



The Use of Force for State Power

History and Future

MICHAEL WARNER
JOHN CHILDRESS

palgrave
macmillan

The Use of Force for State Power

Michael Warner • John Childress

The Use of Force for State Power

History and Future

palgrave
macmillan

Michael Warner
Maryland, USA

John Childress
Maryland, USA

ISBN 978-3-030-45409-8 ISBN 978-3-030-45410-4 (eBook)
<https://doi.org/10.1007/978-3-030-45410-4>

© The Editor(s) (if applicable) and The Author(s), under exclusive licence to Springer Nature Switzerland AG 2020

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use. The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Palgrave Macmillan imprint is published by the registered company Springer Nature Switzerland AG.

The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

To our families, who endured this

“We must understand, therefore, that particular citizens have conveyed their whole right of war and peace unto some man or council; and that this right, which we may call the sword of war, belongs to the same man or council, to whom the sword of justice of belongs.”

—*Thomas Hobbes, “The Citizen,” VI:7*

PREFACE

This book extends a conversation that began in 2015. The authors pondered the ways in which despots had diminished the optimism of the 1990s, when it seemed that liberal states had established an order between nations that would confer peace and prosperity around the world. The authoritarians remaining after the Cold War were apparently unable to modernize their societies absent democratic reforms—they could not compete economically or militarily because they could not mobilize people and innovation. Isolated and left behind by globalization, they seemed destined to adopt, sooner or later, the modern technological and political tools that would ultimately transform their dictatorships and archaic societies.

Such an imagined future diverged dramatically from subsequent events. To the surprise of many, the new technologies emerging at the end of the Cold War did not loosen dictatorship's grip. Illiberal regimes found in technology and ideology a new lease on life—specifically, they found new ways to build power and wield force. As we explored this trend, deeper patterns emerged from the unfolding tapestry of politics and international affairs. We recognized common themes in the ways that force has been applied across history and in our own time. In this book, we seek to sketch these dynamics and share what we have learned about the nature of force in all ages.

We understand that we are stepping onto a much-used and oft-contested field. Military, diplomatic, and security history are vast subjects, made larger still when one adds to that corpus the shelves full of social

science and theoretical analyses. Why add another work to the pile? Because we believe that history has reached a pass where new developments clarify principles evident in earlier ages. Enhanced perspectives from the distant and recent past have sparked insights on familiar and contemporary events. This is what we offer here.

Our work is rooted in history and by necessity it draws liberally from insights in other disciplines. We are struck with the ways in which ancient, modern, and contemporary authors keep returning to certain notions. Concepts in one field, such as military history, echo ideas in other areas like political philosophy and intelligence studies. How is it that a Greek philosopher, Aristotle, discusses tyranny in terms much like an Indian sage, Kautilya, when these two near-contemporaries never heard of one another? And why are military strategists and security services in our day unwittingly operating in cyberspace in ways that would have seemed familiar in Ancient Greece or Kautilya's India?

This book addresses questions like these by studying force, the coercive application of power against resistance. Thomas Hobbes observed that sovereignty as such cannot be divided. All self-contained political orders, even those that we would not yet call states, have some ultimate authority that uses two “swords” to both dispense justice and defend the polity against its internal and external enemies. As Max Weber suggested a century ago, the modern state seeks a monopoly on the legitimate use of armed force. Hobbes would retort that it is ever thus. The swords of justice and war, he explained, are twinned and cannot be separated: “All judgment, therefore, in a city, belongs to him who hath the swords; that is, to him who hath the supreme authority.”¹

Our contention is that rulers wield both the sword of war and the sword of justice in very similar ways, applying common principles across time and space. They try to be prepared to use force when necessary, but they typically seek to employ it in ways that seem more efficient and less risky. Those ways, we will try to show, work like the edge of a sword—they divide. They aim to keep foes from working together—by preventing them from concerting their actions, or by eliminating the trust that should bind them. In short, they make enemies afraid to cooperate.

Such an argument could strike some readers as mildly reductionist. This history can only trace an outline of events; there are so many more sources that could be incorporated, with far more detail and nuance. We acknowledge the risk of sacrificing the details for the sake of the pattern. As much as possible, we have tried to preserve subtlety, context, and special

circumstances while also drawing attention to commonalities. Our book asks, in effect, why these commonalities recur across times, cultures, and technological contexts. We did our best to avoid reductionism, and we leave it to our readers to judge our success. We also add this challenge: the critic's job, it seems, is not only to critique our hypotheses but also to suggest alternative ways to explain the recurring echoes that we highlight, and to do so without dismissing them all as coincidence.

Today the force that the liberal West worries most about—at the level of states and groups that can wreak mass destruction—always has technological and ideological characteristics. Baldly stated, anti-liberal regimes and movements fear to live next to liberal ones, whether in physical space or in cyberspace. The borders of their worldviews are the fault lines of conflict in our contemporary world—fault lines that the technologies of our time will not dissolve. Into this unhappy moment, we offer our thoughts.

Maryland, USA
Maryland, USA

Michael Warner
John Childress

NOTE

1. Hobbes observes that every polity requires “some man or council” to wield both the “sword of justice” and the “sword of war” on behalf of the community. Thomas Hobbes, “The Citizen,” in Bernard Gert, ed., *Man and Citizen* (Gloucester, MA: Peter Smith, 1978), VI:1–8, pp. 174–178.

