1. Introduction: International stability and human security in 2017

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Global security has deteriorated markedly in the past decade. The number of armed conflicts has increased.¹ There has been prolonged and shocking violence in large parts of the Middle East, Africa and South Asia. Russia's annexation of Crimea in 2014 and support to separatist forces in eastern Ukraine form a focal point of disputation amid a general atmosphere of deepening confrontation between Russia and the West. International transfers of major weapons have increased, and global military spending has stabilized at a high plateau—above the level it stood at during the last years of the cold war.² Equally, the number of states possessing nuclear weapons has increased, although the number of deployed nuclear warheads has continued to decline.³ However the measures that achieved these cuts are under threat.

The introductory chapters to the past two editions of the SIPRI Yearbook remarked on the decline in the conditions for international stability and human security in 2015 and 2016.⁴ Although violent conflicts and incidents proliferated in much of the Middle East and parts of Africa and South Asia, the framework of multilateral international institutions continued to function well, producing both the 2030 Agenda for Sustainable Development and the Paris Agreement on climate change in 2015.⁵ In 2016, while work to implement those global agreements progressed, many global indicators of peace and security continued to regress: military spending, arms transfers and violent conflict all increased. These developments produced discomfiting questions about, for example, whether gains in peaceful relations since the end of the cold war had been reversed, whether the international security architecture is durable, and whether strategic competition between

¹ Sollenberg, M. and Melander, E., 'Patterns of organized violence, 2007–16', *SIPRI Yearbook 2017*, pp. 25–46; and chapter 2, section I, in this volume.

² See Tian, N. et al., 'Trends in world military expenditure, 2016', SIPRI Fact Sheet, Apr. 2017; and chapter 4, section I, in this volume.

³ On the stockpiles of those states possessing nuclear weapons see chapter 6, sections I–IX.

⁴ Smith, D., 'Introduction: International security, armaments and disarmament', *SIPRI Yearbook 2016*, pp. 1–13; and Smith, D., 'Introduction: International security, armaments and disarmament', *SIPRI Yearbook 2017*, pp. 3–20.

⁵ UN General Assembly Resolution 70/1, 'Transforming our world: The 2030 Agenda for Sustainable Development', adopted 25 Sep. 2015, A/RES/70/1, 21 Oct. 2015; and the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC), adopted 12 Dec. 2015, opened for signature 22 Apr. 2016, entered into force 4 Nov. 2016. major powers could impede the management of increased conflict risk.⁶ A further source of unpredictability by the end of 2016 concerned the potential impact of the incoming President of the United States, Donald J. Trump.

In 2017 the previous year's discomfiting questions persisted without receiving decisive answers. While some risks to global stability and human security have intensified, others are being effectively managed. To take an overview of this terrain, this introduction looks first at developments in global stability, focusing on arms control, including the 2017 Treaty on the Prohibition of Nuclear Weapons (TPNW). It moves on to discuss tensions between major powers and then scans some of the world's most pressing issues of human security—focusing on violence, food insecurity and climate change. It concludes with some reflections on prospects for international institutions.

I. Nuclear weapons in international politics

Nuclear arms control

During the cold war, nuclear arms control negotiations were a central feature of Soviet-US detente. When relations deteriorated, arms control stalled and became an irritant. But as change in the Soviet Union unfolded and the cold war ended, arms control and arms reductions made a radical difference on the international scene. On the nuclear front, two Soviet-US treaties set the pace. The 1987 Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles (INF Treaty) eliminated all ground-launched nuclear and conventional missiles (and their launchers) of any range from 500 to 5500 kilometres.7 The 1991 Treaty on the Reduction and Limitation of Strategic Offensive Arms (START I) reduced each side to 6000 strategic nuclear warheads on a maximum of 1600 delivery vehicles (bombers and missiles). Further reductions came from the Presidential Nuclear Initiatives of September and October 1991 that substantially reduced the number of tactical (or battlefield) nuclear weapons on both sides.8 The negotiation of a follow-on treaty took almost two decades. When the USA withdrew from the 1972 Treaty on the Limitation of Anti-Ballistic Missile Systems (ABM Treaty), one of the first achievements of Soviet-US nuclear arms control, Russian reaction was muted in part, perhaps, because of the Treaty on Stra-

⁶ See Mead, W. R., 'The return of geopolitics', *Foreign Affairs*, May/June 2014; and World Economic Forum (WEF), *The Global Risks Report 2016*, 11th edn (WEF: Geneva, 2016), pp. 24–28.

⁷ For a summary and other details of the INF Treaty and other bilateral arms control treaties in this section see annex A, section III, in this volume. On nuclear arms control developments related to the USA and Russia see chapter 7, section II, in this volume.

⁸ 'The Presidential Nuclear Initiatives (PNIs) on tactical nuclear weapons at a glance', Arms Control Association, 1 July 2017.

tegic Offensive Reductions (SORT, Moscow Treaty) agreed the same year.⁹ In 2010 Russia and the USA signed the Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START), limiting each side to 1550 nuclear warheads deployed on 700 strategic delivery systems. Overall, the number of nuclear weapons worldwide fell from 65 000–70 000 at its peak in the mid-1980s to 14 470 at the end of 2017.

Conventional arms control was equally dramatic. The 1990 Treaty on Conventional Armed Forces in Europe (CFE Treaty) capped at equal levels the number of heavy weapons deployed between the Atlantic and the Urals by the then members of both the North Atlantic Treaty Organization (NATO) and the Warsaw Treaty Organization (WTO).¹⁰ The CFE limits continued to apply to the latter states, even after the WTO itself fell apart and many joined NATO.

Other arms control milestones of the period included the 1993 Chemical Weapons Convention (CWC), the 1996 Comprehensive Nuclear-Test-Ban Treaty (CTBT), the 1997 Anti-Personnel Mines (APM) Convention and, somewhat later, the 2008 Convention on Cluster Munitions and the 2014 Arms Trade Treaty.¹¹

Today, the scene is much different. The CTBT has not entered into force.¹² Russia and the USA accuse each other of infringing the INF Treaty and, although New START is being implemented, it expires in February 2021, and there are no current talks on extending or replacing it.¹³

The horizon is also bleak in the case of conventional weapons. Russia suspended its participation in the CFE Treaty in an extended process that concluded in 2015.¹⁴ The core Russian argument was that NATO's enlargement meant that the equity of the original caps had been lost. Furthermore, despite repeated efforts in the Organization for Security and Co-operation in Europe (OSCE), there is no progress in and little active discussion of confidence- and security-building measures.

What some may regard as the biggest recent failure and the biggest recent success of arms control both lie outside the normal negotiating arenas. On

⁹ Kile, S. N., 'Russian–US nuclear arms control', *SIPRI Yearbook 2003*, pp. 600–605.

¹⁰ For a summary and other details of the CFE Treaty see annex A, section II, in this volume.

 $^{^{11}}$ For summaries and other details of these arms control agreements see annex A, section I, in this volume.

