Zhu Hua*, David Wei Dai, Adam Brandt, Guanliang Chen, Giuliana Ferri, Spencer Hazel, Chris Jenks, Rodney Jones, John O'Regan and Shungo Suzuki

Exploring AI for intercultural communication: open conversation

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Abstract: AI is not new. What is new, however, is the speed and depth of its expansion in almost every aspect of our lives. This discussion forum is dedicated to exploring new frontiers and agendas for language and intercultural communication research. In this concluding piece, we invite the contributors to share insights on five key questions: their experiences (Question 1), the challenges and opportunities that we face (Question 2), the strengths and skills afforded by intercultural communication and applied linguistics (Question 3), considerations when collaborating with AI developers and user groups (Question 4) and the future landscape of intercultural communication (Question 5). Through these inquiries, we hope to amplify the contributors' voices and experiences, often difficult to fit in academic writing, but crucial for contextualizing their epistemological stances in their work. We seek to broaden the discussion, drawing out a bigger picture of pressing issues, and exploring future prospects.

Keywords: intercultural communication; AI; ethics

***Corresponding author: Zhu Hua**, UCL, London, UK, E-mail: zhu.hua@ucl.ac.uk. https://orcid.org/0000-0003-1500-3047
David Wei Dai, Giuliana Ferri and John O'Regan, UCL, London, UK. https://orcid.org/0000-0002-3575-131X (D.W. Dai). https://orcid.org/0000-0002-4843-3273 (G. Ferri). https://orcid.org/0000-0002-1335-820X (J. O'Regan)
Adam Brandt and Spencer Hazel, Newcastle University, Newcastle upon Tyne, UK. https://orcid.org/0000-0002-4675-0101 (A. Brandt). https://orcid.org/0000-0001-8124-1567 (S. Hazel)
Guanliang Chen, Monash University, Melbourne, Australia. https://orcid.org/0000-0002-8236-3133
Chris Jenks, Utrecht University, Utrecht, The Netherlands. https://orcid.org/0000-0002-2563-5737
Rodney Jones, University of Reading, Reading, UK. https://orcid.org/0000-0002-9426-727X
Shungo Suzuki, Waseda University, Shinjyuku, Japan. https://orcid.org/0000-0002-6327-3298

1 What draws you to research in AI and intercultural communication? How does your previous research experience inform your exploration of this emerging field (in other words, what approaches or skill sets do you find particularly helpful in exploring this topic)?

Zhu Hua: My interest in AI and technology is driven by personal observations and broader societal trends. During a visit to Beijing in September 2023, I witnessed the deep integration of technology into everyday life. The locals live in WeChat and QR codes. As I could not set up WeChat payment, the primary mode of transaction, I had to ask friends to order taxis for me and to pay for me in shops. A telling moment came when I was given a lift by a friend, I noticed that her car navigation system featured her ten year old daughter's voice, a customization made possible by technology. The deep penetration of technology, while offering convenience or the possibility of personalization, in fact, widened the divide between those who have access to it and those who don't, in the similar way as we have seen in the spread and dominance of English over other languages in global communication. I wondered then ***to what extent living in technology, to be precise, living in one's phone, has changed the way we communicate and socialise with each other and created new forms of social (im)mobility***.[1]

I am also aware of increasing concerns about the potential impact of AI on language education. The decline in the number of language students was reported for the first time over several decades in China, partly to do with the assumption that technology could overcome language barriers. These developments prompt me to reflect on what we can do as language and intercultural communication researchers and educators. ***We cannot ignore or resist the ongoing technological changes. Rather than remaining as spectators and recipients, let's channel our energy into shaping the technology***. Generative AI depends on the dataset which, as far as we could tell, is biased towards Anglo-centric data. How can we leverage our disciplinary knowledge and toolkits to contribute to the debates and to effect changes?