ACKNOWLEDGMENTS

We thank the many people who shared with us their time, sources, ideas, corrections, and critiques. Their comments helped us more than we can ever repay. We thank Amy Chao, Philip Costopoulos, Michael Fischerkeller, Jim Golby, Emily Goldman, Richard Harknett, Hugh Liebert, Lt. Gen Kevin McLaughlin, Joshua Rovner, and the late James V. Schall, SJ for helping in various ways or at least listening so politely to our attempts to articulate the ideas in this book. We also owe a special note of thanks to Don Jacobs, for making us rethink our initial approach. Dr. Warner adds a note of thanks to his students at American University for their questions about this material. Finally, we thank Anca Pusca and Rachel Moore at Palgrave Macmillan for turning a lump of coal into something that Marilyn Monroe in *Bus Stop* might have called “not exactly not a diamond.” What is good here comes largely from them. What is flawed stems from our faults alone. Finally, we wish to thank our families for enduring this project. You make everything possible.

Both authors work for the U.S. government, but this work reflects their own thinking and does not represent official positions of the U.S. government or any of its components. The book was reviewed by several agencies to ensure it contained no classified information. We thank all who played their quiet but necessary roles in this process.

CONTENTS

1	Introduction: Tools for Sovereignty—Power and Force	1
2	Divide and Conquer: The Progress of Force to 1800	17
3	“The Civilizing Mission”: European Dominance to 1914	55
4	The World Crisis: 1914–1953	81
5	A Frozen World, 1953–1990	123
6	A Liberal Order?	181
7	Information Wars	213
8	Conclusion: Force and Trust in the Future	259
	Bibliography	277
	Index	299

AUTHOR BIOGRAPHIES

John Childress is a U.S. Army Lieutenant Colonel who has served as a ground commander in Iraq and Afghanistan. During his nineteen years of service, he has also served as a military fellow in the office of the late Congressman Elijah Cummings and as an assistant professor at the United States Military Academy at West Point where he taught politics and political philosophy. He now serves as a strategist where he deals with questions of policy and legality that are at the heart of the exercise of military power in a democratic republic.

Michael Warner serves as a historian in the U.S. Department of Defense and has written and lectured on intelligence and cyberspace history. He is in his fourth decade of service as a civilian employee of the U.S. government and has also taught at American University, Columbia University, and Johns Hopkins University. His third book, *The Rise and Fall of Intelligence: An International Security History*, was published in 2014. He sits on the Board of Editors of the peer-reviewed journal *Intelligence and National Security*.

LIST OF FIGURES

- Fig. 2.1 A Japanese view of Portuguese sea power in the early 1600s. Carracks and charts enabled the Portuguese to travel and comprehend the globe strategically. (Unknown artist, “Arrival of the Europeans,” seventeenth century, Screens, 105.1 × 260.7 cm, Metropolitan Museum of Art, Mary Griggs Burke Collection) 35
- Fig. 3.1 Napoleon I’s victories inspired Carl von Clausewitz to write *On War*. (Louis Philibert Debucourt, *Napoleon I*, 1807, Etching, 46.5 × 35 cm, Metropolitan Museum of Art) 57
- Fig. 3.2 Railroads revolutionized the conveyance of troops. J.J. Higginson, *Military Map of the Seat of War*, 1861, Map, 33 × 38 cm, New York Public Library Lionel Pincus and Princess Firyal Map Division 61
- Fig. 3.3 Paris Commune handbill (Imprimerie Nationale, Republique Francaise/N. 42, 1871, 40.5 × 52 cm, Musee Carnavalet Paris) 67
- Fig. 4.1 Telephones allowed commanders to convey information even on the battlefield in World War I. (Unknown Photographer, *Field Telephone Line Construction*, Approx. 1914–1918, Photograph, 18 × 24 cm, German Federal Archives) 86
- Fig. 4.2 British and Soviet soldiers in Soviet propaganda. Wartime propaganda fostered cooperation among the Allies. (Unknown Artist, Unity of Strength—Inter-allied posters: British and Russian servicemen, shaking hands over dead body of swastikaed dragon, 1939–1946, Poster, U.K. National Archives Kew INF3/327) 109

Fig. 5.1	CASTLE BRAVO thermonuclear detonation, 1954. (Source: U.S. Department of Energy, <i>Castle Bravo</i> , February 28, 1954)	127
Fig. 5.2	The computer goes to war: civil defense workers learn about the U.S. Air Force’s Semi-Automatic Ground Environment (SAGE) air defense system. (Office of Defense and Civil Mobilization, <i>SAGE Discussion at Maine Civil Defense College</i> , 1951–1961, Photograph, U.S. National Archives Boston)	160
Fig. 5.3	General Secretary Gorbachev (left) and President Reagan (center) at Reykjavik, 1986. (White House Photographic Office, Photograph of President Reagan and General Secretary Gorbachev meeting at Hofdi House during the Reykjavik Summit, 1986, Photograph, Ronald Reagan Presidential Library) (Color figure online)	163
Fig. 6.1	Iraqi armor destroyed by the coalition during the Persian Gulf War. (SSGT Reeve, <i>Iraqi T-62 main battle tanks destroyed during Operation Desert Storm</i> , 1991, Photograph, U.S. National Archives at College Park)	183
Fig. 6.2	U.S. Air Force B-1B bomber flying from the United Kingdom in support of Operation ALLIED FORCE. (SSGT Mallord U.S. (National Archive, <i>A B-1B Lancer is marshalled to a full stop at RAF Fairford, United Kingdom</i> , 1999, Photograph, U.S. National Archives at College Park)	193
Fig. 7.1	An armed Predator drone flying from Balad Air Base in Iraq. (SSGT Lewis, at Balad Air Base, Iraq, a U.S. Air Force RQ-1 Predator Unmanned Aerial Vehicle taxis to a runway on a mission in support of Operation Iraqi Freedom, 2004, Photograph, U.S. National Archive at College Park)	220
Fig. 7.2	U.S. soldiers firing on ISIS positions. (SGT Bigelow, <i>Engaging ISIS</i> , 2017, Photograph, Department of Defense)	232



