

Tymoshenko (p. 51). In one conspicuous case from the region, that of Kyrgyzstan in 2010, the decidedly authoritarian SCO failed to come to the defense of a semi-authoritarian regime (p. 51). Although the *defensive* nature of NDROs clearly comes through in this analysis—in that they are far more committed to the protection of their members from the forces of democratization than to actively spreading autocracy—this issue likely should have been explored further, given that it speaks directly to the potentially unique qualities of NDROs and their broader influence on the balance between democracy and autocracy. If NDROs do less than expected against the forces of democratization, is their authoritarian nature actually that impactful on their member states and the broader international system? Alternatively, should the democratic world be concerned about the rise of NDROs, as some commentators have posited? These are questions for further research spurred by the book under review.

Obviously, not everything can be included in any one volume, and these are relatively minor criticisms that should not detract from the important work these authors have done, the questions that they raise, and the considerable contribution that this work represents to the field. They do themselves a disservice by commenting several times that their conclusions might not travel well outside the former Soviet Union, given the unique nature of regionalism and the international organizations in this post-imperial space that also includes a clear regional hegemon. For students of the current authoritarian wave, this study will likely serve as the foundation for future research into the domestic, regional, and global implications of NDROs throughout the world for the foreseeable future. It is an important and groundbreaking work that elevates each of the literatures that it addresses to the next level. Many will be inspired by this book, which comes highly recommended. For this, Obydenkova and Libman should be congratulated.

**International Relations in the Cyber Age: The Co-Evolution Dilemma.** By Nazli Choucri and David D. Clark. Cambridge, MA: MIT Press, 2018. 420p. \$45.00 cloth.  
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— Myriam Dunn Cavelty , ETH Zürich  
dunn@sipo.gess.ethz.ch

For more than a decade, academics at the fringes of the discipline have pointed out that traditional international relations (IR) theories do not pay enough attention to the transformational effects of technology in general and to cyberspace in particular. Given the mounting significance that digital technologies play in social interactions, this fringe is now moving steadily toward the mainstream

while gathering speed, with a growing number of scholars on both sides of the Atlantic creating theoretical work to bring technologies and world politics closer together. As a result, research coalescing around the premise that technological possibilities and constraints influence socioeconomic processes and that, in turn, political preferences and contexts shape the evolution of digital technologies is no longer a rarity.

Nazli Choucri and David D. Clark's book is the second in a series of three that devotes its attention to this interconnection between cyberspace and world politics. In its 12 chapters, it sets out to show how the “co-evolution dilemma,” which is caused by the different intensities and speeds at which international relations and cyberspace evolve as two closely interconnected systems, creates wicked problems for the state. The first part of the book establishes an analytical framework integrating both spheres, so that the mutual influences and critical linkages between the two can be identified in a systematic manner. The second part introduces a method called “control point analysis” that helps identify “the space of contention, its configuration, and the control option of key actors” in different contexts (p. 26).

To understand the effects of new technologies on world politics requires sufficient technical knowledge. This basis is provided in chapter 2 (“Cyberspace: Layers and Interconnections”). While paying a refreshing amount of attention to actors and their agency, the chapter introduces different layers of the internet, details the roles of key actors, and explains how they form networked relationships. It thus enables the reader to understand how cyberspace links to the levels of analysis traditionally used in IR. The integrated framework (chapter 4: “The Cyber-IR System: Integrating Cyberspace and International Relations”) combines cyberspace layers and levels of analysis into a matrix that can be used to identify goals, objectives, and activities of important actors.

The second part of the book introduces a method to take this mapping tool a step further. The method is geared toward “finding the locus of power and control” (p. 168) and identifying actors that “obtain power, economic or otherwise, by virtue of control over key components of the system” (p. 170). The authors provide the reader with a series of useful examples for what this looks like in practice. In the remainder of the book, some of the issues emerging from the “co-evolution dilemma” are described in more detail: cyber conflict in chapter 8, issues of cyberspace governance in chapter 9, and the issue of international order in chapter 10. Subsequently, the authors look into the future in chapter 11 and stimulate the reader with alternative visions of possible futures.

