**Workshop AI and Education for Democracy**

**Nice September 28-29, 2023**

**Thought Experiments on AI as a Tool of Education for Democracy**

***Sylvie Allouche, Lyon Catholic University, ERC DEMOSERIES (Université Paris 1 Panthéon-Sorbonne)***

My presentation will be devoted to one of the most speculative questions that the development of AI raises to democracies, namely: under which conditions could an AI be considered a possible member of a democracy? Beyond the prospective interest that this question may have, it presents the interest, according to the modality of thought experiments, of leading us to interrogate certain implicit foundations of political and democratic life, and can be used for this reason as an original tool of education for democracy.

**Sylvie ALLOUCHE** has been a part-time associate professor at Lyon Catholic University (UR CONFLUENCE Sciences et Humanités EA 1598) since 2014, and a researcher in the ERC DEMOSERIES (Université Paris 1 Panthéon-Sorbonne) since 2020. She develops her research along two complementary directions: 1. the philosophical issues raised by techno-scientific progress – transhumanism, geo- and bio-engineering, robotics and AI, bioart, etc.; 2. the relationship between philosophy and fiction, science fiction and TV series in particular.

**AI, democracy and the humanistic self**

***Piergiorgio Donatelli, Sapienza Università di Roma***

AI technologies engage with the fabric of facts and aspects that underpin our sense that we are beings who can transform and progress with a sense of direction and community. Very basic ideas tied to normative authority and human personality are nurtured within forms of life that are deeply transformed by AI technologies. These new technologies undoubtedly present opportunities for expanding the humanistic and democratic project but they also carry the potential to jeopardize it. The issue is multifaceted: encompassing corporations, designers, regulations, and education. Remarkably, education appears to be the least acknowledged facet of this problem.

Piergiorgio Donatelli is Professor of Philosophy at Sapienza Università di Roma. He has written on the history of ethics, contemporary moral theory, bioethics and on issues related to human life, as well as on Wittgenstein, Stanley Cavell, J. S. Mill, and Foucault. Among his recent publications: *Etica. I classici, le teorie e le ine evolutive* (Einaudi, 2015); *Manières d’être humain. Une autre philosophie morale* (Vrin, 2015); *La filosofia e la vita etica* (Einaudi, 2020); *The Politics of Human Life. Rethinking Subjectivity* (Routledge, 2021).

**Special session with UNESCO**

***Dafna Feinholz (Chief of the Bioethics and Ethics of Science and Technology Section, UNESCO.)***

Since September 2009, Dafna Feinholz is the Chief of the Bioethics and Ethics of Science Section, within UNESCO’s Social and Human Science Sector. In this capacity, she leads different activities aiming at reinforcing capacities of Member States to manage bioethical challenges and to identify the ethical, legal and social implications of cutting-edge science, emerging technologies and their application for sustainable development, and promoting awareness raising and public debate. She has played a leading role in the revision of the UNESCO recommendation of Science and Scientific Researchers, the elaboration and adoption of the Declaration of ethical principles of climate change, and the recently adopted Recommendation on the Ethics of AI.    She is responsible for oversight of the secretariat of the International Bioethics Committee (IBC), the World Commission on the Ethics of Scientific Knowledge and Technology (COMEST), the Intergovernmental Bioethics Committee (IGBC) and the UN Inter-Agency Committee on Bioethics (UNIACB).

