? Are these new academic offences or does generative AI amount to plagiarism and collusion? These are the questions reverberating around department and faculty meetings throughout higher education. And the goalposts are moving so quickly that an answer one year becomes redundant the next. Meanwhile our students are asking bigger questions about their futures: What AI relevant skills do I need to become competitive in a changing marketplace? What jobs will remain as AI takes on more and more tasks? What impact will AI infrastructure have on the environment?

Overview of Papers in the Special Section

The five papers presented in this special section draw and extend many of the discussions held at the RAI's 2024 Anthropology and Education conference in London. It was here that we first raised the question of how AI is already being used in teaching and learning context, to creatively play, probe and test the limitations and possibilities of generative AI in education. Rather than focus on the polarising debates surrounding generative AI in education, in this Special Section we turn to what anthropologists do best, namely showcasing what it is that students and educators actually do. Weston et al.'s paper invited students to reflect candidly on their own use of generative AI. Our student co-authors helped us understand the far greater array of generative-AI uses students are embracing and how they often stray outside the binaries laid out in academic regulations. We explore how generative AI is being used to augment thinking – to provoke new directions of thought and explain challenging content as well as economising time in regards to more mundane everyday academic practices. Use is dynamic and often idiosyncratic, reflecting students' needs and their proclivity to play and experiment in conjunction with their disposition towards rules and broader ethics. This leads to an uneven terrain where students perceive a lack of fairness in regulations, false positives in detection and in related punishment. This in

turn feeds a culture of secrecy relating to how students use these tools. We argue that students need to be part of the conversation about how we might work alongside generative AI in education now and into the future.

Bearing in mind the damage generative AI has done to essay writing as a learning endeavour, Hornbeck and Lin look towards what might constitute more fruitful applications of AI in a learning context. Delving into AI chatlogs from students tasked to engage in a conversation with ChatGPT and other AI programs about Michel Foucault and Judith Butler, they explore the approaches that provided more interesting insights into the assigned authors. Hornbeck and Lin found that those students who engaged with AI through the prism of their own personal experiences opened up space for a grounding of theory that was lacking with those that took more straightforwardly explicative routes. The paper demonstrates both the strengths and weaknesses of AI as a tool for learning while showing that novel, literally thought-provoking paths are available.

Another example of innovative use of technology, that fosters students' creative use of online resources can be found in Shishis et al's paper where they explore the value of the Virtual Mystery webtool which produces unique anthropologically oriented problems for students to solve in small groups (see also Fukuzawa, 2024). The paper investigates students' positive responses to the webtool and how it helps facilitate collaborative practice either in-person, or through online/asynchronous collaboration, dealing with many of the problems posed by post-Covid shifts in teaching practice. Their analysis of student feedback highlights the possibilities for using creative technological approaches to promoting self-led learning.

Krause-Jensen and Hau look at how AI chatbots and the emergence of Large Language Models are challenging anthropology in a way that is not dissimilar to the crisis of representation of the 1980's. Exploring the use of such tools in writing and in the applications of theory and fieldwork analysis their paper unpacks the challenges posed by Gen AI in the production and analysis of experiential research. Acknowledging the complexity and risk of such shifts, the authors ultimately advocate for a cautious, caveated, strategic adoption aimed at enriching what the discipline does well. They argue that AI literacy in teaching staff will be a fundamental to achieving this if we are to maintain practices of careful and authentic representation.

Longkumer's article explores the varied ways in which students engage with Gen AI in the context of taught anthropology classes. He uses classroom-based case studies covering simulated anthropological interviews through AI prompts, co-creation of fictional fieldnotes, and analysis of AI-generated anthropological essays. Through these, Longkumer shows how students can be led to engage with AI as a source of distributed knowledge in ways that are both creative and critical, acting as a useful tool in the teaching of research methods and ethnographic writing. The article argues that engagement with Gen AI can augment more traditional methodologies if we are attentive to the critical and ethical nuances that emerge from such hybridised practice.

Across the Special Section, authors offer pragmatic paths for engaging with AI to enhance learning, but with a healthy critical eye. The healthy scepticism acknowledges the fact that the increases in applications and abilities of Generative AI are easily outstripping our ability to legislate them at a disciplinary, university or classroom scale. There will certainly be innovative ways to bypass AI to test our students on an entirely organic basis, but on a more general level a more hybridised reality within and beyond the classroom looks like it will become increasingly normalised. That being the case – we need to maximise learning opportunities and mitigate harms where possible. Taking this approach requires teachers who are at least moderately AI-cognizant, but preferably more than that. Straightforwardly – the more we know, the better. More creative adaptations, better informed scepticism, refining solutions to ethical ambiguities – these all come about though increased awareness and ongoing conversations. The aim of this Special Section is to help foster the climate in which such fruitful conversations might occur.

References

Combi, M. (1992) 'The Imaginary, The Computer, Artificial Intelligence: A Cultural Anthropological Approach.', *AI & Society*, 6, pp. 41–49. Available at: https://doi.org/10.1007/BF02472768.

Downey, G.L., Dumit, J. and Williams, S. (1995) 'Cyborg Anthropology', *Cultural Anthropology*, 10(2), pp. 264–269. Available at: https://doi.org/10.1525/can.1995.10.2.02a00060.

Fukuzawa, S. (2024) 'The Virtual Mystery Webtool: Open access online Hybridized Problem-based Learning', *Teaching Anthropology Blog*, 13 April. Available at: https://teachinganthropology.org/the-virtual-mystery-webtool-open-access-online-hybridized-problem-based-learning/.

Gell, A. (1992) 'The Technology of Enchantment and the Enchantment of Technology', in J. Coote and A. Shelton (eds) *Anthropology, Art, and Aesthetics*. Clarendon Press.

Haraway, D. (2010) 'A Cyborg Manifesto', in I. Szeman and T. Kaposy (eds) *Cultural Theory: An Anthology*. John Wiley & Sons, pp. 454–471.

Houtman, G. and Zeitlyn, D. (1996) 'Information Technology and Anthropology', *Anthropology Today*, 12(3), pp. 1–3. Available at: https://doi.org/10.2307/2783142.

McCarty, W. (2020) 'Modeling, Ontology, and Wild Thought: Toward an Anthropology of the Artificially Intelligent', in G. Lloyd and A. Vilaca (eds) *Science in the Forest, Science in the Past*. Chicago: Hau Books, pp. 209–236.

Seaver, N. (2018) 'What Should an Anthropology of Algorithms Do?', *Cultural Anthropology*, 33(3), pp. 375–385. Available at: https://doi.org/10.14506/ca33.3.04.