

Rethinking the ethics of AI:

Towards a Franco-Japanese dialogue Educational and cultural perspectives

AIの倫理を再考する：日仏対話に向けて

2023年秋京都でのシンポジウム

Conference

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Abstracts and biographies of participants

Philippe CODOGNET, Professor, Sorbonne University (France), CNRS, University of Tokyo

Experimenting AI through Digital Arts

In the last few years, AI has become a buzzword in many domains, including the arts. As AI has expanded its application domain from image recognition to text understanding and image generation, new AI techniques paved the way to the totally automated production of visual or musical creations, reviving the dream of acheiropoietic artworks.

After beating humans at Chess (Kasparov versus Deep Blue, 1997), at Go (Lee Sedol versus AlphaGo, 2016), will AI also beat humans at creativity ?

To put such a question in context, we will present in this talk a few old and new artworks using AI techniques in order to illustrate how experimenting with digital artworks can give a direct way of experimenting some key issues related to the evolution and the impact of AI. Indeed, the future may lie not only in the use of generative AI to create artworks produced by autonomous machines, but also in an interactive use of AI tools to foster the artists' creativity.

Philippe Codognet is professor of Computer Science at Sorbonne University since 1998. He received a Ph.D. in Computer Science from University of Bordeaux-I (France) in 1989 and was a researcher at INRIA (French National Research Center in Computer Science) from 1990 to 1997, with a sabbatical leave in 1997/8 at Sony Computer Science Laboratory in Paris. He also worked as scientific attaché at the French Embassy in Tokyo and in Singapore and director of the CNRS office for North-East Asia in Tokyo. He is currently seconded to CNRS and the director of the Japanese-French Laboratory for Informatics (JFLI) an International Research Laboratory between CNRS, Sorbonne University, University of Tokyo, Keio University and the National Institute of Informatics (NII), based in Tokyo.

His main research topics are in the domain of artificial intelligence and focus on combinatorial optimization and constraint programming, high-level programming languages, logic, parallel computing, computer-based music and, more recently, quantum computing . He has also been working for many years on the relationships between arts and technology, in particular in digital arts.

Noa GARCIA, Specially-Appointed Assistant Professor, Institute for Datability Science (IDS), Osaka University.

“Text-to-Image Generation in Art and Society”

In the digital age, the dynamic field of text-to-image generation has opened up exciting possibilities in the realms of art, culture, and communication. This talk explores the transformative potentials and critical considerations surrounding this technology, from its applications in art analysis to its impact on pressing social issues.

Dr. Noa Garcia is a Specially-Appointed Assistant Professor at the Institute for Datability Science (IDS) at Osaka University. Previously, she was a postdoctoral researcher at the same institute for 2.5 years, after completing her Ph.D at Aston University, United Kingdom. Her research interests lay at the intersection of computer vision, natural language processing, ethics, and art.

Rafik HADFI, Associate Professor, Kyoto University

“Leveraging Conversational AI to Support Gender Equity”

Artificial Intelligence is driving the development of platforms that have the potential to empower marginalized groups. This transformative process can significantly contribute to the social inclusion of women, minorities, and individuals with disabilities. In this talk, I will first introduce various aspects of digital inclusion, equity, and pluralism, explaining their interconnected roles in fostering self-realization. I will then explore the potential applications of intelligent conversational agents in increasing women's engagement on online platforms. I will particularly share the findings of a study that examined the impact of gender-sensitive conversational agents on 240 Afghan women and men as they discussed the fall of Kabul in August 2021. The enabling character of conversational agents reveals an apparatus that could enhance women's agency.

Rafik Hadfi is an associate professor in the Department of Social Informatics at Kyoto University in Japan. His research interests lie in the design, development, and application of distributed AI. He is currently using distributed conversational AI to study democratic deliberation, gender equality, and the respect for human autonomy. Rafik is a recipient of the Gregory Kersten GDN Journal Best Paper Award (2023), the IJCAI-ACAN Supply Chain Management League Competition Award (2021), the IBM Award of Scientific Excellence (2020), the Japanese Society for Artificial Intelligence Annual Conference Award (2020), the Information Processing Society of Japan Best Paper Award (2016), and IEEE Young Researcher Award (2014). Rafik serves as a Program Committee member of leading AI conferences such as IJCAI, AAMAS, and AAAI and is a reviewer for Autonomous Agents and Multiagent Systems, Group Decision and Negotiation, Artificial Intelligence Review, and Neural Computation.

Colin DE LA HIGUERA, Professor, Nantes University (France), Unesco Chair in Open Educational Resources and Artificial Intelligence

“Artificial Intelligence, a field necessarily shared between Humanities and Science”

With the foreseeable impact of Artificial Intelligence the question of education to AI is making sense. Whereas there can be a natural inclination towards training pupils to the technical aspects of AI only, it is argued that an AI competences framework should be much more balanced and include, early, an understanding of the ethical issues is primordial. This is for example the case of the Unesco frameworks discussed currently. During this talk we will analyse the proposals and discuss the different ways to introduce ethics (of AI) in a curriculum.

Colin de la Higuera is Professor at Nantes University (France). He has been involved in a number of research themes, including algorithmics, formal language theory, pattern recognition and artificial intelligence.

He has been chairman of the International Community in Grammatical Inference (2002-2007), the founding president of the SIF, the French Informatics Society, and is currently a trustee of the Knowledge for All foundation where he is working towards the usage of technology for an open dissemination of knowledge and education.

In 2021 and 2022 he was co-chair of the Open Education Global Congress.

In 2017, based on the project Class'Code he contributed to launch in France, UNESCO has created a Chair in Technologies for the Training of Teachers by Open Educational Resources at University of Nantes. Since 2020 he is Chief Equality Advocate at IRCAI. In 2021 UNESCO renewed the Chair in “Open Educational Resources and Artificial Intelligence”.

Hidetaka ISHIDA, Emeritus Professor, University of Tokyo, Honorary President of Asian Semiotics International Association (ASIA).

“Artificial Intelligence and the "Why"”

In 2008, the magazine Wired proclaimed the end of theory, suggesting that the data deluge made theory obsolete. Chomsky, on the other hand, questioned the ability of systems like ChatGPT to deduce fundamental principles, such as Newton's law, from mere data. A central element of human education is to answer the insatiable curiosity of children who constantly question the "why" of the world. Current AI is limited in its capacity to address fundamentally teleological and transcendental questions, exploring the "why" of things. In this context, how can we adapt AI to support children's quest for knowledge, especially when it lacks an intrinsic desire to know? This is the challenge posed by the current state of AI for education.

Hidetaka ISHIDA is Emeritus Professor at the University of Tokyo. Philosopher, semiotician and theorist in media studies. Honorary President of the Asian Semiotics International Association (ASIA). Docteur en sciences humaines de l'Université de Paris X.

He served as Dean at the Graduate School of Interdisciplinary Information Studies, the University of Tokyo.

He edited the Japanese translation of *Dits et Ecrits de Michel Foucault* (10 vol. Chikuma Shobo, 1998-2002) and of Bernard Stiegler *La Technique et le Temps* (3 vol. Hosei University Press 2009-2013).

His works in Japanese language include, *The knowledge of Sign / the knowledge of Media* (TheUniversity of Tokyo Press, 2003), *Contemporary Philosophy* (Chikuma Shobo, 2010),

Media Theory for adult people (Chikuma Shobo, 2016), *The New Semiotics* (with Hiroki Azuma, Genron Publisher 2019), *Cours de sémiotique : leçons pour la critique de la vie quotidienne* (Chikuma shobō, 2020).