

Undergoverned Spaces and the Challenges of Complex Infinite Competition

Chapter Three

ADAM R. GRISSOM, RAND CORPORATION

This chapter is extracted from *Adaptive Engagement for Undergoverned Spaces: Concepts, Challenges, and Prospects for New Approaches*, by Aaron B. Frank and Elizabeth M. Bartels, eds., RR-A1275-1, 2022 (available at www.rand.org/t/RR-A1275-1).

Prepared for the Defense Advanced Research Projects Agency,
Defense Sciences Office
Approved for public release; distribution unlimited



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Published by the RAND Corporation, Santa Monica, Calif.

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Undergoverned Spaces and the Challenges of Complex Infinite Competition

Adam R. Grissom, RAND Corporation

Since its inception in 1947, the U.S. Department of Defense (DoD) has struggled to develop a cost-effective approach to safeguarding the nation's interests in *undergoverned spaces* (UGS) around the globe. DoD efforts in UGS have alternated between long periods of neglect and occasional spasms of large-scale interventionism; the efforts have produced results that typically range from outright failure to ambiguous stalemate, but they rarely, if ever, have produced a clear, positive, and strategic return on investment.

This ambiguous performance is puzzling. The U.S. armed forces are among the most professional and capable in history, and, although UGS have typically been a secondary priority for DoD, even a fraction of a more than \$700 billion defense budget represents substantial resources and capacity.¹ Whatever the economies taken by DoD with steady-state funding, when the United States has chosen to intervene on a large scale—such as in Vietnam, Afghanistan, and Iraq—it has spared no expense.² Yet all the resources, professional forces, and sophisticated capabilities have typically delivered ambiguous results at best in U.S. military operations in UGS.

This chapter explores this puzzle and the possibility that the problem might be fundamentally analytical in nature—that despite the support of a well-funded intelligence apparatus and the world's most developed defense analytical community, DoD's undistinguished record might be rooted in an inability to perceive and understand the strategic dynamics of UGS well enough to support effective operations.

This chapter has two major sections. The first explores the role of UGS in U.S. defense strategy and the broad patterns of DoD's performance in UGS. The second examines UGS as an analytical problem, using the example of Africa and seeking to identify those characteristics that pose the greatest challenges for DoD's ability to perceive and understand the stra-

¹ Office of the Under Secretary of Defense, Comptroller/CFO, *Fiscal Year 2021 Budget Request*, Washington, D.C.: U.S. Department of Defense, February 2020.

² Amy Belasco, *The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11*, Washington, D.C.: Congressional Research Service, 2006.

tegic dynamics at play in UGS. We close with some thoughts on the need for a new approach to guide DoD's analysis of UGS.

UGS in U.S. Defense Strategy: A Brief History

UGS is a contemporary defense planning term denoting geographical regions or domains of interaction (e.g., cyberspace) that are not under the full control of government institutions that have legitimacy and a monopoly on armed forces.³ From a defense planning perspective, UGS are therefore regions and domains where armed actors other than government forces, perhaps including nonstatutory armed forces aligned with government actors, wield militarily significant capabilities and enjoy politically significant freedom of action.⁴

To an extent often underappreciated by outside observers, UGS have been an important defense planning priority for the United States for most of its history. From the period of independence through the 19th century, the United States was fixated first on UGS of the western frontier and later on UGS abroad, where the United States competed with European empires and local powerbrokers.⁵ In the American West, warfare against Native American nations, some of them quite militarily potent, was an ever present reality until the 1890s.⁶ The nation's first overseas war was, famously, against pirate lairs on the "shores of Tripoli" along the ragged undergoverned edges of the Ottoman Empire.⁷

³ For a discussion on the definitions of UGS, see Chapters Two and Four of this report (Aaron B. Frank, "Undergoverned Spaces: Problems and Prospects for a Working Definition," in Aaron B. Frank and Elizabeth M. Bartels, eds., *Adaptive Engagement for Undergoverned Spaces: Concepts, Challenges, and Prospects for New Approaches*, Santa Monica, Calif.: RAND Corporation, RR-A1275-1, 2022; and Jonathan S. Blake, "Perspectives on State Governance, Undergovernance, and Alternative Governance," in Aaron B. Frank and Elizabeth M. Bartels, eds., *Adaptive Engagement for Undergoverned Spaces: Concepts, Challenges, and Prospects for New Approaches*, Santa Monica, Calif.: RAND Corporation, RR-A1275-1, 2022).

⁴ For use of the term in DoD, see Jim Garamone, "Middle East, Africa Commanders Discuss Terror Threats," DoD News, March 10, 2020. For a more conceptual DoD treatment, see James Schear, "Fragile States and Ungoverned Spaces," in Patrick M. Cronin, ed., *Global Strategic Assessment 2009: America's Security Role in a Changing World*, Washington, D.C.: Institute for National Strategic Studies, National Defense University, 2009.

⁵ For the early period, see R. Ernest Dupuy and William H. Baumer, *Little Wars of the United States*, New York: Hawthorn Books, 1968, pp. 1–26; and generally, Sam Sarkesian, *America's Forgotten Wars: The Counterrevolutionary Past and Lessons for the Future*, Westport, Conn.: Greenwood Press, 1984.

⁶ For an account reflecting the Army's institutional memory, see Andrew J. Birtle, *U.S. Army Counterinsurgency and Contingency Operations Doctrine, 1860–1941*, Washington, D.C.: Army Center for Military History, 2001, pp. 1–86. For academic treatments, see Peter Cozzens, *The Earth Is Weeping: The Epic Story of the Indian Wars for the American West*, New York: Vintage, 2017; and Dee Brown, *Bury My Heart at Wounded Knee: An Indian History of the American West*, New York: Picador, 2007.

