

CHAPTER FIVE:

An Anatomy of Unpeace: How Globalization was Turned into a Weapon

President Recep Tayyip Erdoğan is not the sort of man who likes to grovel. Born into a poor background as one of five children, he has the manner and persona of a street fighter. When he was a schoolboy he used to sell lemonade and sesame rolls on the streets, and funded his degree in business administration by playing semi-professional football. When he entered politics, as an Islamist he faced regular persecution. He once lost a job in the Istanbul Transport Authority for refusing his secularist boss's injunction to shave off his moustache. Erdoğan eventually ended up in prison in 1998 for inciting religious hatred after publicly reading an Islamic poem that included the lines: 'the mosques are our barracks, the domes our helmets, the minarets our bayonets and the faithful our soldiers ...'¹ On the global stage, he has sought a reputation as the alpha male's alpha male – unafraid to pick fights with friend and foe alike.

When I went to see him, in the grandiose 1,000-room presidential complex that he built for himself at a reported cost of \$615 million, he oozed confidence and treated me with the courtesy and charm of a sultan receiving tribute from a foreign guest.² He was funny and assertive, attacking Europe for its attitude to Muslims, the United States for its missteps in Syria, and telling stories about meetings with Nicolas Sarkozy and his wife Carla Bruni. But one topic he avoided was his relationship with the Russian President Vladimir Putin. Before I left he presented me with a tie monogrammed with his initials and he asked his photographer to capture a shot of us shaking hands. When they sent me the photo later I noted that it was deliberately taken from an angle which made the president tower above me against the gilded backdrop of his 'sultan's palace'.

One reason that Putin may not have been discussed was that earlier in that week – a few days before we met – President Erdoğan was forced to show a side of his personality that is usually hidden from view: humility and contrition. He had issued a statement apologizing to the Russian president. The background was a long-running dispute between Ankara and Moscow over the civil war in Syria. These two tough-man leaders had found themselves on different sides of the struggle – with Putin supporting President Assad and Erdoğan backing various rebel groups that were trying to overthrow him. As Moscow increased its military involvement in Syria, it began bombing rebel groups near the Turkish border, including several Turkomen groups that were backed by Ankara. The Turkish military protested against this many times in vain. Eventually, Erdoğan lost patience and gave the order in November 2015 to shoot down a Russian Sukhoi Su-24M fighter jet that had entered Turkish airspace. The image of the falling plane immediately went viral. Calls for revenge exploded across the Russian media and internet. Protesters hurled stones and eggs at the Turkish embassy in Moscow. The high-profile host of Russia's main political TV talk show compared the downing of the jet to the 1914 assassination of Archduke Franz Ferdinand that triggered the First World War. So how did Russia's hawkish leader, Vladimir Putin, respond to the battle cries of his people?

He signed a decree halting fruit and vegetable imports from Turkey, banning charter flights and the sale of package holidays, and scrapped Russia's visa-free regime with the country.

By the time I met with President Erdoğan in August 2016, Vladimir Putin's counterattack had worked. The sanctions were brutally effective. In 2014, 3.3 million Russian tourists travelled to Turkey, but official figures released in June 2016 revealed a 92 per cent fall year-on-year in Russian visitors. Russia also used to be a major market for Turkish goods, ranging from vegetables to clothing to construction materials, as well as a source of remittances from Turkish workers and small entrepreneurs in Russia. In the first four months of 2016, bilateral trade plummeted to 45 per cent of the level it reached in the same period in 2015.³ Estimates of the combined cost of Turkish losses from tourism, small-scale luggage trade, and official exports – from agriculture and steel products to textiles – were around \$14–15 billion. That is why Erdoğan reached out to Moscow with an uncharacteristic apology for downing the plane and a request to patch up the relationship.

Putin is not shy of using military force. He has sent troops and weapons to Chechnya, Georgia, Ukraine, Syria and Libya. But in the conflict with Turkey, he showed that the most important battleground of conflict between great powers will not be the air or ground. Rather, it will be the interconnected infrastructure of the global economy: disrupting trade and investment, the movement of people, transport links, international law, and the internet. Of course what he did was not a uniquely Russian trick. Putin, in fact, knew how harmful sanctions could be to others because he himself had been the victim of EU and US embargoes after his annexation of Crimea two years earlier. He could see how each of the five global networks purporting to bring about peace could be transformed into a battleground.

ECONOMIC WARFARE

Sanctions, population expulsions and trade wars have been around for centuries but until the world became organized around global supply chains, and a dollarized financial system, it was hard to strangle foreign economies and societies at so little cost to oneself.⁴ All types of economic activity – trade, finance, ideas and people – are now being used as weapons. It is an irony that it is the United States of America – the country that brought us the 'Dell Theory of Conflict Prevention' – that has done the most to turn the international trading and financial system into a battleground.

US sanctions used to be very blunt instruments – not unlike the Russian sanctions against Turkey – and they only used to work well on countries that were directly dependent on US markets. But, around the turn of the century, there was a revolution in American thinking which allowed the systematic weaponization of economic links, using cooperation with multinational companies, which gradually transformed the idea of sanctions from catch-all blockades such as the one they introduced against Cuba in the 1960s to finely targeted regimes that were applied towards Iran, North Korea and Russia. This new generation of network-savvy measures is to the Russian sanctions – in the parlance of the Pentagon – a scalpel to their sledgehammer.

The transformation of financial warfare was the work of an improbable warlord, the former Treasury official Stuart Levey. Levey, a fast-talking lawyer from Ohio, was the first ever Under Secretary of the Treasury for Terrorism and Financial Intelligence in the Bush administration. When he started work, he joined a team of self-styled 'guerrillas in grey suits' who had been following money trails and using the regulation of finance to pursue the global war on terror after the devastation of 9/11. As part of their fight they had gone after money-

launderers, circulated lists of terrorists to banks and started introducing sanctions against countries suspected of producing weapons of mass destruction, such as North Korea and Iran.

The process of sanctioning Iran proved frustrating. The USA did not do much trade with Tehran, so American sanctions had a limited impact. Moreover, as soon as Levey thought they were making progress getting allies such as the European Union to cut their imports of oil and gas from Tehran, other powers such as China would step in and buy up any spare capacity. Eventually Levey realized that they would have more impact if they could get the private sector to do the work for them – and take advantage of the dominance of the dollar in the global financial system. His big idea was to get banks to refuse to have anything to do with Iran – and to use that as a way of strangling other forms of investment and commerce. While UN sanctions can always be circumvented or even vetoed, the dollar's unique position as a reserve and clearing currency in 87 per cent of all foreign exchange transactions allows the American government to dictate terms to every bank and company in the world.⁵

Levey's plan was a kind of blackmail: banks are only as reputable as their clients' practices, he would say, and Iran was backing terrorists and pursuing a nuclear programme. Levey launched an 'Iran financial roadshow', meeting over one hundred times with bank officials around the world. Coupled with his quiet diplomacy were less quiet enforcement actions. In his first five years, dozens of banks were fined including Lloyds, Standard Chartered, Barclays, ABN Amro, Clearstream, ING Groep, HSBC Holdings and Credit Suisse Group before the most high-profile case against BNP Paribas, which was fined a stunning \$8.5 billion.⁶ An essential first step to make this campaign possible was asking SWIFT – a global information transfer service based in Brussels – whether the US Treasury could get access to its records to go after terrorist financing. The SWIFT data were described by a Treasury official as the 'Rosetta stone' for US financial warfare. What started as a war against al-Qaeda grew to encompass measures against North Korea, Iran, Sudan, and even Russia. Once the Treasury had the data on financial transactions they used this to tighten a financial noose around economies they disapproved of. They put enormous pressure on SWIFT to disconnect banks from those countries, thereby shutting them off from international credit.⁷

Once banks began to be fined billions of dollars, they had a strong incentive to build a vast machinery employing thousands of people to enforce the sanctions. A study by the British accounting firm Deloitte found that over half of financial service institutes *outside of the US* explicitly use the sanctions list developed by the American Office of Foreign Assets Control (OFAC) as the key list of whom to do business with.⁸

It took a while for people outside the United States to realize how powerful what the CIA director of the time called a 'twenty-first-century precision-guided munition' is.⁹ When Vladimir Yakunin, Putin's close friend and the head of Russian Railways, was put on the US sanctions list he was very dismissive, declaring to the *Financial Times*, 'I did not intend to travel to the US. I have no assets. So it does not bother me at all.'¹⁰ But as one analyst explained, the real threat is not the inconvenience of having assets frozen or a visa ban but the signal they send to banks: 'They are the financial equivalent of leprosy, discouraging financial institutions from touching the targeted entity in any way.'¹¹ Once you are targeted, it is not just US banks that refuse to deal with you, but any entity which needs to have correspondent banks in the USA, which is roughly everyone. That makes it very difficult for people on the list to do anything – whether it is buying a chalet in Courchevel or paying school fees in London. And today different parts of the American system are applying the scientific approach that they developed towards banking to other parts of our connected economy. As trade and value chains become so much more globalized, they have discovered that hitting

one small link in the chain – such as chips or semiconductors – can be enough to bring a company or country to its knees. China doesn't have the capacity to manufacture the crucial chips it needs to power its economy and imports roughly \$300 billion of them every year. The USA is trying to squeeze it. As *The Economist* claims: 'In the 20th century the world's biggest economic choke-point involved oil being shipped through the Strait of Hormuz. Soon it will be silicon etched in a few technology parks in South Korea and Taiwan.'¹² This is the vulnerability the US government exploited in the measures it took to restrict exports to Chinese tech giants such as Huawei and ZTE from 2018. From vaccines and masks to cars and telephone handsets, the reliance on complex 'just-in-time' global supply chains with critical components supplied by only a few specialist players increasingly exposes different nations to the risk of geopolitical pressure.

Faced with war-weary publics and tightening budgets, Western states are projecting power through their influence over the global economy, trade and finance (including the dollar and euro), and through their control over multinational corporations domiciled in their countries. The USA, the European Union and the United Nations currently have sanctions in place against thirty-one different countries in five continents around the world. It has been interesting to watch these weapons being tried out on ever higher-value targets. They began using them on small and weak countries like North Korea and then scaled up their use on to Iran and then Russia. There is now the potential to use them against China, the second-biggest economy in the world. This is a huge leap, with potential costs for the US long-term position in the global financial system. That is a major reason why Treasury was the actor in US government most reluctant to go after the Chinese. But it is worth noting that anxiety about this happening spiked in China significantly last year when Chinese banks were forced to comply with US sanctions on Hong Kong officials.¹³

No other country yet benefits from the same network that the dollar gives the United States, but many are using techniques such as economic blockades (Turkey against Armenia), financial sanctions (South Korea against North Korea), travel and visa bans (China, South Korea, and Japan), gas cut-offs (Russia against its neighbours), restrictions in sales of rare earths (China against Japan), as well as aid suspension, increased import/export inspections, the closing of businesses and expropriation, and denying regulatory approvals and licences.¹⁴ Often the most effective tools are to dangle carrots – loans, investments, new infrastructure – and then to threaten to withhold them, a favourite Chinese tactic. While non-Western countries are not reluctant to use economic warfare, they are more cautious to openly call it that. Often, measures are disguised as stricter sanitary controls or customs-related delays that just so happened to take place against entities from certain countries they have a political disagreement with.

Many states have begun to defend themselves from these developments, aiming at decreasing their dependencies on other countries. Economic mercantilism is growing. 'Buy local' campaigns are often thinly veiled strategies to strengthen domestic producers against international competition in order to make the state less dependent. China now explicitly aims at boosting its domestic technology sector and its domestic economic demand as a way to limit its vulnerability to American pressure.¹⁵ China is trying to build a digital currency that can challenge the dollar, a banking system that is insulated from the United States, and a series of foundational technologies that stop the United States from strangling its access to global markets. In 2020 China and Russia even talked about creating a 'financial alliance' to reduce their dependence on the dollar, as they shifted to doing the majority of their bilateral trade in euros and their national currencies (as recently as 2015 90 per cent of their transactions were in dollars).¹⁶

As it becomes successful at this many fear that Beijing could be tempted to use many of the same techniques that Washington has used – turning its global financial networks into tools of Chinese foreign policy. China has introduced new laws on the screening of foreign investment, promulgated a new export controls law, drawn up an ‘unreliable entity’ list, and adopted an EU-style statute blocking the extraterritorial jurisdiction of US law. People are increasingly complaining that, by using these techniques, Beijing is applying its writ against Hong Kong, in the South China Sea, along the Belt and Road, and in cyberspace.¹⁷ The fear is that it could force users of its digital currency, its technologies or capital to follow Chinese sanctions in the same way that Washington has used its privileged position – but in support of authoritarianism rather than democratic aims. There are also some uniquely Chinese innovations such as building a ‘social credit’ scheme for companies that mirrors the one it introduced for citizens (see Chapter One). In the same way that citizens can be punished for behaving in ways that the Communist Party disapproves of, so too could companies be privileged or punished because of their loyalty to Beijing. So far China has used its market power to bully countries such as Australia, as well as other players like the NBA and Hollywood, but this points to a different agenda. Many fear it is deliberately building dependencies for international firms and foreign states so that it can impose its laws and priorities around the world.