¹² Although 166 states have ratified the CTBT, it cannot enter into force until it is ratified by China, Egypt, India, Iran, Israel, North Korea, Pakistan and the USA. See annex A, section I, in this volume.
¹³ Panda, A., 'The uncertain future of the INF Treaty', Backgrounder, Council on Foreign Rela-

¹³ Panda, A., 'The uncertain future of the INF Treaty', Backgrounder, Council on Foreign Relations, 21 Feb. 2018; Russian Ministry of Foreign Affairs, 'The Treaty between the USSR and the US on the Elimination of Their Intermediate-Range and Shorter-Range Missiles (INF Treaty)', 1 Mar. 2018; US Department of State, Bureau of Arms Control, Verification and Compliance, 'INF Treaty: At a glance', Fact sheet, 8 Dec. 2017; and Woolf, A. F., *The New START Treaty: Central Limits and Key Provisions*, Congressional Research Service (CRS) Report for Congress R41219 (US Congress, CRS: Washington, DC, 5 Feb. 2018). See also chapter 7, section II, in this volume.

¹⁴ See Anthony, I., 'A relaunch of conventional arms control in Europe?', *SIPRI Yearbook 2017*, pp. 577.

the one hand, the Democratic People's Republic of Korea (DPRK, or North Korea) has joined the ranks of nuclear weapon-possessing states, despite major international efforts to prevent it. On the other hand, the Joint Comprehensive Plan of Action (JCPOA) agreed with Iran in 2015 has, thus far, been regarded as a success, even though it is under pressure.

Despite sanctions imposed by nine United Nations Security Council resolutions, North Korea's ballistic missile and nuclear weapon development programmes have frustrated a major international non-proliferation effort.¹⁵ North Korea probably has an arsenal of 10–20 deployable nuclear warheads and the capacity to hit regional powers with ballistic missiles.¹⁶ All evidence indicates that it is aiming to have, and will have, nuclear missiles capable of striking targets in the continental USA. Having arrived at this position, North Korea gave some hints of a wish to engage in substantive diplomacy over security issues during a visit by the UN Under Secretary-General for Political Affairs, Jeffrey Feltman, to Pyongyang in December 2017.¹⁷ Then on 1 January 2018 the North Korean leader, Kim Jong Un, made diplomatic overtures to the Republic of Korea (South Korea) in a speech in which he explicitly stated that he now speaks from a position of strength and security.¹⁸ He proposed that the two states take steps to ease the confrontation on the Korean peninsula and improve their relations.

Unlike North Korea, Iran has neither acknowledged having nor ever been proved to have a nuclear weapon development programme. The JCPOA can, nonetheless, be regarded as an arms control measure. In addition to constraining Iran's uranium enrichment programme and potential path towards nuclear weapons until around 2030, the JCPOA introduced increased monitoring and transparency measures that will remain in place long after that date.¹⁹ Despite its successful implementation thus far, the JCPOA began 2018 under pressure from the USA. President Trump threatened to withdraw the USA from the agreement unless what he describes as the deal's 'flaws'— primarily the fact that the JCPOA is not permanent and does not cover Iran's ballistic missile programme—are 'fixed'.²⁰ Iran has rejected any change to the JCPOA.²¹ It may appear paradoxical that, at a time when arms control

²⁰ Holland, S., 'Trump issues ultimatum to "fix" Iran nuclear deal', Reuters, 12 Jan. 2018.

²¹ 'Iran fulfilling nuclear deal commitments: IAEA chief', Reuters, 30 Oct. 2017; and Dixit, A., 'Iran is implementing nuclear-related JCPOA commitments, Director General Amano Tells IAEA

¹⁵ See chapter 7, section IV, in this volume.

¹⁶ See chapter 6, section IX, in this volume.

¹⁷ 'North Korea crisis: UN political chief in rare visit to Pyongyang', BBC News, 5 Dec. 2017; and Krever, M. and Berlinger, J., 'UN official who visited North Korea sees "high risk" of miscalculation', CNN, 15 Dec. 2017.

¹⁸ 'Kim Jong Un's 2018 new year's address', National Committee of North Korea, 1 Jan. 2018.

¹⁹ The JCPOA is a time-bound agreement with different end dates for different parts of the agreement. See Rauf, T., 'Resolving concerns about Iran's nuclear programme', *SIPRI Yearbook 2016*, pp. 673–88; Rauf, T., 'Implementation of the Joint Comprehensive Plan of Action in Iran', *SIPRI Yearbook 2017*, pp. 505–10; and chapter 7, section V, in this volume.

seems a relatively weak instrument for enhancing global security, one of its achievements—the JCPOA—is undermined by one of its parties for reasons extraneous to it.

The nuclear weapon 'ban': Decisive moment or distraction?

Despite the post-cold war reductions in the global nuclear weapon stockpile, impatience at the retention of nuclear weapons by a handful of states and their continued prominence in military doctrines has been steadily growing for more than a decade among many non-nuclear weapon states (NNWS). An important bargain is central to the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (Non-Proliferation Treaty, NPT): while the NNWS agreed that they would not seek to obtain nuclear weapons, the nuclear weapon states (NWS) agreed under Article VI to take steps to divest themselves of their nuclear weapons.²² However, major reductions in Russian and US arsenals have not led to signs of readiness for the complete elimination of nuclear arms, except in occasional rhetoric such as the speech made by US President Barack Obama in Prague in 2009.²³ More tersely, President Trump has reiterated the dream of a nuclear-free world but, in the meantime-like his predecessor in the White House and like the leaders of the other NWShe has opted to remain energetically engaged in the development of nuclear weapons.²⁴ All the NWS are modernizing their nuclear weapons and their delivery systems and related infrastructure, as well as developing or deploying new weapon systems.25

The frustration of the NNWS over the continued possession of nuclear weapons by the NWS was clearly visible at the 2015 NPT Review Conference. There were stark divisions over disarmament. A major issue of contention was the failure to follow through on the plan agreed at the 2010 Review Conference to convene a conference on the establishment of a zone free of weapons of mass destruction in the Middle East. Divisions between the NWS (together with their allies) and the NNWS are in some cases so sharp that the next Review Conference, in 2020, has the potential to be a critical moment for the NPT.

While the slowly progressing crisis of the NPT might not be apparent to most non-experts, public anxieties have been heightened in recent years

²⁵ See chapter 6 in this volume.

Board', International Atomic Energy Agency (IAEA), 5 Mar. 2018.

²² For a summary and other details of the NPT see annex A, section I, in this volume. According to the NPT, only states that manufactured and exploded a nuclear device prior to 1 Jan. 1967 are legally recognized as NWS. By this definition, there are 5 NWS: China, France, Russia, the UK and the USA. The other nuclear weapon-possessing states fall outside this definition of NWS.

²³ White House, Office of the Press Secretary, Remarks by President Barack Obama in Prague as Delivered, 5 Apr. 2009.

²⁴ Holland, S., 'Trump wants to make sure US arsenal "at top of the pack", Reuters, 23 Feb. 2017.