⁷ On the strategic problem of the Barbary States, see Adrian Tinniswood, *Pirates of Barbary: Corsairs, Conquests, and Captivity in the Seventeenth-Century Mediterranean*, New York: Penguin, 2011; on U.S.

The 20th century marked the transition to “professional” U.S. defense planning focused on the problem of conventional warfare against other major powers, which came with mobilization, logistics, and materiel challenges.⁸ The military problem of UGS was relegated to the occasional and subsidiary *small war*—ranging from conducting counterinsurgency (COIN) operations in the Philippines to rescuing Western legations in Beijing during the Boxer Rebellion to chasing Pancho Villa into northern Mexico.⁹ These small wars were supplanted in 1917 by the deployment of the American Expeditionary Force to tip the balance of the Great War.¹⁰ Thereafter, and to this day, the U.S. armed forces have defined conventional warfighting as their principal purpose and design function.

UGS did not arise again as a significant defense planning problem until the post-World War II era, when the collapse of European empires created opportunities for the Soviet Union and other communist powers to expand their influence into restive colonies and weakly governed, newly independent states.¹¹ The result was the “first insurgency era” of sprawling global competition between the United States and the Soviet Union for influence in “Third World” developing countries.¹² In this Cold War context, UGS presented both challenges and opportunities for the United States. UGS in friendly states attracted the attention of Moscow and Beijing, which sought to foment “wars of national liberation” to overthrow pro-Western governments and shift them into the communist camp.¹³ The United States and its allies sought to counter communist influence through assistance to host-nation internal development and defense.¹⁴ UGS also presented strategic opportunities for the United States. In countries aligned with Moscow and Beijing, the United States conducted numerous uncon-

operations in the Barbary States, see A. B. C. Whipple, *To the Shores of Tripoli: The Birth of the U.S. Navy and Marines*, New York: Morrow, 1991.

⁸ The standard source is Maurice Matloff, ed., *American Military History*, Vol. 1, 1775–1902, Conshohocken, Pa.: Combined Books, 1996, pp. 309–316.

⁹ Brian Linn, *The Philippine War, 1899–1902*, Lawrence, Kan.: University Press of Kansas, 2000; Graham Cosmas, *An Army for Empire: The United States Army in the Spanish-American War*, Harrisburg, Pa.: White Mane, 1994; Birtle, 2001, pp. 147–174.

¹⁰ The standard account is Edward Coffman, *The Regulars: The American Army, 1898–1941*, Cambridge, Mass.: Belknap, 2004.

¹¹ Francis Fukuyama, *U.S.-Soviet Interactions in the Third World*, Santa Monica, Calif.: RAND Corporation, OPS-004, 1985.

¹² Richard Sanger, *Insurgent Era: New Patterns of Political, Economic, and Social Revolution*, Washington, D.C.: Potomac, 1967.

¹³ Robert B. Asprey, *War in the Shadows: The Guerrilla in History*, New York: Doubleday, 1975.

¹⁴ Michael Childress, *The Effectiveness of U.S. Training Efforts in Internal Defense and Development: The Cases of El Salvador and Honduras*, Santa Monica, Calif.: RAND Corporation, MR-250-USDP, 1995.

ventional warfare operations seeking to foment resistance, which often involved DoD participation, though usually under the Central Intelligence Agency's lead.¹⁵

Over the course of four decades, the United States, Moscow, Beijing, and their allies devoted enormous resources and policymaker attention to competing with each other in UGS around the globe.¹⁶ The primary zones of competition shifted from postwar Europe in the 1950s to Southeast Asia and Africa beginning in the 1960s and Latin America in the 1980s.¹⁷ The net result of the competition, from a U.S. perspective, was ambiguous at best. While governments and regions shifted alignment in the bipolar competition, there was rarely evidence that such shifts resulted from a particular external intervention.¹⁸ Most often, superpower assistance was subsumed into local conflicts, intensifying them and escalating their humanitarian impact but to little apparent effect on their trajectory.¹⁹ The primary exceptions to this rule occurred when Washington or Moscow decided to directly intervene with their own conscript forces, as in Southeast Asia in the 1960s and Afghanistan in the 1980s. The primary result, in both cases, was the expenditure of lives and treasure to little gain and at substantial loss of global credibility and rising domestic turmoil.²⁰

With the end of the Cold War, the United States emerged as the de facto guarantor of the international system, and the significance of UGS in U.S. defense policy again shifted as the release of Cold War tensions led to rising instability in states where the political status quo had been supported by superpower assistance.²¹ During the 1990s, the United States was increasingly intervening in failing states to mitigate and contain the instability emanating

¹⁵ Sarah-Jane Corke, *U.S. Covert Operations and Cold War Strategy*, London, United Kingdom: Routledge, 2008; James Callanan, *Covert Action in the Cold War: U.S. Policy, Intelligence, and CIA Operations*, New York: Bloomsbury, 2020.

¹⁶ John Prados, *Safe for Democracy: The Secret Wars of the CIA*, Chicago, Ill.: Ivan R. Dee, 2006; Bard E. O'Neill, William R. Heaton, and Donald J. Alberts, eds., *Insurgency in the Modern World*, Boulder, Colo.: Westview, 1980.

¹⁷ Michael McClintock, *Instruments of Statecraft: U.S. Guerrilla Warfare, Counterinsurgency, and Counterterrorism, 1940–1990*, New York: Pantheon, 1992.

