

GREEN SALON REPORT

FEAR THE ROBOT?

The Impact of Robotics and Artificial Intelligence on the Future of Work

Introduction

On 12th February 2018, robotics, artificial intelligence, and what they mean for the world of work were top of the agenda in a traditional Vienna cafe. It was the second edition of the Green Salon, an invitation-only discussion organised by the Green European Foundation.

Green Salon brings together Green politicians with academics, activists, and industry experts for frank and open discussions on under-explored topics as they emerge on the political agenda. While advances from research and industry in the domain of robotics and artificial intelligence abound, public and political debate over the ethics and oversight of technology remain in their early stages. This challenging situation, reflected in both common fears over the scarcity of jobs and well as a more general perceived lack of control in face of technological and societal change, calls for the shaping of ethical principles capable of ensuring an emancipatory yet controlled human-to-robot interaction. At the European level, Green MEPs, through the Green Digital Working Group, have been particularly active on robotics and artificial intelligence and have presented [recommendations for legislating in this area](#). However, these recommendations have not been endorsed by all Greens and no political family has a coherent or well-established position in this area.

For a satisfactory political response to be developed, all actors – from Green politicians to campaigners to scientists – must engage a common dialogue on the potential uses of technology and their social implications. With this need in mind, the Green European Foundation brought a selected group of scientists and industry leaders round the table with Green MEPs and politicians from around Europe to discuss the rise of the robots and the opportunities and perils of artificial intelligence for society. Participants came from all over the world and gathered in the traditional Café Landtmann, on Vienna's landmark Ringstraße, to engage in what turned out to be an enriching debate.

The evening was split into two parts: the first focusing on the ethics and norms around artificial intelligence and the second on the future of work.

Ethical issues in artificial intelligence: “We always want to put a soul into things”

To those familiar with debates on artificial intelligence, it will not be surprising that the opening statement from a professor from a leading US university emphasised the ethical dimension. As the capacities of human-programmed intelligence increase,

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many researchers are troubled by the many unknowns of this uncharted territory. While there was consent across experts and politicians that it is unlikely that robots take over the world anytime soon, the discussion still soon focused on the more troubling potential of artificial intelligence.

Black boxes and AI rights

When [artificial intelligence starts to discover new solutions](#) and humans can no longer grasp how it arrives at them, it becomes unpredictable. If it becomes unpredictable and begins to act 'on its own', artificial intelligence would lose its usefulness as a tool. With varying degrees of scepticism and conviction, the possibility of 'singularity', the idea that a machine could become more 'intelligent' than humans with drastic consequent was the subject of much debate.

Following this sci-fiesque train of thought, what would our (human) obligations be towards 'awakened' code? The question about the possibility of an ethical human obligation towards an artificially intelligent machine triggered a heated and prolonged discussion among the participating scientists. One side held up the necessity to consider the eventuality, while the other side took a much more political approach and insisted that no matter what an algorithm might be able to do in the future, it remains a tool that can be turned off and destroyed at will. While the discussion engaged the scientists in the room, the politicians were less active, reflecting their more pragmatic and immediate concerns.

To draw a line under the matter, a representative of one of the world's largest robotics companies pointed out that conscience in robots is still too far away to make this issue any more than an academic discussion. "We [humanity] always want to put a soul into things" he observed, but that does not mean that there really is one.

The regulation of artificial intelligence

More practically, the regulation of artificial intelligence was a key subject of debate. Regulation, in this context, could mean anything from establishing boundaries on what can be developed to determining that certain jobs should stay in human hands. One side argued from a very pragmatic point of view saying that it technology cannot be properly regulated before it is created. The industrial revolution was taken as an example to demonstrate how some things just need to happen before people can find a suitable way to regulate them. Industry representatives endorsed this view, unsurprising in their opposition to regulation.

The political representatives present generally disagreed, arguing that the regulation of artificial intelligence is well overdue. Rebuffing the historical argument, the policymakers posited that as artificial intelligence will be in constant evolution, it will never be 'finished', there is no point in waiting to establish regulatory principles. For example, the potential of deep learning is currently the source of much debate, however it would be naïve to expect that artificial intelligence does not develop beyond deep learning and therefore we should regulate sooner rather than later.

Dialogue is crucial

One common position did emerge over the course of this first half of the conversation: that the impact of artificial intelligence on society must be carefully monitored. Ethical discussions should be steered towards being more than just a philosophical debate over robot rights. Instead ethical standards could be used to protect or reassure ease people afraid of losing their jobs or of machines gaining control over aspects of society.

Robotics and the future of work

A former Green member of European Parliament opened the second part of the discussion with a short introduction regarding the impact of robotics and artificial intelligence on the labour market of the not-so-far future. The number of manufacturing jobs replaced by robots has been rising since the 1960s and, increasingly, jobs in administration, banking, hotel, and elsewhere in the service sector are being transformed by automation. The speaker argued that while we cannot say for certain in what way work will change, what is certain is that society has an opportunity to reimagine what it looks like.

Adding nuance to the politician's argument, a robotics expert differentiated between the impact of robotics (referring to hardware) and artificial intelligence (referring to software) on work. While hardware endangers low-skilled jobs, software affects high and medium-skill sectors. The robotics industry representative took this point further, claiming that jobs that can be carried out by robots are some of the most harmful ones for the workers involved and that anyway new professions would be created.

The question of whether new jobs will emerge was a major source of contention. While previous industrial revolutions did ultimately create more work, many of the present social scientists and politicians were sceptical regarding whether the pattern will continue. Technological processes are not only making work easier or less damaging than in the past. Today robots and artificial intelligence could conceivably replace human work. This might not be a bad thing. As argued by one of the political representatives, the decline of the industrial model of work and the growth dogma could promise major societal change.