CHAPTER 1

Introduction: Tools for Sovereignty—Power and Force

This book explores force and what makes it effective when used by sovereign powers for internal security and external defense. We seek to understand how some powers use force with more impact than others—and how the principles by which they do so remain remarkably consistent over time and across cultures. That consistency provides a framework that suggests how rulers have used force to shape societies (and vice versa), and how innovations in force will influence events in our “cyber” age.

The seed of our argument, as it were, is a common observation made by near-contemporaries roughly 2300 years ago. Sun Tzu and Aristotle both noted that successful commanders and rulers divide their foes, whether they are enemy armies or internal rivals. These classical theorists of politics and strategy, however, do more than urge kings and commanders to “divide and conquer.” Both Sun Tzu and Aristotle (and many other observers) suggest the way to keep enemies divided is to break their mutual trust.¹ We also note similar notions across the ancient world and in modern times, including in works by several founders of modernity, such as Machiavelli (and even Shakespeare).

This commonality is echoed today by researchers seeking anthropological, psychological, and sociological explanations for persistent patterns of violence and force. We note in particular the ideas of Douglass North, John Joseph Wallis, and Barry Weingast, who observe in their influential *Violence and Social Orders* (2009) that how societies “solve the ubiquitous

threat of violence shapes and constrains the forms that human interaction can take, including the form of political and economic systems.” North et al. thus echo Thomas Hobbes’ *Leviathan* in viewing the control of violence as a foundational aspect of all social orders, and they accordingly derive a conceptual framework that seeks to explain the endurance of “natural” (i.e., authoritarian and exclusive elites that Hobbes would recognize) in most times and places.

With this allusion to Hobbes’ state of nature, *Violence and Social Orders* explains that these “natural” structures unwittingly perpetuate ancient impositions that rulers undertook to create social orders in the beginning of history.² In short, these “natural states” sustain exclusive (and sometimes cooperating) regimes by engendering mutual trust among actors possessing the power and the will to take human life. The actors’ mutual forbearance in this must always be wary, of course, while rivals remain armed; thus natural states face a constant risk of falling back into violence between mutually distrustful rivals. Social peace lasts only while “each elite understands that other elites face similar incentives” not to fight each other.³ These closed regimes or “natural states” represent the vast majority of all societies across history.

Violence and Social Orders explains that only in the last three centuries have natural states co-existed with a different form of social organization: the “open access orders” in the liberal West. North and his co-authors thus again follow Hobbes in suggesting that societies that respect rights are more stable, thus more free and more predictable, and thus more prosperous.⁴ Yet *Violence and Social Orders* does more than channel Hobbes.⁵ Its authors are describing events that Hobbes could only dimly envision in the seventeenth century, and it does so with evidence about the remarkable stability of the ways in which people interact across time, places, and cultures. The enduring stability of the salience of violence—and thus force—frames the social landscape that we describe in this book.

Explaining social structures as varying answers to the problem of taming violence is a powerful but insufficient insight. North et al. offer a “conceptual framework” in *Violence and Social Orders* rather than a formal theory that tests causal hypotheses. That makes sense given their study’s effort to understand the factors common to the origins and evolution of all societies; laboratory experiments, for example, cannot make much sense of ancient history. Yet the efforts presented in *Violence and Social Orders* (and indeed in Hobbes’ *Leviathan*, for that matter) necessarily do

not investigate two considerations that will inform our own conceptual framework for examining force.

First, while North, Wallis, and Weingast chart how and why societies control violence in consistent ways, they do not explore how novel technologies allow rulers to use the same principles of force to exert it in new and more effective manners. Indeed, military and political histories are replete with instances showing that the control of coercion and violence evolves with technological change, especially in the cyber revolution. The mechanisms by which rulers control *and exert* violence are never neutral, as Marshal McLuhan (“the medium is the message”) and two generations of military historians have helpfully explained. Such mechanisms are shaped by their societies, and they in turn shape societies.

Second, *Violence and Social Orders* compares how societies develop and function but says relatively little about how they interact. Peace has always been more the exception than the rule, as North et al. recognize. The disparities of power that emerged as growth took off in the “open access” societies during the modern age made it possible to create larger empires than ever before. This was quantitatively new, but it was soon followed by a new form of conflict: the ideological struggles of the twentieth century between open access states and other Western (but nonetheless totalitarian) natural states—which were also new. The endurance and severity of that twilight conflict also makes the reader wonder how such ideological states could arise in the first place from ideologies that emerged in reaction to the ideas that had guided the open access orders.

Studying the properties of force and how they have worked together across cultures and technological conditions has given us insights into the similar strategies and tactics that rulers use to maintain control and guard their interests at home and abroad. These similarities, moreover, obtain in both the military and the internal security fields. In short, force gets wielded in remarkably similar ways, both in the “natural states” and in the “open access societies” alike—as Aristotle and Sun Tzu suggested above. Its components are three-fold, and they fit together in predictable ways.