Back in 1941 Albert Hirschman claimed that people were wrong to think that trade was simply motivated by profits and came up with a theory of ‘power trading’. ‘It is possible,’ he wrote, ‘to turn foreign trade into an instrument of power, of pressure, and even of conquest.’¹⁸ Hirschman’s insights came from studying how Germany manipulated the global trading system to degrade its adversaries’ capabilities, entrap nations as reluctant allies, and build up its own industries under the Kaiser and the Nazis. Modern-day analysts claim that China is following many of the rules of so-called ‘power trading’: turning nations into dependent vassal states by creating vested interests in those countries, using monetary manipulation to reduce export costs, dumping products to prevent the industrialization of potential competitors, using industrial espionage to steal intellectual property, and targeting key industries for potential dominance.¹⁹

Although, on a human level, the fear of being blown to smithereens is much more visceral than the pain of regulations or tariffs, these connectivity weapons can hurt many *more* people than bombs. There are no comprehensive studies of how many lives have been blighted or ended by sanctions but there were clues in a series of studies of national sanctions regimes.

Some of the stories from places that have lived with sanctions, like North Korea, are heartbreaking: mothers so undernourished that they were unable to produce milk, people in the better-off parts eating their harvest before it was ripe, even horrific stories of people eating their own children.²⁰ Although many of the problems come from the inhumanity of the regimes that are targeted, there is no question that sanctions have blighted the lives of millions – from Venezuela and Iran to Sudan and North Korea – primarily by restricting access to food, medicines and electricity and by wreaking general economic havoc. Their social impact is often devastating. Prices for imports skyrocket; medicines become scarce; water quality decreases; jobs are lost; and public services like healthcare, sanitation and education decline. Ultimately, lots of people die avoidable deaths.

Studies have shown that sanctions typically reduce economic growth by about 2 per cent a year – so a country can lose a quarter of its economy after just a decade.²¹ In Syria, sanctions contributed to the doubling of unemployment²² and saw 80 per cent of the population plunged into poverty rates. In Iran, sanctions led the Iranian GDP to shrink by up to 10 per

cent a year.²³ Venezuela already faced economic troubles before the introduction of the US sanctions but the IMF claimed that the sanctions led to inflation increasing to 500,000 per cent, while the percentage of Venezuelans living in extreme poverty went up to 85 per cent in 2018.²⁴ The political turmoil, socioeconomic instability and the ongoing humanitarian crisis caused the largest external displacement crisis in Latin America's recent history.²⁵

The health consequences are no less stark.²⁶ There was a big backlash against the human costs of catch-all sanctions in the 1990s. For example those placed on Iraq in the 1990s set back the health system by fifty years.²⁷ The infant mortality rate went back to levels not seen since the 1940s.²⁸ In Iraq, the UN estimated the number of deaths among children under five years during the sanctions in the 1990s at between 382,000 and 576,000. For these reasons, there was a move at the turn of the century to develop 'smart sanctions' targeted on elites rather than wider society.

But although the new generation of sanctions could theoretically be targeted on elites responsible for oppression or crimes against humanity, the trend of moving towards 'maximum pressure' is once again hurting entire societies. For example, Harvard University calculates that at least 4,000 people died in North Korea due to the sanctions and funding shortfalls in 2018.²⁹ US sanctions in Venezuela were credited with causing over 40,000 deaths in 2017 and 2018.³⁰ And many studies have argued that Iran's healthcare system as well as its economy has been decimated by Western sanctions. The same thing is true of Syria today, where British doctors working in Aleppo claim that 'over 80 per cent of those requiring urgent medical treatment die as a result of their injuries, or lack of basic care, medicine and equipment'.³¹

INFRASTRUCTURE COMPETITION

Hungary's prime minister built a reputation on saying no to migrants – particularly those who are not Christian. He introduced razor wire fences, invested in border guards, and broke EU law to keep foreigners out of Hungary. But there is one exception to his rule. In 2013, he introduced a 'residency bond' aimed at attracting wealthy Chinese into the country. Since then some 10,000 have settled in this Central European country, taking advantage of the clean air, schools and universities and the culture of this ancient land.³² Viktor Orbán's motivation was not a desire to help Chinese connect with the culture of 'Mitteleuropa' – rather it was the desire to hitch Hungary's wagon to the Chinese economic juggernaut.

Orbán's goal was to turn Hungary into China's hub in Central and Eastern Europe. In the last five years, China has invested over \$3 billion in Hungary, and bilateral trade turnover has grown to an annual \$10 billion.³³ The aim was not just to get China to pour money into Hungary, but also to link it up with Chinese trade and communications routes. The Chinese prime minister and Viktor Orbán launched a flagship high-speed railway that will connect Budapest to Belgrade. And China's telecoms giant Huawei has been operating in Hungary for the past ten years, employing 2,500 people and drawing on the services of almost 600 local suppliers.³⁴ These investments are not simply about money (in fact China has put much less money into Hungary than it has into Poland and other western European countries). They also represent an ideological escape route from the West's traditions of liberal democracy.

Viktor Orbán first came to prominence as a 26-year-old activist for liberal values. On 16 June 1989, he gave a rousing speech in Heroes' Square, Budapest, demanding free elections and the withdrawal of Soviet troops. The occasion was the reburial of Imre Nagy and the martyrs of the 1956 Hungarian Revolution. Overnight he became one of the most articulate and

effective advocates of the ‘return to Europe’, founding a political party committed to liberalism and rising to the premiership of his country at the tender age of thirty-five. After four years in power, he lost the elections and spent almost a decade in opposition during which he totally transformed his worldview.

When Orbán came back to power in 2010, his political project was about escaping from, rather than embracing, Europe. The erstwhile liberal reinvented himself as the biggest enemy of his previous philosophy. He rapidly set about centralizing power, reintroducing state planning and protectionism. And with an iconic speech at Băile Tuşnad in Romania (Tusnádfürdő) on 26 July 2014, he crystallized his ideas. ‘A trending topic in thinking,’ he said, ‘is understanding systems that are not Western, not liberal, not liberal democracies, maybe not even democracies, and yet making nations successful. Today, the stars of international analyses are Singapore, China, India, Turkey, Russia ... We are searching for ... ways of parting with Western European dogmas, making ourselves independent from them ... in this great world-race.’³⁵

It is striking how many countries who once queued up for EU membership are now trying to curry favour with China. Beijing’s leaders have identified the second battleground of the age of unpeace: competition through the physical infrastructure of globalization. Many countries have understood that if they cannot be independent, the next best thing is to make their partners dependent on them. If all roads lead to Rome, countries are best served by becoming Rome. This quest for ‘asymmetric interdependence’ is encouraging leading regional powers – Russia, Germany, Brazil, South Africa, and Nigeria – to try to entrench their role as core economies. But few countries have taken the ‘road’ element of the saying as literally as China.

In 2013, President Xi Jinping announced the ‘One Belt, One Road’ project – later rebranded as the ‘Belt and Road Initiative’ (BRI) – intended to link China to cities as far away as Bangkok and Budapest, and develop the Eurasian coast. The original promise of the Belt and Road Initiative was to link sixty-five countries and markets, with China as the hub around which all the contact flows. China has promised to invest \$1 trillion – roughly seven times as much as the Marshall Plan.³⁶ ‘For a great power to rise, it needs the support of its periphery,’ the Chinese nationalist thinker Yan Xuetong argues. The BRI is the most ambitious of China’s infrastructure projects aimed at exporting China’s surplus capacity while expanding its access to raw materials and export markets. That China has perfected infrastructure diplomacy should not come as a surprise: with over 160 Chinese cities boasting populations of more than one million (Europe has thirty-five) it has had to learn to build more infrastructure faster than any other power in history.

China’s approach to international integration through infrastructure is very different from the EU’s. The EU has also built infrastructure across the continent and with its neighbours, but its goal was always to try to bury power politics. Germany, in particular, was keen to use regional integration to assuage the fears of its neighbours. Berlin has struggled with a sense that the creation of the euro and the infrastructure for global supply chains has led other countries to feel that they are reduced to its periphery (as we explored in Chapter Three). But China, on the other hand, seems to see the projection of power as one of the explicit goals of its new infrastructure projects. It uses offers of infrastructure and aid to buy political loyalty and favours.³⁷ These efforts are worrying many of Beijing’s neighbours, who fear that China’s Belt and Road project creates dependencies that can then be exploited. On the one hand is the fear of debt diplomacy – where China lends huge amounts of money to countries to build infrastructure and then demands political concessions when they inevitably struggle

to repay. The cost of the railway between China and Laos represents 80 per cent of Laos's annual budget, leaving the country very dependent on Chinese support.³⁸ There are also more traditional security fears: that the transport containers full of shoes and T-shirts could as easily send tanks and soldiers from China into the continent. There are still residual memories across Asia of Japanese railway transports during the Second World War.³⁹

As Covid-19 raged across the world and many economies were plunged into crisis, China's infrastructure projects also ran into trouble. Some states struggled to meet their debt payments and Chinese institutions paused their lending.⁴⁰ As it navigates a developing world debt crisis Beijing will no doubt reassess its approach to political and economic risk, but Xi Jinping's signature project is seen as a generational one. What is more, even as the physical infrastructure projects are paused, Beijing is refocusing its energy on the digital side of the Belt and Road as we will see below.⁴¹

Hungary's strategy of binding itself to China is part of a search for geopolitical options. Orbán would rather be a small 'core' than rely on his country's position as part of Europe's large 'periphery'. By joining China's sphere of influence, he thinks he can counterbalance Germanic influences. But although he probably has very little to fear from Chinese troops, he may end up losing sovereignty as he drifts into a Chinese periphery.

WEAPONIZING THE DIGITAL WORLD

If infrastructure is being weaponized in the traditional economy, the internet has been the front line of the new tech wars. In just a few years the internet has gone from being seen as the ultimate unifier of a global village to being seen as 'the perfect weapon'.⁴² There are several tech wars being waged between China and America which are turning the technology of connectivity into one that is dividing the world.

The first is a battle over cybersecurity, where America's National Security Agency is up against the Chinese Ministry of Public Security. Second, there is a tussle for primacy between corporate superpowers that pits US tech giants (Google, Apple, Facebook, Amazon, Microsoft) against China's new titans (Baidu, Alibaba, Tencent and Xiaomi). This conflict includes both hardware (chips, 5G, etc.) and software (AI, algorithms, data). It governs the flow of ideas, intellectual property and patents. A third battle over the rules of engagement has balkanized the internet into different worlds. And as time goes on these tussles are becoming entangled – and leading to ever more fragmentation, conflict and 'unpeace'.

It used to be that there were 'good' and 'bad' guys and 'fair' and 'unfair' competition. Everybody knew the rules. But now that is changing. The science and technology that united the world in the past is becoming the most divisive realm of the future. Just look at the story of these two tech leaders, a man called Zhu Hua and a woman named Wu Xifeng.

Zhu Hua likes to go by the hacker name of God Killer, but the grainy photographs of him on the FBI's 'most wanted' page give him a somewhat less than Nietzschean appearance. His chubby face and porcine features are scrunched up in different poses; in one he is snapped shovelling food into his open mouth. The FBI claims he is as greedy for data as for junk food – squirrelling away hundreds of gigabytes of sensitive information over a twelve-year period. That is why they made the rare move of taking him to court. The Grand Jury of the Southern District of New York indicted him for 'conspiracy to commit computer intrusion, wire fraud and aggravated identity theft'.⁴³

Zhu is alleged to be a leading member of a hacking group that has gone under the names of ‘Stone Panda’, ‘Red Apollo’, ‘Cloud Hopper’ and ‘Potassium’ among others. Its members claim to work for a company in Tianjin, a second-tier megacity 80 km south of Beijing, but the FBI thinks this is a front for the Chinese Ministry of State Security.⁴⁴ Stone Panda’s hacking activities cover a wide spectrum of mischief, and their escapades are respected for their sophistication and audacity.