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by the increased salience of nuclear risk. In a symbolic expression of the perception of global risk, in early 2018 the Bulletin of the Atomic Scientists moved its Doomsday Clock to 'two minutes to midnight', the closest to 'midnight' that it has been since 1959.26 While that assessment is informed by more issues than the risk of nuclear war-climate change, most notably-and might in any case be questioned and nuanced in debate, it reflects an apparently growing public concern.27

In the context of these combined developments it is arguably no surprise that an opposing trend has gained growing support. The background lies in a humanitarian perspective on nuclear weapons. While the idea of applying the perspective of international humanitarian law to nuclear weapons had been advocated previously by the International Committee of the Red Cross, it was first linked to the NPT at the 2010 Review Conference. This led to a series of three intergovernmental conferences (in Oslo in 2013, in Navarit, Mexico, in 2014 and in Vienna in 2014) that highlighted the catastrophic consequences of the use of nuclear weapons and the risk of unintentional use. The Vienna conference also produced an Austrian-sponsored 'humanitarian pledge' that called for international cooperation 'to fill the legal gap for the prohibition and elimination of nuclear weapons'.²⁸ This approach, supported by civil society movements as well as many NNWS, was taken up in the UN. with a working group set up at the end of 2015 to 'address concrete effective legal measures, legal provisions and norms that will need to be concluded to attain and maintain a world without nuclear weapons'.²⁹ It produced agreement that a prohibition treaty, even without the nuclear weapon-possessing states, was the best way forward.³⁰ In July 2017 the Treaty on the Prohibition of Nuclear Weapons was adopted by a UN conference, supported by the votes of 122 NNWS. Fifty states signed it on the day it was opened for signature.³¹

The TPNW is the first multilateral treaty to clearly define the possession, use or threatened use of nuclear weapons as illegal under international law. From early on in the international discussions that led to its drafting

²⁶ Science and Security Board, 'It is now two minutes to midnight: 2018 Doomsday Clock statement', Bulletin of the Atomic Scientists, 25 Jan. 2018. The clock was set at 2 minutes to midnight in 1953 and remained at that time until 1960, when it was moved to 7 minutes from midnight. 'Timeline', Bulletin of the Atomic Scientists.

²⁷ See e.g. Savitsky, S., '82% of Americans fear nuclear war with North Korea', Axios, 11 Aug. 2017; Murphy, K., 'Australians fear North Korea standoff will lead to war-Guardian Essential poll', The Guardian, 9 Oct. 2017; and Badham, V., 'Fear, anxiety and sleepless nights: The cold war terrors have returned', The Guardian, 21 Apr. 2017.

²⁸ UN General Assembly Resolution 70/48, 'Humanitarian pledge for the prohibition and elimination of nuclear weapons', adopted 7 Dec. 2015, A/RES/70/48, 11 Dec. 2015.

²⁹ UN General Assembly Resolution 70/33, 'Taking forward multilateral nuclear disarmament negotiations', adopted 7 Dec. 2015, A/RES/70/33, 11 Dec. 2015, para. 2. ³⁰ International Campaign to Abolish Nuclear Weapons (ICAN), 'Majority of UN members

declare intention to negotiate ban on nuclear weapons in 2017', Media release, 19 Aug. 2016.

³¹ For a summary and other details of the TPNW see annex A, section I, in this volume. On the negotiation of the treaty see chapter 7, section I, in this volume.

and adoption, the aim was to develop an instrument to stigmatize nuclear weapons as a prelude to banning and eliminating them.³² The logic is that successfully stigmatizing nuclear weapons will eventually compel states 'to take urgent action on disarmament'.³³

It is likewise no surprise that there has been considerable opposition to the TPNW and the effort at stigmatization. France, the United Kingdom and the USA issued a joint statement declaring their unqualified opposition to the new treaty as soon as it was adopted, arguing that it failed to 'address the security concerns that continue to make nuclear deterrence necessary'.³⁴ Russia, too, has been clear in its opposition. The Russian Foreign Minister, Sergev Lavrov, described the rise of the movement to ban nuclear weapons as a 'dangerous and delusive trend' that 'disregards the importance of taking stock of all the current factors that influence strategic stability'.³⁵ Of the five permanent members of the UN Security Council (the P5), China has been the least unsympathetic in its expressed attitude to the TPNW. Instead of voting against the treaty negotiations at the UN General Assembly, China abstained. According to a statement from the Chinese Ministry of Foreign Affairs in March 2017, China's goal of a 'final comprehensive ban on and total destruction of nuclear weapons' is 'fundamentally in line with the purposes of negotiations on the nuclear weapon ban treaty'.³⁶

For the supporters of the TPNW, the treaty offers a new way forward, a potentially decisive opportunity to restart progress towards complete nuclear disarmament. For its opponents, it is a distraction that fails to address the realities of global power politics and the strategic role of nuclear weapons. For its supporters, the commitment of the NWS to maintaining the strategic role of nuclear weapons in the current disposition of global politics is precisely the problem that needs to be addressed. For its opponents, that view simply highlights the clash between their own realism and the naive idealism that gave birth to the treaty. Other grounds for concern about the TPNW have also been aired, not least the possibility that adherence to it might undermine the effectiveness of the NPT, despite language

³⁶ Chinese Ministry of Foreign Affairs, 'Foreign Ministry Spokesperson Hua Chunying's regular press conference on March 20', 20 Mar. 2017.

³² International Campaign to Abolish Nuclear Weapons (ICAN), 'Stigmatize, ban and eliminate: A way forward for nuclear disarmament', 1 Oct. 2013.

³³ Beatrice Fihn, Executive Director of the International Campaign to Abolish Nuclear Weapons, quoted in Högsta, D., 'ICAN at the UNGA', Heinrich Böll Stiftung, 16 Nov. 2016.

³⁴ US Mission to the United Nations, 'Joint press statement from the permanent representatives to the United Nations of the United States, United Kingdom, and France following the adoption of a treaty banning nuclear weapons', 7 July 2017.

³⁵ Russian Ministry of Foreign Affairs, 'Foreign Minister Sergey Lavrov's remarks at a UN Security Council meeting on the non-proliferation of weapons of mass destruction: Confidence building measures, New York, January 18, 2018', 18 Jan. 2018. See also Russian Ministry of Foreign Affairs, 'Statement by Foreign Minister Sergey Lavrov at the 72nd session of the UN General Assembly, New York, September 21, 2017', 21 Sep. 2017.

in the TPNW acknowledging and supporting the NPT, as well as a lack of clarity about how to verify compliance with the treaty.³⁷ At the heart of the discussion about the TPNW's worth, however, are long-standing and deep philosophical differences regarding the relationship between nuclear weapons and international security. Many of the most influential critics of the TPNW regard nuclear weapons as a contribution to their own security and to global stability. This is true not only of the NWS but also other states that base their security policies on the perceived deterrent effect of an ally's nuclear weapons, such as those member states of NATO that do not have nuclear weapons of their own. In contrast, supporters of the TPNW see an ineradicable risk that, as long as nuclear weapons exist, they may be used, whether by design or by accident, and argue that with such destructive consequences, any risk is too high.

The issue will not be settled by the weight of philosophy on either side of the case but by political weight. The problem that supporters of the TPNW face is that, whereas 50 NNWS signed the treaty straightaway, only 6 more had signed by the end of 2017. A movement to challenge the status quo has to maintain momentum or it may peter out. The problem for the nuclear weapon-possessing states, and especially the P5, is that, even when including their allies, they will always be in a minority on this issue in every international forum except the UN Security Council itself.

The treaty will enter force 90 days after the 50th state has ratified it. As signatories go through their ratification processes, and perhaps as additional states sign, arguments about the TPNW will start to connect with preparations for the 2020 NPT Review Conference. Previous review conferences have been the occasion for the NNWS to articulate their frustrations and for the NWS to be defensive and obstructive. It would be refreshing if the 2020 conference were to be an exception in this regard. Steps could be taken to further reduce nuclear warhead numbers and enhance nuclear safety, for example. The opponents and supporters of the TPNW might unexpectedly find themselves sharing the objective of protecting the world's major non-proliferation instrument—the NPT itself—from the risk of being undermined, which each sees the other as posing.

