What are fundamental rights and how will they be affected by artificial intelligence?

Fundamental rights or human rights are something we rely on all the time. Schools, hospitals, elections, the police force, sports associations - these are all things that put your rights into practice day-to-day.

To get a better grip on what fundamental rights are, you need to look at where they come from. And their origins are rooted in the aftermath of world war 2.

After the second world war many governments wanted to find a way of preventing this kind of large-scale conflict ever happening again. The fighting caused massive loss of life, but there were also lots of atrocities committed during the war. In particular, during the war the Nazi regime had exterminated millions of Jews, Roma, LGBT people and used torture and slave labour.

The United Nations got a group of intellectuals together from all over the world and asked them to come up with a list of human rights standards that would apply to everyone everywhere in the world. They created the Universal Declaration of Human Rights.

There were two aims behind human rights standards. First, to prevent governments from committing atrocities again. That's where you get the prohibition on torture or the prohibition on imprisoning people who haven't committed any crimes, or the prohibition on discrimination and hate speech and the right to life.

But the other thing that the creators of human rights wanted was to prevent a situation where governments were able to persuade their populations that total war and genocide was a good idea.

To get to that point a government has to brainwash the population by taking over the education system and taking over the media. It has to take control of

the courts so it can lock away political opponents and intellectuals who criticise it. It has to stop people from being able to protest and shut down NGOs so that people can't organise to oppose authoritarian policies and laws. It has to rig the election system so that it stays in power.

And this is where a lot of human rights standards come from: to stop governments from controlling public opinion. The right to free and independent media. The right to a fair trial. The right to create an organisation or to go out and protest. The obligation to educate people about human rights.

And finally, the creators of human rights realised that mass unemployment and poverty made it easier for politicians to manipulate the public. It's generally agreed that the Great Depression helped to fuel the rise of Nazism. So human rights standards were also created to protect people from poverty and to give every individual the chance to develop to their full potential. And this is where you get rights that are supposed to give us all an equal shot in life no matter what your background is. So you have the right to an education, and to health care, and to housing and food and right to social security, and protection for workers.

Human rights were created in large part to prevent a return to the type of populist authoritarian regimes that we now see re-emerging across Europe.

So how what impact will artificial intelligence have on our ability to protect and promote human dignity?

Most technology isn't inherently good or bad. It depends how you use it. Are you going to use AI just as a way of reducing the cost of employing humans? Or are you going to use it to make life better for everyone? AI has great potential to help us respond to complicated, fast moving problems like climate change. But it can just as easily make our lives worse.

The way that AI is being used at the moment shows that there are risks to human rights. For example, the EU has just passed legislation that requires companies like Google and Facebook to stop copyrighted material from being posted online. And they will use AI to filter out anything that looks like a breach of copyright. So, if you want to upload a meme using a picture from a film or upload a family video with pop music in the background, the AI isn't smart enough to realise that this isn't the same thing as a pirated dvd. The AI just filters anything that could get Google or Facebook a fine. And that's going to have a big negative impact on freedom of expression on the internet. That's an example of AI being used in a way that violate our rights.

We are also using AI to take decisions about policing and about sentencing criminals that discriminates against minorities. That's because the AI is built by humans who have biases that they don't realise. And then the AI replicates those biases.

Thinking more long term, some economists have said that AI might cause a lot of job losses. In the past technological advances allowed us to farm using machines rather than people. And then the work force moved into manufacturing. Then technology allowed us to use machines for manufacturing, and more people moved over into the service industry. But now AI is being used increasingly for clerical work, it is starting to replace journalists, lawyers, doctors, police, bankers, insurance assessors. The risk is that AI could lead to increasing unemployment. One day, will the only people with jobs be people who build and maintain AI and robots? The only people who will make money are the people who own the technology. If that happens, then we are at risk of creating the same environment that led us into the second world war.

It doesn't have to be a bad thing if you can find a way of spreading the wealth fairly across society. If AI is owned by the state, or if everyone in the country is given shares in AI as a source of income, or if the government decides to create a universal guaranteed income for everyone. Then we all get the benefits of AI

doing all the work. But as it is, we don't own this technology. Private companies do.

But we do have a choice. We can force our governments to make sure that AI is built for good in four ways.

First, human rights by design. When developers create AI then should make sure that whatever the AI's job is, that job is one that ideally promotes human rights or at worst, does not violate human rights. At the moment, developers only think about the specific task they're trying to accomplish and only think about human rights implications afterwards if something goes wrong.

Second, transparency. Companies must make algorithms transparent and public so that we can look inside and see what factors their decisions are based on. At the moment we often can't look at how algorithms are making decisions because they are private property.

Third, regular monitoring. The government has to check AI regularly to make sure they comply with human rights standards.

Fourth, accountability. If an AI violates human rights standards, then it has to be easy to take the company or authority using that AI to court.