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Science Diplomacy with Diplomatic Relations to Facilitate Common-Interest Building

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Considering Diplomatic Reform

This discourse considers the text of the Vienna Convention on Diplomatic Relations (1961) as a straw man to identify the diplomatic challenges for humanity to evolve as a globally interconnected civilization, recognizing that 193 nations are parties to this framework agreement from last century after the Second World War. The words about diplomatic relations that have been negotiated by diplomats carry lessons and wisdom, which are important to preserve, reflecting national interests and in rare cases common interests with survival as the umbrella consideration for humanity across time. The concept of time is at the heart of science—natural sciences, social science, and Indigenous knowledge—all of which characterize patterns and trends that have become the bases for decisions to address change, requiring diplomacy (Berkman et al. 2017, 2022a; Young et al. 2020).

Concepts in the first preambular phrases of the Vienna Convention on Diplomatic Relations (Box 33.1) reflect the course for humanity, which is across time, “ancient” into the future. Having in mind the purposes and principles of the Charter of the United Nations (United Nations 1945) further

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amplifies the notion of time, considering the first half of the twentieth century when nations collided on a planetary scale, requiring international solutions forever after (Fig. 33.1).

Box 33.1 Vienna Convention on Diplomatic Relations (1961)

Preamble

Recalling that peoples of all nations from ancient times have recognized the status of diplomatic agents,

Having in mind the purposes and principles of the Charter of the United Nations concerning the sovereign equality of States, the maintenance of international peace and security, and the promotion of friendly relations among nations...

The Vienna Convention on Diplomatic Relations also identifies fundamental responsibilities at local-global levels to nurture the diplomatic agents (Box 33.1) who will contribute to the maintenance of international peace and

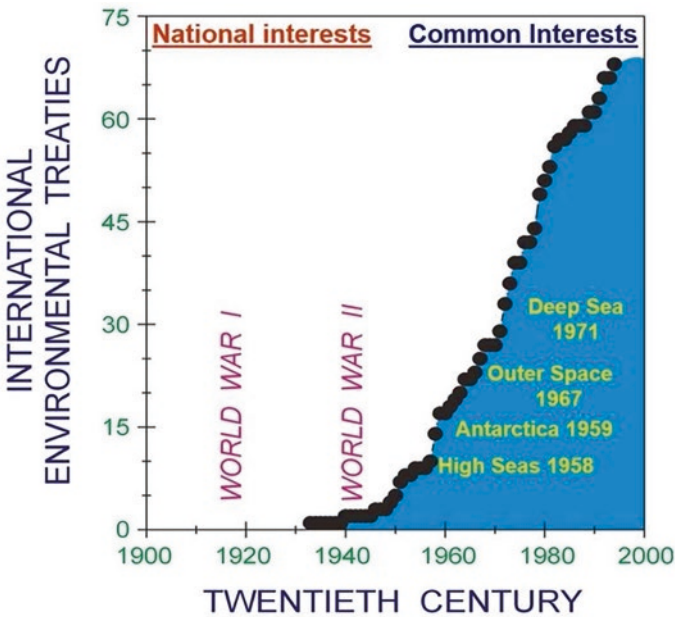


Fig. 33.1 Balancing national interests and common interests on a planetary scale began during the twentieth century, illustrated with international environmental treaties to address sustainability questions at local-global levels. Adapted from Berkman (2002), including legal establishment of areas beyond national jurisdictions (yellow), international spaces (Kish 1973; Berkman et al. 2011; Berkman 2020a) to build common interests and minimize risks of conflict over jurisdictional boundaries across the Earth on a planetary scale (Berkman 2009)

security and the promotion of friendly relations among nations across our world (Box 33.1). This challenge exists despite the sovereign equality of states, which will always look after national interests first and foremost, asserting national prerogatives however interpreted often without global consideration. While the promotion of friendly relations among nations may be necessary, such efforts are insufficient unless they also prevent conflict, recognizing the persistent planetary risk of mutually assured destruction (MAD) for humankind.

Considering the context of ancient times (Box 33.1), the oldest continuous calendars on Earth have been recording time annually with human populations across nearly 6000 years, sixty centuries. The simple fact is we are just in our infancy as a globally interconnected civilization, recognizing last century was the first in all of human history with “world” war (Fig. 33.1). The questions below are designed to awaken consideration about the global transformations since the Vienna Convention on Diplomatic Relations was signed, within heartbeats of the Second World War.