David: My research program focuses on how working professionals communicate in intercultural contexts. This is motivated by my previous work experience teaching and assessing professional communication skills in a medicine faculty. A major

1 Emphasis here and in the rest of the text is added by the editors, Zhu Hua and David.

challenge with professional communication education is the resource-intensiveness of simulation practice. When there are a large cohort of one hundred nursing students in a program for example, it is difficult to find one hundred actors to roleplay the same diabetic patient profile of certain sociocultural features. This issue extends to assessment because if we want to evaluate students' ability to handle real-time, face-to-face professional communication. Even if there were enough resources to hire roleplay actors, human actors would introduce variability, which is a concern when we want to standardize students' learning and assessment. Since interaction is co-constructed, students' learning and assessment outcome depend on the interlocutors they are paired with. There could be concerns of bias if some students were paired with a more supportive roleplay actor while others a less supportive one.

These considerations have often made me wonder how AI could contribute to better professional communication education since AI can provide consistent, standardized experiences for learners. AI can also reduce the cost and barriers to interaction-based learning and assessment, especially when developing professionals' ability to communicate (their Interactional Competence) requires ongoing interaction with members of respective professional communities. To further this line of work, I think ***it is crucial to understand 1) how AI interactional agents communicate, 2) how large language models understand and represent the nuances of professional communication, and 3) how culture is approached by AI agents in professional communication***.

Guanliang: The intersection of AI and intercultural communication captivates me due to its potential to foster empathy and understanding in an increasingly interconnected world. Drawing from my expertise in AI, natural language processing, and learning analytics, ***I see this field as an exciting opportunity to leverage technology for social good***. In approaching this emerging field, I prioritize user-centred design principles, striving to develop AI solutions that truly meet the needs and preferences of learners from different socio-economic and cultural backgrounds. Techniques like prompt engineering are essential for tailoring AI outputs to align with cultural sensitivities and contextual nuances. By combining technical expertise with a nuanced understanding of human behaviour and cultural dynamics, I believe we can unlock the full potential of AI to facilitate meaningful intercultural exchanges and bridge divides in our global society.

Shungo: My biggest motivation to conduct research related to AI was our own research project that aims at developing and validating an automated conversational speaking test. We decided to use conversation AI agents as an interlocutor throughout the test (https://www.teai-waseda.jp/en/), which can offer ***"systematic interlocutors" for the sake of fairness*** among test-takers (cf. interactional variability). From the

perspective of language assessment, the authenticity of test content, which in our case includes both conversation content and AI agent's behaviour, should be high enough, particularly when the test is designed for a group of test-takers who have specific target language use domains and tasks including specific target interlocutors (e.g., medical and legal communication). To systematically design such assessment tasks, I believe that expertise in needs analysis, including the discourse analyses of target discourse, is definitely essential. Furthermore, as we introduced in our paper in this volume, our team is also interested not only in how closely AI agents can approach human-like interactional behaviour (AI's potential), but also in how people perceive AI agents and whether they can perceive AI agents as a social agent like a human. Depending on the answer to those questions, we may need to reconsider our expectation for AI in real-world applications including language testing and language learning support for intercultural communication. If AI can indeed be perceived as equal to humans, we should aim for that level of sophistication. However, if people ultimately see AI as fundamentally different from humans, we should rather focus on maximizing the unique affordances of AI technology itself. While exploring technological innovations and their applications, ***it is essential to investigate how diverse individuals perceive such AI technologies and tools for envisioning a future society and even "culture" where humans and AI co-exist and co-evolve***. This broader perspective on the human-AI interaction and co-evolution is a focus of our research team.

John and Giuliana: We are not so much drawn to research in AI and intercultural communication as aware that AI has become impossible to ignore. It seems no exaggeration to say that its advent is on an order of magnitude that is at least as profound as that unleashed by the introduction of the Internet, desktop computers and cell phones in the later twentieth century. The time when none of these technologies existed is well within our collective memory and yet we now live in a completely different world. In the 1980s and 90s we undoubtedly lived slower and much less intensely connected lives, although globally, and interculturally, these were decades that were no less turbulent, exploitative or inegalitarian. AI, especially of the generative sort, while seeming to offer much in relation to seamless communication, scientific advancement and knowledge production, fills us instead with a sense of foreboding, even dread. Why? Because just as with the invention of the A-Bomb in the 1940s or the Internet in the 1980s, those with the loftiest of motivations for advancing AI are likely to find their vision undermined by others with much less principled impulses. Whatever the upside, there is a real danger that the transition from automated to generative AI will be utilized by malevolent state and non-state actors for the furtherance of their own strategic self-interests and goals, and that this