¹⁸ See McClintock, 1992; and Prados, 2006. Also see Jeffrey Record, *Beating Goliath: Why Insurgencies Win*, Washington, D.C.: Potomac, 2007.

¹⁹ For a representative appraisal, see Benjamin Schwarz, *American Counterinsurgency Doctrine and El Salvador: The Frustrations of Reform and the Illusions of Nation Building*, Santa Monica, Calif.: RAND Corporation, R-4042-USDP, 1991.

²⁰ Gregory Feifer, *The Great Gamble: The Soviet War in Afghanistan*, New York: Harper, 2009. For a prescient assessment, see Fritz Ermarth and George Kolt, "Impact of the Afghanistan War on the USSR," memorandum to Director of Central Intelligence, NIC #01085-85, February 28, 1985.

²¹ The definitive policy statement is White House, *National Security Strategy of the United States of America*, Washington, D.C., 1994. The political underpinnings are described in Francis Fukuyama, *The End of History and the Last Man*, New York: Free Press, 1992. The strategic aspects are aptly described in Colin S. Gray, *The Sheriff: America's Defense of the New World Order*, Lexington, Ky.: University Press of Kentucky, 2004.

from these conflicts.²² The United States sought to spread the burden of these operations by conducting them under United Nations, North Atlantic Treaty Organization, or coalition auspices.²³ The results of the post-Cold War “peace operations” ranged from uncertain to disastrous. Operations in the Balkans, Cambodia, Latin America, and some parts of Africa successfully contained violence, while typically leaving the underlying conflict unresolved.²⁴ Other cases, such as Somalia and Rwanda, produced catastrophic failure.²⁵ Unalloyed success remained as elusive in post-Cold War UGS as it had during the Cold War.²⁶

The al-Qaeda terrorist attacks of September 11, 2001, again altered the significance of UGS in U.S. defense planning. After the attacks on New York and Washington, D.C., UGS came to be seen as potential sanctuaries for terrorist networks seeking to attack the United States and undermine the stability of the international system.²⁷ Few in the national security and intelligence communities had predicted beforehand that an undergoverned area as remote as eastern Afghanistan could serve as the launching pad for a mass-casualty attack on key global centers of financial and political power; as a result, policymakers came to view any undergoverned area in any region of the world with any appreciable terrorist activity to be an unacceptable threat to the security of the U.S. homeland.²⁸ This assessment would spur an unprecedented wave of interventions in UGS around the globe.

The first intervention after the terrorist attacks of September 11, 2001, occurred, of course, in Afghanistan. The United States invaded Iraq two years later, and, together, Operation Enduring Freedom and Operation Iraqi Freedom became the two most-important U.S. experiments in large-scale stability operations in more than a generation. This is not the place to describe the campaigns in Afghanistan and Iraq, other than to note that, in both cases, the

²² These interventions are expertly summarized in John T. Fishel, ed., *The Savage Wars of Peace: Toward a New Paradigm of Peace Operations*, Boulder, Colo.: Westview Press, 1998.

²³ For an overview, see James Dobbins, Keith Crane, Seth G. Jones, Andrew Rathmell, Brett Steele, Richard Teltschik, John G. McGinn, Rollie Lal, Rachel Swanger, and Anga Timilsina, *The RAND History of Nation-Building*, Santa Monica, Calif.: RAND Corporation, MG-304/1-RC, 2005.

²⁴ See cases in James Dobbins, John G. McGinn, Keith Crane, Seth G. Jones, Rollie Lal, Andrew Rathmell, Rachel Swanger, and Anga Timilsina, *America's Role in Nation-Building: From Germany to Iraq*, Santa Monica, Calif.: RAND Corporation, MR-1753-RC, 2003; and James Dobbins, Seth G. Jones, Keith Crane, Andrew Rathmell, Brett Steele, Richard Teltschik, and Anga Timilsina, *The UN's Role in Nation-Building: From the Congo to Iraq*, Santa Monica, Calif.: RAND Corporation, MG-304-RC, 2005.

²⁵ Gerard Prunier, *Africa's World War: Congo, the Rwandan Genocide, and the Making of a Continental Catastrophe*, Oxford, United Kingdom: Oxford University Press, 2009; Walter Clarke and Jeffrey Herbst, eds., *Learning from Somalia: The Lessons of Armed Humanitarian Intervention*, New York: Westview, 1997.

²⁶ For a recent comprehensive assessment along these lines, see Marek Madej, ed., *Western Military Interventions After the Cold War: Evaluating the Wars of the West*, London, United Kingdom: Routledge, 2020.

²⁷ Angel Rabasa, Steven Boraz, Peter Chalk, Kim Cragin, Theodore W. Karasik, Jennifer D. P. Moroney, Kevin A. O'Brien, John E. Peters, *Ungoverned Territories: Understanding and Reducing Terrorism Risks*, Santa Monica, Calif.: RAND Corporation, MG-561-AF, 2007.

²⁸ White House, *National Strategy for Countering Terrorism*, Washington, D.C., September 2006.

United States attempted to achieve its objectives with a small presence, which was stymied by the development of a broad and potent insurgency. The United States and its allies and partners responded in both cases with a major surge of forces and the attempted implementation of population-centric COIN. In Iraq, the coalition was greatly assisted by an uprising of rural clan networks against al-Qaeda cadres that had overstayed their welcome, and violence declined precipitously by 2009. In Afghanistan, the coalition enjoyed no such local mobilization, and violence remained stubbornly elevated.