The grand jury indictment accuses Zhu of stealing intellectual property from at least forty-five commercial and defence technology companies in Brazil, Canada, Finland, France, Germany, India, Japan, Sweden, Switzerland, the United Arab Emirates, the United Kingdom and the United States. He is also accused of compromising the computer systems of the United States Department of the Navy and of stealing the personal information of more than 100,000 navy personnel (almost a third of the combined staff). Most of the sectors he snooped on – aviation, space, satellites, manufacturing, oil and gas exploration, computer processors – lie at the heart of the Chinese government’s industrial plans. ‘More than 90 per cent of the department’s cases alleging economic espionage over the past seven years involve China,’ said former Deputy Attorney General Rod Rosenstein at a press conference detailing the indictment. ‘More than two-thirds of the department’s cases involving thefts of trade secrets are connected to China.’⁴⁵

The US government knows a thing or two about surveillance. Edward Snowden has shown how the US National Security Agency turned the internet into a gigantic snooper’s charter. The most important infrastructure is the network of fibre-optic cables that connect the world. Roughly 97 per cent of intercontinental traffic goes through just 300 cables.⁴⁶ After 9/11, the US established the ‘STELLARWIND’ programme to suck up data going through US networks. As General Michael Hayden, the head of the NSA, said, ‘This is a home game for us. Are we not going to take advantage that so much of it goes through Redmond, Washington? Why would we not turn the most powerful telecommunications and computing management structure on the planet to our use?’ He was referring to the headquarters of Microsoft, but his activities also targeted AT&T and in fact managed to collect data directly from the cables – making it unnecessary to even ask permission from companies.⁴⁷

The FBI’s worries are not restricted to theft of intellectual property and surveillance – they worry about threats to lives and security. They know how much damage cyber attacks such as the Stuxnet worm we saw in Chapter Four can inflict. And so they are very worried about falling victim to attacks themselves. Even economically motivated attacks can kill accidentally. For example, the Russian ransomware ‘WannaCry’ attack in May 2017 was designed to extract money from companies, but as a by-product of its success it ended up disabling much of the British National Health Service’s electronic infrastructure. It resulted in almost 20,000 cancelled appointments, 600 GP surgeries having to return to pen and paper, and five hospitals simply diverting ambulances, unable to handle any more emergency cases.⁴⁸

These days there is as much attention on politics and psychology as on physical infrastructure. The USA has been obsessed with Russia’s attempts to hack the 2016 presidential elections (a campaign known as ‘Grizzly Steppe’) as well as the fake news factories Moscow supported to spew out political misinformation. But Chinese groups like Stone Panda had been at work at similar operations before then, launching high-profile cyber attacks on the Commission on Elections in the Philippines in March 2016 (where it stole the details of 70 million voters) as well as on China-sceptic parties in Japan and Taiwan.⁴⁹ Since 2016, there have been attempts to interfere with national elections in twenty countries, representing 1.2 billion people.⁵⁰

Although many hacks were not particularly effective at their explicit aim they often achieved the broader target of making the democratic population fearful of interference and mistrustful of the results. In some cases the spread of disinformation can undermine the idea of truth itself.

Western societies feel increasingly vulnerable to multi-layered attacks. American cyber experts warn that individuals or small groups could take down the entire US electrical grid, incapacitate the UK's Trident nuclear submarine fleets or convulse the banking industry. And the use of disinformation could spread panic in an already rattled country.[51](#)

But what happened to the other tech leader, Wu Xifeng, is maybe even more consequential for the digital competition of the future. Professor Wu was seeking to find a cure for cancer rather than spreading viruses on American computers. She had worked twenty-seven of her fifty-six years at the University of Texas's MD Anderson Cancer Center, where she was director of the Center for Public Health and Translational Genomics. She was a naturalized US citizen and a model researcher with a publication list of 540 papers. The international cooperation she pioneered – including with universities and hospitals in her native China – was regarded as an embodiment of MD Anderson's mission to 'end cancer in Texas, America and the world'. But her approach came from the world of yesterday and fell foul of the new rules of engagement. No one accused her of stealing anyone's ideas. Her crime was to 'secretly aid and abet cancer research in China'. Although no formal charge was made – and no proof presented of her having given China any proprietary information – Wu was placed on unpaid leave while she was being investigated. In the end she quietly resigned her post in January 2020.

Ways of working that were encouraged for decades are now being criminalized. FBI agents read private emails and submit ethnically Chinese researchers to loyalty tests, even arresting them at airports. The philosophy behind the new approach was set out by FBI director Christopher Wray, who claimed that Chinese intelligence services use every tool at their disposal – including state-owned businesses, students, researchers, and ostensibly private companies – to rob intellectual property.[52](#) 'China seems determined to steal its way up the economic ladder, at our expense,' he said, and alleged that whereas the Cold War was fought by armies and governments, the new contest is being waged, on China's side, by the whole of society. The USA now needs its own 'whole-of-society' response, he claimed. In today's Washington DC, worries have shifted from illegal hacking to the legal catch-up by China in areas such as 5G, artificial intelligence, quantum computing and blockchain.

There is also a lot of concern about the way that China is using the digital silk road to export many of its technologies and to shape global standards and norms.[53](#) Beijing has been inspired by the nineteenth-century German industrialist Werner von Siemens' claim that 'he who owns the standards, owns the market'. As a result it has sent top officials to take up the leadership of global standard-setting bodies such as the International Telecommunications Union (ITU), the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).[54](#) As of 2019 China has also reached eighty-five standardization agreements with forty-nine countries and regions.[55](#) When I was in Pakistan in 2019, I heard that the government was implementing a 'safe cities' project to introduce facial recognition and surveillance in the top big cities, an initiative that had been subcontracted to Chinese companies like SenseTime and its rivals. The Chinese government has exported its AI and surveillance technology to many countries around the world – from Azerbaijan to Zimbabwe. Furthermore, it has hosted media officials from thirty-six countries to three-week seminars on its sprawling system of censorship and surveillance. And, according to Freedom House, around forty countries have commissioned Chinese companies

to build their telephone infrastructure. The fear is that many countries will combine the use of Chinese technology with a vision of a ‘managed internet’ that prohibits free speech and keeps data in the country to allow the government to use it for surveillance.[56](#)

Long imagined as a cross-border, non-territorial global online commons, the internet is already becoming a maze of national or regional and often conflicting rules. Academics have identified several competing organizing philosophies for the internet.[57](#) The original founders in Silicon Valley favoured an open internet with transparent standards and portable technology. But today it is competing with a Chinese internet where technologies of surveillance and identification help ensure social cohesion and security by targeting would-be criminals, terrorists or dissenters. The US attitude to the internet has evolved, and is now mainly commercial, treating online data as a commodity to be monetized while excluding others from using it. In contrast, Europeans are trying to create a ‘bourgeois internet’ which minimizes trolling and bad behaviour by offering strict privacy laws. Another philosophy – led by Russia – is of the internet as the soft underbelly of rival nations, which can be exploited for disinformation and hacking.

WEAPONS OF MASS MIGRATION

‘You are not the ones who picked up the body of the Aylan baby, nor the ones feeding the three million refugees,’ said Recep Tayyip Erdoğan to the then EU Commission president in the middle of the migration crisis of 2015. ‘You freaked out when there were fifty thousand refugees at the border and said, “What if Turkey opens the gates?” Look at me now. If you go any further, these borders will open.’[58](#) Erdoğan saw the 3 million desperate refugees who had come to Turkey as a bargaining chip to increase his power over its neighbours. In a Machiavellian game of politics he reportedly threatened to open the borders and ship the refugees by bus into the EU unless they acceded to his demands.[59](#) The Turkish president successfully pressured the EU into agreeing to a refugee deal that earned Turkey €6 billion, visa liberalizations and steps towards EU membership.

Erdoğan is not the first politician to use migrants and refugees in this type of blackmail. Migration experts have identified over seventy-five attempts to instrumentalize migration flows since the 1951 Refugee Convention came into force, more than one per year.[60](#) The number of refugees used in such moves ranges from a few thousand (Polish asylum seekers in 1994) to over 10 million (east Pakistanis in 1971). Libyan strongman Muammar Gaddafi famously threatened to ‘turn Europe black’ if it did not pay him €4 billion to hold back migrants travelling to Europe in 2010.[61](#) (Gaddafi had successfully used this tool in 2004, 2006 and 2008 and it was used again by Libyan warlords after he was deposed.)

It is no wonder that Gaddafi used this threat several times – research shows that the weaponization of migration is a particularly effective tool. In nearly three-quarters of these historical cases, the coercers achieved at least some of their articulated objectives, and in over half they achieved everything they sought, making this instrument of state-level influence more effective than war or sanctions.[62](#) Migration is a particularly effective weapon for the weak against the strong. There is no way that countries like Cuba, Haiti, or Mexico could threaten the USA with military force. Their demographic time bombs have been more persuasive than real bombs could ever have been.[63](#)

Global migration has almost tripled in the past fifty years.[64](#) There are now some 240 million people living outside their country of birth – enough to form the fifth-biggest state in the world.[65](#) Some states have realized the potential of instrumentalizing it, turning the gateways

of migration into a source of power. They have developed different approaches as ‘Generators’, ‘New Colonialists’, ‘Go-betweenes’, and ‘Integrators’.

The first group, *Generators*, actively engineer migration to use it as a weapon. During the Syrian war, the US General Philip Breedlove – who served as Supreme Allied Commander Europe in NATO – accused Russia of using its deliberate bombing of hospitals and other civilian centres in Syria to drive refugees into Europe.⁶⁶ Russia has also used the large number of people from the post-Soviet states who live in it to blackmail their countries of origin. For example it threatened to restrict visas for the millions of settlers from Tajikistan (who sent large remittances back home) if their government refused to join Moscow’s Eurasian Economic Union in 2014.⁶⁷ In a much less violent manner, the former British Prime Minister Theresa May obliquely threatened the EU with 3 million repatriates, in the Brexit negotiations, by not initially guaranteeing the right to remain for EU migrants in the UK.

The second category, *New Colonialists*, encourage their own populations to emigrate and flex their geopolitical muscles through these human ties.⁶⁸ Just as settlers from Europe spread across the world to the benefit of their homelands in the eighteenth and nineteenth centuries, the most mobile citizens of the twenty-first century are helping their countries of origin to get access to markets, technology and a political voice beyond their borders. For example, there are tens of millions in the Chinese diaspora around the world, and over a million who have settled in Africa alone. And when some of those migrants return to China, the skills and knowledge they have picked up are expertly harvested – as we saw with the ex-Microsoft staff at SenseTime. Called ‘sea turtles’, these returning migrants dominate China’s technology industry.

The other continent-sized country, India, also has a diaspora of about 20 million Indian citizens who are extremely successful and hyper-connected. One in ten companies in Silicon Valley is set up by Indian-born entrepreneurs. Google and Microsoft’s chief executives are Indian, as are the inventor of the Intel Pentium processor and the chief technology officer at Motorola. How does this benefit India? For one, India gets \$58 billion in remittances every year, the highest number worldwide and almost 4 per cent of its GDP, more than it spends on education. And while it is impossible to prove a causal connection, the influx of Indians into America also coincided with a shift in both countries’ geopolitical orientation. The historic deal which saw the US recognize New Delhi’s nuclear ambitions in 2005 marked the end of its policy of equidistance between India and Pakistan.

The third group are *Go-betweenes*, like President Erdoğan. These are countries that use their geography to extract concessions from migration-phobic neighbours. They don’t create migration flows themselves but exert power by opening and closing borders as it suits them. Cuba has taken on this role with the United States several times in recent history, most famously during the Mariel boatlift of 1980, during which 125,000 Cubans reached Florida (a number of whom had been released from prisons and mental health institutions). Niger – a major transit hub through which 90 per cent of all West African migrants pass on their way to Italy – succeeded in extracting €600 million from the last EU aid budget. Go-betweenes’ power usually appears suddenly, but they are at the mercy of geography and have little control over the timing of their power surge.

The fourth group are the *Integrators*. These are at the receiving end of migration flows and know how to use them to their advantage. For all the anti-migrant rhetoric in the twenty-first century, migrants are major drivers of global productivity, particularly in developed economies. Migrants create \$7 trillion per year – almost 10 per cent of global GDP – even

though they only represent 3.4 per cent of the world's population.⁶⁹ By moving to more productive regions and occupations, migrants contribute more to global GDP than they would have in their country of origin. Much more would be possible. McKinsey estimates that up to \$1 trillion additional annual output would be possible through better integration in destination countries.⁷⁰ There is a huge economic dividend for countries that get integration right, a McKinsey Global Institute report notes.⁷¹

Libraries have been filled with accounts of how the United States has benefited from its ability to transform the brightest and the best from around the world into American citizens. Angola and Brazil have now reversed the brain drain and are receiving large flows of immigration from their former colonial power, Portugal.

But the two most eye-catching experiments in integration in recent times are in the Middle East: Israel and the so-called Islamic State (IS). Israel is the only country whose population has multiplied by nine in the space of fifty years. It is probably the first country to have a word – ‘Aliyah’ – for migrating to it. This is supported by a government infrastructure of ‘Aliyah consultants’ offering free one-way flights, language classes and practical support. A book that showed how Israel has reinvented itself as a digital ‘start-up nation’ asks the question: ‘How is it that Israel – a country of 7.1 million people, only sixty years old, surrounded by enemies, in a constant state of war since its founding, with no natural resources – produces more start-up companies than large, peaceful, and stable nations like Japan, China, India, Korea, Canada, and the United Kingdom?’⁷² The answer is immigration.