- Considering the persistent global risks of nationalism (Fig. 33.1), is it reasonable to leave diplomacy solely in the hands of states?
- What types of diplomatic relations are necessary for humankind to mature as a globally interconnected civilization?

If there is a singular lesson of the twentieth century—it is nationalism in our world with billions of people, advanced technologies, and industrial capacities is a recipe for global conflict. In this context, the acceleration of nationalism (Weiss et al. 2019; Bieber 2022; Ashford and Shiffrinson 2022) suggests that diplomatic relations can be greatly improved “to balance national interests and common interests for the benefit of all on Earth across generations” (Fig. 33.1), which is a defined goal of science diplomacy (Berkman et al. 2011, 2022a; Berkman and Vylegzhanin 2012).

Diplomatic Relations and Missions

It is clear from reviewing the Vienna Convention on Diplomatic Relations (1961) that its focus is on the mechanics of diplomatic intercourse, especially with privileges and immunities that are conferred between states to diplomatic agents (Box 33.1) and diplomatic missions (Box 33.2). While the development of friendly relations among nations (Boxes 33.1 and 33.2) is an

explicit objective of this Convention from sixty years ago, its national focus seems incomplete in our world with eight billion people this decade.

Box 33.2 Vienna Convention on Diplomatic Relations (1961)

Preamble

Believing that an international convention on diplomatic intercourse, privileges and immunities would contribute to the development of friendly relations among nations, irrespective of their differing constitutional and social systems.

Article 2

The establishment of diplomatic relations between States, and of permanent diplomatic missions, takes place by mutual consent.

Well beyond the national-international dynamics of the twentieth century (Fig. 33.1), humankind now has diverse linkages on a planetary scale. Exponential impacts at local-global levels—across diverse time scales (Fig. 33.2a–d)—underscore the arenas of diplomacy and even the characteristics of next-generation diplomats in the twenty-first century and beyond. We each can see exponential change with the COVID-19 pandemic as a powerful illustration, across orders of magnitude during months-years with the first reported death in the United States in January 2020 (Mueller 2021); past 10, 100, 1000, 10,000, 100,000 and reaching 1,000,000 deaths on 17 May 2022 (Donovan 2022). The idea of “bending the curve” with COVID-19 is exactly what is anticipated over decades-centuries with carbon that has been increasing exponentially in the Earth’s atmosphere in relation to climate change, for example (Fig. 33.2).

Looking across the twenty-first century and beyond on a planetary scale (Fig. 33.2a–d)—the challenges and the solutions for humankind will involve holistic (international, interdisciplinary, and inclusive) considerations among people in digital world when dis- and mis-information are easy to convey with social media. Enhancing research abilities inclusively with science as the “study of change” (Berkman 2020a; Berkman et al. 2022a)—revealing patterns, trends, and processes that underlie decisions—is a path for all to apply in their quest of truth.

- Who are the diplomatic agents (Boxes 33.1 and 33.3)?
- What are the characteristics and skills of next-generation diplomatic agents (Boxes 33.1 and 33.3)?
- What is the purpose of diplomacy in the twenty-first century, in contrast to ancient times (Box 33.1)?

