rtificial intelligence (AI) has great potential to change our daily and work life - and is doing so already. But given the far-ranging impacts

and potential downsides, from bias in predictive policing to errors in AI for healthcare, Kate Crawford advocates that we play a much more active and critical role in ensuring these tools are safe for all. This requires more in-depth research, and interdisciplinary work on the sociological, legal, and technical frameworks of Al.

Dr. Crawford, you are concerned with AI and with the fact that self-learning machines tend to discriminate against people. Do you have an example?

KATE CRAWFORD: There have been many examples of discriminatory decisions made by algorithmic systems. Women were not being shown highly paid jobs in a Google search of open positions. U.S. software rated the risk of relapse of black prisoners to be higher than that of white prisoners in the criminal justice system. And predictive policing software, which has been shown to be ineffective at reducing crimes, causes over-policing of low-income communities.

Now the debate seems to have reached the big companies - and they're starting to react. Why now?

KC: Because these systems now touch the everyday lives of many people. And if they discriminate against or disadvantage individuals, the companies behind them face real risks to their customers and their public reputations. The technology sector needs to ensure that its tools are not causing any harm.

Are companies and science responding appropriately?

KC: I have noticed a worrying pattern emerging in the AI field: the quick fix. This rests on the idea that we can simply bring a mathematical idea, a formula for fairness, into technical systems. That

Kate Crawford

has been a Robert Bosch Academy fellow in Berlin since 2018. The Academy provides her with the opportunity to discuss the implications of artificial intelligence with European politicians and experts.

Kate Crawford is a leading scientist whose work

ocuses on the social implications of artificial intelligence and related technologies. She is co-founder and co-director of the Al Now Research Institute at New York University. the first university-affiliated institution in the United States dedicated to studying the role of advanced technologies in social systems.

Crawford is a Distinguished Research Professor at New York University and a Principal Researcher at Microsoft Research New York. In 2016, she co-chaired the Obama White House symposium on the social and economic implications of AI, and she has advised politicians and policymakers at the European Commission, the United Nations, and the U.S. Federal Trade Commission.

will fail, because when we talk about these biases, we are talking about a very deep structural inequality that emerges from a long history. The question right now is: How do we want to live, and how should our technical systems support this?

Are you optimistic that we'll ever have Al without these biases?

KC: No. For now it seems likely that these systems will produce forms of discrimination. We need three things to ensure fairer use of these technologies. First, due process so people can appeal unfair decisions made about their lives in high-stakes contexts. Tech companies need to take real responsibility; this can include pre-release trials and evaluation of Al systems so we know how they work before releasing them on live populations. We also need to regulate the most invasive and error-prone tools, such as facial recognition. And we might also avoid using AI tools entirely in certain areas until they are shown to be working better - for example, in criminal justice.

What does the future hold?

KC: (laughs) I'm not going to make any predictions as far as that area's concerned. Everything changes too quickly and too much. But more importantly, I am convinced that we spend too little time learning from history. The way to achieve a better future with these technologies is to learn from the past.

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Kate Crawford speaking at an Academy event.