A CONCEPTUAL FRAMEWORK OF FORCE

Our conceptual framework re-examines the evidence from history, political theory, and social science in a way that suggests insights that in turn can prompt theory building or guide the proposal of

hypotheses. We believe that force requires concentration, and concentration in turn depends upon three components: cooperation, conveyance, and comprehension. Like the engine, drive train, and steering in a racing car, cooperation, conveyance, and comprehension all work together to allow a ruler or commander to concentrate force at the right time and place. The framework we advance here matters in our day because digitally and globally networked capabilities are rapidly transforming the third of those variables—comprehension—causing a revolution in what governments can know about adversaries at-scale and in real-time.

We seek to show that mastering this three-part relationship of cooperation, conveyance, and comprehension since ancient times has given rulers victory abroad and rest from enemies at home. Throughout military and political history, commanders and ministers have typically achieved disruptive and asymmetric advantages over their foes when by skill or chance they have been able to combine relative superiority in some or all of these three factors. Once again, we find ancient insights supported by modern research (as noted below). The factors that strengthen cooperation, of course, can also be attenuated in ways that impair cooperation among adversaries. These findings hint—as Sun Tzu and Aristotle long ago proposed—that rulers and generals disrupt and vanquish their foes by impairing their willingness to collaborate.

We are guided in this quest by the synthesizing efforts of two modern scholars, William H. McNeill and Michel Foucault. McNeill's meta-history *The Pursuit of Power* (1982) showed the interaction between economic acumen, technological innovation, social organization, and the military art, finding that power over the last thousand years consistently flowed to states that could assemble and sustain these elements. Foucault's *Discipline and Punish* gives us a complementary concept—one that he called *surveillance*—to explain how states use knowledge and coercive might against their own subjects not only to keep them in line but also to remove from the popular consciousness the possibility of struggling to live in some other way. Drawing from these insights into the power of technology and ideology, we gain confidence in our typology of force and its relevance to the fields of strategy, politics, and military history.

DEFINITIONS

Force and its varieties comprise the central subjects of this book. Any discussion of force, however, must proceed from an understanding of power. The *Oxford Living Dictionary* defines power and force this way:

Power: The ability or capacity to do something or act in a particular way.
 Force: Coercion or compulsion, especially with the use or threat of violence.⁶

Both power and force have intuitive meanings in many disciplines. Indeed, the *Oxford Living Dictionary* offers nineteen other definitions for power alone, and those include specialized usages in politics, physics, theology, and other fields. This plethora of meanings illustrates the difficulty of providing simple definitions to words with such wide applications. In some sense, power and force are twin foci for most political theorists, social scientists, and historians—not to mention military strategists—and a seemingly limitless literature treats them in similar but varied ways. Harold Lasswell even defined political science as the “shaping and sharing of power.”⁷

Given the range of connotations for power and force, we use their common English meanings, with some qualifications. First involves the shadings between force and coercion, which were long used as synonyms (and in places still are).⁸ We recognize a certain distinction between them: coercion includes both the use and the threat of violence to compel its subject to change his actions. Force is the tool of coercion—it is how coercion makes itself felt. This book accordingly focuses on the ways in which rulers exert force rather than on the shades of difference between different concepts of power, coercion, and compellence (i.e., political power and economic power). Second, while we recognize that those differences matter for other purposes, we are attempting a more practical task—to explain “how” those in power use force and how those not in power experience it. The common English meanings above confer the benefit of corresponding to widespread intuitions about power, coercion, violence, and force without countermanding our core concerns. This aids understanding, simplicity, and clarity.

Thus power is “the *ability* or *capacity* to do something or act in a particular way [emphasis added].”⁹ This means that power must be understood as potentiality. Since power is potential, force is then a type of action

that fulfills that potentiality.¹⁰ Yet *force* is something more as well; it is power exerted against *resistance*, especially *but not always* with the use or threat of violence. Force allows the ruled to “feel” the ruler, and power allows the ruler to exert force.¹¹ Power and force thus serve different functions—power gives the ability to create force, and force translates power into violence or its threat to coerce. We focus in the chapters ahead on force, discussing its applications by rulers for internal security and for military advantage, for it is our sense that these two applications of force work in the same way.¹²

ANTECEDENTS AND ELABORATIONS

The framework that we advance finds an antecedent in the writing of the ancient Indian sage Kautilya, who wrote a treatise much like Machiavelli’s *The Prince* around 200 BC, almost seventeen centuries before the birth of the better-known Italian classicist and diplomat.¹³ Kautilya’s *Arthashastra* ranges wider than *The Prince* while surpassing it in ruthlessness, taking up military matters as well as statecraft and identifying three key elements for military force: “enthusiasm, military might, and the power of counsel—[in that] ascending order of importance.”¹⁴

Kautilya’s typology of force for a battlefield commander resembles our notion of force’s internal dynamic, though the parallel is not exact. What he called “military might” we in turn call *cooperation*, which covers not only raw physical force but the ability to sustain it over time. That capacity has several sub-components—like enthusiasm, or its modern corollary, morale. Kautilya’s “military might” also overlaps with our notion of *conveyance*, which seeks to capture the importance of moving concentrations of force to the right place and controlling their employment. What Kautilya called “the power of counsel” relates to what we call *comprehension*, a term which integrates information gained from various tools, like nautical charts, computers, and sensors, with analytical insight, into an accurate appraisal of a situation.