Neither would be happy with the parallel, but before it was bombed out of existence, IS's rapid emergence on the map drew many lessons from the Israeli example. It has also adopted a word for migrating to it – ‘Hijra’ – an Arabic word meaning ‘emigration’, evoking the prophet Muhammad's historic escape from Mecca, where assassins were plotting to kill him, to Medina. The so-called Islamic State may not have been recognized by anyone as an actual state, and it was eventually defeated militarily, but for many months it was one of the most successful receivers of migration. According to the Soufan Group, between 27,000 and 31,000 people travelled to Syria and Iraq from eighty-six countries⁷³ – and that is before you count all the groups around the region that declared loyalty to it, not to mention individuals in Western capitals who have claimed to be inspired by it. Against all the odds, IS was able to create a functional proto-state (complete with flag, currency, administrative structures, police); to enlarge and defend a large amount of territory (IS ruled at some point over more than 34,000 square miles⁷⁴); to generate income (taxes, exporting oil, extortion, etc.) and to encourage more migrants to come (through the use of ‘celebrity’ fighters, propaganda videos and social media).⁷⁵ That it managed to survive for so long – in spite of the fact that it had united the USA, Russia, Iran, Israel and Saudi Arabia against it – was surprising.

The migration superpowers have had a huge impact on global economics and politics. The richest countries that first benefited from the globalization of trade have clubbed together in a group called the ‘G7’. But another batch of countries outside the G7 – China, India, Israel, Libya, Niger, Russia, and Turkey – have used migration to increase their clout. They could be called the ‘M7’. Emigration, immigration, and control over the flow of people are now currencies of power. States that follow the M7's lead and adapt to this new age could supersize their geopolitical heft.

LAWFARE

In a connected world, we have no option but to work together to solve problems like climate change. What, after all, is more connected than the air we breathe, the water we drink and the climate we live in? There is as yet no 'Planet B', in spite of the best efforts of the super-rich to explore space travel. The big hope for globalists everywhere has been that climate change will shock national leaders out of their petty competition and instead focus their minds on protecting the future of the planet.

In 2018 the teenage activist Greta Thunberg sprang into the world like an envoy from the future with a warning about the suicidal course the world is set on.⁷⁶ The school strikes she started at the age of fifteen were a model for others all around the world as well as for new activist movements such as 'Extinction Rebellion'. In order to avoid the destruction of humanity, she urges us to focus on the fate of the planet as a whole, rather than on the relative performance of individual countries. She wants carbon-reduction deals to be governed by international law rather than the power of individual nations. And she cares about scientific truths rather than political slogans. Thunberg distilled the argument for global governance into a new political philosophy. Where global survival is at stake there can be no space for national interests or power games. The only distributional struggle she recognizes is between the old people who run the earth and the young who will inherit it. There are no shades of grey – only fact and fiction, action and inaction. The world is on fire, she explains, and we need to act now in order to save it.

International law was intended to be a way of peacefully settling disputes between discordant nations. After the Cold War, multilateral institutions were supposed to be the benign invigilators of a new era of 'win-win' cooperation. But security experts have since come to regard international law as a weapon against hostile countries – they have nicknamed it 'lawfare' – while the institutions designed to administer it are becoming an important front for geopolitical competition.

There are many examples of countries undermining the international system by gridlocking institutions or pushing for a selective application of the rules. Emerging powers such as India, Russia and China have sought to frustrate the established powers by disrupting their use of existing institutions – from supporting well-known human rights abusers for election to the UN's Human Rights Council, to blocking the WTO's Doha Round of trade talks, or stopping the Organization for Security and Co-operation in Europe (OSCE) from conducting independent election observation missions. At other times they have even ignored their edicts, as Russia did over the 'open skies' agreement or China over the territorial rulings of the International Court of Justice in the South China Sea.

Emerging powers claim – although this is contested in Western capitals – that this behaviour has been mirrored by the United States and its allies, which have increasingly sought exceptions from the rules for themselves. For example, Washington calls on other countries to abide by the law of the sea, although it has not itself ratified the relevant UN convention. The EU and the US talk about the inviolability of borders and national sovereignty, but tried to change both norms through their intervention in Kosovo (which they tried to retroactively legitimate by coining the 'responsibility to protect').

As these universal institutions have become gridlocked, many countries have begun to work around them. There is a global trend towards forming competing, exclusive 'mini-lateral' groupings, rather than inclusive, universal multilateral projects. These groupings, bound by common values – or at least common enmities – are made up of like-minded countries at similar levels of development.

Frustrated by Chinese and Russian vetoes on everything from trade to human rights, the West began creating new groupings outside the universal institutions – such as the Trans-Pacific Partnership (TPP) in Asia and the Transatlantic Trade and Investment Partnership (TTIP) – that exclude Beijing and Moscow. In parallel to the Western order-building projects, Moscow and Beijing began to craft a ‘world without the West’ with a new set of groupings that include the BRICS (Brazil, Russia, India, China and South Africa), the Eurasian Economic Union (EEU) and Regional Comprehensive Economic Partnership (RCEP), as well as a host of sub-regional bodies. China has worked to promote parallel institutions to the Western-created ones – such as the Asian Infrastructure Investment Bank (AIIB) and the Shanghai Cooperation Organization (SCO) – some of which complement the existing order and some of which compete with it. These new friendship groups often struggle to agree very much, but their existence serves to weaken the legitimacy of global institutions.

Rather than embodying a new consensus, Greta Thunberg’s speeches were assaulted by leaders such as Donald Trump, Jair Bolsonaro and Scott Morrison. Instead of treating action on climate change as a common project to save the planet, these leaders have tried to weaponize it to help their own economies while punishing others. If they deploy these weapons at international climate conferences, they risk derailing the entire negotiations. The giants of the Global South – countries like China, India, and Brazil – are now in absolute terms the world’s biggest emitters. But they still have relatively low emissions per capita and point out that the developed economies have been the top carbon emitters for over a century. At the same time, the developed world is not willing to face up to fundamental changes in its way of life. Leaders like Australia’s Scott Morrison have resorted to climate-change denial to avoid their responsibilities; in the face of national wildfires in January 2020 that burned 46 million acres and affected nearly 3 billion animals, reportedly among the ‘worst wildlife disasters in modern history’, Morrison went on holiday to Hawaii.⁷⁷

Although Trump has departed – and Biden has rejoined the Paris Agreement – he was more of a symptom than a cause of the change in the climate negotiations. In the brief period of Greta Thunberg’s life, the world has gone in exactly the opposite direction from her political doctrine: power has triumphed over law, politics over science and nationalism over internationalism. The Kyoto Protocol which was signed in 1992 had many flaws but it was broadly in line with Greta’s recipe for survival: a multilateral treaty, with legally binding international targets, determined by the world’s best scientists. But Kyoto was like a grape that withered on the vine. And the Paris Agreement of 2016, the best hope for a successor, represents a very different approach. It was hailed as a triumph only because hopes of getting a global agreement were so low. The reality is that it is much less constraining and intrusive than the Kyoto Protocol, which held national governments to commitments bound by international law. The Paris Agreement, on the other hand, left all the big countries free to adopt the national energy policies they had already decided on, while pretending that they had made a deal to tackle the climate emergency together. Meanwhile the planet burns.

Since the first global intergovernmental meetings on climate in 1988, global CO² emissions have risen by 40 per cent. The planet has already warmed by 1°C since we began burning coal on an industrial scale – and it could rise four times that amount by the end of the century.⁷⁸ Over half the world’s rainforests have been chopped down since the 1960s.⁷⁹ Half of the Great Barrier Reef has been bleached into an underwater grave by rising water temperatures. And the United Nations warns about the ‘sixth mass extinction’ which could wipe out over a million species of plants and animals.⁸⁰

All this risks making Thunberg an envoy from a future that will never be. The softness of the Paris climate deal in relation to Kyoto is emblematic of a more profound hollowing out of international treaties over the last fifteen years. The same logic of non-binding agreements lies at the heart of the UN's Sustainable Development Goals and its Global Compact for Migration. Maybe most worrying is the way this approach is being exported to areas such as nuclear weapons, as successive arms control treaties are discarded.[81](#)

Connectivity, it seems, encourages some citizens and states to think about their own relative interests rather than focus on the welfare of the whole. The technology of connectivity was embraced by a globalized economy, powered by footloose capital with a logic of growth, expansion, and accumulation. This created huge concentrations of wealth and poverty which make cooperation difficult, because working for common interests results in asymmetrical rewards. Once this is overlaid with the psychology of envy unleashed by social media it becomes even harder to get citizens to focus on the common good rather than their relative situation in a global pecking order. One of the most dramatic examples of this was the online (dis)information campaign against the UN Global Compact for Migration that led to political crises in several European governments – Belgium, Estonia, Slovakia – and a decision to withdraw from the deal by almost twenty countries.[82](#)

The loss of control that comes from connectivity has also damaged faith in the power of government. Most people are aware that global problems cannot be solved alone. These feelings of powerlessness often lead to cynicism about the possibility of *any* solution emerging – what economists call ‘collective action problems’. All too often, leaders and citizens conclude that the most rational short-term strategy is to do nothing oneself and hope that others will solve the crisis.

THE TIES THAT BREAK

With the collapse of the Soviet Union at the end of 1991, a divided world living in the shadow of the bomb gave way to a world of interconnection and interdependence. For some, it heralded the end of history, as a largely united world pursued the benefits of globalization. But contrary to the widespread hopes of the time, burgeoning connections between countries did not eradicate the tensions between them. The power struggles of the geopolitical era persisted, but in a new form.

This chapter has shown how trade wars, tariffs, sanctions and regulatory competition have weaponized the world's economic links. Our new physical and virtual global infrastructure enables countries to compete with each other by increasing their links to other countries – while denying contact to their rivals. Worldwide movements of people are also a source of power, as some countries leverage refugee flows or mobilize their diasporas overseas. Even international law has been turned into a weapon, as rival states manipulate it to achieve political goals rather than using it to limit their confrontations.

The forces binding people together have become battlegrounds, and each power has a different strategy for fighting in our new age of unpeace.

CHAPTER SIX:

The New Topography of Power

Many fairy stories start with the words ‘Once upon a time’, but for most of history there was no commonly agreed idea of time. In fact, global time zones are one of the most revolutionary modern inventions. For most of human existence, people might as well have lived in different galaxies. Civilizations rose and fell. They had their own languages, cultures, religions, social mores, technologies and little or no contact with each other. In some ways, the story of humanity is an account of the gradual creation of one world. Around 10,000 BC, Earth was home to thousands of self-contained worlds. By 2000 BC they had consolidated into a few hundred and by AD 1415 – with the onset of European colonialism – it had become a few dozen.¹ The possibility that there could be any kind of ‘global consciousness’ only emerged in the second half of the nineteenth century.² Before that, the ‘known world’ in many continents stretched only a few miles inland from the coast.³ But within the course of a few years all countries were explored, mapped and locked into a single global system through industry and empire. The period from 1850 to 1914 saw a wave of travel, trade and conquest which shrunk, connected and standardized the world – making it possible for the first time ever to apprehend the planet in its entirety. And one of the most important foundations for this was the unification of time.⁴

Before the world agreed on a ‘standard time’, the clocks on church towers, town halls and train stations in every city, town and village in Europe and North America were set according to the passage of the sun. In 1875, seventy-five railway times were used in the United States: six in St Louis, five in Kansas City and three in Chicago.⁵ Even in the mid-nineteenth century, the idea of universal standardized time was still a utopian political project, advanced by idealists and eccentrics. Sandford Fleming (1827–1915) was a Scottish-Canadian administrator, engineer and inventor who designed Canada’s first postage stamp, created a vast body of surveys and maps, and engineered much of the Intercolonial and Canadian Pacific Railways. But his most enduring achievement was the creation of worldwide standard time. In 1876, after missing a train in Ireland because of confusion about the timetable, he began writing a series of papers and pamphlets calling for a single way of measuring time, which he believed would be the prelude to the emergence of a world united by trade, technology and mutual understanding.⁶ Fleming was a delegate at the International Meridian Conference in Washington DC in 1884, which translated his idealistic dream into an international treaty, and settled on a single, unified ‘world time’. It took years for these ideas to be implemented, but by the end of the nineteenth century they had achieved unstoppable momentum. Time was not only standardized, but also democratized through cheap pocket watches, which became almost as ubiquitous as mobile phones today. The historian Jürgen Osterhammel has documented in intricate detail how these technologies led to the birth of the modern world and spawned the creation of a series of global networks of trade, communications, travel and ideas.⁷

If the long nineteenth century was a period when the world came together, the short twentieth century was defined by a logic of division. But when the Soviet Union collapsed in 1991, a second wave of connectivity could begin, facilitated by a revolution in information and communications technology that was almost as significant as the invention of the steam engine and the telegram. As a result, we’re linked today in ways that Sandford Fleming could

never have dreamed of. Half of the planet is now connected by smartphones and the internet into a single human-made network. And if the unification of time enabled countries to become linked, the unification of information has the potential to exponentially thicken our networks of connection, almost obliterating the distinction between home and abroad.

If Sandford Fleming was one of the most effective pamphleteers and campaigners for the first era of connectivity, the equivalent for the second era is the journalist Thomas Friedman, whose knack for reducing complex ideas to simple concepts has led millions of people to buy his paeans to globalization. At the beginning of the millennium Friedman's *The World Is Flat* was a bestselling book and on every businessperson's list.⁸ His book looked at the ten forces that were flattening the world – from supply chains to wireless communications. And once they had levelled the global economy, Friedman told us, we should expect a frictionless level playing field.