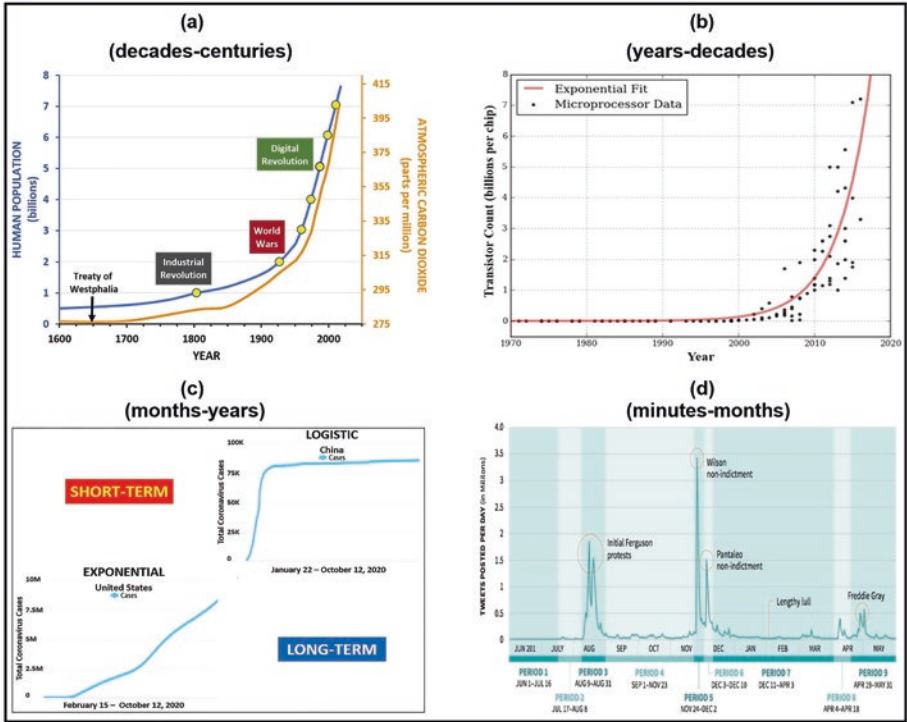


Fig. 33.2 a–d Globally interconnected civilization time scales revealed by exponential changes with (a) climate and human-population size over decades to centuries in view of global events; (b) high-technology change over years to decades illustrated by “Moore’s Law” with transistors on a chip; (c) global pandemic over months to years with COVID-19 cases; and (d) social-media interactions over minutes to months, illustrated by 2014–15 tweets about “Black Lives Matter.” Adapted from Berkman (2020b), which has references to data sources with elaboration

Certainly, one of the enduring diplomatic skills in our globally interconnected civilization (Figs. 33.1 and 33.2)—across differing constitutional and social systems (Box 33.2)—will be to interact with people, optimally among friends with trusted relations, building common interests. Whether between states, permanent diplomatic missions, or other entities, the concept of mutual consent also will remain as a boundary condition of diplomacy with respect for the decision-makers and the institutions they represent.

The difference between 1961 and today, operating into the future, involves the capacities for inclusive dialogues on a planetary scale to address questions of common concern over diverse time scales. The concept of permanent diplomatic missions presumably was to address issues across all of these time scales. Distinguishing these tempos of our world, now raises questions about

impermanent diplomatic missions to enhance diplomatic relations across jurisdictions today into the future.

- What types of diplomatic relations are necessary for humankind to build sustainable local-global connections inclusively short-to-long term (Fig. 33.2a–d)?

Answering this question benefits from a historical perspective over the same period, across decades-centuries, considering the origin of the nation-state with the 1648 Treaties of Westphalia (Croxtton 1999) as the starting point across a diplomatic threshold (Box 33.1).

In the twentieth century (Fig. 33.1), as human population size continued accelerating globally (Fig. 33.2a), nations bumped into each other, necessitating national-international governance with the League of Nations after the First World War and the United Nations after the Second World War, crossing a new diplomatic threshold. Two billion humans were alive at the time of the First World War and the last global pandemic around 1920. One century later, there are eight billion people living on Earth—when the intricacies of diplomatic relations have expanded exponentially across diverse time scales (Fig. 33.2a–d)—awakening the next threshold to cross, which again will require diplomatic relations at new levels in our world of the 21st century.

Today, nations are appointing ambassadors to the technology industry (Satariano 2019; Clarke 2021), which is then hiring these diplomatic agents (Boxes 33.1 and 33.3) and creating ambassadorial training, as in the case with Microsoft (2020, 2022), resulting in new types of diplomatic relations. Cities are operating on a planetary scale, independent of nations, to address global challenges such as climate change (C40 2022) and subnational jurisdictions surpass the economic capacities of many nations, noting that California has the fifth largest economy in the world (Cooper 2018). In effect, to be inclusive, there is a spectrum of subnational-national-international jurisdictions (Fig. 33.3), recognizing the nation is the central jurisdictional unit (like meters with kilometers larger and centimeters smaller) with public-private and other partnerships that are involved with diplomatic relations.

Additionally, across the jurisdictional spectrum for sustainability (Fig. 33.3), non-state actors are connecting with international law (Noortmann 2001) but operating without specific addresses for diplomatic relations. In effect, the diversity of connections that are involved with diplomatic relations are as broad and deep as the United Nations Sustainable Development Goals (United Nations 2015), with implementation at local-global levels across generations.