Where Kautilya sought to explain what made a prince strong on the battlefield, however, we take a broader view that includes a fuller sweep of the ways in which a ruler exerts force for both internal and external purposes. Our judgment that concentration is the principle of force rests upon the reality that no human enterprise can hold absolute power against internal and external rivals forever. Soldiers age, weapons rust, and no tactic surprises enemies for long. Even superior forces cannot be strong

everywhere; ideas and emotions do not persuade everyone; and princes and commanders must sleep. Thus any superiority in the use of force is relative and temporary, and success depends upon a formula: the victor wields the right force “at the right place and at the right time” (in the words of Carl von Clausewitz) to prevent his enemies from concentrating lethal force against him. Clausewitz insists the best strategy “is always *to be very strong*; first in general, and then at the decisive point....there is no higher and simpler law of strategy than that of *keeping one’s forces concentrated*.”¹⁵ The late John Boyd would explain the use of this “maneuver conflict”: he calculated that the successful commander is the one who is able to break up his opponents into “many non-cooperative centers of gravity, as well as disorient, disrupt, or overload those that the adversary depends upon, in order to magnify friction, shatter cohesion, produce paralysis, and bring about his collapse.”¹⁶ We apply this formula to political struggle as well as military conflict, and from it we derive the three components of force which fill out the notion at the heart of this book.

First, since no single ruler can exert force alone, *cooperation* is the basic element of creating concentration and wielding force. People must unite to act, though they might do so less than willingly. Without cooperation, force loses mass and ceases to be relevant. Cooperation therefore is a key to force, because without the mutual assistance of multiple individuals, force does not meaningfully exist.¹⁷

The inducements to cooperation come in many varieties. Wages and coercion serve as physical incentives; medals and honor draw upon the emotions. Kinship, class, race, creed, or justice provide powerful ideas that enable cooperation. And, of course, some inducements work better than others. Coercion is inefficient; chain gangs can be made to work together, but that requires guards and guns and dogs. Slaves or inmates may have little incentive to work skillfully, and can hardly be trusted with sensitive tasks or rare materials. Emotional and ideational incentives—as complicated as “liberty” or as simple as the promise of gold—are typically more effective at building cooperation. They help mitigate the risk that freely choosing individuals will abandon the ruler in the hour of need. Likewise, the replicability and durability of ideas may foster creativity and innovation that indirectly augments the power of the collective.

The factors that strengthen cooperation, of course, can also be attenuated in ways that impair cooperation among adversaries. Rulers have long used force to make people afraid to work together, whether on the battlefield or in darkened rooms where plots are hatched. Cooperation requires

trust; without it, people will not collaborate in ventures that place their lives at risk. Here some interesting findings relating to information and entropy hint at how it is that groups function or atomize under stress. Social scientists are exploring this in terms of Trust, which sample after sample shows on the increase when people feel confident about the information they are gaining about their situation and any risks it entails for them.¹⁸ Related research suggests the reverse as well. Trust evaporates and coordination falters in conditions of “high entropy”—when each new bit of information they encounter seems to make little sense of others because it cannot be easily reconciled with what is already known.¹⁹ It follows in turn that rulers and generals can disrupt their opponents’ cooperation by impairing the trust that those opponents have in each other—especially by increasing entropy. Clever sovereigns and commanders thus seek to suborn, confuse, deceive, or mislead their adversary’s subjects, supporters, and allies to drive down the willingness of their foes to collaborate. They do so by flooding their foes with too much information to process, confirming foes’ biases while hiding key elements and clues to their real intentions, and especially by making adversaries afraid of each other. In short, effective rulers and generals do what they can to break down trust among their opponents.

The second factor in our notion of force—*conveyance*—emerges from the requirement to exert force at the right place and time. Conveyance is an old word and used more frequently in the past. We employ it because it describes both physical and non-physical “movement.” For instance, roads and canals convey goods across the countryside, while legal instruments convey ownership between persons. Both physical and non-physical movements are important to the concentration of force because information must be conveyed to soldiers (through couriers or networks) who must themselves be conveyed to the battlefield.

The ruler who can convey force more adeptly than the adversary gains the benefit of position and time. Soldiers march faster in shoes and on good roads. They move even more swiftly when transported on rail cars or in aircraft. New forms of conveyance also accompany the opening of new “domains” of conflict. Indeed, force could hardly apply at all in three domains—the air, the sea, and in space—before the invention of boats, aircraft, and rockets. The newest domain, cyberspace, is a wholly human construction with still fewer ties to terrestrial realities, yet it also has become a venue for conflict, and conveyance pertains there as well, for

even data packets must move from their source to their recipient (or their target).

While the importance of railroads or airplanes for conveying soldiers will surprise no one, the importance of conveying information has been somewhat taken for granted by some strategists. The oldest technology for conveying ideas—writing—long ago revolutionized conveyance in ways that are now lost to history. Subsequent developments, like the printing press, radio, and computers, continued this progress. Communication at a distance in real-time became possible in the Industrial Revolution. In recent decades, the Information Revolution has in turn facilitated the transmittal of data as well as audio and video signals and greatly enhanced storage and analysis. These developments helped not only conveyance but comprehension as well.