will be at our collective expense as well as that of the planet as a whole. ***There is much talk of the urgent need for global governance and regulation of AI, but as with climate change and the increasingly destabilized international order, there has been little will to act in any meaningfully coordinated manner***. This lack of coordination has been exacerbated by a marked global shift towards increased state authoritarianism involving competing ideological fundamentalisms in religion, economics and politics. These have in turn significantly heightened regional intercultural dissonances and created fertile ground for the major proliferation of global interstate miscommunication and warfare. ***The massive toxicity of global interstate intercultural relations at the present time is such that with generative AI the potential for our distorted communication to become yet more distorted seems unacceptably high***.

Theoretical perspectives which might allow us to examine and critique this global shift and within that the role of generative AI will of necessity have to include the historical and the material as much as they include the intercultural, because a focus on the latter is insufficient as a response to the dangers that are immanent in the ever-evolving global dysfunction. For us, these theoretical perspectives include critical realism, international political economy, world-systems analysis and critical theory, within which multiple analytical models which emphasis the material are available. In our field, they include critical discourse analysis, critical intercultural communication and critical applied linguistics.

Chris: Human communication has evolved alongside and as a result of technology, so it is natural for us to be curious about AI. I am particularly interested in how current technological advancements are driving us to be more dependent on technology. Central to this interest is remembering how previous generations transformed as a result of technological advancements, which I believe will help us understand how to move forward with technology. So, there are historical reasons for examining, as well as forthcoming incentives to investigate, AI and communication. My previous experience researching chat rooms being used for lingua franca communication partly informs how I approach the study of AI. I have always been interested in how technology affords us the ability to communicate across time and space, crossing linguistic, cultural, and geographical boundaries in unprecedented ways. Similarly, AI affords us the ability to understand and manage information, including cultural knowledge, in ways that were not possible in previous years. Therefore, ***it is imperative that intercultural communication researchers approach AI by coupling a historical perspective that attends to issues of technological advancement with a philosophical awareness of what it at stake for humanity as societies continue to exploit the ostensible conveniences that***

are afforded to us by such advancements. In short, all approaches and skills sets are potentially useful to understand AI and intercultural communication, but ones that are guided by history and philosophy will be particularly valuable in providing large-scale sociological observations.

Adam: As perhaps with all of us, my interest in AI (and conversational AI in particular) goes beyond how it relates to intercultural communication (ICC). As an Applied Linguist who uses Conversation Analysis in my research, I have long been interested in how people adapt their communicative practices when using technologies for communication, and also how such technologies change the way we communicate more broadly. But once Spencer and I began collaborating with a healthtech startup who have developed their own conversational agent for clinical consultations, it was probably inevitable that we would also eventually begin to consider the implications for ICC. Having also researched how people adapt their communicative practices when interacting in a second language, or with interlocutors of different cultural communicative backgrounds, it seems like an obvious crossover of research interests.

At the same time, as John notes in his answer to this question, AI has become impossible to ignore. It seems obvious that ***this period of accelerated AI advancement marks an epochal moment in our social lifeworlds; one with which it may be impossible to keep up, as individuals and as researchers. It therefore feels important to be part of the onset of research in this area, and a privilege to have the opportunity to do so***.