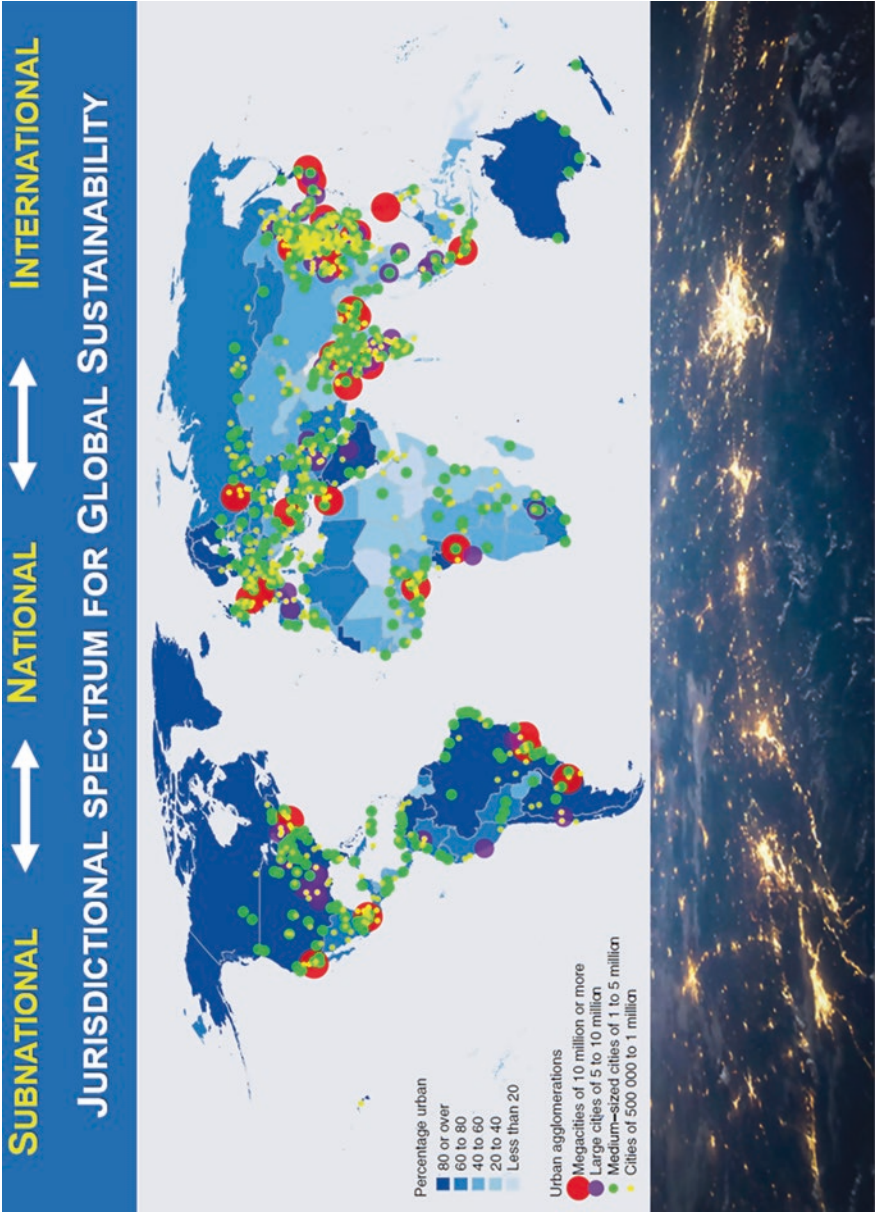


Fig. 33.3 Spectrum of jurisdictions on Earth, illustrated by megacities with capacities with capacities of states at subnational levels, representing an inclusive framework for humankind to address impacts, issues, and resources in our globally interconnected civilization (Fig. 33.1) with diplomacy across diverse time scales (Fig. 33.2a–d). Adapted from Berkman et al. (2022a)

National Security and Armed Conflict

Despite the vision to operate across a jurisdictional spectrum (Fig. 33.3) for the maintenance of international peace and security (Box 33.1)—the reality is nations will consider their security individually first and foremost. National security broadly and social security in the context of tax exemption (Box 33.3) are specifically mentioned in the Vienna Convention on Diplomatic Relations (Box 33.3), noting many additional forms of security have entered into the regulatory arenas of nations since 1961: climate security, cyber security, environmental security, food security, health security, and other security types inclusively. With greater precision about the types of security also comes enhanced resolution of the diplomatic agents (Boxes 33.1 and 33.3) who are involved with implementation, indicating that diplomatic relations have become increasingly complicated.