The third factor in our framework—*comprehension*—proceeds from the fact that the ruler and commander must exert force at the right time and place against the right adversary. This is roughly what Clausewitz meant in a tactical context when he noted: “If all threads of military activity lead to the engagement, then if we control the engagement, we comprehend them all. Their results are produced by our orders and by the execution of these orders, never directly by other conditions.”²⁰ Aligning all of these factors requires more than data, as might be implied by the term “information.” This of course ties back to the centrality of information and entropy noted above. Likewise, it requires more than the ability to connect dots, as might be implied by “intelligence.” Developing comprehension is also what the ruler or the general does to control entropy among his own people, forces, and allies. Getting it right requires the ability to use an understanding of the whole situation to know one’s own powers as well as the intentions and capabilities of the relevant actors. This is comprehension, or “the knowledge gained from the process of coming to know or understand something.” Comprehension makes concentration relevant; without it, the application of force will likely be wasted or counterproductive.²¹ It facilitates both concentration and dispersal, at the appropriate time for each. In this context we note Martin Van Creveld’s comment on technology and war. In his book of that title, he concluded that technology is everywhere in war but not determinative of war’s nature. We paraphrase his conclusion on war by adding that the underlying logic of force is “not linear but paradoxical.”²² Grasping and employing that paradoxical nature of force is what comprehension accomplishes.

THE ARGUMENT SUMMARIZED

The horseback survey to follow covers perhaps 3000 years and mentions authors from China to Europe to Latin America. We apply our conceptual framework to shed new light on three world historical disruptions, each of which is treated in two chapters below. These episodes show examples of sovereign powers effectively applying force simultaneously for internal *and* external uses (though many a king and minister has wielded force well at home but not abroad, and vice versa).

The first of these historical disruptions was the ascent of Europe that began in the Renaissance and continued through the Industrial Revolution (Chaps. 2 and 3). Since ancient times no one region or culture held enduring advantages in the military arts so long as weapons relied mainly on muscle power and navigation depended on memory. The first culture to break free of these constraints—that is, the western states of Europe in the sixteenth century—set in motion a global revolution in military affairs that abetted an economic revolution as well.

This “Great Divergence” now has a voluminous and contested scholarly literature (which we cite at many points), but many of the key facts have never been in dispute. In short, a handful of nascent states on the western edge of Europe managed to forge huge sea-based empires in a remarkably short time. Portugal, for instance, by 1600 controlled the shipping of the Indian Ocean and forced open trading ports in China and Japan. Spain’s contemporaneous empire in the Western Hemisphere was even richer. We cite contemporary views on these and subsequent empires, including those of Hobbes and Adam Smith, who perceptively explained how these salt-water empires were conceptually and economically sustained. This European dominance in cooperation, conveyance, and comprehension grew seemingly insurmountable in the Industrial Revolution, when steam power, cheap steel, and telegraph lines, followed soon by air transport, radio, and electricity, gave the advanced and “doorstep” open access states in Europe and America the power to rule virtually anywhere on Earth.²³ Liberal or not, these regimes nonetheless honed old ways of breaking trust at-scale among their subject populations.

We also examine the progress of internal security in the West from the wars of religion through the Industrial Revolution, when European (and soon American) superiority in the arts of force grew even more dominant. We note, moreover, that that dominance created ideological rifts within Europe itself, ensuring that the twentieth century would be the bloodiest

in history as Western states, despite their mastery of conveyance and comprehension, could no longer sustain cooperation in their own polities, with their neighbors, or with their colonies.

The second world historical disruption we track (Chaps. 4 and 5) was the downfall of the Western empires in the twentieth century. In a sense European dominance made Europe's problems into the world's. Even before World War I devastated Europe and eliminated any European claim to moral (as well as physical) superiority, the liberalizing states that had arisen since the Enlightenment felt under siege by radical notions of equality and "systemic violence." In the postwar wreckage these ideologies took power in Russia, Italy, and Germany, creating totalitarian regimes and precipitating an even more ruinous conflict.

World War II accelerated the dispersion of Western power by opening the possibility of widespread decolonization. The two world wars distributed modern weapons and tactics across the colonies while globalizing the struggle between rival Western notions of equality—a struggle which seemingly culminated in the fall of the Berlin Wall in 1989. Even Europe's technological superiority could not sustain the empires during the ideological struggles of the Cold War, a trend that reached its completion with the demise of the Soviet Union. The Cold War struggle also saw two key developments for the future of strategy. First, nuclear weapons made direct clashes between the most powerful states mutually suicidal. At the same time, a growing respect for international law largely de-legitimized aggressive war as a means of resolving inter-state disputes.

While the police states of the twentieth century could exercise control in their time, they hardly knew whose trust to break, and thus crudely impaired many non-threatening social connections that might have fostered the civil society and economic growth essential to a healthy state. The ensuing ideological exhaustion and economic collapse of Soviet Communism led to the USSR's downfall and the growth of free societies at the end of the Cold War. Of course, this did not settle the historic argument over how societies should run. The Cold War argument over equality may have ended in 1989, but the ideas and ideals of the liberal West have not convinced many dictators to change their ways. Despite the global ascendancy of liberal or open access states with market economies, not every regime believed that it had to grant liberty if it wanted to remain economically viable. China in particular compromised by allowing circumscribed economic freedom for the sake of rapid growth (though other authoritarians lacked China's market clout and freedom to experiment).

This salience of ideology persists into the third disruption (Chaps. 6 and 7), which is the current expansion of conflict into cyberspace. While North et al. suggest that societies have always controlled violence in consistent ways across cultures and times, the intense change in how states exploit cyberspace raises the question of whether that consistency will endure in this new domain, as people and states wield force in, through, and from digital enclaves. We note the increased precision and reach of the means of force, especially with the digital revolutions in surveillance, targeting, and data toward the twentieth century's end. These means grew ever more sophisticated after the brief pause in ideological conflict after the Cold War, when it seemed to observers like Francis Fukuyama that digital information technology structurally favored the "open access" societies (later described by North et al.), noting how the "enormous prosperity created by technology-driven capitalism, in turn, serves as an incubator for a liberal regime of universal and equal rights."²⁴

By the beginning of the twenty-first century, the Information Revolution had introduced a new and disruptive factor in this geostrategic dynamic. The same digital methods that transformed communications and production also powered a revolution in military affairs, helping combatants make conventional weapons devastatingly more precise in their application and allowing states to target individuals for surveillance or destruction from thousands of miles away. When the use of such tools has been authorized by international bodies like the United Nations, it has wrecked authoritarian regimes—and convinced other authoritarians that they too could be targeted for "humanitarian" interventions. Justified or not in each particular case, such interventions have perturbed the international order, and the anti-liberal regimes have now responded.