Spencer: It may well be that AI and intercultural communication will emerge as a field in a way that aviation and intercultural communication never did. ***It is not yet defined what relationship there is – if any – between these two very different things.*** We use the term AI to refer to a set of emerging technologies, the possibilities of which we still do not fully comprehend. Intercultural communication on the other hand we use as shorthand to refer to a social phenomenon loosely related to differences in how people perceive or act in the world. That said, AI does present the most recent of a long line of technological revolutions that provide the human world with a means to circulate ideas and practices across populations. The printing press, the telegraph or telephone, the train and the airplane, radio and television, the world wide web and the introduction of social media, each of these introduced greater opportunities for bringing people and ideas from sometimes very different cultural groups into contact with one another. This has enabled the wider distribution of locally constituted normative ways of behaving, including that at the ideational level, i.e. ways of thinking, ways of believing the world to be (or should be), and at the practices level, i.e. routine ways of being around one another and managing our

interactions. Some of the technologies framed as AI may 'facilitate' the circulation of ideas (e.g. Large Language Models, Generative AI more broadly), while others (e.g. Conversational AI) may draw on the normative social practices of a cultural group and offer this as an interactional framework for people to use to control how the technology behaves. Often these are combined in a single tool, as in the examples of personal assistants like Alexa and Siri, or the 'deepfakery' manipulations of video communications. Any of these technological interventions offer possible staging posts for what we might conceive as intercultural contact to take place. However, at present at least, none of them are being designed for the benefit of facilitating such intercultural communication.

What we can say with some confidence is that we are currently in a period of transition. Soon it will be normal for people to interact with AI-driven technologies where previously they had interacted with another person, and this should be of interest for anyone working within the social sciences. ***How does the technology facilitate the distribution of particular memeplexes throughout a population, and what are the normative social practices on which it is modelled and through which it carries out such communication***? For those of us working in social interaction research (also in the field of intercultural communication), this will likely have a profound impact on the scope of our work.

Rodney: As with others, my interest in AI and intercultural communication comes partly from intellectual interest, and partly from necessity. Nobody working in the fields of linguistics or education can ignore the profound effects these technologies will have on language, communication and learning. My previous work in digital literacies has increasingly led me down critical posthuman pathways that demand that we help our students confront the ways they are entangled with technologies and with the natural world and develop the means to act ethically from within these entanglements. As a sociolinguist, I am also interested in how particular ways of speaking and social identities become 'enregistered', and the consequences this has on the way people think about and treat one another. ***Generative AI has the capacity to 'turbo-charge' these processes of 'enregisterment' in ways that might make it harder for us to combat biases and stereotyping***. Finally, I'm interested ***not just in the ways AI imagines us as cultural beings, but the ways we imagine AI, and how our imaginaries of AI come to impact our understanding and experience of things like 'intelligence', 'sentience' and humanity itself***. Like John and Giuliana, I am extremely concerned about the long-term consequences of these technologies, especially in the hands of a few powerful corporations. But like Spencer, my immediate concerns have more to do with the mundane ways these technologies might operate to erode our sense of agency, our epistemological capacities, and our abilities to respond ethically to the many political, ecological and economic issues that confront us.

2 What are the most pressing issues in exploring AI for intercultural communication either in terms of research or application? What are things that keep you awake at night or make you excited?

Giuliana: I do not want to sound overly pessimistic or appear like a Luddite, but I am concerned by the rapid development of AI on an unprecedented scale. I agree with experts in the field of AI who are asking for a pause to better understand the implications of this technology and to put measures in place to mitigate some of its most worrying aspects in the short term. Experts like Kyle Taylor, or even Geoffrey Hinton who is one of the creators of AI, have highlighted the dangers of an unchecked development of AI guided by tech companies with the sole aim to increase profit. The potential use of AI to influence elections, or to create fake news is another worrying aspect. And finally, the use of AI in warfare is extremely dangerous. AI is not only used in surveillance, but also to identify human targets that account for the possibility of 'collateral damage', meaning that the loss of civilian life is intentionally embedded in its algorithm. This can be seen in the recent news of the Lavender programme used by the Israeli government in Gaza. From this, the real possibility of autonomous weapons being deployed in future wars is extremely concerning. In terms of intercultural communication, any research on AI would need to engage with these issues and interrogate the motives behind the development of this technology. I am an occasional user of Chat GPT and I can see the benefits of AI in a myriad of applications, such as in healthcare settings, but I think that ***we need to seriously engage with the potential dangers of a technology that is still poorly understood. Any work in applied linguistics and intercultural communication on AI should consider the silencing of voices not aligned with the vested interests of global capitalism***.