Box 33.3 Vienna Convention on Diplomatic Relations (1961)

Article 26

Subject to its laws and regulations concerning zones entry into which is prohibited or regulated for reasons of national security, the receiving State shall ensure to all members of the mission freedom of movement and travel in its territory.

Importantly, across all of the types above, a common feature of security is to address risks of instabilities that are immediate (Berkman and Vylegzhanin 2012), whether actual or perceived, as with Russia during a future Cold War (Berkman 2013). The immediacy also represents time with issues, impacts, and resources connected to the present. Subsequent diplomatic relations operate across diverse time scales (Fig. 33.2a–d). This diplomatic complexity across time also has a common feature, noting there is an inflection point when exponential change decelerates (Fig. 33.4). Understanding inflection points and the surrounding circumstances is a fundamental skill required for diplomatic agents (Boxes 33.1 and 33.3) to exert leverage, especially to be transformational, as happened during the Second World War.

The Second World War, which ended in August 1945, is a critical example of diplomatic relations before-through-after an inflection point. In 1943, despite being in the middle of a world war, plans were laid for the United Nations Food and Agriculture Organization to ensure humanity's freedom

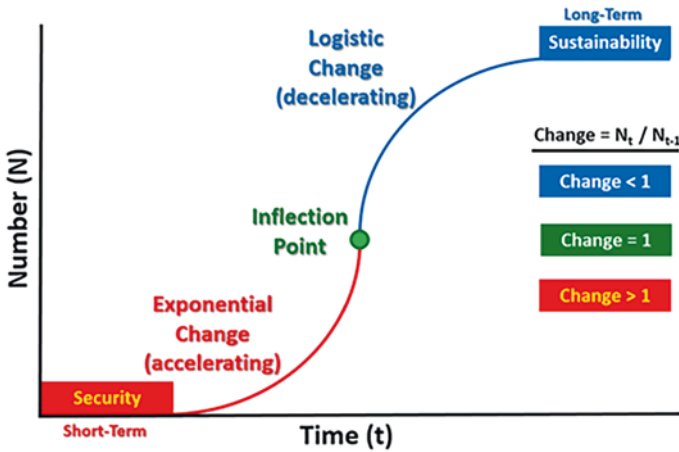


Fig. 33.4 Short- to long-term features of diplomatic relations, highlighting exponential change across an inflection point toward logistic (S-shaped, sigmoid) change, as described by numbers (N) changing per unit of time (t). Diplomatic relations are required before-through-after inflection points with scalability across embedded time scales in our globally interconnected civilization (Fig. 33.2a–d). Adapted from Berkman (2020b, 2020c)

from hunger, contributing also to an expanding world economy (OECD/FAO 2016). The Bretton Woods Conference in New Hampshire in July 1944 initiated a worldwide economic regime with a vision of the International Monetary Fund and the International Bank for Reconstruction and Development that would become the World Bank (Steil 2013). The United Nations Conference on International Organization in San Francisco, from April to June 1945, produced the Charter of the United Nations and Statute of the International Court of Justice to govern human activities on a planetary scale (United Nations 1945).

After the 1945 inflection point of armed conflict (Box 33.4) with atomic bombs—human interactions were transformed on a planetary scale by strategies conceived during the period when there was a common interest in survival among humans across the Earth (Fig. 33.1). We are living during such a moment now, when there is a common interest in survival once again at local-global levels, due to diverse causes at different time scales (Fig. 33.2a–d).

Box 33.4 Vienna Convention on Diplomatic Relations (1961)

Article 45

If diplomatic relations are broken off between two States, or if a mission is permanently or temporarily recalled:

(a) the receiving State must, even in case of armed conflict, respect and protect the premises of the mission, together with its property and archives;...

With emphasis, armed conflict (Box 33.4) is mentioned three times in the Vienna Convention on Diplomatic Relations, displacing all other security (Boxes 33.1 and 33.3) considerations. In this context, it is noteworthy that COVID-19 was the “most challenging crisis we have faced since the Second World War” (Guterres 2020) until the Russian invasion of Ukraine.