The need for reflection here can be glimpsed in an interesting disjuncture between several recent authors who see a curious "blurring" in the present and future of conflict, but who disagree over its meaning. In *The Future of War: A History*, Lawrence Freedman, perhaps our foremost living strategist, recently counseled humility, judging "[t]here is no longer a dominant model for future war, but instead a *blurred* concept and a range of speculative possibilities [emphasis added]." He concedes digital tools and methods have tactical value. Still, he wonders "how cyberwar should be viewed strategically." The issue, Freedman suggests, remains "linking the hurt to a political purpose."²⁵ In contrast, Peter W. Singer and Emerson T. Boking implicitly disagree in *Like War: The Weaponization of Social Media*. They argue that online battles have already changed "what 'war"

means...further *blurring* the distinction between actions in the physical and digital realms [emphasis added again].”²⁶

Singer and Brooking seem to imply that Freedman has overlooked something important, for even if cyber means cannot win wars, they can still shape political—that is, strategic—outcomes. In other words, the fates of states and peoples may now be altered without fighting, and thus coercive strategic outcomes need no longer require war. We agree and believe our conceptual framework of force as cooperation, conveyance, and comprehension helps to explain what has been happening in cyberspace. We note in particular that cyber conflict between sovereign powers usually occurs along the “virtual borders” between ideological (Party-based) regimes and those states with “open access orders.” In these all-too-common struggles, the former powers insist that their democratic opponents practice a superficial tolerance that cloaks “systemic violence”—that the so-called rule of law in liberal Western states masks a power structure that marginalizes and ultimately oppresses disfavored classes, races, lifestyles, or faiths.

The conclusion of our book suggests a potential (and perhaps likely) direction for cyber conflict, both above and below the threshold of armed force. Empowering rulers and commanders with extraordinary comprehension in our time has troubling implications. Here we note the growing body of journalism and government findings illustrating the ways in which cyber means are being used to put at risk the legitimacy of governments, the intellectual property that sustains their economies, and the privacy (and safety) of their citizens in their homes and workplaces. Cyber actors are increasingly able to use big data analytics to tell from friend from foe at an individual level, and regimes are increasingly willing to employ these means for internal control and the intimidation of opponents abroad.

Anti-liberal powers today are building powerful military forces that incorporate advances from the current revolution in military affairs, while targeting their citizens using Internet-enabled surveillance, and working to use global digital connectivity and media to discredit liberal ideals and institutions. A new level of comprehension made possible by the technologies of cyberspace can help authoritarian rulers maintain their monopoly on political control and potentially relax social controls that retard economic growth. As a result, the means and methods employed by these new authoritarians now can threaten to touch individual citizens of every country—not merely those who live in warring states—even in their laptops and their neighborhoods. Force may work as it always has, but its increasing reach and precision will affect us all.

NOTES

1. The tyrant, explained Aristotle, sought to guard “against anything that customarily gives rise to two things, high thoughts and trust.” A tyrant therefore sought “to make all as ignorant of one another as possible,” while he sent out his spies “wherever there was some meeting or gathering (for men speak less freely when they fear such persons).” Tyrants especially dreaded men who trusted one another, thus a tyrant would “slander them to one another, and set friends at odds with friends”; cf. Aristotle, *Politics*, in the Carnes Lord trans. (Chicago: University of Chicago Press 1984); V, 11, 1313bl. In Sun Tzu’s *Art of War* we read:

All warfare is based on deception. Therefore, when capable, feign incapacity; when active, inactivity. When near, make it appear that you are far away; when far away, that you are near. Offer the enemy a bait to lure him; feign disorder and strike him. When he concentrates, prepare against him; where he is strong, avoid him. Anger his general and confuse him. Pretend inferiority and encourage his arrogance. Keep him under a strain and wear him down. *When he is united, divide him.*

See Sun Tzu, *The Art of War*, Samuel B. Griffith trans. (London: Oxford, 1963), Chapter 1, “Estimates”; emphasis added.

2. Douglass C. North, John Joseph Wallis, and Barry R. Weingast, *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History* (New York: Cambridge University Press, 2009), pp. xii, xvii, 14, 18–20, and 53.
3. *Ibid.*, pp. xii, 14, 18–20, and 53.
4. *Ibid.*, p. xv.
5. Hobbes in 1651 famously described human life in the “state of nature” thus:

In such condition, there is no place for industry; because the fruit thereof is uncertain: and consequently no culture of the earth; no navigation, nor use of the commodities that may be imported by sea; no commodious building; no instruments of moving, and removing, such things as require much force; no knowledge of the face of the earth; no account of time; no arts; no letters; no society; and which is worst of all, continual fear, *and danger of violent death*; and the life of man, solitary, poor, nasty, brutish, and short.

See Thomas Hobbes, *Leviathan* (New York: Touchstone, 1993), chapter 13; emphasis added.