The United States withdrew from Iraq in 2010—too early—and the Islamic State in Iraq and the Levant (ISIL) arose to seize western Iraq and eastern Syria. U.S. forces returned and led a multiyear campaign to destroy ISIL. The withdrawal of U.S. forces from Afghanistan led to the immediate collapse of the Western-backed regime in Kabul.²⁹

The costs have been substantial. In Operation Enduring Freedom, the expenditure totals approximately \$1 trillion, and 1,845 U.S. servicemembers have been killed in action to date. The United States remains unable to say that it accomplished its objective of creating a stable and democratic Afghanistan that will no longer serve as a sanctuary for terrorist networks. In Operation Iraqi Freedom, with another \$1 trillion spent and 3,481 U.S. personnel killed in action, the United States still cannot claim to have achieved its objectives of a stable, free, and democratic Iraq.³⁰

Since 2001, the United States has also conducted counterterrorism (CT) campaigns in a wide swath of UGS beyond Afghanistan and Iraq, albeit with a smaller footprint and a relatively greater reliance on special operations forces, airpower, and partner forces.³¹ These campaigns have been conducted across Northwest Africa, North Africa, Central Africa, the Horn of Africa, the Levant, Yemen, Pakistan, and Southeast Asia.³² Thousands of jihadists have been killed or captured, and numerous networks have been disrupted and defeated.³³ Yet U.S. CT efforts are widely regarded as containment measures that have done little to resolve the

²⁹ The definitive U.S. histories of the wars in Iraq and Afghanistan are yet to be written. For the closest existing approximations, see Theo Farrell, *Unwinnable: Britain's War in Afghanistan, 2001–2014*, London, United Kingdom: Penguin, 2017; Ronald Neumann, *The Other War: Winning and Losing in Afghanistan*, Washington, D.C.: Potomac Books, 2008; and U.S. Department of Defense, *Enhancing Security and Stability in Afghanistan: Report to Congress*, Washington, D.C., issued semiannually from 2009 to 2020.

³⁰ Congressional Research Service, “Overseas Contingency Operations Funding: Background and Status,” Washington, D.C., September 2019; Congressional Research Service, *American War and Military Operations Casualties: Lists and Statistics*, Washington, D.C., July 2020.

³¹ Adam R. Grissom and Karl P. Mueller, *Airpower in Counter-Terrorist Operations: Balancing Objectives and Risks*, Santa Monica, Calif.: RAND Corporation, EP-67403, 2017.

³² Stephen Watts, Jason H. Campbell, Patrick B. Johnston, Sameer Lalwani, and Sarah H. Bana, *Countering Others' Insurgencies: Understanding U.S. Small-Footprint Interventions in Local Context*, Santa Monica, Calif.: RAND Corporation, RR-513-SRF, 2014.

³³ Linda Robinson, Austin Long, Kimberly Jackson, and Rebeca Orrie, *Improving Understanding of Special Operations: A Case History Analysis*, Santa Monica, Calif.: RAND Corporation, RR-2026-A, 2018, pp. 81–204.

root causes of the genesis of terrorist networks.³⁴ Conditions remain ripe for the reemergence of those networks across the Arc of Instability in Africa and the greater Middle East, suggesting that the overall success of these campaigns has been limited and ambiguous.³⁵

In sum, DoD's historical performance in UGS has been mixed at best. Through seven decades of Cold War competition, peace operations, COIN, and CT, DoD has very rarely accomplished its assigned policy objectives in UGS, and almost never in a durable form. The results of U.S. military intervention have more often been an ambiguous mix of moderate success, chronic frustration, and implicit or explicit failure. Success has tended to be rare, modest, and temporary.

Again, this is puzzling. Why has the American military experience in UGS been so equivocal? The United States has tried numerous variations in its strategic and operational approach to the challenge of UGS. It has attempted to ignore, contain, mitigate, and transform UGS at various times and places. It has conducted limited-liability special operations campaigns, small-footprint air-centric campaigns, and full-scale direct stability campaigns. It has emphasized the development of local government forces, empowered local nongovernment proxies, flooded UGS with its own forces, relied on allied forces from abroad, operated through international organizations and alliance structures, and virtually all the combinations thereof. And yet across these permutations, the results have remained consistently modest at best.

This suggests that the causes of the ambiguous U.S. experience in UGS might be more fundamental than operational technique and design. It suggests that the problem might be analytical in character. The United States appears to lack perception and awareness in UGS, struggling to identify key actors, ascertain the sources of their behavior, and understand the dynamics and incentives that shape conflict in UGS. For that reason, regardless of the operational approach used—small footprint or large scale, unilateral or partner focused, CT or COIN—the results appear to regress to the ambiguous mean.

This apparent analytical weakness is of more than just historical interest because the nation's defense strategy continues to place strong emphasis on the strategic challenges presented by UGS. The 2018 National Defense Strategy defines three key strategic challenges for the U.S. armed forces: improving conventional deterrence vis-à-vis China and Russia, competing more effectively with revisionist great powers and regional rogue regimes in the *gray zone* below the threshold of armed conflict, and maintaining more cost-effective pres-

³⁴ For useful overviews, see Mark Mazzetti, *The Way of the Knife: The CIA, a Secret Army, and a War at the Ends of the Earth*, New York: Penguin, 2013; Sean Naylor, *Relentless Strike: The Secret History of Joint Special Operations Command*, New York: St. Martin's, 2015; Peter Henne, "Assessing the Impact of the Global War on Terrorism Threats in Muslim Countries," *Terrorism and Political Violence*, July 2019; and Kyle Kattelman, "Assessing Success of the Global War on Terror: Terrorist Attack Frequency and the Backlash Effect," *Dynamics of Asymmetric Conflict*, Vol. 13, No. 1, September 2019.