John: Or with those who claim that their interests are otherwise, when in reality they are also capitalisms of various stripes. At the present time they include the governments and national economies of China, Cuba, Vietnam, North Korea and Venezuela. Even North Korea is part of the capitalist world-system because of its need for foreign exchange, so it operates on the international black market as a dealer in plagiarized high-grade weaponry, amongst other things. As Giuliana and I have inferred in our response to Question 1, ***it is the clash of differential capitalist fundamentalisms in conjunction with AI that is our greatest concern***. Going still further, Geoffrey Hinton, who Giuliana mentions, and who is considered one of the foundational thinkers in the development of generative AI, was very recently quoted as saying that "If I were advising governments, I would say that there's a 10

per cent chance these things will wipe out humanity in the next twenty years. I think that would be a reasonable number" (How fatalistic should we be on AI? Financial Times, 22.02.2024). I am not looking forward to the period between now and 2044, but I hope that someone is reading this then and having a good laugh at my and Hinton's expense.

Chris: The answer here will certainly be informed by the approach or skill set that characterizes the work of the researcher answering this question. I lay out in my Cambridge Elements book on new frontiers in language and technology, which is cited in my contribution within this special issue, some of the more pressing issues that we need to investigate (see Jenks, 2023, *New Frontiers in Language and Technology*, Cambridge University Press). Perhaps one of the more pressing issues that I discuss in said book is tied to the human-machine interface, which refers to the social and interactional relationship that we have with machines. ***Researchers must better understand how our relationship with, and dependency on, machines influence how interculturality is co-constructed***. Research on the human-machine interface can be approached by looking at the ways in which interculturality is co-constructed when we communicate with, or to, machines. Furthermore, there are numerous theoretical and empirical issues that should occupy the interests of intercultural communication researchers when considering AI in general and the human-machine interface in particular. While this open discussion is not the right forum to identify some of these issues, they all more or less fit within four modes of communication: (1) how humans communicate with each other using machines (human-machine-human), (2) how humans communicate to machines (human-machine), (3) how machines communicate with humans (machine-human), and (4) how machines communicate with other machines (machine-machine). These four modes of communication will help us make sense of the varied ways in which interculturality is co-constructed in and through technology, including AI.

Guanliang: When exploring AI for intercultural communication, several pressing issues have arisen and caught my attention, both in terms of research and application. One of the most critical challenges is addressing bias in AI models, especially in generative AI technologies. These models may inadvertently perpetuate stereotypes or cultural biases present in the training data, leading to potentially harmful outcomes in intercultural communication scenarios. Prior research in adapting AI technologies for education can offer insights into techniques such as bias mitigation and prompt engineering to address these issues. Besides, existing AI technologies often struggle to understand and adapt to the nuances of different cultural contexts. Intercultural communication requires sensitivity to cultural norms, values, and communication styles, which can vary significantly across communities. ***Research efforts should focus on developing AI systems capable of***

recognizing and respecting these differences to facilitate effective communication. Lastly, successful adoption of AI tools in intercultural communication contexts hinges on user acceptance and trust. Learners from diverse backgrounds may have varying levels of familiarity and comfort with AI technologies, leading to potential barriers in usage. Prior research in technology-enhanced education and learning analytics can inform strategies for building trust and ensuring user acceptance of AI-driven intercultural communication platforms.

3 What theoretical or methodological frameworks within ICC or applied linguistics do you think could help us to explore AI for intercultural communication (in other words, why do we need insights from intercultural communication and applied linguistics?) and conversely, how understanding AI for intercultural communication can help us to take our research and practice to the next level?

