



Reflections on AI

Q&A with
Celina Bottino

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The TUM IEAI had the pleasure of speaking with Celina Bottino, Project Director at the Institute for Technology & Society of Rio de Janeiro (ITS Rio). She is an expert on human rights and technology. We were able to ask her some brief questions about AI ethics and its potentials and challenges, related to the use of AI in the Global South.

1. What is the biggest misconception about Artificial Intelligence?

One of the biggest misconceptions is the assumption that AI is a silver bullet that will solve all of our problems. AI is a toolbox, it has several applications but it depends on the direction that we humans decide to give it. So, AI is not as autonomous as people think, and I believe it will be developed according to the directions researchers, developers and companies will give it.

2. What is the most important question in AI ethics right now?

I think the most important question of AI Ethics right now is how to make it inclusive. How to avoid that this technological development ends up enlarging the gap between developed and underdeveloped countries, when it could do just the opposite and bridge this gap. So ensuring inclusion from different stakeholders and also different countries from different regions is key for the debate of AI Ethics as it unfolds.

3. What is the role of academia, research institutions and other centers when it comes to the ethics and governance of AI?

I think universities have a great role and function when it comes to AI Ethics in governance, due to their core mission which is being an open resource community. So as pointed out by Prof. Urs Grasser from the Berkman Klein Center, universities offer a place for research and experimentation, where AI applications could be tested, where systems for establishing fairness and accuracy could be developed as well. And since it is a multidisciplinary environment, it could also convene meetings with researchers and different stakeholders to discuss issues such as AI responsibility and ethics. And finally, there is still an asymmetry of information regarding AI and universities may help translating information to a larger public.

4. What are the potentials and challenges related to the use of AI in the Global South?

One of the biggest challenges relates the lack of basic infrastructure, both regarding connectivity and data. AI applications depend on connectivity and there is still a significant digital divide, for example more than half of the population in Brazil is still disconnected. A second element refers to data, as data is not necessarily in a format that can be used to develop and feed AI system, for example. At the same time, as the Global South faces these systemic

difficulties, AI also has the potential to solve them. So taking the health sector as an example, AI is able to enhance human decision processes, support better management capabilities and deliver better services. This will have a very important impact.

5. Why is thinking about AI governance and policy in the Global South of particular importance?

A study of the OECD suggests that AI research and development is highly concentrated, as 93% of AI patents are from companies located in only 7 countries- Japan, South Korea, United States, Taiwan, China, Germany and France. So the Global South is left with the brunt of the impact of AI, seen basically as a consumer market and not a developer. It is crucial that people in those countries are not left behind. They should be included in the discussion and the governance of AI, they should have a diverse base - be multi ethnic, multi sectoral and global.

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

If we do not set limits on the uses on what we want in AI, it will end up affecting our capacity of seeing ourselves as true human beings. When we delegate our decisions to AI applications and to predictions based on mathematical equations, we lose important aspects of human nature that requires us to improvise and learn from experimentation. The more we rely on AI for making decisions and guiding our lives, the more we lose agency, the ownership of history, of our own lives. And as paradoxical as it may seem, the closer we get to this scenario the more it reminds us that human nature is limited and that

humanity is defined by our own vulnerabilities and dependence on one another. Which is ok, as it is part of our uniqueness as human beings.

Meet the expert



Celina Bottino has a Master's Degree in Human Rights from Harvard University and Undergraduate Degree in Law from Pontifical Catholic University (PUC -Rio). Celina Bottino conducts research at the nexus of human rights and technology. She is affiliated with Harvard's Berkman Klein Center and is Project Director at the Institute for Technology & Society of Rio de Janeiro (ITS).

She has previously worked as a researcher at Human Rights Watch in New York and a Supervisor at the Human Rights Clinic in Fundação Getulio Vargas (FGV Rio). Celina was also a consultant for the Harvard Human Rights Clinic and a researcher at ISER.

As an Associate of the Children's and Adolescent's Rights Protection in Rio de Janeiro, she is also Director at Darcy Vargas Foundation, where they run a school for more than 150 children.