³⁵ For a trenchant statement, see Richard Ganske, "Counter Terrorism, Continuing Advantage, and a Broader Theory of Victory," *Strategy Bridge*, March 13, 2014. For an empirical version of the argument, see James Regens and Nick Mould, "Continuity and Change in the Operational Dynamics of the Islamic State," *Journal of Strategic Security*, Vol. 10, No. 1, Spring 2017.

sure on violent extremist organizations (VEOs). Conventional deterrence in Europe and the Western Pacific receives the lion's share of attention within DoD, but strategic competition and counter-VEO operations are likely to occur most often in UGS. Examples of gray-zone competition—ranging from Russia's interventions in Syria, Libya, and Sub-Saharan Africa to Iran's proxy operations across the Levant and Arabian Peninsula to China's efforts to edge neighbors out of the South China Sea with semi-official vessels—all occur in UGS. So despite the desire of many in DoD to return to a focus on conventional warfighting against great powers, which has been familiar territory since the early 20th century, UGS once again promise to remain an inconvenient priority for the U.S. armed forces. This suggests that it will remain important for the United States to analyze UGS—the subject of the next section.

The Analytical Challenge of UGS: Understanding Africa

Analytical errors of the kind DoD encountered in UGS typically result from a mismatch between the available analytical lenses and the relevant conditions on the ground. In this context, the memorable formulation of James C. Scott that the U.S. government (USG) “sees like a state” is relevant.³⁶ As the most powerful state in the international system and the de facto guarantor of the system itself, the USG naturally views UGS through the lens of state capacity, legitimacy, and influence.³⁷ From a legal and policy perspective, the United States finds it most natural to work with other states, and it tends to measure governance in terms of the influence of the central state apparatus in an area.³⁸ When seeking to understand the strategic dynamics in an undergoverned space, the USG also, therefore, tends to focus on the activities and capabilities of the central state apparatus.³⁹

³⁶ James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*, New Haven, Conn.: Yale University Press, 1999. Scott's analysis certainly has its weaknesses, but the idea that states “see” society in particular ways has enriched theory and practice. For an overview of the theoretical importance of Scott's book, see, for example, Shannon Stimson, “Rethinking the State: Perspectives on the Legibility and Reproduction of Political Societies,” *Political Theory*, Vol. 28, No. 6, December 2000. For an application of Scott's idea of “seeing like a state” to policy, see Christopher Coyne and Adam Pellillo, “The Art of Seeing Like a State: State Building in Afghanistan, the DR Congo, and Beyond,” *Review of Austrian Economics*, Vol. 25, No. 1, March 2012.

³⁷ Robert J. Art, *A Grand Strategy for America*, New York: Century Foundation, 2003; Robert J. Art, *America Abroad: Why the Sole Superpower Should Not Pull Back from the World*, Oxford, United Kingdom: Oxford University Press, 2018.

³⁸ For a programmatic statement, see James Dobbins, Seth G. Jones, Keith Crane, and Beth Cole Degrasse, *The Beginner's Guide to Nation-Building*, Santa Monica, Calif.: RAND Corporation, MG-557-SRF, 2007. For a less paternalistic version, see James Dobbins, Laurel E. Miller, Stephanie Pezard, Christopher S. Chivvis, Julie E. Taylor, Keith Crane, Calin Trenkov-Wermuth, and Tewodaj Mengistu, *Overcoming Obstacles to Peace: Local Factors in Nation-Building*, Santa Monica, Calif.: RAND Corporation, RR-167-CC, 2013.

³⁹ For a trenchant description and critique, see Andrew Radin, *Institution Building in Weak States: The Primacy of Local Politics*, Washington, D.C.: Georgetown University Press, 2020.

Additionally, the Executive Branch departments responsible for defense and foreign policy are among the most institutionally robust organizations in existence. DoD's chief management officer has described the department as the "largest, most entrenched bureaucracy in the world."⁴⁰ Unsurprisingly, therefore, DoD also tends to view governance in terms of formal state institutions—it "sees like an institution" when it looks at UGS.⁴¹

Moreover, individuals who serve in DoD and advise from the intelligence and analytical communities tend to be those who have shown the greatest facility for performing successfully in large-scale bureaucratic institutions.⁴² In general, individuals are not incentivized to develop deep expertise in a particular substantive area or region. They are instead shuffled around the organization, broadened, and ultimately developed as generalists.⁴³ This is particularly true for those who are promoted to positions of greater influence and responsibility.⁴⁴ It might therefore be said that those involved in analyzing UGS and making policy and operational decisions "see like generalists," or, perhaps less generously, "see like functionaries."

It is entirely possible that a system in which the government sees like a state, DoD sees like an institution, and individual analysts see like generalists works well for a great number of the strategic, policy, and analytical problems confronting the nation. It might be that the very scale of the American military instrument might require such an approach and that this might help explain the popularity of systems analysis and other highly rationalist modes of thought in DoD.⁴⁵ However, given the enduring struggle to develop an effective military

⁴⁰ Aaron Gregg, "Pentagon Shaves \$6.5 Billion by Selling Obsolete Equipment, Overhauling Bureaucracy," *Washington Post*, February 14, 2020.

⁴¹ See, for example, Adam R. Grissom, "In Our Image: Statebuilding Orthodoxy and the Afghan National Army," in Robert Egnell and Peter Halden, eds., *New Agendas in Statebuilding: Hybridity, Contingency, and History*, New York: Routledge, 2013a.