David: I think interactional analysis, and in particular, Membership Categorization Analysis, is a suitable research method for investigating AI-mediated ICC communication. Membership Categorization Analysis (MCA) is an ethnomethodological method that studies culture in action. It has a rich analytic apparatus that allows researchers to generate empirically grounded accounts of how speakers organize knowledge of social categories (e.g., a lawyer, a physiotherapist, a politician) and their respective rights, entitlements and obligations (e.g., what a trustworthy lawyer should do). With AI making inroads into every layer of social interaction, there is an intensifying awareness that we need to develop more culturally-sensitive, and interactionally-competent AI conversational agents, a point that was consistently articulated in contributions to this forum. One way to address this issue is to use MCA to look at how cultures and social categories are currently represented and reproduced in AI-mediated communication. From here ***we can identify, for example, better prompting techniques to help AI reduce biases and stereotypes. Conversely, while engaging in practical work in training AI to be a more interculturally competent communicator, intercultural communication researchers and applied linguists can refine their knowledge of human***

interaction and sociality, which feeds into better interpersonal communication in general, with or without AI.

John: We need insights from intercultural communication for the reason that many of the other authors in this special issue have indicated (e.g. Chris Jenks, Rodney Jones, Adam Brandt and Spencer Hazel), which is that ***AI is linguistically and culturally illiterate – algorithmically monochrome and devoid of heart***. It may be interesting, even beguiling, when requested to write a four-stanza love song about frying eggs in the style of the US rock musician Lou Reed, or Confucius, but when questioned seriously, its default is to produce bland-sounding, non-committal and often ethically problematic statements, and if not that, to fall back on learned 'standard' – and often racially cliched – tropes in language and identity, as the contribution of Rodney Jones highlights very well. The default of generative AI in English is perhaps not surprisingly the standard form. What is more interesting than this – and which seems to validate further what I have just said – is that given the vast data pools to which it has access, AI's – or at least ChatGBT's – attempts at non-standardness, such as responding when prompted in Sri Lankan English, Chinglish, Singlish or Japlish – I tried it – is so inauthentic. I believe that AI in English is likely to remain in this default standard format for the foreseeable future due to the linguistic and cultural narrowness of the LLMs on which it relies, and the fact that these LLMs are monetized by the corporations that produce them, so defaulting in themselves to dominant linguacultural capitals and norms. It may be that 'one shot' speech-recognition ***AI will solve the issues of spoken interaction in English that some of the authors in this special issue have noted, but it will not change the underlying mechanism of English in the standard mode being the factory reset for English. That is a matter for capitalism, not for AI***.

Chris: In order to answer this question, I think that it is necessary to be clear what intercultural communication research entails. A defining feature of intercultural communication research is its focus on interculturality, which I define in this special issue as the meaning-making process in which cultural knowledge, such as belief systems and language identities, is co-constructed in a human encounter. Interculturality runs through many AI topics and themes, and is indeed a fundamental meaning-making process for a lot of what is communicated in and through technology. I discuss, for example, in my article how humans and chatbots can co-construct interculturality. Similarly, machines can communicate to other machines, creating cultural knowledge for humans to consume. For me, then, many of the existing theoretical frameworks and methodological tools that are used within the literature to investigate human encounters are suitable for investigating AI. An understanding of AI can, however, offer exciting opportunities to transform the ways in which we do intercultural communication research. For example, ***AI will transform notions of what constitutes data (e.g., ethical issues surrounding***

what is "real" and what is fabricated cultural knowledge), as well as how data management is handled (e.g., technology that automates transcription and analysis work). The potential for AI to elevate our research is indeed an issue that must be explored more deeply in the coming years.

Adam & Spencer: As we discuss in our paper in this forum, we think the full gambit of methodological approaches will be required to provide a holistic understanding of the relationship between AI and ICC. ***Our own personal interest lies with a CA (Conversation Analysis) approach to the examination of human sociality and so, by extension, this is how we approach what is being referred to as '****Artificial Sociality****'***. A CA approach allows us to examine how conversation designers draw upon their understandings of social interaction to design their systems, as well as how users engage with these systems, including how conversational practices differ from human-human interaction. Other research methodologies can, and will, complement this by offering insight into, for example, the self-reported views of AI system designers, as well as users of a wide range of language, cultural, and other, backgrounds. And of course there are many other forms of AI systems beyond the conversational, for which a range of other methodological approaches and theoretical frameworks will be needed.