But in fact, globalization created winners (up) and losers (down) within countries and across them. It reshaped the topography of individual countries and of the international system in a way that leaves us in a much more complex world. The world we are inhabiting today is not just round but mountainous too. To understand its topography we need to spend some time looking at the theory of networks.

HOW NETWORKS UNITE AND DIVIDE THE WORLD

Political scientists, economists, pollsters and international relations experts have developed models for understanding the world that focus on the individual incentives and powers of voters, consumers, statesmen and diplomats. But these models are increasingly unable to explain the ways of a world connected into a single networked system.

How many predicted the global financial crisis, the Arab uprisings, Brexit, the election of Trump? How many foresaw the collapse of newspapers, the rise of Uber, or Airbnb? And how many anticipated the way governments and people would react to Covid-19? But most importantly, how many thought that all of these upheavals would take place within a single decade? The sort of political upsets that are meant to happen once in a century seem to be happening every fifteen minutes.

A lot of the unpredictability in our economies, technological systems, politics and society stems from how they organize themselves. If the industrial era was defined by the hierarchies of factories, armies, churches and bureaucracies, the most powerful organizational form of our connected age is the network. A network is a fancy name for describing a collection of objects (nodes) which are connected by links (ties). It does not typically have a single centre but rather a series of connections between the nodes. However, some nodes are much more connected than others, bringing lots of separate networks together (hubs).⁹

Networks have existed as long as people have but for centuries they were outgunned by the deadly efficiency of hierarchies until technology emerged that could allow them to thrive. As we have seen, the digital revolution and globalization – coupled with the relative peace of the post-Cold War era – have seen the emergence of new networks of exchange that have wiped out some of the borders between countries and linked them together in new ways. The key feature of our age is that many of the institutions that used to be free-standing have reinvented themselves as nodes in giant networks. Factories have become part of global supply chains that spread the production of parts across different countries to make them better *and* cheaper. Banks have become part of global financial markets that trade trillions of dollars of mobile

capital, and rely on international messaging platforms. Universities and scientists have built a web of collaborations across continents. Mass media, churches, sports bodies, criminal gangs and terrorists have all reorganized themselves to become part of massive networks that link up people and organizations across the planet.

And even states have come together in different sorts of networks. This includes global institutions governed by treaties, like the United Nations and the World Trade Organization; neighbourhood clubs, like the European Union or the African Union; and informal groupings, like the G7, the BRICS or the Organisation of Islamic Cooperation. What is more, there have been mushrooming links between intelligence agencies, courts, regulatory agencies, executives, and even legislatures that network with their counterparts abroad to tackle terrorism, organized crime, environmental degradation, money laundering, bank failure, and securities fraud.¹⁰

THE RULES OF NETWORKS

Networks have a number of features which make them unique.¹¹ Any network is only as strong as its weakest link – which is why we have seen so many disruptions to our global economy in recent years, with car manufacturing held up by shortages of semiconductors or Covid tests by a lack of specialist chemicals. But networks are constantly changing rather than static entities.¹² They are flexible and can reconfigure their components while retaining their goals if the environment changes. This is as true of reconfiguring your home music network as of your nervous system. Because they often don't have a single centre and can operate in a wide range of configurations, they can find ways of bouncing back from attacks. When one leader of al-Qaeda is captured another one can pop up. When a Japanese factory in China is closed by demonstrations, one in Vietnam can pick up the slack. And what's more, they are scalable – which means they can grow and shrink in size with little disruption. This is particularly true of the new networked companies that are springing up to take over the world.

They lead to contagion. Every child learns how a butterfly flapping its wings on one side of the world can cause a typhoon on the other. This is an inherent danger in connected systems: you get chain reactions. We have seen how epidemics and pandemics such as coronavirus, the plague, influenza, AIDS and foot and mouth disease gather pace until they become overwhelming. And when you add human reactions into the mix, these dynamics become even more complicated, leading some observers to talk about 'fearonomics'.¹³ The fear of contagion, the flow of false information, and beggar-my-neighbour policies of individual states has accentuated the cost of financial, refugee and health crises.¹⁴ The obverse of fearonomics is the speed at which a mood for political change can travel. Look at the case of Tarek el-Tayeb Mohamed Bouazizi, the Tunisian fruit-seller who set himself on fire in 2010 to protest about political corruption. Within two months, Tunisia's autocratic President Ben Ali had been toppled and the wave of protest soon spread to Egypt, where crowds gathered in Tahrir Square shouting: 'Tunisia is the solution.' Demonstrations also erupted in Algeria, Bahrain, Djibouti, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, the Palestinian Territories, Saudi Arabia, Somalia, Sudan, Syria and Western Sahara. The form was almost as important as the content of these movements – they also inspired demonstrations against inequality (Occupy Wall Street), austerity (Los Indignados), even the price of cottage cheese (Israel).

The way that viruses, ideas and other entities spread reflects the structure of the network. We saw in Chapter Two how they encourage self-segregation into like-minded groups, or what scientists call homophily.¹⁵ We have learned from games such as six degrees of separation

that it is weak ties between different clusters that allow ideas or infections to spread across large distances. This is enhanced by a ‘power law’ that makes well-connected nodes become even more connected (allowing the rich to get richer, or making networks such as Facebook more useful with each new member they attract).¹⁶ In fact, one of the most important qualities of a network is the effect of connection on all the nodes. That sounds fanciful – until you start to think about today’s economy. As Tom Goodwin of the advertising agency Havas has pointed out, the world’s largest taxi firm, Uber, owns no cars.¹⁷ The world’s most popular media company, Facebook, creates no content. The world’s most valuable retailer, Alibaba, carries no stock. The world’s largest accommodation provider, Airbnb, owns no property. For all of these platforms, their value comes from acting as an interface to the network. And being in a network changes the nature of all the nodes. An unused car can suddenly morph into a taxi, a spare room into a holiday destination (or a TV star into a president in the USA or Ukraine). The same is true of states when they are connected to new networks. As long as India and China were disconnected from the global economy, they were also peripheral to global politics. But their connection over the last thirty years has speeded up the creation of megacities, new industrial specializations and global supply chains, making these two giant civilizations much more politically influential.

One of the most interesting and under-researched features of networks is actually how they are also changing the nature of power.

THE CHESSBOARD AND THE WEB

The scholar and diplomat Anne-Marie Slaughter has argued that we need to update our mental maps of the world. Traditionally, leaders and diplomats saw global politics as a grand competition between states – a chessboard on which leaders play games of power politics. Slaughter concedes that this world will not disappear but offers a different model for global politics – as a web of networks where games are played not through bargaining but by building connections and relationships. She offers the arresting image of satellite photos of the world at night, with corridors of light marking roads, cars, houses, and offices. The lights stand for human relationships, where families and workers and travellers live and come together. ‘It is,’ she claims, ‘a map not of separation, marking off boundaries of sovereign power, but of connection.’¹⁸ Slaughter claims we need to develop a ‘network mindset’ to understand the dynamics of the non-hierarchical systems that define energy, trade, disease, crime, terrorism and human rights. In these areas, the chessboard’s emphasis on states, sovereignty, coercion and self-interest are overshadowed by the web’s orientation towards connections, relationships, sharing, and engagement.¹⁹ It is the shift from a world of self-contained states to a huge web of entanglements that is changing the nature of global politics.

Early theorists thought that the rise of networks would lead to the decline of power politics. Networks connect people horizontally – allowing them to outwit old-fashioned hierarchies. They make it possible for the powerless to become powerful. The early stories of the internet age are filled with tales of Davids defeating Goliaths, plucky upstarts overthrowing or disrupting the establishment. The hope was that this would extend beyond the world of business to politics itself. In the wake of internet-inspired protests against the Iraq War, the former Irish President Mary Robinson even called global public opinion the ‘second superpower’. But the reality has been that so-called ‘network effects’ have created a winner-takes-all structure – allowing the rich to become ever richer and many of the most powerful to defeat the powerless. The internet is connecting people more than ever before, but not all connections are equal: power is becoming centralized in ever mightier hubs.²⁰

In the business realm, Amazon, Facebook, Uber and Airbnb have helped to disrupt traditional hierarchies including retailers, newspapers, hotel chains, and taxi companies. They have empowered hundreds of millions of people, but at the same time they have concentrated enormous power in their platforms. The same has happened to politics, where single-party systems like the Chinese Communist Party and Putin's Kremlin have been strengthened rather than weakened by the internet. In connected systems, power is defined by both profound concentration and by massive distribution. Network theorists have found that similar dynamics govern all networks – whether they are studying proteins, neural networks, the financial system, social media or the economy.²¹ There is a tendency to turn the world into cores and peripheries – the more power is spread to the periphery, the more powerful the core must become.²²

If we go back to Anne-Marie Slaughter's framework, many globalists hoped that the web of connected countries would make the power games of chess players irrelevant. But it turns out that connectivity has not led to the end of competition. Globalization is not leading to a flat world, but rather a new topography of power. Some countries are more connected than others, and they can use these connections to enhance their power and prestige, and even turn them into weapons. Power politics has not disappeared – it has simply had to adapt to the asymmetries between cores and peripheries. The multilateral world of globalization has not displaced the multipolar world of great-power competition. The reality of twenty-first-century geopolitics is more about the fusion of the two. The network is the new board on which geopolitical games are being played out. Interdependence itself is being weaponized.

THE SEVEN HABITS OF HIGHLY EFFECTIVE CONNECTIVITY WARRIORS

In the last chapter we explored how all the connections that bind the world together – supply chains, trade routes, pipelines, railways, roads, cables, and the flows of people, goods, money and data – are becoming part of the currency of power. But the way that power is exercised depends on the topography of our networked world. The distribution of nodes, the density of ties and the emergence of dense hubs are creating a new map of power in the twenty-first century. All states are trying to control the high ground of this new world and identifying their strengths as well as the vulnerabilities of their opponents.

The terrains of power in this networked world – the mountains and valleys in each of the battlegrounds – create opportunities for different players to manipulate networks of finance, people, technology, and institutions. Once we start to look at the shape of each network we can understand the most efficient means of influence. In my research over the last few years, I have identified seven strategies used by the most effective states, the strongest connectivity warriors:

1. *Centrality*. The goal is to put yourself into a position where other people need you more than you need them. Then you can dictate the terms of the relationship. This is what Russia has tried to do with its energy markets, allowing it to blackmail countries like Ukraine or the Baltic states. People used to think that a relationship that benefits both parties would lead to harmony. But now states are increasingly looking at the relative importance of the relationship to each side. They don't want to put themselves in a position where they are the needy party – and therefore open to pressure.
2. *Gatekeeping*. The ability to decide who is 'in' and who is 'out' of the network. For example, the USA has effectively shut Iran out of the global financial system by threatening to exclude any banks from using the dollar if they trade with Tehran.

Because 90 per cent of foreign exchanges involve the American currency, they have created a 'choke-point'. The European Union has also used the prospect of offering its neighbours membership of the club, or at least an association agreement with it, to transform their choices. Many countries are trying to make themselves into hubs in different sectors so that they can convert their position into influence, profit or power in a similar manner.

3. *Data-mining*. States tap into their control of a network to spy on others, something that Edward Snowden revealed was being practised by America's National Security Agency. If information flows through your cables or networks, you can end up with a treasure trove that can allow your country to get ahead and punish others.
4. *Subversion*. States get involved in other countries' systems and try to overturn the normal rules so that they no longer apply. Russia, for example, spreads disinformation about vaccines in the West, and about the financial interests of politicians in the post-Soviet space, in an attempt to spread chaos.
5. *Infiltration*. Rather than influencing a country from outside, it is often more efficient to change it from within. This might mean encouraging companies to invest, political parties to develop friendships or even citizens to emigrate. In recent times there has been a controversial debate about the way that President Erdoğan appeals to Turkish minorities in European countries or Putin reaches out to ethnic Russians in Eastern Europe. Others talk about the role which Chinese settlers are playing in African countries and how their investments are helping skew the choices of local elites while changing the political orientation of many countries in which they have settled.[23](#)
6. *Rule-making*. The goal is to try to set the norms or rules for the whole network, just as the US did with domain names for internet sites and the European Union has done with its privacy regulations. Increasingly, the twenty-first century is turning into a battle to make the rules. China, a country that traditionally had to follow a rule-book set by others, is going to great lengths to define the regulations for new technologies such as 5G or artificial intelligence. It realizes this will give its national champions a commercial advantage. But more importantly, it can devise global rules that are compatible with its own interests and values.
7. *Independence-seeking*. If many powers are trying to weaponize their links with others, the best defence can be to minimize your dependence on them in order to free yourself from external manipulation. The USA has tried to do this with global energy markets, just as China is now doing with semiconductors and computer chips.

WINNERS, LOSERS AND THINKERS

Every connection between nations is part of a new map of power. A great power can become even greater by controlling its links to others. It can use regulations and set standards. It can manipulate financial or energy flows. It can restrict access to niche products or supply chains. It can build social media platforms or set search engine standards. It can even try to interfere with elections in other countries. Each power wants to take advantage of its unique position in the topography of our networked world to build spheres of influence.