⁴² An early systematic treatment can be found in Joel D. Aberbach, Robert D. Putnam, and Bert Rockman, *Bureaucrats and Politicians in Western Democracies*, Cambridge, Mass.: Harvard, 1981. One important school of military innovation research discusses these dynamics. Seminal works are Theo Farrell, *The Norms of War: Cultural Beliefs and Modern Conflict*, New York: Rienner, 2005; Stephen P. Rosen, *Winning the Next War: Innovation and the Modern Military*, Ithaca, N.Y.: Cornell University Press, 1991; and Dima Adamsky, *The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, the US, and Israel*, Palo Alto, Calif.: Stanford University Press, 2010.

⁴³ See, for example, Shanthi Nataraj and Lawrence M. Hanser, *Career Paths in the Army Civilian Workforce: Identifying Common Patterns Based on Statistical Clustering*, Santa Monica, Calif.: RAND Corporation, RR-2280-A, 2018; M. Wade Markel, Jefferson P. Marquis, Peter Schirmer, Sean Robson, Lisa Saum-Manning, Katherine Hastings, Katharina Ley Best, Christina Panis, Alyssa Ramos, and Barbara Bicksler, *Career Development for the Department of Defense Security Cooperation Workforce*, Santa Monica, Calif.: RAND Corporation, RR-1846-OSD, 2018; and Shirley M. Ross, Rebecca Herman, Irina A. Chindea, Samantha E. DiNicola, and Amy Grace Donohue, *Optimizing the Contributions of Air Force Civilian STEM Workforce*, Santa Monica, Calif.: RAND Corporation, RR-4234-AF, 2020.

⁴⁴ David M. Cohen, *Amateur Government: When Political Appointees Manage the Federal Bureaucracy*, Washington, D.C.: Brookings Institution, 1996.

⁴⁵ The classic statement is Alain C. Enthoven and K. Wayne Hitch, *How Much Is Enough? Shaping the Defense Program, 1961–1969*, Santa Monica, Calif.: RAND Corporation, CB-403, 1971.

approach to UGS, it is worth exploring whether those lenses are appropriate to the analytical problem of undergovernedness. In the following section, I discuss the strategic characteristics of UGS, looking at Africa as an example.

Strategic Characteristics of UGS: The Example of Africa

In seeking to understand whether there might be a mismatch between DoD's perceptual capacity and the characteristics of UGS, it is useful to begin with Africa.⁴⁶ This continent remains an active operational theater for the United States and, for many, exemplifies the idea of an "undergoverned area."⁴⁷

At the individual level, working on DoD Africa policy tends to be an uncomfortable experience in Washington, in Stuttgart (at U.S. Africa Command), or on the continent itself. Most U.S. military and DoD civilians who become involved with Africa have virtually zero background knowledge of the region. They learn about Africa on the job. This creates encounters with Africa that are both strange and nearly universal, becoming a kind of badge of honor for those working in the region. Virtually everyone has a story to tell of a meeting with African government officials that produced agreement on joint action, only for there to be no follow-up and no explanation from African interlocutors for the lack of follow-up—if such interlocutors could be located at all. What those working on Africa policy encounter is the following:

- high-profile policy initiatives that dissolve into thin air
- key decisions awaiting approval by power brokers in agencies outside the respective ministries of defense (MoDs)
- meetings in which senior African representatives appear oddly, to American eyes, deferential to lower ranking members of their delegation
- stories of learning about close family ties between senior military leaders and key business, cultural, and political figures, or of meeting African government and military interlocutors who are themselves also business owners or politicians
- stories of the moment when it dawned on the American that their African interlocutors are not powerful because they hold a senior position in the armed forces but instead hold a senior position in the armed forces because they are already powerful.⁴⁸

⁴⁶ The following discussion draws heavily on previous analyses conducted for U.S. Africa Command and its components on U.S. military strategy on the continent.

⁴⁷ See Theresa Whelan, "Remarks to the Portuguese National Defense Institute," May 24, 2006, reprinted in *Nacao Defesa*, Vol. 114, No. 3, 2006.

⁴⁸ This is based on my experience in and around the civil service for more than two decades. Of course, Africans have the equivalent stories about working with Americans, including anticipated long-term relationships, such as staff talk series, in which U.S. officers and appointees rotated so quickly that no two meetings were attended by the same leaders on the U.S. side. There are also stories of senior U.S. leaders, even cabinet secretaries, being unable to deliver on simple commitments; of countless visits by large teams of American personnel collecting unending information that never appeared to be shared or retained; of interminable delays while the unimaginably vast and complex DoD bureaucracy ground its way to a deci-

These are common experiences that unite DoD's Africa community.

The individual experiences of DoD military and civil servants have institutional analogues:

- equipment and materiel delivered to African partners at great expense and effort that rapidly deteriorate or “sprout feet” and disappear
- training events for which students fail to turn up
- units that attend collective training events, only to be disbanded, their personnel scattered to other units
- African MoDs that insist on acquiring showy systems that provide little or no useful capability
- MoDs that allow carefully developed capabilities to disintegrate without notice or apparent concern
- African armed forces that absorb enormous amounts of individual and collective training without any apparent improvement.

The overall experience is one of Sisyphean futility, interrupted by unexpected episodes of progress and growth.

Within DoD circles, the common and lazy explanation for these experiences is that African armed forces lack capacity and professionalism. They are not enough like the United States. The prescription that follows this diagnosis is to admit defeat and withdraw or to significantly escalate the U.S. effort to develop and professionalize the African partner. The fact that DoD has been pursuing this general pattern for 75 years without much apparent return on investment raises the possibility that something deeper is happening.