³⁷ Rühle, M., 'The nuclear weapons ban treaty: Reasons for scepticism', *NATO Review*, 19 May 2017; Carlson, J., 'The nuclear weapon ban treaty is significant but flawed', The Interpreter, Lowy Institute, 11 July 2017; and Afina, Y. et al., *Negotiation of a Nuclear Weapons Prohibition Treaty: Nuts and Bolts of the Ban—The New Treaty: Taking Stock* (UN Institute for Disarmament Research: Geneva, 2017).

II. International tensions and shifting dynamics of power

Russia, the United States and the West

The background to the stalling of nuclear arms control since New START was agreed in 2010 includes the ailing relationship between Russia and the USA. The problem developed slowly. Long before Russia annexed Crimea in 2014, the Obama administration had wanted to reset relations with Russia, which had soured after the fighting between Georgia and Russia in August 2008.³⁸ Even before then, difficulties had been looming for Russian–US arms control. This was partly because Russia was seeking a way back to a position of global strength and saw many of the arms control agreements, by which it was then bound, as products of earlier Russian weakness. There were also problems within the field of armaments and arms control itself. Following the USA's withdrawal from the ABM Treaty in 2002, Russia argued that US development of missile defence systems was a major obstacle to nuclear arms reductions because, if those systems become effective, it would destabilize the deterrence relationship. Russia has raised those concerns particularly since 2007, especially in relation to the INF Treaty, after the announcement of US plans to set up ballistic missile defences in Eastern Europe.³⁹ Although the discussion in the USA and other NATO members focused on defence against Iranian missile potential, Russian officials repeatedly stated that the development would diminish Russia's nuclear deterrence posture. In 2008 Russia reportedly began testing ground-launched cruise missiles (GLCMs) with a range prohibited by the INF Treaty.⁴⁰ In February 2017 the US media reported that Russia had deployed these GLCMs; a senior US officer repeated this claim in a hearing at the US Congress.⁴¹ It is not possible to prove that, in the absence of a US missile defence capability. Russia would not have developed and tested the new GLCM; however, Russian statements of concern and a need to respond have been persistent and clear.

Irritants arising from the development of armaments and the effective stalling of arms control have only been part of the story of rising tensions between Russia and the USA. Concern about close encounters between Russian and NATO forces in the air and at sea go back several years.⁴² More

³⁸ 'Obama resets ties to Russia, but work remains', *New York Times*, 7 July 2009; and Zygar, M., 'The Russian reset that never was', *Foreign Policy*, 9 Dec. 2016.

³⁹ Erastö, T., Between the Shield and the Sword: NATO's Overlooked Missile Defense Dilemma (Ploughshares Fund: San Francisco, CA, June 2017).

⁴⁰ Gordon, M. R., 'US says Russia tested cruise missile, violating treaty', *New York Times*, 28 July 2014.

⁴¹ Gordon, M. R., 'Russia deploys missile, violating treaty, and challenging Trump', *New York Times*, 14 Feb. 2017; and Ali, I., 'US general says Russia deploys cruise missile, threatens NATO', Reuters, 8 Mar. 2017. See also chapter 7, section II, in this volume.

 ⁴² Sharkov, D., 'NATO: Russian aircraft intercepted 110 times above Baltic in 2016', Newsweek,
 4 Jan. 2017; Frear, T., 'List of close military encounters between Russia and the West, March

recently there have been allegations of Russian interference in Western domestic politics, especially the 2016 US presidential election.⁴³ It was, however, Russia's annexation of Crimea and engagement in the conflict in eastern Ukraine that marked the decisive moments in the long deterioration of the relationship.⁴⁴ These actions ended any likelihood that Russia could in the medium term become integrated with the West, as it had attempted during the 1990s. The evolution of Russia's grand strategy has instead confirmed an approach aimed at becoming the geopolitical fulcrum of Eurasia.⁴⁵ This implies both that Russia is aiming for a balanced relationship with China and that it is taking a leading role in shaping the politico-strategic environment in its neighbourhood, as most dramatically demonstrated by the Russian decision to engage militarily in Syria since September 2015.⁴⁶ The US National Security Strategy announced in December 2017 reflects, from the other side, a similar reading that attempting integration with Russia (and likewise with China) has, for the most part, failed.⁴⁷

These tensions between Russia and the West are reminiscent in some ways of the cold war. However, the parallels should not be overdrawn, as much of fundamental importance has changed in the three decades since that confrontation ended. One salient difference is that the difficult relationship between Russia and the US-led group of powers is only one among several important sites of international tensions in contemporary world politics.

The South China Sea, the East China Sea and China-India tensions

A combination of economic growth and military power has enabled China to pursue an increasingly strong international policy, both in regional geopolitics and on the global stage. Unresolved territorial disputes remain key elements of China's relations within its region. Central among these are disputes with several South East Asian states about islets and islands in the

⁴⁶ 'Unlikely partners', *The Economist*, 29 July 2017.

⁴⁷ White House, *National Security Strategy of the United States of America* (White House: Washington, DC, Dec. 2017), p. 3.

^{2014–}March 2015', European Leadership Network, [2015]; and Frear, T., Kulesa, Ł. and Kearns, I., *Dangerous Brinkmanship: Close Military Encounters Between Russia and the West in 2014* (European Leadership Network: London, Nov. 2014).

⁴³ Gessen, M., 'Russian interference in the 2016 election: A cacophony, not a conspiracy', *New Yorker*, 3 Nov. 2017; 'Russian hacking and influence in the US election', *New York Times*, [n.d.]; and Mason, R., 'Theresa May accuses Russia of interfering in elections and fake news', *The Guardian*, 14 Nov. 2017.

⁴⁴ On the deteriorating relationship between Russia and the USA see Smith, *SIPRI Yearbook 2017* (note 4), pp. 10–12. On Russia's estrangement from the European security architecture see Anthony, I., 'Conflict or peace in Europe? Increasing uncertainties, rising insecurities', *SIPRI Yearbook 2017*, pp. 119–39. On the conflicts in the post-Soviet space see Klimenko, E., 'Conflicts in the post-Soviet space: Recent developments', *SIPRI Yearbook 2017*, pp. 140–50.

⁴⁵ Trenin, D., 'Russia's evolving grand Eurasia strategy: Will it work?', Carnegie Moscow Center, 20 July 2017.

South China Sea and with Japan about eight uninhabited islets in the East China Sea.⁴⁸ Both disputes intensified in 2016: China's claims in the South China Sea were rejected by international arbitration in a case brought by the Philippines; and Japan announced in late 2016 that it would step up its naval deployments in the East China Sea.⁴⁹

In 2017, however, tensions in both disputes eased somewhat. In June China and Japan agreed to launch an air and maritime contact mechanism to prevent clashes in the East China Sea region.⁵⁰ Similarly, in November the Association of Southeast Asian Nations (ASEAN) and China agreed to start negotiations on a code of conduct for regional maritime activities in the South China Sea.⁵¹

In contrast, tensions in the always difficult relationship between China and India surfaced again in mid-2017, apparently triggered by the Chinese People's Liberation Army (PLA) doing road construction work in territory claimed by both China and Bhutan and close to India's Sikkim state.⁵² This was not a direct territorial dispute between China and India, but India deployed military units on behalf of Bhutan, the only neighbouring country with which China lacks diplomatic ties. The stand-off lasted over two months before the two sides extricated themselves from it. The chronic mistrust underlying what was essentially a small and localized crisis flared up again in December 2017, when an Indian unmanned aerial vehicle (UAV, drone) crashed on the Chinese side of the Sikkim section of the China–India border.⁵³

Reignition of the India-Pakistan conflict over Kashmir

India has an even more uneasy relationship with Pakistan. This unresolved confrontation—punctuated by four wars and a number of smaller clashes—

⁴⁸ Lin, K.-C. and Villar Gertner, A., *Maritime Security in the Asia-Pacific: China and the Emerging Order in the East and South China Seas* (Chatham House: London, July 2015).