Doing something meaningful

The more politically minded participants now put the value and position of work at the centre of the debate. To the individual, work can bring social connections, a sense of self-worth, and the feeling of being part of a wider society, as all the participants agreed.

However, robotics and artificial intelligence could undermine the capacity of work to deliver such benefits to the individual and society at large. As a member of the Austrian Greens summarised: "As long as the definition of a valuable citizen is linked to work, we will get into trouble with automation." Some other participants of the debate concluded that this calls for a change in mindset regarding what kinds of work are recognised and valued in society. Our notion of work could be expanded to include the huge amount of social 'care' work



that currently is unpaid and largely unrecognised. Irrespective of proposals such as the unconditional basic income, people still will feel the need to do something meaningful with their lives.

Technology changing society

Beyond the meta-question regarding the value of work, welfare state and taxation systems are based on a model of work that is already changing. As one of the participants asked: “How can the welfare state be maintained with all the job losses we could face?” One politician speculated on whether a robot tax could offer a way out.

The social risks of unemployment and insecurity were discussed, with a better distribution of work emerging as a potential solution that could rectify imbalances between the people employed yet under pressure and stress, the people whose work goes unrecognised and unremunerated, and the people who are unemployed or underemployed. The political dangers of not addressing the future of work were apparent to all: disconnection with the political system and a turn towards populism and authoritarianism.

Society changing technology

The participants all agreed that education plays an important role in this whole debate. As observed by one of the scientists, technology is now so complex that it is hard to explain to people – even the experts do not fully understand how artificial intelligence works. Knowing who or what to trust, the question of the control of data is one such example, is also difficult. In order to prepare people to interact with and use technology fruitfully, the participants speculated how education needs to change. Learning to code, at least the basics, was one idea. However, considering the pace of change and range of technology, a robotics specialist argued creativity and analytical thinking may be far more apt.

Conclusion

Although the rise of robots and the future of work are vast topics for one evening’s conversation, what the Green Salon demonstrated is that dialogue between different stakeholders is crucial. Artificial intelligence is a powerful tool which may well shape the economy and society of the future.

It is therefore important to discuss the ethical questions it poses urgently, not only among scientists also with people from political, activities, and business backgrounds too. An interdisciplinary approach may well reveal new problems, but also has the potential to help find solutions.

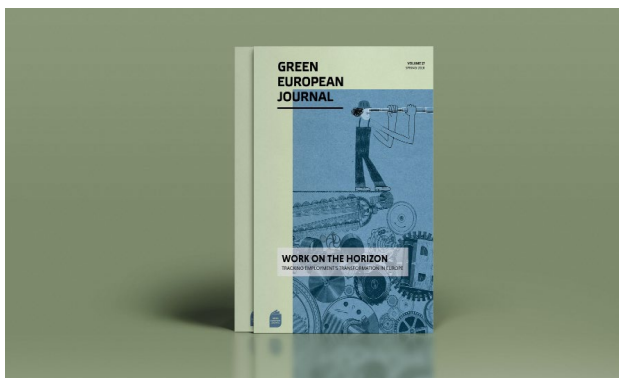
As one of the scientists at the debate insisted, we still own technology, not the other way around. As technology changes society, society should not underestimate its ability to change technology. People, the scientist argued, are in still in charge.



Further reading

For more analysis on artificial intelligence, robotics, and the future of work, the Green European Journal, the print and online venue for Green debate and ideas, has been following the topic closely.

[Work on the Horizon: Tracking Employment's Transformation in Europe](#)



The 17th print edition of the Green European Journal turns its lens on the future of work. Featuring interviews and analysis on topics ranging from automation to social protection to trade unions, the edition is essential reading for those seeking Green and progressive perspectives on the transformation of work and society.

In the Debate

The online edition of the Green European Journal offers many more viewpoints on artificial intelligence, robotics, and the future of work, including:

Green Observatory

▶ [Robotics and Artificial Intelligence](#)

A round-up of what is happening across Europe with artificial intelligence and robotics. We asked experts and politicians about the positions and actions of their country and the Green party.

On artificial intelligence and robotics

▶ [Invisible Threats: The Digital Dangers to our Real Lives](#)

An interview with Jan Philipp Albrecht and Ralf Bendrath

▶ [Lost in the numbers: the missing politics of big data](#)

An interview with Marleen Stikker by Erica Meijers and Socrates Schouten

▶ [Minds of Their Own? Why We Need to Get Up to Speed on Robotics](#)

An interview with Jan Philipp Albrecht

▶ [Promise and Prejudice: When Algorithms Decide](#)

An interview with Aleksandra Przegalinska by Matthias Spielkamp

▶ [Protecting data without stifling innovation: a question of regulation?](#)

An interview with Isabelle Falque-Pierrotin by Benjamin Joyeux

▶ [Technology is No Guarantee of Equality](#)

An interview with Jędrzej Niklas by Bartłomiej Kozek

▶ [To Fear or Not to Fear the Robot](#)

An interview with Aleksandra Przegalińska by Aaron Sterniczky

▶ [Who's in Charge Here? Humans in a Robot World](#)

An interview with Wendy Hall

On the future of work

▶ [Labour at your Fingertips](#)

An interview with Jeremias Prassl by Krisztian Simon

▶ [Job-Robbing Robots](#)

An interview with Tiffany Blandin by Benjamin Joyeux

▶ [The Robot and Donald Trump: Technology and the Rise of Populism in the West](#)

An article by Aaron Sterniczky

▶ [Understanding the Digital Revolution and What It Means](#)

An Article by Henning Meyer