Rodney: I think we will need to bring in a variety of theoretical frameworks to meet the challenges posed by AI. ***Much of how we end up interacting with AI will be a function of the individual and societal imaginaries we construct around it, and I'm particularly interested in how the notion of metapragmatics from sociolinguistics can help us to understand this, starting from the ways we make inferences about how AI is 'thinking' (and how it makes inferences about us), and how these inferences lead to user developing 'theories of mind' in relation to technological systems***. I also think recent posthuman approaches in applied linguistics will be enormously useful. As humans and technologies become increasingly entangled, these approaches will give us ways to analyse the material discursive means through which humans negotiate agency and learn how to formulate what Barad calls 'response-ability' when it comes to AI mediated social practices.

4 If you were to collaborate with or offer guidance to developers or users of AI technology, what advice would you offer and why?

Shungo: From my experience of collaboration with engineering and machine learning researchers, it has become clear that their sense of values regarding research design and dataset are similar but critically different from those we, applied linguists or more broadly, social scientists, have***. AI researchers and Applied***

Linguists need to engage in "conversation" extensively to conduct interdisciplinary research in a true sense. This can be achieved, for instance, by reading articles in their partner's field and expressing the assumptions and epistemology behind one's opinions and arguments explicitly.

John: I really don't know what advice I could give. At the empirical and actual levels, there is a need to incorporate the pragmatics of language and culture and of its diversity into the AI models which we will all be using, and to guard against discrimination and other ethical transgressions, as many in this issue have argued. But at a completely other level – the level of the real – ***I would warn them of the potential deliberate misuse of their insights for malevolent ends and ask whether what they are doing could be manipulated in that way***. The founder of the World Wide Web (aka the Internet), Tim Berners Lee, in 2018 professed himself devastated at what his discovery had become, and before him, J. Robert Oppenheimer, the inventor of the A-Bomb, was equally horrified at how following the atomic holocaust unleashed upon Hiroshima and Nagasaki in 1945 his life's work was so expropriated that the precise opposite of what he intended became universalized and atomic proliferation advanced to become nuclear proliferation and the certain destruction of the planet and all living things. In the words from the Bhagavad Gita that he invoked then, "Now I am become Death, the destroyer of worlds." He should have added "for all time."

Adam and Spencer: We are fortunate to already be collaborating with developers of a voice-based conversational AI system, and have already engaged in providing input on how their system can be developed further. We have also delivered workshops to designers of other kinds of conversational AI systems, such as chatbots. We are also fortunate that, in our experience to date, everyone we have engaged with has demonstrated how they are driven to produce systems which have societal benefits, so our work to date has been approached in the spirit of shared endeavours and aspirations.

Our advice so far has been ***that AI systems are tools to be used, and should be designed as such***. ***The focus should be on improving what the system can do (e.g. produce humanlike conversational patterns for users to engage in), rather than on focusing on building in sleights of hand that encourage the user to perceive the machine as doing something it cannot (e.g. sympathise, affiliate***). It is not only ethically questionable, but also practically disadvantageous to try to have AI systems which can, and aspire to, pass as human.

Rodney: My advice to users is to use it as much as possible, especially if you are a teacher or a student. It is only though frequent experimentation with these tools and practice in making inferences about what they are doing that we will be able to cultivate the kind of critical we will need to resist their influence over us. For developers of AI systems, I doubt any advice I could give would trump the profit

motive, so my advice is for governments and public institutions – we cannot let the development of these tools to be totally dominated by the market. ***Governments need to step up with the resources to claim an AI public square that is based on principles of design justice and equal access***.