But each power also brings a distinct philosophy and worldview, etched into its consciousness by the forces of history and geography. In that sense the twenty-first century will be as much defined by the clash of our ideas about connectivity as by the manipulation of the ties that bind us together.

For at least the next two decades, powers such as Turkey, Russia, Saudi Arabia, Iran or India will not be strong enough to set the global terms of competition. There are only three blocs

armed with enough connections, money and institutional power to weaponize the whole system: the United States of America, China and the European Union. We're not far off George Orwell's dystopian vision of a world split between Oceania, Eurasia and Eastasia. It is to them that we will turn in the next chapter.

CAPTER SEVEN:

Empires of Connectivity

The Pentagon is sometimes compared to a city within a city, but to a European accustomed to a smaller scale, it might seem more like a small country (the Department of Defense's 700,000 staff is bigger than the population of Luxembourg or Malta). Getting into the building is quite a hassle, with multiple document checks, each preceded by compulsory queues and airport-style security scans. But once you are in, you need never leave. The 600,000 square metre complex is filled with restaurants, supermarkets, gyms and shops for all seasons and occasions – from jewellery and chocolate to videos and pharmacies.

One person who seemed particularly reluctant to leave was the late Andrew Marshall, the founder and former head of the 'Office of Net Assessment'. First appointed to the role by Richard Nixon in 1973, every subsequent president confirmed him in the role, until he finally retired in 2015 at the age of ninety-four. Marshall was a legendary figure, known affectionately as Yoda within the defence community for his wisdom and creativity as well as his ability to spot and mentor talent. But while the original Yoda had the universally popular Luke Skywalker among his wards, Marshall's star protégés were rather more controversial, including former Vice President Dick Cheney and former Defense Secretary Donald Rumsfeld.

In his long career, Marshall's core speciality was always the future – analysing it and influencing it before others could catch up. He began his work as a nuclear strategist and in the 90s he commissioned a series of studies to define what he christened the 'Revolution in Military Affairs'. The RMA – as it became known – was about harnessing network technology to bring the battlefield into the information age with computers and precision-guided missiles.¹ Marshall was also one of the very first people to start seeing China as America's number one strategic threat – way back in the 1980s when the USA had embarked on a process of détente with a technologically backward and impoverished People's Republic. While successive administrations were working out how to reach out to China and turn it into a 'responsible stakeholder', Marshall's office spent its time organizing war games, studying Beijing's strategic thinking and ultimately planning for a potential conflict against China.

I went to see Mr Marshall in 2013 and was ushered in through a vaulted, steel-reinforced door to his Office of Net Assessment. When he walked in to greet me he was surprisingly spry for a man in his nineties. His only concession to his advanced years was wearing a fleece on top of his shirt and tie. He spoke slowly and was not afraid of silence, pausing after each point to let his ideas sink in.

What struck me the most in our meeting was how little he talked about weapons and technology – and how much he was worrying about the gap between Chinese and American ways of thinking. It is, in fact, no exaggeration to say that Marshall had become obsessed with the ways that the Chinese thought about our connected world. He told me that he encouraged policymakers in the Pentagon to read texts on ‘eastern ways of thinking’ such as the French philosopher François Jullien’s *The Propensity of Things*, *The Geography of Thought* by cognitive psychologist Richard Nisbett, and even books on Chinese medicine such as *The Web That Has No Weaver*.

He talked with fascination about an experiment by Richard Nisbett where Americans and Chinese were instructed to look at a fish tank. The Americans looked straight at the fish, following where they were swimming and how big they were. The Chinese, on the other hand, began with the shape of the tank, the stones and plants within it, and used their reading of the environment to understand what options were open to the fish. It is amazing, Marshall told me, to see the world through Chinese eyes. We in the West, he argued, are so focused on individual actions that we fail to look at the networks of connections that lie in the background. The Chinese, on the other hand, start by trying to understand the way these things shape the world and only see individual action as making a difference on the margins.

His Chinese opposite numbers would be flattered to hear of his interest: the fascination was mutual. In 2012, Major General Chen Zhou, the main author of four Chinese defence white papers, claimed that Marshall was the most important figure in changing Chinese defence thinking in the 1990s and 2000s: ‘We studied the Revolution in Military Affairs exhaustively,’ he claimed. ‘Our great hero was Andy Marshall in the Pentagon. We translated every word he wrote.’²

I already could see, back in 2013, that these two countries were preparing for a new bipolar age. Both Marshall and Chen were products of the Cold War and their mental models came from a period of superpower confrontation. Their work was early preparation for what they saw as the next Cold War – splitting the world between China and America. And they fully expected that, as the world split back into two, the West which had been divided by the Iraq War and the financial crisis of 2008 would reunite. Europe would fall back into line as a junior partner in the free world.

But while the Americans and Chinese were examining their respective ways of understanding the power of technology – and its implications for world order – with mutual fascination, the Europeans set off in a different direction. Their foreign policy makers were not paying much attention either to Andrew Marshall or Major Zhou. The European Commission in Brussels had an alternative vision about its future relationship with China and America, and a completely different notion about the power of networks and their role in our future.

Influenced by the turbulent recent history of the continent, Europe had come to see networks as bridges between countries that allowed the world to avoid war, rather than weapons in a great-power confrontation. They thought of themselves as internationalists who wanted to build a strategic partnership with China alongside their alliance with the United States. It was obvious that even as the USA and China moved from a relationship of complementarity to one of greater competition, Europe would not neatly fit into the American camp. When I left Marshall’s office, I was struck by the paradox that as we entered a period of total connectivity, the three major powers differed in the way they saw connectivity itself. And all around them is a fourth world of countries – including some the size of continents – that also want to plough their own furrows rather than play by someone else’s rules.

Rather than a world split between authoritarianism and the free world, we will see the geopolitics of the twenty-first century play out as a battle between the three connectivity hyper-powers, and other states who navigate between them in a 'fourth world'. Each of these empires of connectivity has different weapons in its armoury. They also have very different philosophies. And each is currently going through a major process of evolution.

How do we reconcile the fact that great powers are becoming more similar with the fact that their different philosophies of connectivity are in conflict? The great powers are slowly coming together through the mimetic bind that I described earlier – but they are coming from very different places. As a result they are often, to borrow George Bernard Shaw's famous quip about America and England, 'divided by a common language': meaning quite different things when they use the same words. It is worth looking at each in turn, before seeing how our global order will be defined by the battle between these empires of connectivity. In the first chapter we looked at how the growing connections provided an opportunity for them to compete in new ways, how they were mirroring each other's techniques and how this was fuelling a connectivity security dilemma. In this chapter we can see how their emerging philosophies of connectivity relate to one another.

WASHINGTON: GATEKEEPER POWER

Traditionally American thinking about connectivity has been shaped by different tribes: the libertarian founders of the internet; the monopolistic entrepreneurs of Silicon Valley; the watchful eyes of the intelligence community; the Treasury's 'warriors in grey suits'; liberal internationalists in the State Department; as well as securocrats in the Pentagon like Andy Marshall.

These groups did not agree on everything but over time they settled on a modus operandi governed by some basic principles. They had universal ambitions and promoted a single and open internet which reconciled the idealism of the liberal internationalists, the expansive vision of the entrepreneurs and the power ambitions of the spies and geopolitical power-brokers. They also tended to be against heavy government regulation, whether because of their libertarian political instincts, their commercial goals or their fear of state capture by the likes of China and Russia. They would talk about supporting a liberal international order based on open societies, open governments, and an open international system. This philosophical approach follows squarely in the tradition of American liberal internationalism that bequeathed the world the Bretton Woods institutions, NATO and America's network of security alliances as well as its support for an 'open internet' and China's membership of the WTO. America's predilection for open markets and open societies resembled the UK's preferences during its hegemonic period in the nineteenth century. Because American companies enjoy pre-eminence in so many areas, openness was massively in their interest. And during the Cold War and post-Cold War periods, open societies used to be American allies – almost by default.

But even while talking about an open international system, Washington has systematically exploited its position at the heart of global networks to push forward two of the most effective tools we explored in the last chapter: gatekeeping and data-mining. The USA has used its privileged position as a hub to limit or threaten to penalize others. We saw in the last chapter that, after 9/11, officials in the US Treasury started exploring how Washington could leverage the ubiquity of the dollar and US dominance of the international financial system to target the financing of terrorism. By threatening to cut firms off from the dollar-based system they developed a stranglehold on the global banking sector. Even more dramatic is the way that the

cover of the global war on terror allowed the USA to co-opt global communications networks as surveillance mechanisms.

But in 2016 America's attitude to connectivity changed dramatically. Watching an election that he did not participate in, Joseph Biden – along with other Democrats – saw how America's open society and neoliberal philosophy in its outlook towards the rest of the world had left it vulnerable to Russian electoral interference and Chinese economic coercion, which Donald Trump was able to exploit.³ And that is why – even as they try to rejoin the world in dramatic ways – they are rethinking their approach to connectivity. While Biden talks about defending an open international order, he wants more protection for America from external interference. And he wants to have a more instrumental approach to global connectivity.

Team Biden rejects Trump's crude desire to put 'America First'. But Biden has claimed that his foreign policy will need to work for the middle class – and to protect them from the ravages of globalization.⁴ The Democrats do not support a wholesale 'decoupling' of the American and Chinese economies – but they do want to make sure that trade talks keep jobs in the USA and defend America's middle classes rather than the profit margins of corporations.⁵ This will involve developing a much stronger industrial policy which brings production for many key products back to the USA and its allies so that it is not open to being blackmailed by unfriendly countries like China (interestingly one of the very few papers the Biden campaign published before the election was on rethinking American supply chains).⁶

Biden's goal is to ramp up competition with China – but to do it in a way that avoids both a catastrophic hot war or the full decoupling of a cold war.⁷ He does not contest Trump's notion that the Chinese were exploiting the open networked system against the USA – and that the US should respond in kind. But unlike the Republicans, he wants to do this by working closely with allies across Asia and Europe.

One of the drivers of this is a reassessment of US power. There was a big debate in the Trump administration too about whether the US had enough leverage alone to make China change its approach. The assessment of Team Biden is that the Trump experiment showed the limits of unilateralism. They think that only collective pressure and collective efforts to set rules will work in the longer term. The crux of their approach is a move from openness and integration with the whole world to a deeper integration and coordination only with trusted friends. For Biden's team this is seen as necessary rather than optional in the quest to preserve America's power and its technological edge. They have discovered that they will not be able to set global standards on 5G or semiconductors if they pursue a US-only approach.

Biden's team is also likely to be more open to the regulation of the digital sphere. Russia's interference in the 2016 presidential elections and the proliferation of fake news makes this inevitable. There are also geopolitical reasons for thinking again. One of the best ways of pushing back against Chinese expansionism and of recruiting allies in Europe will be to raise issues of privacy and regulation in the hope that China's big technology players – who are hand in glove with the Communist Party and Chinese state – will fail to meet the requisite standards of independence. It is probable that a Biden administration will subtly reorientate the core strategies advanced during the Bush and Obama administrations to a more fragmented and multipolar world.

The Biden administration has signalled it wants to get back into the order-building business. However, this new 'system-building' is likely to be among a 'like-minded' group of democratic countries rather than through global institutions where China and Russia are veto

players. This could lead to a greater fragmentation of the global system into rival friendship groupings.

BEIJING: RELATIONAL POWER

The China Foreign Affairs University was founded in 1955 by Mao's right-hand man, the then foreign minister Zhou Enlai, to train diplomats in Communist ideology and instruct them on how to promote permanent revolution around the world. It was forced to close during the Cultural Revolution but was reopened by Deng Xiaoping in 1990 to train a new generation of diplomats to reach out to the world, rather than transform it. I sometimes go to see the current president of the university, Qin Yaqing, when I travel to Beijing, drinking tea with him in the big formal armchairs of his meeting room or grabbing lunch in the restaurant across the road from his university. He is mild-mannered, with a smooth face and an unusually perfect grasp of English – reflecting his original training as an interpreter.

Qin is a serious thinker rather than a simple party hack. He first made his name in the Chinese academic community with highly regarded translations of the work of Alexander Wendt, one of the founders of a new(ish) school in Western international relations called 'constructivism'. He is much more dovish than most of the foreign policy intellectuals in China and is maybe less influential than some of the more hawkish voices (I have portrayed some of these licensed thinkers in my earlier books *What Does China Think?* and *China 3.0*).⁸ But, in spite of his dovish nature and his detailed study of Western thinking – including as a foreign student at the University of Missouri-Columbia – Qin Yaqing is one of a small number of Chinese scholars who want to emancipate their country from Western thinking by developing a 'Chinese school of international relations' (something he has in common with Yan Xuetong, the hawkish academic we met in Chapter One). In his current role, Qin Yaqing is charged with training up the next generation of Chinese diplomats to sell Xi Jinping's China Dream to the world and to smooth the way for his ambitious Belt and Road Initiative.

