



Reflections on AI

Q&A with

Prof. Benedetta Giovanola

“Every technology changes us as humans because technology is never just a tool.”

The [TUM IEAI](#) had the pleasure of speaking with Benedetta Giovanola, Full Professor of Moral Philosophy at the University of Macerata, Italy.

Q: What is the biggest misconception about AI?

A: I would say that one of the biggest misconceptions is that AI is considered to be either entirely bad or entirely good or, for some others, it is considered to be neutral. This leads us somewhere in a deterministic way. So somewhere good, or somewhere bad. On the other side, I think we should really point to the fact that AI is a very complex phenomenon and that it really needs to be orientated towards a goal that it does not have in itself.

Q: What is the most important question in AI ethics right now?

A: One of the most relevant ones concerns the issue of fairness, justice and inequalities. So, the issue of whether AI systems might be a force for good that would strengthen equality or fairness and so would also have a positive social impact rather than a harmful impact. And it is a very interesting question because it regards the role that AI might have and ought to have for ethical purposes with not only regard to the individual, but also the society as a whole. So, that is intrinsically ethical because it would prompt us to question how AI can be something good, something that promotes values and principles that are good, both at the individual level, for each and every person, and at the social and collective level.

Q: What factor should be considered when developing AI systems to avoid reinforcing or intensifying current social injustices?

A: One of the main factors is to take into account representative data sets already in the training phase of the AI systems. And by representative, I mean data sets that might also account for differences in the most relevant domain. One then needs to take these differences into account through an inclusive perspective, also at further stages of the design and the development of the AI systems themselves. The most relevant differences to be taken into account are those that relate to gender. So, it is very important to have an inclusively gender-oriented perspective in designing, developing and deploying AI systems. But, what is no less important is to account for differences that play a role at the social level, cultural level and differences that are related to ethnicity and race. Otherwise, one of the main problems of AI systems, that might eventually intensify, reinforce or also automate existing inequalities, is that they would discriminate exactly according to gender or culture or race-based features. So, it is important to take them into account and mitigate them already in the design phase of the system.

Q: What is the role of academia when it comes to governing trustworthy and responsible AI?

A: I think academia has a huge role, provided that this is a very complex issue and needs a sort of co-creation process where all the stakeholders are engaged. So, including academia, public sector, the private sector and so on and so forth. Academia has the task, first of all, of spreading knowledge and setting the conditions through which people would become aware of the opportunities and risks which are connected to AI. Then academia also



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has the role of doing research on the topic and transferring this research to the public, endorsing, I would say, a sort of citizen science-oriented perspective. And it also has the role of training new generations of people that will be workers in different fields. Here I think academia also has to go beyond some traditional borders and try to invest a lot in cross-contamination, interdisciplinarity and intersectionality, so dialogue with external stakeholders. This is particularly crucial when it comes to AI, because what is needed of course is technical competence, knowledge and skills, but also the awareness of the ethical implication, the legal requirements, and the social impact. And this cannot be done if we just offer a narrow or one-sided curricula. So, it is also a challenge for academia to rethink itself in a way that can offer a transdisciplinary path that would really allow to form competencies and skills that are needed nowadays more than ever.

Q: Why do we need to bridge AI ethics and theories of justice?

A: We need to bridge AI ethics and theories of justice because theories of justice provide us with a sort of comprehensive, or at least extensive, enquiry into what it means for a society to be just. What are the major inequalities, how might we eventually act to counter them and how can we avoid them? So, the theories of justice are extremely intriguing, and we need the conceptual background knowledge to allow us to act accordingly. So first try to see what justice is and then try to elaborate principles through which we might fight against injustice. AI ethics has been dealing a lot with what is called algorithmic fairness, so it has endorsed a specific conception of justice applied to ethics, mainly understood as the absence of biases and as a

source of non-discrimination, which in turn is related to biases. This is an interesting perspective, but it has turned out to be discriminatory under other aspects. And this really depends on a sort of narrow conception of justice applied in the AI ethics debate that would benefit from a dialogue with what comes out of the theories of justice. AI ethics, in turn, can offer theories of justice a more empirical ground, if you want, that would identify the main facets and features of the digital transformation due to AI that constitutes the environment in which justice might apply. And so this would allow theories of justice to be less developed at the ideal level and account for the real-world transformation and phenomena.

Q: We often say that AI is changing or transforming the world. To what extent is AI changing us as humans?

A: Every technology changes us as humans because technology is never just a tool. Technology is also an environment in certain ways. And so we live in a world which is more and more mediated by technology, especially when it comes to AI technology. We have transformed the ways of purchasing goods; for example. And then, of course, AI has had and still has a huge impact in many sectors of our society, including the job market. I think here the point is to understand that AI ought always to be human-centered and for the good of the people. And so, on the one side, we cannot deny the fact that AI is transforming the way in which we act, but on the other side, I think we should not give up what really makes us humans. We should not try to take AI as the kind of metaphor for what is good or better than us and try to emulate it. We must focus on what is distinctively human and try to understand how AI might enhance it. So

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change it for the best and let us really flourish in what makes us humans, rather than substituting or depriving us of something.

Meet the Expert:



[Benedetta Giovanola](#) holds the Jean Monnet Chair Ethics for inclusive digital Europe co-funded by the European Union and is Full Professor of Moral Philosophy at the University of Macerata (Italy), where she has also been Deputy Rector and Vice-Rector for international relations. She is a regular visiting professor at Tufts University and previously held visiting positions at the UIBE in Beijing, at KU Leuven and was Huygens Fellow at the Radboud University Nijmegen. She is the vice-president of the Italian Association of Moral Philosophy and past member of the executive board of the Italian association of analytic philosophy.

Her research interests are in business ethics, theories of justice, media ethics in the ethical questions raised by digital technologies and artificial intelligence, especially regarding fairness, social justice and inclusion.

Disclaimer: Please note that the text version of this interview has undergone slight edits for clarity and conciseness.