To understand what that something might be, one must begin with a fresh understanding of the continent, its societies, and their armed forces—Africa's strategic context.⁴⁹ That context is exceedingly complex, and that complexity begins with geography. Africa's 54 states make up a bit more than a fifth of the planet's land mass and are home to more than 1.3 billion individuals, who identify with more than 200 discrete ethnic groups speaking more than 2,000 discrete languages.⁵⁰ The continent is essentially a single, enormous chunk of the planet's crust called a *craton* that has been geologically stable for 500 million years.⁵¹ While other continents have drifted around the mantle and experienced manifold landform processes, such as volcanic activity and glaciation, Africa's stable surface has lifted, aged, and eroded.

sion; and of American interlocutors who could not name the countries in their portfolios, who did not understand the diversity of the continent's nations and societies, and who appeared to know nothing about Africa beyond what was in their briefing books.

⁴⁹ This section borrows heavily from unpublished research and writing conducted for the Department of the Air Force on improving the provision of assistance to African partner air arms.

⁵⁰ Population Reference Bureau, *2016 World Population Data Sheet*, Washington, D.C., 2016.

⁵¹ John Reader, *Africa: A Biography of the Continent*, New York: Knopf, 1997, p. 10.

As a result, the continent is largely a single plateau of extraordinarily old and unproductive topsoil that has little topographical relief and astounding quantities of rare minerals lying just beneath the surface.⁵²

Africa is the cradle of humankind, but, because of its poor topsoil and weather patterns, Africa in 2021 is not particularly conducive to human life.⁵³ Only roughly 10 percent of the continent is covered by alluvial or volcanic soils able to support intense agriculture.⁵⁴ Much of the continent is buried under the Saharan, Namibian, and Kalahari deserts or the rainforests of the Congo Basin.⁵⁵ Many regions of Africa that do possess decent soil for agriculture are, unfortunately, located in agricultural pest and disease zones.⁵⁶ Thus, Africa is said to have a low geographic “carrying capacity.”⁵⁷ As a result of this low carrying capacity, for much of recorded history, the population density of the continent has been lower than other regions of the globe where environmental conditions are more favorable.⁵⁸ Today, even after five decades of rapid population growth, Africa is only approximately 33 percent as densely populated as Asia and half as populated as Europe.⁵⁹ Although there are pockets of dense population in Africa where conditions are more favorable, the continent is comparatively very sparsely inhabited.⁶⁰

These geographic and demographic characteristics have traditionally shaped African economic systems. Low carrying capacity of the land has typically led Africa’s inhabitants toward subsistence dry field cultivation and nomadic pastoralism.⁶¹ In dry field cultivation, farmers subsist by clearing land to raise dispersed fields of low-yield crops for a few seasons

⁵² Hari Eswaran, Russell Almaraz, Paul Reich, and Pandi Zdruli, “Soil Quality and Soil Productivity in Africa,” *Journal of Sustainable Agriculture*, Vol. 10, No. 4, 1997.

⁵³ Philip Curtain, Steven Feierman, Leonard Thompson, and Jan Vansina, *African History: From Earliest Times to Independence*, New York: Pearson, 1995.

⁵⁴ Roelf L. Voortman, Ben G. J. S. Sonneveld, and Michiel A. Keyzer, “African Land Ecology: Opportunities and Constraints for Agriculture Development,” *AMBIO: Journal of the Human Environment*, Vol. 32, No. 5, 2003.

⁵⁵ These deserts and rainforests cover more than 60 percent of the continent. See European Soil Data Centre, “Soil Atlas of Africa and Associated Soil Map,” webpage, undated.

⁵⁶ Abe Goldman, “Pest and Disease Hazards and Sustainability in African Agriculture,” *Experimental Agriculture*, Vol. 32, No. 2, 1996.

⁵⁷ World Bank, “Development Indicators,” database, undated-a (search terms: Sub-Saharan Africa, Arable Land, 2013).

⁵⁸ Paul Collier and Jan Willem Gunning, “Why Has Africa Grown Slowly?” *Journal of Economic Perspectives*, Vol. 13, No. 3, Summer 1999c.

⁵⁹ Population and landmass data from Central Intelligence Agency, *World Factbook*, undated.

⁶⁰ Richard Vengroff, “Population Density and State Formation in Africa,” *African Studies Review*, Vol. 19, No. 1, 1976.

⁶¹ Andrew B. Smith, *Pastoralism in Africa: Origins and Development Ecology*, New York: Hurst, 1992.

and then move on when soil quality and moisture have been exhausted.⁶² Nomadic pastoralism revolves around herds of livestock that constantly move in search of good pasture land.⁶³ Today, of course, much has changed, and a substantial proportion of Africans live in urban concentrations. A century of gradual industrialization and the more recent advent of the service and information economies have altered the patterns of life for many in some regions. However, more than 60 percent of Africans continue to live as subsistence farmers, and the patterns of agricultural life still provide the de facto foundation for contemporary economic and social life in many regions of the continent.⁶⁴

The other fundamental feature of African economics is the oil and mineral wealth that is concentrated in certain regions of the continent's geology. Africa possesses approximately 30 percent of the globe's mineral reserves, and it is a leading world producer of aluminum, bauxite, cobalt, diamonds, platinum, and gold.⁶⁵ Africa also has a significant share of global oil production and reserves, estimated at 12.2 percent of production and 9.5 percent of reserves.⁶⁶ These extractive industries create enormous wealth for some but contribute less to overall economic development and poverty reduction in Africa than might be assumed.⁶⁷ The reasons for this are debated by economists and social scientists, but the *point rent* nature of African extractive industries and the heavy involvement of foreign companies are commonly cited factors.⁶⁸ Some economists also point to a "resource curse" by which very lucra-

⁶² Stephen Twomlow, "Dry Land Farming in Southern Africa," in Gary A. Peterson, Paul W. Unger, and Chris C. Du Preez, eds., *Dryland Agriculture*, Madison, Wisc.: American Society of Agronomy, 2006.