Like Andrew Marshall, Qin Yaqing has studied Richard Nisbett's work *The Geography of Thought*. He was particularly struck by a passage which contrasts ancient Chinese with ancient Greek ways of thinking. The Greeks, according to Nisbett, thought of themselves primarily as independent. The core units of society are not groups but individuals. But the Chinese, on the other hand, saw themselves primarily as interdependent. The most important feature of their worldview is the relationship. Society, for them, is a collection of families bound by relationships of loyalty rather than individuals. While the Greeks saw the pursuit of liberty as the highest goal, for the Chinese – whether influenced by Taoism or Confucianism – the most important quest was harmony between these groups.⁹

Qin's thesis is backed up by Zheng Yongnian, a political scientist and informal government adviser who has studied how the internet and globalization have changed Chinese politics. 'The Western notion of the nation state is as a legal society,' he said to me in an interview in early 2021, 'but China is a "relationship society".' In practical terms he thinks this starts with the different circles of the family radiating out from the father. Zheng says that this hierarchical model also extends to the political system. Just look at the architecture of the Beijing ring roads, he says. The centre is the Communist Party HQ on the first ring. Then you have the government on the second ring road. The National People's Congress is on the third ring. The people's consultative committee is on the fourth ring and so on.

Professors Qin and Zheng argue that this Confucian focus on relationships also shapes how China sees our interconnected world – and contrast this with Western perspectives. Zheng

argues that Westerners tend to see international relations in terms of geography. But for China, what matters is not the geographical distance between two countries but how close they are socially or politically. ‘If the political distance is close I will give it more [favourable treatment],’ he says, ‘and put it in a very close ring to me. If I feel it is further I will put it in the third or fourth ring.’ He uses the example of China and Australia, who share a geography but argue a lot – ‘not because of national interests but because they don’t feel they are close to us politically’.

Professor Qin says that the Confucian system also gives the Chinese a different idea of power. Westerners, he argues, see the individual state as the key to international relations. They measure power by comparing the technology, military, economy and institutions of each state. The Chinese, on the other hand, are less focused on the individual states themselves and more on the nature of their relationships to others (although Chinese think-tanks do exhaustively map the ‘comprehensive national power’ of different countries). The most powerful countries are the ones with the most links to other states, and those most central to the system. For Confucians the way you should treat other actors in the world depends on how much loyalty they show to you. Rather than trying to convert others to your values and your way of life, you should attempt to find ways of mutual coexistence.¹⁰ The Confucian system depends on the exchange of favours (*renqing* – 人情) and punishments rather than on the rule of law.¹¹ It is this Confucian system that bound Koreans, Japanese and Mongols into tributary relationships with a dominant China during the Ming dynasty (AD 1368–1644).

Many see it as the model inspiring the Chinese President Xi Jinping as he seeks to develop the Belt and Road Initiative, a practical vision for recreating the *Tianxia* (天下), a community of common destiny centred around China. Xi Jinping thinks a lot about his role in history. And this is leading to a big rethink about how China deals with globalization and its dark side. In 2020 Xi Jinping launched a new vision under the slogan of the ‘dual circulation economy’.¹² Zheng Yongnian was one of nine hand-picked scholars invited to a symposium with the Chinese president to discuss the idea, held in August 2020 in the Communist Party headquarters in Zhongnanhai.

Behind the technical-sounding phrase lies an idea that could change the global economic order. Instead of operating as a single economy that is linked to the world through trade and investment, China is fashioning itself into a bifurcated economy. One realm (‘external circulation’) will remain in contact with the rest of the world, but it will gradually be overshadowed by another one (‘internal circulation’) that will cultivate domestic demand, capital, and ideas. The purpose of dual circulation is to make China more self-reliant. After previously basing China’s development on export-led growth, policymakers are trying to diversify the country’s supply chains so that it can access technology and know-how without being bullied by the United States in some of the ways we examined in Chapter One. In doing so, China will also seek to make other countries more dependent on it, thereby converting its external economic links into global political power.

As part of this rethinking of economic links Xi Jinping has expounded the concept of ‘big security’ (*da an* – 大安). Rather than just worrying about invading armies and navies, China now needs to protect itself from the dangers of interdependence being manipulated in almost every area of national life, from financial ties and trade to telecoms and newspapers.¹³ His mission is to reduce China’s exposure to globalization. Zheng Yongnian explained the significance of this: ‘Everything can become a security issue because the two countries are too interdependent. China will put more energy in its own technology development. Some degree of decoupling is inevitable and good for the relationship.’ Some of the most eye-

catching initiatives are ‘Made in China 2025’ and ‘China Standards 2035’, which are designed to allow the country to become 70 per cent self-sufficient in the most important technologies of the future. Xi Jinping has also tried to reduce China’s dependence on the dollar by diversifying Chinese investments and experimenting with a digital renminbi (RMB) as well as a new payment system that avoids connections with the US currency.

In the summer of 2020 the Chinese authorities approached some of the biggest foreign companies in China, asking them to prepare to send a senior representative for a top secret, small, closed-door meeting on China’s new economic strategy with a senior official at an undisclosed time and location. As so often in China, the form of the event echoed its content. According to two people with direct knowledge of the matter who insisted on anonymity to discuss it with me, the organizers asked companies to send only ethnically Chinese representatives, a perfect metaphor for a vision that sees Beijing trying increasingly to develop its own technologies, its own energy sources and to rely on its own consumption rather than relying on foreigners. Under dual circulation, Beijing’s new rules on data, research and development, and standards will force prominent Western companies to acquire Chinese characteristics, unless they withdraw from China altogether. As one well-placed private-sector observer put it to me, ‘China’s idea is that if companies like Daimler or Volkswagen want to work in China, they will have to move services, R&D, and new products there. Beijing hopes that dual circulation will transform them into Chinese companies.’

Xi Jinping’s approach is extreme but it echoes the philosophy of previous Communist leaders – from Deng Xiaoping onwards – who wanted to balance the economic opportunity of opening up to the West with the risk of its opening China up to regime change or blackmail. These considerations led to the cautious process of opening and reform being married with policies such as capital controls, the Great Firewall and moves to promote indigenous innovation.

As well as taking defensive action to stop foreigners changing China, Xi Jinping also sees interdependence as a potential source of leverage over other countries due to their own vulnerabilities.¹⁴ The Chinese government and scholars are carefully studying the American debate on ‘decoupling’ and are exploring how to respond in kind. When China was less powerful it spent a lot of time thinking about how to overcome its weakness to challenge the USA through America’s networks. The most detailed agenda for an aggressive approach to connectivity came in a book called *Unrestricted Warfare*, which shot into the Chinese bestseller lists in 2001. The book sets out a series of strategies for ‘non-military warfare’, arguing that ‘soldiers do not have the monopoly on war’ (see [Table One](#) overleaf).

Xi Jinping is looking at how to weaponize connectivity from a position of strength rather than weakness. He is using China’s huge domestic market to bully other countries into following Beijing’s lead. His officials have threatened to withhold medical supplies, close markets and withdraw investments from countries that do not comply with China’s demands. And Xi Jinping certainly seems to be following ancient Chinese thought in the implementation of the Belt and Road Initiative. His master plan seems to be underpinned by a desire to turn China into the central power in the world – the Middle Kingdom! The Belt and Road is based around linking China with the rest of the world – and showing goodwill to countries that show sufficient deference to Beijing. It involves flexible relationships which are not overly constrained by rules or institutions. Even though China’s trade and economic power are leading to ever-growing links with the rest of the world, its most innovative geo-economic tool has been infrastructure, physical, virtual and institutional. China today is using

connectivity more frequently, more assertively, and in a more diverse fashion than ever before.

TABLE ONE: The many facets of unrestricted warfare

MILITARY	TRANS-MILITARY	NON-MILITARY
Atomic warfare	Diplomatic warfare	Financial warfare
Conventional warfare	Network warfare	Trade warfare
Bio-chemical warfare	Intelligence warfare	Resources warfare
Ecological warfare	Psychological warfare	Economic aid warfare
Space warfare	Tactical warfare	Regulatory warfare
Electronic warfare	Smuggling warfare	Sanction warfare
Guerrilla warfare	Drug warfare	Media warfare
Terrorist warfare	Virtual warfare (deterrence)	Ideological warfare

Source: Qiao Liang and Wang Xiangsui, *Unrestricted Warfare* (Beijing: PLA Literature and Arts Publishing House, 1999)

BRUSSELS: RULE-MAKER

You may not have heard of Margrethe Vestager but she has been hailed as a saviour of the connected world. As the European Union's Competition Commissioner, she is one of the few with the power and confidence to take on the digital giants that have produced our networked world, companies that have grown larger than many countries. Over the last few years, she has fined Google €8.2 billion for including Chrome on its Android browser and trying to shut other players out of online advertising. She fined Apple a record €13 billion for tax avoidance (plus a further €1.2 billion in interest). She went on to introduce a new digital rule-book – clunkily named the General Directive on Privacy Regulation (GDPR) – which forced companies to obtain explicit consent from consumers before gathering and monetizing their data. In 2019, Vestager set her sights on Facebook and promised to investigate its new digital currency, Diem (formally known as Libra).[15](#)

Not everyone agrees with the detail of each policy – in fact the European Court of Justice recently overturned her landmark decision to fine Apple – but it is hard not to be impressed by her audacity. Most governments treat the digital revolution like the weather – something you need to adapt to – but her ambition is nothing less than to control the seasons.

Vestager is a unique figure. She managed to catapult herself into one of the most powerful jobs in the world in spite of coming from one of the smallest parties in one of Europe's smallest countries (she was the inspiration for the prime minister in the acclaimed Danish TV show *Borgen*). She is the internet's supreme tech regulator but she refuses to use Google, whose privacy policies she disapproves of (she opts for the European DuckDuckGo instead). She is a believer in the potential of the technological revolution, but she wants politics to shape it. She is known as a pragmatist, but she is also a stubborn defender of moral rectitude. Vestager's ethics are no doubt influenced by her upbringing by two Lutheran pastors. But though Vestager's biography is unique, her attitude to networks and rules is not. The Vestager agenda is, in fact, a perfect expression of the European Union's attitude to connectivity.

The European Union has done as much as any other power to promote the emergence of a networked world. Although European politicians often evoke the mirage of a country called

Europe – complete with flag, anthem, currency, and passports – the EU is no super-state. It is a decentralized network which allows countries to have the best of both worlds – a continent-sized market and currency but tailored politics at a national level. The EU’s different centres of power, or ‘nodes’, are member states, European institutions and other actors, which share power horizontally, rather than vertically according to the rigidly pre-defined blueprint of a constitution. They are all interdependent, and though they carry different weight on different issues, no node, however powerful, can afford to ignore the others. An open network system like the EU wouldn’t survive for very long if it were purely about instrumental cooperation – its founders recognized the need to have clear rules and norms that govern what everyone is allowed to do.

This is one of the paradoxes the EU faces. On the one hand it agrees passionately with Adam Smith that trade and interdependence tame nationalism and militarism. But, at the same time, once you break down the barriers between yourself and others, you need to make sure that they do not abuse their access. So the more openness you have to others, the more common rules you need. When new countries want to join the EU, they need to integrate over 80,000 pages of law – governing everything from gay rights and the death penalty to lawnmower sound emissions and food safety – into domestic legislation. This is the EU’s operating system, otherwise known as the ‘*acquis communautaire*’.

The EU does not just abide by this operating system itself – it has tried to make anyone else who comes into contact with its network follow the same rules. This export of regulations has been extended into the EU’s dealings with outsiders and there are values clauses in every single trade deal and association agreement it signs. Because the EU has the world’s largest single market, even multinational companies depend on access to the region.¹⁶ Europe uses this economic power to put forward its idea of how society should be organized – threatening to exclude companies that do not live up to its norms.

For example, in its competition with China, Brussels is not just trying to get access to the China market, it is trying to defend Europe’s social model which includes higher wages and social protection. In environmental and food protection, Europe is much more risk averse than other powers. It has adopted a ‘precautionary principle’ of assuming the worst will happen and trying to pre-empt the problem, rather than clearing up the mess afterwards. This is the philosophy that lies behind the EU’s ban on genetically modified organisms (GMOs) and its prohibition of chlorinated chicken and beef with hormones, which has put it at loggerheads with the United States. The EU also has norms that protect cultural diversity and the role of agriculture in the stewardship of the countryside. The so-called ‘Brussels effect’ has made the EU the world’s standard-setter in many areas, including computer software, children’s toys, cosmetics, household appliances and food safety.¹⁷

Margrethe Vestager has been following a pattern of behaviour set by her predecessors, but she has drawn extra attention because she started to use these powers on an industrial scale. When I spoke to Peter Thiel in California, he confided to me that many tech companies in Silicon Valley fear Brussels more than Washington. ‘They understand Washington and know how to influence it,’ he explained, ‘but they don’t understand how to influence the EU although they fear that bad things will come from there.’