With hope, the diplomatic opportunity remains to operate before-through-after the inflection point of the COVID-19 pandemic (Fig. 33.2c), which will happen with certainty as with all plagues, although when and how are the questions with the latter determined by diplomatic missions. Importantly, operating in the short-to-long term is to recall the global acceleration of intra-state armed conflicts (Box 33.4) throughout the Cold War (Tillema 1991; Center for Systemic Peace 2022), further reflecting the need for subnational-national diplomacy (Fig. 33.3). The challenge is to recognize the inflection points (Fig. 33.4), which are few and far between, and then to capitalize on those rare moments as levers for transformation, which could be considered as a successful outcome of diplomatic relations that are inclusive.

Science Diplomacy to Negotiate Transformation

The goal of this chapter is to introduce questions about diplomatic reform, exploring the utility of the 1961 Vienna Convention on Diplomatic Relations (Boxes 33.1, 33.2, 33.3, and 33.4) after the twentieth century, when humankind unambiguously became interconnected across the Earth (Fig. 33.1) at both:

- Security Time Scales (mitigating risks of political, economic, cultural, and environmental instabilities that are immediate); and
- Sustainability Time Scales (balancing economic prosperity, environmental protection, and societal well-being across generations).

To be inclusive, these different time scales represent a “continuum of urgencies” (Fig. 33.4), operating from minutes-centuries (Fig. 33.2a–d) at the levels of peoples, nations, and our world (Fig. 33.3).

To be transformational is to be brave, if not humble, introducing options (without advocacy), which can be used or ignored explicitly with respect for the decision-makers and their institutions, which operate across subnational-national-international jurisdictions inclusively (Fig. 33.3). Across a globally interconnected civilization (Figs. 33.1, 33.2, and 33.3), another way of interpreting inclusion is in view of scalability (does this work for me and you?),



Fig. 33.5 Informed decisions operate across a “continuum of urgencies,” illustrated for peoples, nations, and our world from security to sustainability time scales (Figs. 33.1, 33.2, 33.3, and 33.4). Negotiation strategies that contribute to the decision-making with diplomatic agents (Boxes 33.1 and 33.3) also exist short term in view of conflicts to resolve and long term in view of common interests to build—balancing societal, economic, and environmental considerations across generations. Adapted from Vienna Dialogue Team (2017); Young et al. (2020); Berkman et al. (2022a)

involving all humanity with stewardship responsibilities on a planetary scale. The diplomatic agents (Boxes 33.1 and 33.3) are each of us.

For example, without plenipotentiary credentials, I co-convoked and chaired the first formal dialogue between the North Atlantic Treaty Organization (NATO) and Russia regarding security in the Arctic (Berkman and Vylegzhanin 2012). The option (without advocacy) simply was for allies and adversaries to consider their common interests, starting with questions (Fig. 33.6) rather than asserting prerogatives to resolve conflicts. Such common-interest building opened the doors to translate all of the Russian Arctic laws into English from the early nineteenth century to the present (Berkman et al. 2019), enabling rare legal transparency for user-defined assessment to generate informed decisions (Fig. 33.5). This history led to the Science Diplomacy Center at MGIMO University in Moscow with me as the Director from Boston (MGIMO 2021), being brave to convene inclusive dialogues (Berkman et al. 2022b), protecting and enhancing open science (United Nations 2021) that will enable humanity to operate short-to-long term (Figs. 33.1, 33.2, and 33.4) across a “continuum of urgencies” (Fig. 33.5).

The transdisciplinary process, starting with questions (Arthur et al. 1989), is represented in Fig. 33.6 as the foundational feature to build common interests inclusively. When questions of common concern arise, the diversity of science methods (natural science, social sciences, and Indigenous knowledge) to study change also is revealed, generating necessary data as stages of research. However, data to answer questions is fundamentally different from evidence



Fig. 33.6 Pyramid of informed decision-making with science diplomacy to apply, train, and refine across a “continuum of urgencies” (Vienna Dialogue Team 2017), characterizing the scope of an informed decision (Fig. 33.5) as the apex goal of an holistic process that begins at the stage of questions to build common interests among allies and adversaries alike. Enhancing research capacities is a positive feedback that results from common-interest building. Adapted from Berkman et al. (2022a)

for decisions, which involves institutions that take action. The data-evidence interface is where the science diplomat sits, contributing as both an observer and participant in the process to generate informed decisions (Fig. 33.5).

