On January 27, 2021, in one of its first executive orders, the Biden administration asked the intelligence community to produce a National Intelligence Estimate (NIE) on the “national and economic security impacts of climate change.” Addressing this complex issue provided an opportunity to broaden the concept of national security to emphasize the responsibility, as stated in the administration’s Interim National Security Strategic Guidance, “to protect the security of the American people.” It was also a chance to “reimagine American foreign policy and national security for the next generation,” as the president said when first introducing his national security team.

But the resulting NIE, “Climate Change and International Responses Increasing Challenges to US National Security Through 2040,” published in October 2021, falls short of these ambitious goals. The report looks through the proverbial keyhole: the basic narrow picture is accurate, but vital information and perspectives are missing. To meet the administration’s stated objectives, future national security approaches must go beyond a traditional state-centric national security lens to grapple with the larger ecological, social, political, and intergenerational dynamics that may arise in the wake of climatic changes and other complex, transnational challenges.

Quite reasonably, the NIE recognizes that climate change presents challenges to national security, that geopolitical tensions will grow over efforts to reduce emissions, and that the effects of climate change will “exacerbate cross-border geopolitical flashpoints.” The report explicitly acknowledges its narrow scope, stating that its analysis is limited to the effects of climate change on US national security interests abroad.

Where the NIE falls short is in failing to acknowledge that such a restricted framing of the topic itself creates an inherent security risk. In this way, the NIE is an example of the perils of excessively relying on the military and defense framing of “security” that have characterized the US national security sector since the end of World War II. Indeed, the history of NIEs as intelligence community (IC) products reflects this broader trend. The National Security Act of 1947 established the concept of an “estimative” intelligence report following the surprise invasion of South Korea by North Korean troops. Such reports represent the IC’s “most authoritative and coordinated written assessment.” Producing them currently involves the IC’s 18 intelligence agencies, the National Intelligence Council, and the coordinating Office of the Director of National Intelligence. Policymakers are the main consumers of these reports, which are usually classified.

A narrow lens leading to strategic surprises
The traditional geopolitical framing of the climate NIE reflects the limits of current conceptions of security. A policymaker reading the 27-page document could easily come away with the sense that the biggest challenges are global competition for land in the warming Arctic and the possibility that a country might unilaterally deploy geoengineering. And although the NIE acknowledges...
that higher temperatures and loss of biodiversity will increase human health risks, it makes no mention of the COVID-19 pandemic. The public is accustomed to hearing about the pandemic and climate change as different issues involving different experts, impacts, and audiences—but in fact they are related phenomena. Their global nature and interdependent linkages with natural and human systems reveal important new security realities that cannot be captured by a state-centric analysis. COVID-19 has triggered global economic contractions, reversal of international development gains, greater vulnerabilities for girls in low-income countries, and tremendous upsets to supply chains, which are all still roiling the world. And the crisis has exposed and exacerbated security-related vulnerabilities and inequities that weaken society’s capacity for resilience.

The experience of the pandemic suggests that national security should be reframed to include global public health. Climate change and environmental breakdown contribute to recurrent disease outbreaks, including pandemics. International cooperation around the subject of global public health will be essential to human, national, and economic security in a world disrupted by climate change. The emergence and spread of new mutations of the novel coronavirus, including the omicron variant, and its relationship to disparities in vaccine availability and acceptance, are yet another reminder of this important aspect of security.

The NIE also assumes, problematically, a gradual increase in climate change-amplified risks over time. A chart on the first page of the document, for example, projects the geopolitical “risks to US interests through 2040” as increasing in a progressive way. This belies the potential for highly disruptive nearer-term risks emanating from converging crises, such as the prospect of extreme weather events causing global disruptions in food, energy, or medicine.

Although it is difficult to capture the notion of abrupt change in charts that are linear by design, the NIE’s framing implies a steadily building emergency that progresses in a logical, step-by-step fashion—a characterization at odds with nonlinear and potentially more abrupt climate change scenarios. Fundamentally, this perspective fails to capture the immediacy and unpredictability of abrupt departures from normal climatic patterns.

Another limit of the climate NIE, and current concepts of security more generally, is its focus on potential state-based strategic competition and relative lack of attention to systemic risks in human and ecological systems. Relatedly, national security today assumes an inert and stable natural environment as a baseline condition. Operating under these assumptions obscures potentially significant interdependencies between traditional and nontraditional security issues. Such interdependencies have been at the root of notable strategic surprises and led to intelligence or policy failures: the unexpectedly sudden end of the Cold War in late 1989, for example, and the global financial crisis of 2007–2008.