**Rule-Following: AI and Education Today**

***Juliet Floyd,******Boston University Center for the Humanities, Boston University***

Wittgenstein’s idea that following a rule is a matter of practice, rather than theory or interpretation, situates human rule-following (hence, the following of algorithms, standards, criteria for assessment, measures) against an evolving backdrop of words, actions, and the “forms” of their embedding in human life: what Bourdieu calls our habitus. In particular, Wittgenstein argued, we cannot follow a rule ‘privately’, in our heads: the social context of uptake, negotiation, articulation, history, care and embodiment cannot be eliminated from our concept of “following a rule” without loss, as these factors give content to what it means for things to be “open to view” and for “thinking” to take place. Such themes in philosophy of logic raise a number of issues for philosophy of education in an age of LLM’s and AI: the idea of “virtual” reality’s connection to embodied experience; “hallucinations” about meaning and truth; the measurement of outcomes through quantification and the scribal culture of writing; democratic education’s Deweyan aim of developing resilient individuality collectively; education as the ultimate scene of personality expression, but also personalized microtargeting. Nurock (2023) notes in Berkeley’s philosophy an important 18th century source of our contemporary problematic: formalism about reasoning is tied to doubts about “infinitesimals” and a “mixed mathematics” of morality. She argues that the idea of wholly communicable and algorithmicize able, neutral objectivity -- abstracted from our conceptions of care, emotional growth, the formation of life -- is an essential component of current rhetoric about AI and ethics. Since Kohlberg and Gilligan we have known that this contractual fantasy about justice is gendered. We will explore, as Katz, Schiepers and Floyd (2023) do, how “nudging” faces its limits in questions about ethics and education.

Juliet Floyd is Borden Parker Bowne Professor of Philosophy at Boston University and the director of the Boston University Center for the Humanities. She researches 20th century analytic and American philosophy, philosophy of logic, mathematics, language, symbolism, aesthetics, and computational and emerging media. She has published two volumes on Wittgenstein (Wittgenstein on Mathematics, Cambridge, 2021, Wittgenstein’s Remarks on Hardy’s Course of Pure Mathematics (with Felix Mühlhölzer, 2020) and over one hundred articles, co-editing the volumes Future Pasts: The Analytic Tradition in 20th Century Philosophy(with S. Shieh, Oxford 2001), Philosophy of Emerging Media (with James E. Katz, Oxford, 2016), Philosophical Explorations of the Legacy of Alan Turing (with A. Bokulich, Springer, 2017), Perceiving the Future Through New Communication Technologies (with James E. Katz and Katie Schiepers, Springer, 2021), Stanley Cavell’s Must We Mean What We Say? at Fifty (with Greg Chase and Sandra Laugier, Cambridge, 2022) and Nudging Choices Through Media – Ethical and Philosophical Implications for Humanity (with James E. Katz and Katie Schiepers Springer Nature, 2023).

**Open Education for a Better World Mentoring Programme: The impact and challenges related to the AI and education for democracy. *Mitja Jermol (UNESCO Chair on Open Technologies for Open Educational Resources and Open Education, IRCAI)***

Open Education for a Better World Mentoring Programme (<http://oe4bw.org>) is a global programme that is aimed at creating open educational resources (OER) on various aspects related to global challenges. It started in 2018 and has by now involved more than 400 participants from 40 countries that developed OER and Open Learning courses. In this talk we will discuss some challenges related to education for democracy and the role of OER and AI that we encountered in the programme and are tackling UNESCO fundamental principles.

Mitja Jermol, is the holder of UNESCO Chair on Open Technologies for Open Educational Resources and Open Education a board member of the International Research Center on Artificial Intelligence under auspices of UNESCO and the head of the Centre for knowledge Transfer, all at Jozef Stefan Institute, Ljubljana, Slovenia. He has been doing research and development on artificial intelligence, cybernetics, cognitive systems and e-learning. His research includes Artificial Intelligence in the context of Business Intelligence, Personalized Learning, Smart Cities and Factories of the Future. He is particularly interested in artificial intelligence, contemporary models and theories of knowledge, complex systems and global systems dynamics. Together with the University of Nova Gorica he initiated a global mentoring programme Open Education for a Better World. Mitja has long‐term experience with more than 20 large scale Horizon, H2020, FP7 and FP6 RTD projects.

**How AI in the classroom can harm education for democracy, and what to do about it. *James E. Katz* ( *Boston University*)**

Artificial intelligence (AI) has the potential to revolutionize schoolroom processes in ways that support democracy in the larger society. But if this exciting technology is not deployed in school systems with care and consideration, it can instead pose a substantial risk to democratic practices. AI could do this by creating new thoughtways and practices in the school setting which are then socialized among cohorts of young people who over time influence associated democratic practices. AI could be misused in the classroom in a variety of ways which are identified in my presentation. They include promoting hostile ideological regimes, limiting information, re-defining truth, and diminishing students’ critical capacities. Even some steps specifically designed to promote democracy using AI appear to have a boomerang effect. These practices are illustrated with recent examples. After discussing these and other AI-based threats to democratic practices arising in the classroom, I propose ameliorative steps.