Across the data-evidence interface with research into action (Fig. 33.6), the diplomacy with science simply is in revealing options (without advocacy), which can be used or ignored explicitly, respecting the institutions. Options (without advocacy) underlie diplomacy as a process with science, empowering diplomatic agents (Boxes 33.1 and 33.3) to navigate dialogues without making recommendations that would engender political dynamics with perceived or actual agendas.

The challenge with diplomatic relations is to be eminently practical, recognizing that sustainable development at local-global levels involves close coupling of:

- Governance Mechanisms (laws, agreements, and policies as well as regulatory strategies, including insurance, at diverse jurisdictional levels); and

- Built Infrastructure (fixed, mobile, and other assets, including communication, research, observing, information, and other systems that require technology plus investment).

The two generalized arenas of decision-making (Fig. 33.6) to achieve progress with sustainable development (United Nations 1987, 2015) also represent the public and private institutions involved with diplomatic relations, as observed above with the technology industry.

Conclusion

The rationale for science diplomacy to balance national interests and common interests (Fig. 33.1) recognizes such capacity is only possible if nations have common interests. The lesson of the 1959 Antarctic Treaty is that a common interest in survival does exist at local-global levels with compassion for the future, even among superpower adversaries. The future operates across diverse time scales (Fig. 33.2), each with its own exponential trajectory and all converging with challenges for humanity together as part of a globally interconnected civilization with planetary dynamics across a spectrum of jurisdictions (Fig. 33.3).

Understanding there will be inflection points (Fig. 33.4) is an opportunity for all diplomats—especially those who study change—to build common interests before-through-after the global inflection point that is happening now across a “continuum of urgencies” (Fig. 33.5), writing the future of all on Earth inclusively. The gift of science diplomacy is to build common interests so that balance can be achieved short-to-long term, as illustrated with the concept of sustainable development, with methodology that simply starts from questions, leading to informed decisions (Fig. 33.6): not good decisions or bad decisions; right decisions or wrong decisions; but decisions that optimize the questions and available information inclusively.

Informed decision-making is like driving a car, constantly adjusting to the immediacies on the left and right while maneuvering in view of future urgencies with red lights ahead and circumstances to consider in the rear. As the engine of science diplomacy (Berkman 2020c), informed decision-making is available for humankind inclusively, recognizing that reading, writing, and arithmetic are necessary, but no longer sufficient when each of us has effectively infinite and instantaneous access to digital information. The sufficiency comes with being able to operate across a “continuum of urgencies” (Figs. 33.5 and 33.6), which is something that can be trained at K-12 with basic

education, starting with questions, enhanced with research skills in universities, and polished with leadership through the professions.

This local-global journey is underway with science diplomacy and informed decision-making as reflected in training the diplomatic corps of nations through their foreign ministries, including Algeria, Armenia, Canada, Costa Rica, Ethiopia, and Indonesia among others, as described in the *Informed Decisionmaking for Sustainability* book series (Young et al. 2020; Berkman et al. 2022a). The scope of this science diplomacy training with informed decision-making extends across the United Nations with the United Nations Institute for Training and Research (UNITAR). Informed decision-making also is being introduced at the level of universities as with the joint course between Tufts University and MGIMO University (Berkman and Vylegzhanin 2020), recognizing science diplomacy courses are emerging around the world more broadly.

The science diplomats are the brokers of dialogues, starting with questions that contribute to informed decisions (Figs. 33.5 and 33.6), which operate short-to-long term (Figs. 33.1, 33.2, and 33.4), at local-global levels across generations (Fig. 33.3), which will take generations to test as a proposition, triangulating education-research-leadership with lifelong learning (Fig. 33.6). Transforming diplomatic relations with science diplomacy as a common language—involving diverse diplomatic agents (Boxes 33.1 and 33.3) who can contribute inclusively—is an option (without advocacy) for all nations.

With informed decision-making, science diplomacy becomes a language of hope “for the benefit of all on Earth across generations.” The opportunity is to turn science fiction into science reality, like traveling from the Earth to the Moon (Verne 1865) across the next century.

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