By failing to anticipate interdependencies or the likelihood of abrupt changes, limited analysis may increase the potential for surprises. Thus the NIE’s framing could even be risking a false sense of security. For example, although the report highlights the dangers of food insecurity, it overlooks instances in the last decade when localized climate events, including droughts, floods, and wildfires, affected global commodities networks. Linkages among local, regional, and global phenomena make it potentially misleading to characterize a single country’s adaptability to climate change without reference to the complex international web of transboundary interdependencies.

The statement in the NIE that “Egypt is less exposed to climate effects than many countries,” seems to overlook other analyses as well as recent experience. In 2010, high rainfall in Canada and drought and bushfires in Russia, Ukraine, and Kazakhstan contributed to unexpected spikes in global market prices of wheat, an imported commodity that Egypt relies on heavily. Higher bread prices aggravated discontent, and political protests soon coalesced into the Arab Spring movement. Although the Arab Spring sparked first in Tunisia, it quickly moved to Egypt in early 2011 in what was a major strategic surprise for the United States and global institutions.

**Reconsidering the definition of “security”**

Although the National Intelligence Council has published broader analyses in the past, the climate NIE reflects the job the IC originally was designed to do. The IC’s mandate is for strategic estimative analysis, not to establish US national security interests and priorities. But the NIE’s approach to climate change evokes an earlier age when national security’s near-exclusive focus involved defending the United States against external threats, an approach that assumes international and zero-sum competition.

The challenges facing the world now require a new concept of security that is appropriate to a time when common threats affect all nations in their own way. As the United Nation’s top climate change official, Patricia
Espinosa, recently said, “There is not anymore a situation where we can say these are the vulnerable countries and these are not the vulnerable countries.”

Considerations of national security must be reframed in a global context, under which conditions of systemic global changes intertwined with regional and national developments, instability, and unpredictability are the norm. However, earth system changes are not a typical focus of intelligence analysts. There is no theory in international relations or security studies on which to base this kind of integrated analysis.

The IC can build anticipatory analysis as part of a global security paradigm only by accepting uncertainty and working to create a community that studies the potential implications of the discontinuous changes facing the country. One sign that these methods of assessment and warning need updating is the paradoxical regularity with which we are now surprised by “unprecedented” natural disasters. Becoming better attuned to the behaviors of complex natural systems requires inviting different frames of analysis, perspectives, and methods into security-related research and assessment efforts. The IC may also need to rethink the classified environment, which can make a holistic systems-based approach more difficult.

And as security is reconceived, young people’s rights, perspectives, and needs deserve special consideration. As of mid-2020, children under 15 made up about one quarter of the world’s population. In a recent survey of 10,000 young people between 16 and 25 years old in ten countries, more than half reported being very or extremely worried about climate change, as well as experiencing feelings of anger, sadness, and guilt. “Climate anxiety and distress were correlated with perceived inadequate government response and associated feelings of betrayal,” the survey found. Climate change and society’s failure to act are creating feelings of deep insecurity in youth—feelings that have potentially profound implications for governments.

Concerns about the mental health of young people rarely enter into traditional national security priorities, but current framings may lead to the vilification of climate activists by criminalizing their advocacy for their own security. Young people involved in nonviolent direct actions such as road blockages, civil disobedience, or mobilizing more support are sometimes—and perhaps increasingly—seen as security threats themselves. The Indian government, for example, has invoked a colonial-era sedition law against 22-year-old climate activist Disha Ravi. Similar prosecutions elsewhere are creating new security dynamics involving international and intergenerational tensions.

Looking broadly at the security implications of climate change will require a much wider lens than the IC has traditionally used. Understanding the physical, social, and political impacts of climate change requires more deliberate consideration of global interdependencies between natural and manmade systems. Uncertainties and the potential for strategic surprises must be more explicitly analyzed. Global cooperation needs to become a national security imperative. And children’s rights to security, today and in the future, deserve consideration.

As environmental security researcher Simon Dalby has observed, “for much of the history of the rise of European power and the subsequent extension of its mode of economy to encompass most of the world in the processes of globalization, [western and US national] security has been about maintaining this social order.” This is no longer good enough.

The pandemic can be seen as a harbinger of a new security landscape. More and more often, security issues are global and environmental and cannot be adequately addressed by individual nations acting on their own. Intelligence analysis must encompass a wider range of disciplines, cultures, and perspectives, and it must establish connections between global and nation-centric analysis. While traditional national security analysis has generally served the United States well in the postwar era, the nation has entered an uncharted world of societally novel conditions. Past experience is no longer a reliable guide to the future.

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RECOMMENDED READING

National Intelligence Assessment on the National Security Implications of Global Climate Change to 2030, Before the House Permanent Select Committee on Intelligence and House Select Committee on Energy Independence and Global Warming (June 25, 2008) (statement of Thomas Fingar, Deputy Director of National Intelligence for Analysis and Chairman of the National Intelligence Council).