⁴⁹ Permanent Court of Arbitration (PCA), 'PCA Case no. 2013-19 in the matter of the South China Sea arbitration before an arbitral tribunal constituted under Annex VII to the 1982 United Nations Convention on the Law of the Sea between the Republic of the Philippines and the People's Republic of China: Award', 12 July 2016; and Associated Press, 'Japan boosts coast guard fleet to defend disputed East China Sea islands', *The Guardian*, 22 Dec. 2016. For a helpful guide to the dispute and the 500-page judgement see Holmes, O. and Phillips, T., 'South China Sea dispute: What you need to know about The Hague court ruling', *The Guardian*, 12 July 2016.

⁵⁰ 'China, Japan agree on early launch of air, maritime contact mechanism', Xinhua, 30 June 2017.
⁵¹ It remains to be seen how the code of conduct will differ from the 2002 ASEAN–China

Declaration on the Conduct of Parties in the South China Sea. See Lee, Y., 'A South China Sea code of conduct: Is real progress possible?', The Diplomat, 18 Nov. 2017.

⁵² Bhutanese Ministry of Foreign Affairs, Press release, 29 June 2017.

⁵³ Chinese Ministry of Foreign Affairs, 'Foreign Ministry spokesperson Geng Shuang's regular press conference on December 7, 2017', 8 Dec. 2017; and Indian Press Information Bureau, 'In response to the media article of 07 Dec 17 by Xinhua News Agency', 7 Dec. 2017.

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has been a defining issue in South Asia.⁵⁴ The ongoing territorial dispute over Kashmir, never settled since the two countries' independence in 1947, is at the heart of these tensions. Since the Kargil conflict of 1999 and despite a ceasefire agreed in 2003, there have been numerous clashes across the line of control and casualties on both sides.⁵⁵ During 2017, over 200 militants, around 80 security personnel and at least 57 civilians were killed, making it the deadliest year for a decade in the disputed territory.⁵⁶

The geopolitical rivalry between Iran and Saudi Arabia

Iran and Saudi Arabia are locked in a power struggle that has the potential to become as chronic as India's relationships with China and Pakistan. The two are regional heavyweights, facing each other from opposite sides of the armed conflicts in Iraq, Syria and Yemen. Their disputes form one of the key lines of division in the Middle East, and some commentators have described the situation as a new regional cold war.⁵⁷ Their rivalry is often interpreted as a product of conflict within Islam between its Sunni and Shia branches. Religion plays an explicitly crucial political role for both states: Iran's constitution ensures that the Supreme Leader will be a Shia Muslim ayatollah; while the ruling family in Saudi Arabia has a long and close relationship with the Wahhabi interpretation of Sunni Islam, and the Saudi kingdom has the role of guardian of Mecca. While the religious element is important, the Iranian-Saudi Arabian relationship is equally a straightforward contestation for regional power, with each state's strategic objectives being determined by its interpretation of national interests. The historical and national features of this relationship are similarly important since it is an issue between Arabs and Persians as much as between Sunni and Shia Islam.

Iran's strategic interests in the region include supporting President Bashar al-Assad's retention of power in Syria; reinforcing allies in Iraq and preserving that country's territorial unity by opposing Kurdish aspirations for independence; sustaining Hezbollah in Lebanon; and assisting the Houthis in Yemen. The Islamic Revolutionary Guard Corps is the principal conduit for supporting these strategic objectives, which Iran seeks to achieve through

⁵⁶ Agence France-Presse, 'Indian troops kill top militant in Kashmir', *The Guardian*, 26 Dec. 2017.

⁵⁴ 'Conflict between India and Pakistan', Council on Foreign Relations, 15 Mar. 2018.

⁵⁵ 'Kargil conflict timeline', BBC News, 13 July 1999; Kumar, H., 'Indian and Pakistani forces agree to cease-fire in Kashmir', *New York Times*, 26 Nov. 2003; Raja, A., 'Over 4,500 soldiers killed along LOC in Pak firing since 2001: Army', *Indian Express*, 5 Nov. 2016; and 'Indian Army killed 137 Pak soldiers in 2017: Reports', The Quint, 10 Jan. 2018.

⁵⁷ See e.g. Santini, R. H., 'A new regional cold war in the Middle East and North Africa: Regional security complex theory revisited', *International Spectator*, vol. 52, no. 4 (2017), pp. 93–111. On the conflicts in the MENA region see chapter 2, section V, in this volume.

military aid and by recruiting fighters for Shiite militias in both Iraq and Syria.⁵⁸

Saudi Arabia has sought to block further gains in Iranian influence and advance its own with the help of its allies in the region, in particular the United Arab Emirates (UAE), and with the backing of the USA, some European states and, less visibly, Israel. This has led to a series of military and diplomatic battles around the region—in Iraq, Lebanon, Syria and Yemen, and over Qatar—that pitch Iran and Saudi Arabia against each other. When Saudi Arabia, the UAE and Bahrain severed diplomatic and trading relations with Qatar over its alleged support for terrorist groups, Iran was among those countries that stepped in both to support it and to benefit by increasing trade with it.⁵⁹

In Syria, Iran supports the Assad regime, whereas Saudi Arabia tries to undermine it; in Yemen, Saudi Arabia supports the government, while Iran has started to provide some weapons to the rebels. Although Iranian and Saudi Arabian forces have not directly fought each other, they have each fought forces supported by the other, and their proxies have also fought each other. Their engagement in the region's conflicts has, despite proclaimed intentions, not yet led to a peaceful resolution of any.

Intra-NATO tensions with Turkey

Beyond tensions between dyads of rivals or within specific geographic zones, there is a bigger picture of shifting geopolitical and geostrategic relationships and power dynamics. Neither the bipolar global model of the cold war era nor the unipolar model of the first decade or so after the cold war's end is useful for explaining what is happening now. While it is clear that change is under way, it is not clear what the outcome will be. Seen in that light, the growing difficulties in the relationship between most members of NATO and Turkey may be of at least as much long-term significance as shifts in the relationship between Russia and the USA and in the balance of power between China and the USA.

It is not news that Turkey's place in NATO is often uncomfortable, despite more than seven decades as a member state and a strategic bulwark of the alliance's south-eastern flank. For example, the disputes between Greece and Turkey over Cyprus and the Aegean Sea have been part of intra-NATO politics since they joined the alliance in 1952. More broadly, Turkey's complicated relationship with European states and the European

⁵⁸ Hiltermann, J., *Tackling the MENA Region's Intersecting Conflicts* (International Crisis Group: Brussels, 22 Dec. 2017), pp. 4–5; and Katzman, K., *Iran's Foreign and Defense Policies*, Congressional Research Service (CRS) Report for Congress RL44017 (US Congress, CRS: Washington, DC, 19 Jan. 2018).

⁵⁹ Adil, H., 'Turkey, Iran, Pakistan see big trade boost with Qatar', Al Jazeera, 3 Dec. 2017.