Vestager’s ability to impose European preferences on the rest of the world stems from the EU’s unusual structure and its dominant role in global trade. But this imposition is only possible because it adheres to them within the club. This kind of regulatory power is less costly, more durable, more deployable, and less easily undermined by competitors than more

traditional foreign policy tools. We should not forget that the European goal in promoting global networks was not, first and foremost, to develop a new instrument of power. It has always been part of a vision of a world that transcends power politics. Europeans have rejected the idea of *realpolitik* and military power as a way of solving disputes – trying to move towards a situation where disputes are resolved through the courts. They believe in the civilizing power of trade as a means of avoiding war. And though they believe in market economies, they do not believe in market societies and are trying to protect their social models, cultures and environment from market forces. Above all they hope that the networked world can be governed by an ‘operating system’ that values ‘shared sovereignty’ over national sovereignty.¹⁸

THE FOURTH WORLD

Most of the world’s population do not live in the USA, China or the European Union. And many are acutely aware of the ambivalent effects of connectivity. On the one hand, many states have benefited from it. They have seen their economies surge as a result of globalization and the opportunity of being tied into the supply chains of the three great economic motors: the USA, China and the European Union. The price of raw materials – from oil and gas to copper and aluminium and cobalt and lithium – has risen rapidly. New inflows of investment have become available. And some citizens have had the chance to follow their dreams with migration. At the same time, many of the same countries remember from colonial times the exploitation, loss of control and humiliation of being turned into the periphery of someone else’s empire. Their big fear today is once again having to follow diktats from the three big empires of connectivity – and being forced to choose between them rather than being sovereign over their own destiny.

That being said, the new world provides medium-sized powers with more options in geopolitics than in the conventional twentieth-century balance of power, where they were outclassed by the superior technology and firepower of the superpowers. This has led to various niche strategies.

Russia has turned itself into a pioneer of societal disruption. Its recent foreign policy – including gas outages, sanctions, worker expulsions, cyber attacks, disinformation campaigns and efforts to gridlock Western-led international organizations from the UN to the Organization for Security and Co-operation in Europe (OSCE) – has successfully shaped the behaviour of its neighbours and other powers. In an age of mass migration, Turkey has used its ability to control flows of people into Europe as a source of power, demanding the lifting of visa restrictions and financial aid to mitigate the burden of hosting more than 3 million Syrians. Even with low oil prices, Saudi Arabia leverages the 10 million barrels of oil it extracts every day, accepting short-term losses in order to shape global markets to its advantage (and to the disadvantage of rivals such as Iran, Russia or US shale companies). What’s more, it has been willing to invest billions of petro-dollars in support of its foreign policy goals – supporting counter-revolutionary regimes such as that of Egypt’s General Sisi during the Arab uprisings, and waging a proxy war against Iran in Yemen. Conscious of the expiry date on its oil advantage, Saudi Arabia is now trying to lead the way to a post-carbon future and cement its role long-term as the leading economic power in the Middle East. Iran mirrors Saudi ambitions in its links to the Shia communities spread across the region, coupled with its support for militias such as Hamas, Hezbollah and the Houthis, which wage wars on its behalf. It has also been willing to disrupt global energy markets by attacking ships in the Strait of Hormuz, and by launching cyber and drone attacks on the Saudi oil giant Aramco to disable its facilities.

As we head into the middle of the century, there will be at least as many Africans as there are Indians or Chinese. Africa is the next frontier of emerging markets, which is why – after decades of being a geopolitical afterthought – every great power is now trying to deepen its engagement with the continent. Europeans and Chinese are battling to sign up African countries to their respective standards on data privacy; while the USA has become more interested in the continent as a way of countering China’s rise to global prominence. But although many of these African countries are set to become important players, the fifty-four nations of Africa are so divided politically that they’re unlikely to be able to exercise collective power at the global level in the foreseeable future. What is more, very few Africans would agree with the idea that the age of globalization has broken down borders. Even wealthy Africans with prestigious jobs complain that getting visas to come to Fortress Europe or the United States has become humiliating, and is indeed driving Africa to engage ever more with China. For those less fortunate it is precisely the impossibility of moving legally that creates the threat of large migrant flows, as they risk their lives to come over illegally (and then stay in their countries of arrival) rather than moving back and forth in a regulated way. The Western perception that this has been the age of movement shows how invisible these realities have been to policy-makers.

In the Pacific Rim, we can see how Japan, Korea, Australia and ASEAN all try to maintain economic ties with China while hedging militarily with the United States of America. Many of these countries have been pioneers in recalibrating their interdependence and cutting China out of the most sensitive parts of their infrastructure such as 5G, in order to prevent the Chinese from capturing their data. They have also been actively trying to work together and forge much closer relationships with powers outside their neighbourhood in order to increase their freedom of action.

The most important open question in the fourth world is probably India, an ancient civilization with vast ambitions for the modern era. It has the potential to become a pole of its own, but its attitude so far has been defensive rather than strategic. It is also no surprise that, after its traumatic history of imperialism, the debate about ‘data colonialism’ is most lively in India. Delhi’s technological prowess in key sectors and its huge market could make it an important player in setting the norms for our technological future. And its diaspora of 20 million gives it a reach into every other country in the world. India’s decision in 2020 to ban over two hundred Chinese apps from Indian networks and to restrict Chinese investments in Indian companies sent shockwaves through the Chinese system, as India is the only market with the potential to become as big as those of the USA, EU and China itself.¹⁹ If China can sell its technology products in India, it can still benefit from huge consumer markets, even if excluded from the West.

There is an active debate now within India about whether to follow China in shutting out foreign suppliers and aim for autonomy and localization. But so far there has been much less focus on developing a ‘Hindu philosophy of connectivity’ that could rival the international reach of the USA, China and Europe. Instead the debates about connectivity have tended to be more defensive. It is only a decade since the Indian government began to rethink its ban on building roads and railways up to its border with China. After the war between the two Asian giants in 1962 there was a fear that transport links might be used by Chinese troops to make incursions into Indian territory (a fear that was revived in 2020 with some violent border clashes that saw twenty soldiers killed and dozens injured). At the same time there is much concern that the Chinese Belt and Road Initiative will allow Beijing to ‘encircle’ India and rewire its neighbourhood in ways that are inimical to Indian interests.

TABLE TWO: One planet, three visions of connectivity

	EU	CHINA	USA
PHILOSOPHY	Normative	Relational	Instrumental
STRATEGIES	Gatekeeper (membership) and rule-making	Centrality (centrality to the system and benefits)	Gatekeeper (choke-point) and data-mining (surveillance)
POWER INDICATOR	Wellbeing of EU consumers and companies	Number of ties and centrality	Capacity (GDP, military, tech)
CURRENCY	Rules	Relationships	Resources
PRECAUTIONARY PRINCIPLES	Banning GMOs	Pre-crime arrests	Preventive war

Instead of moving into a bipolar world or the ungovernable chaos of a non-polar one, what we are seeing emerge is a ‘four-world order’. Three empires of connectivity have fundamentally different ideas about how to organize the planet, while the remaining countries – amounting to a fourth world – are forced to navigate between them.

The USA is increasingly decoupling from China and using its centrality in the system to export its foreign policy preferences. One of the key aspects of the US policy of China containment is the idea of the Economic Prosperity Network: in short, rebuilding a separate world for ‘like-minded’ democratic and market economies to trade, invest, transfer data and produce value chains under their own rules. Because the USA has lost faith in the prospect of bringing China back towards market (or democratic) convergence, it wants to rebuild a parallel universe from which Beijing is excluded.

The American rethink is being encouraged by Beijing’s ‘Made in China 2025’ policy and its Belt and Road Initiative. These policies are designed to catch up with American development and bypass the USA by building links with the rest of the world. China used to seek access to Western-centric networks while preserving its sovereignty. But today, its main goal is building new networks with itself at the centre.

At the same time, the European Union is still trying to defend universal institutions like the WTO, IMF and World Bank, but increasingly having to act on its own behalf as these become gridlocked by great-power competition. The EU is also moving from a situation where it had a near-religious attachment to promoting interdependence in a globalizing world towards one where it is more interested in asserting its own sovereignty in a more contested world order.

Superficially the ‘fourth world’ is in a similar predicament to the ‘Non-Aligned Movement’ during the Cold War, but its prospects are more promising. The ‘four-world order’ is characterized by high levels of contact between the different blocs – not just through the formal institutions but in the intense economic exchange between different countries. Where many of the so-called ‘non-aligned’ countries found themselves stranded during the Cold War, today they will try to take advantage of benefits from all three orders, although all of the powers will attempt to make them pick a side.

The key terrains of this new world include all the battlegrounds described in Chapter Five: the economy, infrastructure, technology, migration, and international law. Our three great powers have developed a new armoury of weapons and defences. In the place of tanks and planes

they now use regulation and standards, transit control, supply chains, propaganda, sanctions, encryption, monetary policy and financial systems. But it is not just their interests that divide them; they look at the connected world through different eyes.

When Washington looks out at the world it sees hubs in the network map – exploring where it can use them for surveillance or sanctions. When Beijing looks at the world, it looks at the ties – exploring how it can connect other countries to its market and use these infrastructure links to bind them into a Chinese sphere of influence. And when Brussels looks at the world it looks at the individual nodes – or more specifically the welfare of European consumers and companies – and thinks about what norms or rules will best serve their interests.

Even when they use the same language they can mean different things. Take the idea of the precautionary principle. In Chinese hands, this often means using artificial intelligence to spot suspicious behaviour by individuals and arresting them *before* they commit a crime. In America, it often means ‘preventive strikes’ with drones against terrorists who threaten American security. And in Europe it might mean abolishing genetically modified organisms.

Looking forward, some of the biggest dangers will come when these different systems clash in the ‘four-world order’. Xi Jinping is not the only leader who has developed a notion of ‘big security’ for the interdependent age – the USA and Europe have as well. And these ‘big’ concepts of security are leading the jurisdiction of these players to impinge on other great powers. For example, the USA has been using the global reach of the dollar to impose its Iran policies on other players by introducing ‘secondary sanctions’ on companies that continue to trade with the Islamic Republic. This forced big European companies like Total and Airbus to withdraw from billion-euro contracts with Tehran – even though the European governments in the countries where they are domiciled were keen for these deals to proceed. The European equivalent has been imposing its rules on data privacy and competition policy on American and Russian companies by making their access to European markets conditional on living up to EU norms. The Chinese example has been to try to silence opponents of its policies around the world, by threatening to withdraw access to its market. Within China, there is an unspoken deal that companies and citizens can get on with their lives and prosper, as long as they avoid getting involved in politics. Now this deal is being exported to the rest of the world as China threatens foreign governments, sports teams, universities, fashion houses and film production companies with sanctions if they speak out over China’s policies on Hong Kong, Xinjiang, Taiwan, Tibet or the management of Covid-19.

The continuing presence of these three universalist projects signifies that there will be a lot of conflict in future years. In fact, we could see new flashpoints around connectivity in some of the very places that divided the world in previous eras.

One front-line state that has returned in a new form is Belgium, where I spent most of my childhood. The small, flat country has always been the canary in the coal mine of global conflict – from the Napoleonic period to the Second World War, foreign troops have always marched through Belgium when they clashed with each other. And the same is happening today – but today’s conflicts are about global regulations rather than trench warfare. One which we examined earlier was around SWIFT, a financial information service that gives banks access to global financial markets. When the United States took aim at the Iranian economy, one of its first ports of call was to put pressure on SWIFT to cut Iran out of its system. The board of the Belgian-registered company complied – raising enormous questions about European sovereignty. Brussels will continue to be a central front for many other types of regulation – between China, America, and Russia – as well as a player in the future.

Another battleground for connectivity is the Balkans, the combustible region that spawned the First World War. This is where the old empires meet – Russia, China, Turkey, Europe – in a battle for hearts and minds. But the new conflicts between these players are very different from those that divided the great powers a century ago. These days, the EU is competing with Russia and China over access to energy pipelines, rules for getting government contracts and the regulation of their economies.

If the Balkans were the tinder box of the early twentieth century, the Indo-Pacific will likely be the equivalent for the first half of the twenty-first century. Thinkers like Yan Xuetong have warned of a war over Taiwan or some of the atolls and islands in the East and South China Seas. But we could also see competition over small states like Vanuatu, Papua New Guinea or Tonga. What is at stake is not the *Lebensraum* of earlier eras but control over trade routes and connectivity in the globalized world of the twenty-first century.

There is also a new scramble for Africa. In the nineteenth century, all the European empires competed with each other to claim land and resources. And today there is a new frenzy of activity among the great powers to increase their engagement here. The goal today is not only to plunder natural resources, but to tap into the fastest growing economies and markets. From 2010 to 2016 more than 320 embassies were opened in Africa.²⁰ The contest was not just between Europe, China and America but Saudi Arabia, Russia, India and Turkey too. Each of these powers is hoping to sign Africans up to its own rules and standards in battles over data and internet regulation, naval bases, trade routes, and measures to regulate the flow of people.

In future years the big flashpoints in geopolitics are less likely to be about control of the land and the sea. Instead they will be about migration pacts, offshore financial centres, fake news factories, state aid, computer chips, investment protection, and currency wars. As well as fighting to access the flows of our connected world, the ‘four-world order’ will increasingly become a contest to write the rules governing connectivity itself.

footnotes

CHAPTER FIVE: AN ANATOMY OF UNPEACE: HOW GLOBALIZATION WAS TURNED INTO A WEAPON

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