

The future of security and our role on the front line

In the World Economic Forum's analysis of top global risks, climate change and related issues are of primary significance, as are disease, digital inequality, and cyber insecurity. Nowhere do the words 'war' or 'terrorism' appear. We recently held an event on the Future of Security where we spoke to Major General Jonathan Shaw, an army veteran, and former UK Head of Cybersecurity at the Ministry of Defence. He shared his thoughts on the global security risks he thinks we should all be taking more seriously.

As a retired British Army officer, Major General Jonathan Shaw knows a thing or two about what it takes to keep our country safe. But despite his hands-on experience of dealing with serious conflicts in the Falklands, Kosovo, Iraq and Bosnia, even he conceded that predicting and tackling future national security threats is more difficult than ever. He explained, "Defending our country from potential threats looks very different to what has gone before. Climate change, migration, changing demographics, disease and technology will demand a response from the whole of society, not just government. Indeed, they already are."

Climate change and migration

Major General Shaw sees climate change and migration as two issues that are inextricably linked: "Unfortunately, the areas of the world that could become uninhabitable as a result of climate change are also the places with population bulges, such as Africa." He goes on to say, "As a result, vast numbers of people will be forced to migrate elsewhere. But where to? How will the world manage that?"

If food production, access to fresh water, habitable temperatures and ocean food chains break down, so will civilisation as we know it. And if we can't work together, experts believe this presents the greatest threat to global security of all. In which case, what will the catalyst be to really solving the climate crisis, and how quickly can we act?

While many people think it is a political issue, Shaw believes that solving the climate crisis and protecting ourselves from the repercussions are down to every one of us: "In certain situations mass action by individuals can make a difference, and this is one of them. We can all make decisions today that will effect change. For example, you can buy your energy from companies that use green sources as a means of supply. As employees of companies, we can put pressure on our employers to aim for net zero. You can also influence change by voting in favour of green policies."

At the same time, the threat of climate change means the race is on to get ahead in green energy. History tells us that power rests with energy producers, and Shaw believes energy self-sufficiency will change the global dynamic dramatically. He said, "It's no coincidence the UK is now a world leader in wind-power technology. With less reliance on fossil fuels, the Middle East and other security hot spots will lose their stranglehold over the rest of the world, which can only be a good thing."

Changing demographics

Another threat to global security is an imbalance of population and demographics. While the Western world is dealing with the consequences of an ageing and shrinking population, other countries are experiencing the opposite. In Saudi Arabia, 70% of people are under 30 years old while in Africa 41% of the population is under 15. While the median age in Europe is over 40 years old, in sub-Saharan it is 18.

Major General Shaw thinks this makes for an interesting conundrum: "The differences in age demographic and population across the world is insane. How do you satisfy such different needs and aspirations? What the world needs right now is fewer people, and we all need to recognise that to let the planet survive."

He goes on to say, "The reality is that with artificial intelligence and automation, coupled with the effect of climate change forcing people to move, the world cannot support a growing population. Japan is an example of how the world should be approaching this issue. While they have been criticised for their economic stagnation, the reality is that their quality of life has increased thanks to a shrinking population. Although their GDP has ~~fallen as a whole~~ [flattened], it has risen as a percentage per head of population. They have invested in automating care for the elderly and improving the lives of their citizens. We could learn an awful lot from this approach."

The key issue facing countries with a large younger population, is that they are going to need jobs. Many of these younger people live in countries where the economy is heavily reliant on the production and distribution of fossil

fuels, such as Saudi Arabia. What happens when the world no longer needs these fuels? Overlay the effects of automation, and this becomes a key concern for the future.

The threat of disease

As a result of the recent pandemic, we all have a much better understanding of the threat of disease to our national security and economy. The West has arguably been lucky to avoid pandemics for this long, but we will need to get used to living with them in the future. Major General Shaw agrees: “The more we interact with wild spaces, the more likely it is that disease will jump from animals to humans. And ecological disasters such as cutting down the rainforest don’t help.”

The threat of disease is also linked to climate change and demographics. Migration will spread disease in much the same way it has done over the centuries. Take Spain’s invasion of South America. It was the flu they took with them that killed the indigenous population, not war.

Only time will tell if the recent pandemic has a longer-term impact on global travel. But again, it is within our own power to mitigate these threats by making better decisions at a societal level.

Influencing reasoning

While the technology revolution will help us address many of the issues we’ve discussed, it will also manifest its own security threats. Major General Shaw is particularly concerned about the ability of artificial intelligence and machine learning to weaponize the human brain. Artificial intelligence seeks to replicate our thought processes, behaviours and actions, while machine learning enables robots to learn from their mistakes and become ever-more human as a result. What if this technology could be turned against us?

What Shaw fears most is a decline of rationality. The human brain is programmed to accept ideas and views from people and platforms we like and trust versus those we don’t. “What happens when the Chinese develop an algorithm within an app that conditions us to like or dislike certain things? It’s not beyond the realms of possibility for us to be controlled and turned into different people, and we need to be aware of it.”

To an extent, this is already happening as social media platforms influence voters and motivate large groups of people to campaign for certain issues. A recent example of this is the ‘anti-vaccine’ messaging being disseminated across platforms such as Facebook. If enough people believe these messages, which were proven to be false, then it undermines the world’s ability to beat the global pandemic.

Looking ahead

Major General Shaw believes that the pace and profundity of change means leaders must listen, delegate and trust. They must be able to react accurately and in time to the threats at large. He explains, “If the past no longer represents the future, then deductive reasoning is unsound. We will need to move towards inductive reasoning, meaning we will need to rely on observation, analysis and conjecture, rather than [purely data from the past].”

He concludes, “Our best weapon of defence is ourselves. Humans are creative and empathetic and can make judgements in a way that robots can’t. And for that reason, we must all take our place on the front line and ensure we are protecting ourselves from these threats as best we can.”

This interview was held after our Future of Security event, which is part of our series of virtual events, Invested for the Future. If you are interested in finding out more, you can watch the Future of Security event below. Alternatively, you can download the interview on [Spotify](#) <

<https://open.spotify.com/episode/7doDgFAxOc1kwzVhX3q1aq?si=Q3p9iqpASLSmu1cmVvugvA&nd=1>>

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