In the last chapter, the authors wrap up their argument by identifying five imperatives that flow from their research. First, power and politics can only be fully

understood through the lens of a joint cyber–IR analytical framework (as provided in this book). Second, the role of the state needs to be newly envisaged as private actors challenge many of its traditional key prerogatives. Third, the ability to control cyberspace is going to shape its future; the authors contend that we need to better understand the contestation between different actors in this space. Fourth, more effort is needed to comprehend the different dimensions of cyber-in-security and its influence on international relations. Fifth, we need to understand the interaction between cyberspace and IR in an even broader context of the natural world we live in.

*International Relations in the Cyber Age* is a book rich in content that opens up multiple pathways for further investigation. It is written in an approachable manner, avoiding unnecessary jargon or heavy theorizing, and its many examples illustrate the authors' thinking in useful ways. A few of the structural choices are a little puzzling, however, and the overall storyline and main argument are at times elusive. This criticism mainly applies to the chapters that do not directly add to the reader's understanding of the framework or that are, at best, loosely connected to the application of the proposed method. For example, the book mentions sustainability a few times and the need to rethink the cyber–IR interaction in the broader context of the natural environment (see, for example, chapter 5). However, this point is lost in the second part of the book. The "lateral pressure theory," mentioned in chapter 3 and chapter 5, is another interesting theoretical avenue but is not integrated well with the layer framework and is also not followed through systematically to the end. Furthermore, the book would have profited from a more careful discussion of key concepts, such as power and control in its different manifestations, for which there is a wealth of relevant literature.

Indeed, the biggest issue is that the book does not engage with the vibrant new literature on cybersecurity, cyber conflict, and cyber governance that has emerged over the last five years. The field is not only very complex and dynamic, as the authors repeatedly stress, but scholarly knowledge that takes into account more recent empirics has also evolved rapidly in the last few years. For example, there is only one very short subchapter specially dedicated to literature in the whole book (chapter 3, section 7, which only reviews literature up to 2010). In the chapter on cyber security and cyber conflict (chapter 8) the referencing is very thin, even though this is the area where several substantial and important contributions have been made, especially by US scholars. Furthermore, in the chapter on governance (chapter 9), there is not a single mention of the UNGGE process (United Nations Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security), even though that is arguably the most important international attempt to come to an agreement on cyber

"norms of behavior." The consideration of other key events, including the Russian interference in the US elections in 2016 or the knowledge gained after 2013 about the domestic surveillance activities of intelligence organizations, including the NSA, should not be missing from a book published in 2018. Given that they are, the book is outdated in several of its statements and assumptions.

Nevertheless, the book is commendable for how it manages to bring different disciplinary perspectives together and for its bravely detailed discussion of the sociotechnical foundations of the cyberspace system. It contains interesting thoughts on how to move forward in an interdisciplinary manner so that neither technological imperatives nor political considerations are lost. Indeed, as the authors stress in their conclusion, the complex interaction of technology and sociopolitical systems needs innovative theoretical approaches that help explain altered realities.

**War and Chance: Assessing Uncertainty in International Politics.** By Jeffrey A. Friedman. New York: Oxford University Press, 2019. 240p. \$34.95 cloth.  
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— Brian C. Rathbun , University of Southern California  
brathbun@usc.edu

International relations scholars and foreign policy analysts typically claim to be interested in prescriptive theorizing, but this usually takes the form of a perfunctory concluding chapter about how policy makers should behave if their theoretical premises are right, which of course they are. The normative implications of academic work are generally a tacked-on epilogue. We are usually much more interested in explanation than prescription. Not so with Jeffrey Friedman's excellent book *War and Chance: Assessing Uncertainty in International Politics*, the best book on improving decision making through rigorous empirical analysis since Philip Tetlock's landmark *Expert Political Judgment: How Good Is It? How Can We Know?* (2005).

Friedman is particularly interested in the role that probability assessment plays in foreign policy judgment. In an extensive analysis of the explicit guidelines for assessing uncertainty provided by the US military, intelligence services, and foreign policy agencies, he finds an aversion to offering fine-grained probabilistic judgments. A qualitative and quantitative review of decision making during the first decade of US involvement in Vietnam illuminates a number of common pathologies. Elites rely on relative rather than absolute probability, asking whether certain options offer better chances of success than others, rather than estimating an absolute number. Or they engage in what Friedman calls "conditioning," making the case for instance that success requires a