Union (EU), not least because of anti-Turkish prejudice in some European political circles, has been made even more uneasy by periods of direct military rule in 1960–65 and 1980–83 and of military domination of politics in 1971-73 and 1997. These periods gave rise to human rights concerns that resurfaced with the attempted military coup against Turkish President Recep Tavvip Erdoğan in July 2016 and, more particularly, the government's response to it. In the aftermath of the attempted coup, there were largescale dismissals of government officials including many military officers; an estimated 110 000-150 000 officials were sacked and 36 000-50 000 people were arrested, with a large number of trials continuing into 2018.60 While critics of the Turkish Government have raised concerns about infringements of liberty, its supporters' concerns include the continued residence in the USA of Fethullah Gülen, the alleged mastermind of the coup.⁶¹ Suspicion of US involvement in what Turkey has consistently described as a 'Gülenist coup' surfaced early and never quite seems to have disappeared.⁶² Further concerns arose in 2017 surrounding constitutional changes to give the Turkish presidency greater powers.63

Two other recent developments have strained relations between Turkey and its NATO allies: those over Syria and those over Russia.

First, for five years from 2011, Turkey's strategic and political objective in Syria was the overthrow of President al-Assad. In the course of 2016, Turkey's objectives shifted and narrowed in focus, aiming to: secure its border; ensure its continued influence within Syria; counter the Kurdistan Workers' Party (Partiya Karkerên Kurdistanê, PKK) and its sister organizations in northern Syria, the Democratic Union Party (Partiya Yekîtiya Demokrat, PYD) and the People's Protection Units (Yekîneyên Parastina Gel, YPG); and defeat the group called the Islamic State. This shift necessarily meant that Turkey began to distance itself from US strategic objectives and operations in Syria. The fissure created by this shift deepened when Turkey joined with Iran and Russia in convening a conference in Astana, Kazakhstan, at the end of 2016. The conference produced a ceasefire in Syria and, in the process,

⁶⁰ The lower-end estimates are from 'Turkey suspends 291 navy personnel over links to failed coup', Reuters, 13 Nov. 2016. The higher-end estimates are from 'Admirals, others sentenced to life for FETÖ's 2016 coup bid', *Daily Sabah*, 6 Mar. 2018. On the coup attempt see also Sahlin, M., 'Turkey's search for stability and legitimacy in 2016', *SIPRI Yearbook 2017*, pp. 151–62.

⁶¹ The European Parliament passed, with cross-party support, a non-binding resolution condemning 'disproportionate repressive measures' after the attempted coup and urging the EU to freeze the talks on Turkey's membership to the EU. European Parliament, Resolution on EU–Turkey relations, 2016/2993(RSP), 24 Nov. 2016; and Rankin, J. and Shaheen, K., 'Turkey reacts angrily to symbolic EU parliament vote on its membership', *The Guardian*, 24 Nov. 2016.

⁶² Arango, T. and Yeginsu, C., 'Turks can agree on one thing: US was behind failed coup', *New York Times*, 2 Aug. 2016; and 'Turkey seeks arrest of ex-CIA officer Fuller over coup plot', BBC News, 1 Dec. 2017.

⁶³ Srivastava, M., 'Why does Erdogan want a new Turkish constitution?', *Financial Times*, 19 Jan. 2017; and Shaheen, K., 'Erdoğan clinches victory in Turkish constitutional referendum', *The Guardian*, 16 Apr. 2017.

sidelined US diplomatic peacemaking efforts.⁶⁴ The Astana talks continued throughout 2017 and, although less productive, they held enough promise to draw the UN into participating in them.⁶⁵ The USA remained outside. In August 2016 Turkey had also launched offensives in northern Syria against the Islamic State and against Kurdish groups.⁶⁶ While the USA was also targeting Islamic State forces in Syria, it was simultaneously supporting the Kurdish forces that came under attack from Turkey.

Second, at the same time as Turkey's relationship with the USA was deteriorating in Syria, it signed an agreement with Russia to buy the S-400 surface-to-air missile (SAM) defence system.⁶⁷ With NATO–Russia tensions having increased, there is concern in NATO at what could be read as an effort by the Turkish Government to stand on both sides of the dividing line. There is also the more technical but, from a NATO perspective, no less important issue that the Russian system is not interoperable with NATO systems now under development.⁶⁸ At the same time as it is ordering new SAMs from Russia, Turkey retains its order for F-35 combat aircraft and other new weapon systems from the USA, which remains by far Turkey's most important arms supplier.⁶⁹ Turkey is also one of NATO's 'nuclear sharing' countries: although it does not possess nuclear weapons, about 50 US nuclear weapons are stored at the Incirlik air base.⁷⁰

Hitherto in the disagreements and disputes between Turkey and various of its NATO allies, mutually recognized strategic interest in the alliance has trumped all other considerations. There is insufficient evidence on which to reach the conclusion that this will no longer hold true. Yet with other changes in the patterns of world power, a fundamental change in Turkey's strategic positioning is not out of the question. Were it to reorient itself away from NATO, Europe and the USA—perhaps towards a more clearly defined Middle Eastern and Central Asian role, with new allies and new priorities some key strategic assumptions of NATO, Russia and some Middle Eastern regional powers would all be given a jolt.

⁶⁷ The size and final value of the purchase are unclear. Gumrukcu, T. and Toksabay, E., 'Turkey, Russia sign deal on supply of S-400 missiles', Reuters, 29 Dec. 2017.

⁷⁰ Reif, K., 'US nuclear weapons in Turkey raise alarm', Arms Control Association, Nov. 2017.

⁶⁴ Walker, S. and Shaheen, K., 'Syria ceasefire appears to hold after rivals sign Russia-backed deal', *The Guardian*, 30 Dec. 2016; and Osborn, A. and Coskun, O., 'Russia, Turkey, Iran eye dicing Syria into zones of influence', Reuters, 28 Dec. 2016. On Turkey and the Kurds see also chapter 2, section V, in this volume.

⁶⁵ Solovyov, D. and Miles, T., 'UN to join Syria talks in Astana, with humanitarian hopes', Reuters, 21 Dec. 2017.

⁶⁶ On Turkish assessments and operations in 2016 see Sahlin (note 60).

⁶⁸ 'Turkey's \$2bn arms deal with Russia faces hurdles, and possible sanctions', *The Economist*, 30 Nov. 2017.

⁶⁹ See the SIPRI Arms Transfers Database. On the purchase of the F-35s see F-35 Lightning II, 'Turkey: Building on decades of partnership', Lockheed Martin, [n.d.]. Turkey is 1 of 8 US allies that co-funded its development: 'The 11 countries expected to buy F-35 fighter jet', Reuters, 6 June 2014.