5 How do you see the future landscape of intercultural communication being shaped by advancements in AI technology?

Chris: Intercultural communication research is a reflection of what is happening out there in the world – AI will naturally occupy more and more attention in the literature as a result. So, in terms of quantity, the landscape of research will broaden, covering emerging issues and contexts for which AI is a fundamental issue. The type of scholarship that is being conducted will also change: the future landscape of intercultural communication research will evolve alongside ongoing AI advancements. That is to say, AI technology will create new opportunities to understand, as well as conduct research on, intercultural communication. If we return to, and reflect on, the core focus of intercultural communication research (i.e., co-constructing cultural knowledge), then it is easy to imagine a future where conferences, journals, and other dissemination spaces actively pursue an understanding of AI and interculturality. In other words, conference organizers, journal editors, and academic institutions must provide top-down initiatives to drive intercultural communication scholarship on AI into the future. This special issue is an excellent example of one such initiative. The landscape must also be characterized by more bottom-up interests that reflect the expertise of researchers already working on intercultural communication issues. ***For example, AI is currently altering how individuals, communities, as well as societies, make sense of culturally-sensitive topics, such as war, religion, nationalism, and migration. This influence has numerous consequences for future scholarship, including the need for intercultural communication researchers to understand the technology that drives AI and creates the conditions for, say, digital interculturality***. If we as a field of study do not understand such technologies, then it is extremely difficult to offer accurate and nuanced observations about the influence AI has on intercultural communication. We risk as a field of study being left behind in an academic landscape that is collectively committed to developing the digital literacy needed to understand not only the outcomes of AI, but also the technology behind it.

Adam and Spencer: ***Ironically, for a communication technology, what may set AI apart from the likes of the airplane and the telephone is that rather than***

bringing people from culturally different backgrounds into greater contact with one another, it may well do the opposite, removing opportunities to interact with people, wherever they are from. And for anyone interested in human sociality, including what we conceptualise as intercultural communication, that will be interesting to study, and an important societal change for us to feed into.

We are already seeing a shrinking of the translation and interpreting industries. Relatedly, some customer service providers in Japan have introduced AI-powered live translation software. And a few years ago, Google teased the prospect of augmented reality glasses with live translation. As with all things AI, we can be sure that this is just the beginning. Such technologies may lead to live closed captions further removing the need for second language learning. While this may be beneficial to many, it will inevitably bring downsides too: learning a second language for example has many benefits for developing intercultural communicative competence, while also allowing a person to experience how the same world is categorised differently by speakers of other languages.

Alternatively, thinking more optimistically, ***AI-powered technologies may prove far better at grasping the different normative patterns of thinking and behaving across diverse discourse communities, if prompted to identify distributional variation in how members in these groups behave***. This might give us a much more nuanced picture of cultural variation, which could result in a more informed public, and one better equipped to engage with people from other backgrounds.

Hua Zhu: Our debates on AI technology are closely connected with two imperatives of intercultural communication research as envisaged by Judith Martin and Thomas K. Nakayama in their textbook, *Intercultural Communication in Contexts* (McGraw Hill, 2003): technology and ethics. Technology introduces new dynamics to intercultural communication and social relationships, a point confirmed by all the contributors to this forum. As we are moving to a post-digital research era where AI technology is integrated into our lives, understanding its role requires evaluating its impact on human welfare and societal well-being. Beyond the obvious commercial interests (a case well made in John and Giuliana's comments), it is crucial to consider cross-cultural differences in how communities perceive the human-technology relationship as well as the digital ethical dilemmas surrounding privacy, consent, security and identity. Customising one's own daughter's voice for sat nav, as mentioned earlier, might be seen as a smart, and even endearing, application of AI technology in certain cultures, while raising concerns in other cultures for the fear of the loss of control over personal identities. As tech companies race to advance AI technology, there is a pressing concern: ***Are we inadvertently creating digital frameworks which clash with each other's ethical values and thereby exacerbate societal divisions? This critical question demands our collective attention***.

Editors' closing comments

We would like to thank the forum contributors for sharing their insights and experiences at the start of our intellectual journey to understand AI. The richness of the discussion has well exceeded our initial expectation. We differ in our perspectives on how we envisage the role of AI in society – is AI a tool, a facilitator, a personal assistant, 'the more knowledgeable other', an ethical quandary, a machine without heart or culture, a creative partner, or a compassionate proxy? It is still early days to answer these questions. We hope that our open conversation brings attention to the pressing issues facing us: How can we harness artificial intelligence for human flourishing? How shall we confront different and new kinds of bias and ethical dilemmas? How do we strike a balance between machine automation and human agency, patterns and variability, and predictability and creativity? We hope that the collection will serve as a catalyst for further exploration and collaboration.