6. Both definitions come from the *Oxford Living Dictionary*, accessed March 24, 2018, <https://en.oxforddictionaries.com/definition/force>
7. Harold Lasswell and Abraham Kaplan, *Power and Society* (New York: Routledge, 2017), xxviii.

8. There are significant literatures on coercion and compellence in internal security and international affairs. We take a broader view to understand “how force works” irrespective of the purpose to which the ruler puts it. Readers interested in coercion, compellence, and deterrence can consult Kelly Greenhill and Peter Krause’s anthology *Coercion: The Power to Hurt in International Politics* (New York: Oxford University Press, 2018). We noted the first sentence in this anthology’s Acknowledgments: “This book grew from a shared realization that the foundational scholarship on coercion that we regularly read, taught, and utilized was no longer adequate to explain much of the behavior we observed in the world around us”; see p. vii.
9. *Oxford Living Dictionary*, s.v. “Power,” accessed March 24, 2018, at <https://en.oxforddictionaries.com/definition/power>
10. Thomas Schelling discusses a similar distinction between what he calls the power to hurt and brute force; see *Arms and Influence*, (New Haven, CT: Yale University Press, 2008), p. 3.
11. This is a consideration similar to how Nadia Schadlow discusses the consolidation of combat gains into political power. See her *War and the Art of Governance*, (Washington, DC: Georgetown University Press, 2017), p. 3.
12. In *Arms and Influence*, Schelling describes a diplomacy of violence in which states use force and threats of force against one another. Our work takes this into account but focuses on the idea of force as a tool in negotiation rather than on the process and logic of negotiation.
13. No one knows the author’s real name; we only know he wrote around 200 BC, appropriating the name of a counselor to the first emperor to rule a swath of India stretching the length of the Indus and Ganges rivers. Kautilya’s tome, the *Arthashastra* (or “Science of Government”) influenced Indian society and governance for well over two thousand years, even though its manuscript was lost around 1200 and only rediscovered in 1904. See Philip H.J. Davies, “The Original Surveillance State: Kautilya’s *Arthashastra* and Government by Espionage in Classical India,” in Philip H.J. Davies and Kristian C. Gustafson, eds. *Intelligence Elsewhere: Spies and Espionage Outside the Anglosphere* (Washington: Georgetown University Press, 2013), pp. 50–52.
14. Kautilya, *The Arthashastra*, trans. L.N. Rangarajan (New Delhi: Penguin, 1992), 9.1.16—see p. 628 in this edition.
15. Carl von Clausewitz, *On War*, trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), Book III, chapter 11, p. 204 in this edition. See also Book I, ch. 2, p. 95, and Book III, ch. 14, p. 213. Emphasis in original.
16. Quoted in Ian T. Brown, *A New Conception of War: John Boyd, the US Marines, and Maneuver Warfare* (Quantico, VA: Marine Corps University Press, 2018), p. 104; accessed January 23, 2019, at <https://www.usmcu.edu/Portals/218/ANewConceptionOfWar.pdf>

- 2018-11-08-094859-167. Clausewitz would seem to agree, explaining that the defender has lost the battle when “the attacking force has lost little if any of its cohesion and effectiveness...while the defender has become more or less disorganized.” See *On War*, Book IV, ch. 7, p. 241.
17. There is a way in which the doctrine or “technology” of military cooperation can also influence the military success of a nation. In this book we focus more broadly on the concept of cooperation within and without the military. For those who want more detail on how doctrine might influence success; see Stephen Biddle, *Military Power* (Princeton, NJ: Princeton University Press, 2004).
 18. See, for instance, Simin Hall and William McQuay, “Review of Trust Research,” *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (2007).
 19. Charles S. Carver and Michael E. Scheier in discussing information, cybernetics, and control, note that “information” is intuitive yet fuzzy, and attempt to define it as a concept that “revolves around questions of entropy”; *Attention and Self-Regulation: A Control-Theory Approach to Human Behavior* (New York: Springer-Verlag, 1981), p. 12. For more on information, entropy, and trust, see Hall and McQuay, “Review of Trust Research,” pp. 22–24; and Jenna Bednar, Yan Chen, Tracy Xiao Liu, and Scott Page, “Behavioral spillovers and cognitive load in multiple games: An experimental study,” *Games and Economic Behavior* 74 (2012), pp. 12–13.
 20. Clausewitz, *On War*, Book I, ch. 2, p. 95; see also Book I, ch. 3, p. 108.
 21. Note the difference between comprehension and related words. *Understanding* is a near synonym; it is the ability to comprehend, which makes it more than an accumulation of facts. Yet understanding also implies a degree of empathy that would often seem alien to warfare and internal security. In this context, comprehension better suggests the ability to foreknow one’s adversaries’ intentions or plans, rather than simply their location, name, or equipment (the definition of comprehension comes from *Merriam Webster* online; accessed March 8, 2019, at <https://www.merriam-webster.com/thesaurus/comprehension>).
 22. Martin Van Creveld, *Technology and War: From 2000 B.C. to the Present* (New York: Free Press, 1991 [1989]), p. 316.
 23. For the notion of “doorstep” open-access states, see North et al., *Violence and Social Orders*, pp. 192 and 205.
 24. Francis Fukuyama, *Trust: Human Nature and the Reconstitution of Social Order* (New York: Simon & Schuster, 1995), pp. 3–4.
 25. Lawrence Freedman, *The Future of War: A History* (New York: PublicAffairs, 2017), pp. xxi, 237.
 26. Peter W. Singer and Emerson T. Booking, *LikeWar: The Weaponization of Social Media* (New York: Houghton Mifflin, 2018), p. 22.