III. Human security and insecurity

More complex armed conflicts

The broad trend so far this decade is an increase in armed conflicts, with the number each year returning to the levels of the start of the 1990s as the cold war was coming to an end.⁷¹ There has been some progress. In Colombia, for example, the 2016 peace agreement has held, despite concerns in the border areas with Ecuador, Peru and Venezuela.⁷² Similarly, peacebuilding has continued in Nepal.⁷³ But a scan of some of the main armed conflicts reveals both their intractability and their human costs, which fall primarily on civilian populations.⁷⁴ During this decade, the number of civilian deaths in violent conflicts has doubled, as has the number of deaths resulting from combat, which are as always compounded by the indirect lethal effects of conflict in the form of malnutrition and famine, contamination of water supplies, and the collapse of health services in conflict countries.75 The UN High Commissioner for Refugees estimates that 28 300 people each day are forced to flee their homes because of violent conflict and persecution. The world total of forcibly displaced people is over 65 million and has been climbing sharply in recent years, driven primarily by the effects of violent conflict.76

In many places, human security is further diminished because of the fluid and often chaotic nature of conflict. The number of armed groups active in each conflict has tended to increase: the average has risen from 8 in each intrastate conflict in 1950 to 14 in 2010.⁷⁷ The latter figure is quite modest compared to the proliferation of armed groups in some wars: in Syria over 1000 separate militias have been identified, and in Libya as many as 2000.⁷⁸ As the conflicts continue, these militias exhibit shifting allegiances, making and breaking opportunistic alliances with stronger forces. Among these groups are some that export the violence of the conflict in the form of terrorist attacks. Europol recorded a decline from 2014 to 2016 in the number of attempted terrorist attacks in EU countries (down from 226 to 142, of which only one-third were carried out).⁷⁹ Most of the 142 fatalities in terrorist

⁷¹ Sollenberg and Melander (note 1).

⁷² On the peace agreement in Colombia see Valenzuela, P., 'Out of the darkness? The hope for peace in Colombia', *SIPRI Yearbook 2017*, pp. 47–57; and chapter 2, section II, in this volume.

⁷³ On peacebuilding in Nepal see chapter 2, section III, in this volume.

⁷⁴ See chapter 2, section I, in this volume.

⁷⁵ World Bank Group and United Nations, *Pathways for Peace: Inclusive Approaches to Preventing Violent Conflict—Main Messages and Emerging Policy Directions* (World Bank: Washington, DC, Oct. 2017), pp. 6–8.

⁷⁶ UN High Commissioner for Refugees, 'Figures at a glance', 17 June 2017.

⁷⁷ World Bank Group and United Nations (note 75), p. 6.

⁷⁸ World Bank Group and United Nations (note 75), p. 6; and 'Guide to key Libyan militias', BBC News, 11 Jan. 2016.

⁷⁹ European Union Agency for Law Enforcement Cooperation (Europol), *European Union Terrorism Situation and Trend Report 2017* (Europol: The Hague, 2017), p. 10.

attacks in EU states during 2016 were the result of actions by groups and individuals claiming allegiance to fighting groups in the Middle East and North Africa, especially the Islamic State.⁸⁰

In many cases, the activities of a multitude of armed groups are overlaid by criminal violence. Studies of the nexus between crime and conflict show that criminal and political organizations often occupy the same strategic and geographic space, sometimes to contest control of it and sometimes to cooperate in exploiting it.⁸¹ Examples of such spaces include the routes along which narcotics, people, weapons and contraband such as tobacco are traded; illicit or unprotected artisanal mining sites; marginalized communities; and areas of a country and functions of government in which central state control is absent, limited or corrupted. In such cases, the distinction between what is criminal and what is political often becomes a matter of arbitrary labelling.

The lethal potential of criminal violence is as great as that seen in intrastate wars. In Mexico some estimates suggest that murders linked to organized crime exceeded 100 000 in 2006–17; 2006 was the year when President Felipe Calderón took office and the Mexican Government began a major campaign against the country's drug trafficking organizations.⁸² After a high level of violence in 2007–11, the murder rate declined somewhat but is reported to have started to climb again in 2014 and reached its highest level for 30 years in 2017.⁸³ The situation in Mexico since 2006 stands out for the scale and reach of the criminal violence; it illustrates how destructive the problem can become.

Further layers of complexity are added by the internationalization of what often start as purely internal conflicts. Just over one-third of current armed conflicts are internationalized, as measured by the involvement of foreign forces in the conflict, sometimes but not always as direct combatants.⁸⁴ Four of the armed conflicts in the Middle East and North Africa are fundamentally shaped by the involvement of foreign forces—those in Iraq, Libya, Syria and Yemen. Conflicts can also be internationalized in a broader sense, through external support—political, financial or technical such as training or providing hardware—for one or more of the combatants, as is the case in Egypt

⁸³ Flannery, N. P., 'Is Mexico really the world's most dangerous war zone?', *Forbes*, 10 May 2017; and Gillespie, P. 'Mexico reports highest murder rate on record', CNN, 22 Jan. 2018.

⁸⁰ European Union Agency for Law Enforcement Cooperation (note 79). On combating terrorism in Europe see also chapter 2, section IV, in this volume.

⁸¹ De Boer, J. and Bossetti, L., *The Crime–Conflict Nexus: Assessing the Threat and Developing Solutions*, Crime–Conflict Nexus Series no.1 (United Nations University, Centre for Policy Research: Tokyo, May 2017).

⁸² Beittel, J. S., Mexico: Organized Crime and Drug Trafficking Organizations, Congressional Research Service (CRS) Report for Congress R41576 (US Congress, CRS: Washington, DC, 25 Apr. 2017), p. 2. See also chapter 2, section II, in this volume.

⁸⁴ Sollenberg and Melander (note 1).

and the Israeli–Palestinian conflict.⁸⁵ Likewise in Africa, armed conflicts that originate in the internal social, economic, political and, increasingly, environmental conditions of a country have become ineluctably internationalized. One aspect of that internationalization process in Africa is the counterterrorism activities of France, the UK and the USA, which parallel the tendency of some armed groups in Africa to align themselves with al-Qaeda or the Islamic State.⁸⁶

As external actors take on an active role in otherwise internal conflicts, they often develop an interest either in perpetuating the conflict or in shaping the settlement that ends the violence. In virtually all of today's armed conflicts, external interests have to be accounted for in some way if there is to be a viable peace settlement.

The impact of climate change

In the Sahel region, a large area stretching from Mali and the Lake Chad Basin eastwards to Somalia, is now a zone of chronic insecurity. There is armed conflict in Cameroon, the Central African Republic, northern Ethiopia, Mali, northern Nigeria, Somalia and South Sudan. There are, in addition, instances of localized violent conflict in many parts of the Sahel region, in disputes that do not involve an insurgent group attempting to seize state power. These instances generate an endemic situation of insecurity. In March 2017 the UN Security Council focused international attention and policy on the Lake Chad region following a visit to the area at the start of the vear. The resulting Security Council resolution was notable for acknowledging the role of climate change alongside other factors in exacerbating human insecurity.87 However, the subsequent report on the region that the UN Secretary-General was mandated to produce did not make any reference to climate change as a relevant issue.⁸⁸ As this shows, it remains difficult to insert climate and other environmental factors into policy discussions and action on security and insecurity. Nonetheless, an increasing body of research is bringing out evidence of the impact of climate change in generating social and political instability, largely via the intervening variables of food and water insecurities.89

Just as climate change interacts with other factors—such as social and economic inequities and governance that is ineffective, unaccountable or

⁸⁵ See chapter 2, section V, in this volume.

⁸⁶ See chapter 2, section VI, in this volume.

 $^{^{87}}$ UN Security Council Resolution 2349, 31 Mar. 2017. On the conflict in the Lake Chad region see also chapter 2, section VI, in this volume.

⁸⁸ United Nations, Security Council, Report of the Secretary-General on the situation in the Lake Chad Basin region, S/2017/764, 7 Sep. 2017.