James E. Katz, Ph.D., Dr.h.c., is the Feld Professor of Emerging Media Studies at Boston University. His pioneering publications on artificial intelligence (AI), social media, mobile communication, and robot-human interaction have been internationally recognized and translated into a dozen languages. His most recent book, co-edited with Katie Schiepers and Juliet Floyd, is, *Nudging Choices Through Media: Ethical and Philosophical Implications for Humanity* (Palgrave Macmillan). He holds two patents and is the winner of numerous awards including the prestigious Frederick Williams Prize for Contributions to the Study of Communication Technology, given by the International Communication Association. According to Google Scholar, he has been cited more than 17,000 times.

**AI as a hatred of democracy?**

***Anthony Masure****,* ***Associate Professor, Dean of Research, Geneva University of Art and Design (HEAD – Genève, HES-SO).***

***Florie Souday, Master's student in Design Research, ENS Paris Saclay.***

Available from 2021 for as many people as possible, machine learning has created several issues for schools (ie. teaching objectives, exams, etc.). At the same time, these generative technologies are questioning the foundations of democracy, challenging notions of veracity, privacy, ownership and shared values. With its twofold American and Chinese hegemony, AI has become an insidious cultural model for the rest of the world. It doesn’t lend itself well to the development of democracy – if we define this concept as a dynamic principle that “thwarts the normal distribution of power” (Jacques Rancière). What reconfigurations are needed to ensure that AI is not a threat but an opportunity for democracy? How can we redefine education to achieve this objective?

**Anthony Masure** is an Associate Professor and Dean of Research at Geneva University of Art and Design (HEAD – Genève, HES-SO). His research is currently focused upon the impact that artificial intelligence and blockchain technologies have upon design. He is the author of the essays *Design and the Digital Humanities* (2017) and *Artificial Design: Creation Versus Machine Learning* (2023). He is also a co-founder of the research journals *Back Office* and *Réel-Virtuel* and of Hint3rland, a creative studio for the decentralized world. Website: [https://www.anthonymasure.com](https://www.anthonymasure.com/)

**Florie Souday** is a Master's Research student in Design at ENS Paris Saclay. Her projects deal mainly with nostalgia, the fragility of memories and the metamorphoses of nature and the human being through digital technology. Through the hybridization of imaginary worlds, she questions the ways in which the virtual leads to the development of personal universes. Website: [https://www.anthonymasure.com](https://www.anthonymasure.com/)

**Human-centric Artificial Intelligence and Education**

***John Shawe-Taylor* (University College London, UK, IRCAI, Slovenia).**

Human-centric Artificial Intelligence refocuses AI in the role of enabling humans to perform tasks more effectively, but it is far from clear how this can be achieved and the implications for the design of AI systems. The talk will begin with examples of human-centric approaches in the application of AI to Education but will then explore more carefully what should underpin human-centric AI. This will lead to a discussion of the implications of human-centric AI more generally and its relation to the theme of education for democracy

John Shawe-Taylor is professor of Computational Statistics and Machine Learning at University College London and Director of the International Research Centre on Artificial Intelligence (IRCAI) under the auspices of UNESCO at the Jozef Stefan Institute in Slovenia. He has helped to drive a fundamental rebirth in the field of machine learning, with applications in novel domains including computer vision, document classification, and applications in biology and medicine focussed on brain scan, immunity and proteome analysis. He has published over 300 papers and two books that have attracted over 95000 citations.

He has assembled a series of influential European Networks of Excellence. The scientific coordination of these projects has influenced a generation of researchers and promoted the widespread uptake of machine learning in both science and industry that we are currently witnessing. More recently he coordinated the X5gon (x5gon.org) European project developing infrastructure and portals for AI enhanced delivery of open educational materials.

He was appointed UNESCO Chair of Artificial Intelligence in November 2018 and is the leading trustee of the UK Charity, Knowledge 4 All Foundation, championing the cause of open education including assisting with the establishment of the UNESCO Recommendation on Open Educational Resources adopted in 2019.