⁸⁹ Vivekananda, J. et al., *Action on Climate and Security Risks: Review of Progress 2017* (Clingendael: The Hague, Dec. 2017).

corrupt—to generate the conditions for violent conflict, so it interacts with violence to produce further destructive effects. After a long period in which world hunger steadily eased, it is on the rise again, driven by climate change and conflict. Chronic hunger now affects 815 million people, about 11 per cent of the world population.⁹⁰ Some of the areas hardest hit by food insecurity and malnutrition are severely affected by both conflict and climate change. Famine struck in parts of South Sudan for several months in early 2017; as the UN appealed for an urgent increase in humanitarian assistance there, it named north-east Nigeria, Somalia and Yemen—all conflict-affected areas—as also being at serious risk of famine.⁹¹

The implications of climate change for social and political stability, via the effects on food security, are not simply matters of concern in the areas where the direct effects of climate change are experienced. Global food security increasingly depends on international trade. Grain production is highly concentrated. Most wheat, soybean and maize is grown in three areas: the Midwest USA, the Black Sea region and Brazil.92 When food prices are volatile, political risks multiply.⁹³ For example, in Egypt food price rises in 2008 led to riots and in early 2011 to the popular mobilization that ousted President Hosni Mubarak.⁹⁴ Further risks are to be found in the trade 'choke points'-the critical junctures on transport routes through which exceptional volumes of trade pass. Fourteen of these points are critical for food security worldwide, and a 2017 study found that climate change increases the risk of their disruption: increasingly frequent severe weather events will cause more frequent closure of the choke points and damage physical infrastructure, while rising sea levels put port operations at risk.⁹⁵ Conflict and insecurity would also threaten smooth passage of trade through those 14 critical chokepoints. In short, the issue of food security and its relationship to climate change and conflict, on the one hand, and to human security and political stability, on the other, is a matter of global concern and is not limited to states that are poor, directly and severely affected by climate change, or mired in violent conflict.

⁹⁰ Food and Agriculture Organization of the United Nations (FAO), *The State of Food Security and Nutrition in the World 2017: Building Resilience for Peace and Food Security* (FAO: Rome, 2017), p. 2.

⁹¹ 'Famine "largest humanitarian crisis in history of UN"', Al Jazeera, 11 Mar. 2017.

⁹² Bailey, R. and Wellesley, L., *Chokepoints and Vulnerabilities in Global Food Trade* (Chatham House: London, June 2017), p. v.

⁹³ Rüttinger, L. et al., A New Climate for Peace: Taking Action on Climate and Fragility Risks (Adelphi: Berlin, 2015), pp. 42–47.

⁹⁴ Hendrix, C. S. and Haggard, S., 'Global food prices, regime type, and urban unrest in the developing world', *Journal of Peace Research*, vol. 52, no. 2 (Mar. 2015), pp. 143–57; and Potsdam Institute for Climate Impact Research and Climate Analytics, *Turn Down the Heat: Confronting the New Climate Change Normal* (World Bank: Washington, DC, 2014), pp. 144–47.

⁹⁵ Bailey and Wellesley (note 92), p. vi.

IV. The prospects for international institutions

At the start of 2017, two new personalities took over key roles on the world stage: Donald Trump as US President and António Guterres as UN Secretary-General. There is no doubting that the former has the greater practical power, the bigger stage on which to walk and the higher global profile. Statements made by Trump as a presidential candidate (and even earlier) expressed a deep and consistent scepticism about the UN and about the value of international institutions to the USA.⁹⁶ This scepticism appeared to be underlined implicitly by his inaugural speech, with its repeated refrain of 'America first'.⁹⁷ This seemed to be expressed in action when he announced his intention to withdraw the USA from the Paris Agreement on climate change.⁹⁸

Guterres was elected as the ninth UN Secretary-General, having run on a platform that placed the prevention of violent conflict at the centre of his political vision.99 As the contents of this introduction (and of the further chapters in this volume) make clear, that is not the direction in which the world has recently been moving. The scale and complexity of the task of prevention are clear and thus also the need for it is underlined. Nonetheless, despite the many evident challenges to the smooth functioning of the international system for managing conflicts and enhancing human security, there is widespread international backing for making the effort. The Paris Agreement has survived despite President Trump's commitment to withdrawing as soon as possible; indeed, every other country in the world remains committed to the Paris obligations.¹⁰⁰ At the same time, the 2030 Agenda and its Sustainable Development Goals (SDGs) remain the targets that motivate global development efforts. They are the expression of a determination to rid the world of extreme poverty and achieve by 2030 a better, more peaceful, more equitable, more sustainable world than today.¹⁰¹

⁹⁶ Begley, S., 'Read Donald Trump's speech to AIPAC', *Time*, 21 Mar. 2016; and Alexander, H., 'Donald Trump and the United Nations: A fight waiting to happen?', *Daily Telegraph*, 19 Jan. 2017.

⁹⁷ White House, 'The inaugural address: Remarks of President Donald J. Trump—as prepared for delivery', 20 Jan. 2017.

⁹⁸ Shear, M. D., 'Trump will withdraw US from Paris Climate Agreement', New York Times, 1 June 2017; and Volcovici, V., 'US submits formal notice of withdrawal from Paris climate pact', Reuters, 4 Aug. 2017.

⁹⁹Guterres, A., 'Challenges and opportunities for the United Nations', Vision statement circulated by the president of the UN General Assembly, 4 Apr. 2016.

¹⁰⁰ Every state that can join the Paris Agreement has either signed, ratified or acceded to it. The earliest that a party to the agreement can deliver notice of withdrawal is 3 years after entry into force. Since the treaty entered into force for the USA on 4 Nov. 2016, it can deliver the notice no earlier than 4 Nov. 2019 and it will take effect 1 year after delivery. The Paris Agreement (note 5), Article 28(1).

¹⁰¹ On the SDGs, which are listed in UN General Assembly Resolution 70/1 (note 5), see Jang, S. and Milante, G., 'Development in dangerous places', *SIPRI Yearbook 2016*, pp. 345–63.

The widening gap between the rich and the poor both within and between countries is increasingly recognized as both eroding democracy and a potential driver of conflict.¹⁰² According to one study in 2017, based on a new and comprehensive set of indicators of global inequality, between 1980 and 2016 the combined wealth of the richest 1 per cent of the world's population increased by twice as much as the combined wealth of the poorest 50 per cent.¹⁰³ The report's authors warned that inequality had increased to 'extreme levels' in some countries—including Brazil, India, Russia and the USA—and was particularly acute in sub-Saharan Africa and the Middle East. The linking of development and peacebuilding goals, as in the SDGs—and especially SDG 16 on achieving peace and justice by building strong institutions—is thus of great importance for global security prospects.

It is too soon to be able to arrive at conclusions about what impact and on what scale either the US president or the UN secretary-general may have over the years of their respective terms of office. There are, besides, other increasingly influential players in global politics as the patterns and dynamics of international power continue to shift. Their actions, influence and preferences will be part of the mix of factors that determine whether in coming years the world will become more or less peaceful, devote more or less resources to military preparations, and make more or less movement in the direction of disarmament. Future editions of the SIPRI Yearbook will have more to say on that score.

¹⁰² See e.g. World Bank Group and United Nations (note 75); and African Development Bank, *African Development Report 2015—Growth, Poverty and Inequality Nexus, Overcoming Barriers to Sustainable Development* (African Development Bank Group: Abijan, June 2016). SDG 10 is to 'reduce inequality within and among countries'. See Jang and Milante (note 101).

¹⁰³ Alvaredo, F. et al., *World Inequality Report 2018* (World Inequality Lab: Dec. 2017).