⁶³ United Nations Food and Agricultural Organization, *Pastoralism in Africa's Drylands: Reducing Risks, Addressing Vulnerability, and Enhancing Resilience*, Rome, Italy: United Nations, 2018.

⁶⁴ Paul Collier and Jan Willem Gunning, *The Microeconomics of African Growth*, Washington, D.C.: World Bank, May 18, 1999b, p. 5; Paul Collier and Jan Willem Gunning, "Explaining African Economic Performance," *Journal of Economic Literature*, Vol. 37, March 1999a; Organisation for Economic Co-operation and Development and Food and Agriculture Organization of the United Nations, *OECD-FAO Agricultural Outlook 2016–2025, Special Focus: Sub-Saharan Africa*, Paris, France: OECD Publishing, 2016, p. 60. The North African littoral states are exceptions to this pattern.

⁶⁵ World Bank, "Extractive Industries," webpage, undated-b; Thomas R. Yager, Omayra Bermúdez-Lugo, Philip M. Mobbs, Harold R. Newman, Mowafa Taib, Glenn J. Wallace, and David R. Wilburn, *2013 Minerals Yearbook: Africa Summary*, Washington, D.C.: U.S. Geological Survey, 2016, pp. 14–17.

⁶⁶ Christina Katsouris, "Africa's Oil and Gas Potential," keynote at Oil Politics in Africa event, London, United Kingdom: Chatham House, 2011.

⁶⁷ World Bank, *Africa's Pulse: An Analysis of Issues Shaping Africa's Economic Future*, Vol. 6, Washington, D.C., October 2012, pp. 15–19.

⁶⁸ Thorvaldur Gylfason, "The International Economics of Natural Resources and Growth," Munich, Germany: CESifo Group, Working Paper No. 1994, May 2007. *Point rent industries*, also sometimes referred to as concentrated rent industries, are those in which significant excess profits are associated with commercial activity in a very limited local area. Mining and petrochemical extraction the most commonly cited examples.

tive extractive industries appear to fuel corruption and political instability, ironically making the most resource-endowed nations in Africa some of the least economically developed.⁶⁹

Because of these common structural, geographic, and economic factors, anthropologists and sociologists argue that African societies tend to share many key characteristics, notably a *segmented* social model that is highly decentralized, kinship based, geographically diffuse, network-centric, and “acephalous.”⁷⁰ According to this perspective, whereas most Western societies are defined by formal hierarchies, such as socioeconomic classes, African societies are typically notable for their lack of formalized hierarchy.⁷¹ They are more typically defined, instead, by informal social structures, such as generational age sets, lineage associations, and, most importantly, patronage networks.⁷² In such societies, the family tends to be the fundamental social unit—rather than class, caste, profession, or ethnicity.⁷³ Extended kinship networks operate as primary sources of identity for individuals; business, political, and other types of networks are assembled from the building blocks of kinship networks.⁷⁴ Driven by intergenerational migration patterns, kinship groups sprawl over large regions, and social relationships in a given area of Africa will often be a highly decentralized latticework of loosely interacting informal networks.⁷⁵

In turn, Africa’s subsistence economies and decentralized societies shape the continent’s politics in important ways.⁷⁶ Political scientists argue that there has traditionally been insufficient economic capacity to support centralized political units in Africa, which tend to arise where there are accumulations of wealth and capital to support ruling elites and bureaucra-

⁶⁹ See, for example, Halvor Mehlum, Karl Moene, and Ragnar Torvik, “Institutions and the Resource Curse,” *Economic Journal*, Vol. 116, No. 508, January 2006. However, the uniformity and magnitude of the resource curse have been challenged. See, for example, Daniel Lederman and William F. Maloney, “In Search of the Missing Resource Curse,” Washington, D.C.: World Bank, Policy Research Working Paper No. 4766, 2008.

⁷⁰ The classic statement in this regard is found in John Middleton and David Tait, *Tribes Without Rulers: Studies in African Segmentary Systems*, New York: Routledge, 1958; and Jack Goody, *Technology, Tradition, and the State in Africa*, Oxford, United Kingdom: Cambridge University Press, 1971, p. 18. Also see Henry Seidu Daannaa, “The Acephalous Society and the Indirect Rule System in Africa,” *Journal of Legal Pluralism and Unofficial Law*, Vol. 26, No. 34, 1994.

⁷¹ Paula Brown, “Patterns of Authority in West Africa,” *Africa*, Vol. 21, No. 4, October 1951.

⁷² Goody, 1971, p. 18.

⁷³ Kinship societies are also referred to as *lineage societies*. Andrew P. Davidson, *In the Shadow of History: The Passing of Lineage Society*, New Brunswick, N.J.: Transaction Publishers, 1996.

⁷⁴ Paul Collier and Ashish Garg, *On Kin Groups and Employment in Africa*, Oxford, United Kingdom: Centre for the Study of African Economies, WPS/96-6, 1995.

⁷⁵ See Thomas Schweizer and Douglas R. White, eds., *Kinship, Networks, and Exchange*, Cambridge, United Kingdom: Cambridge University Press, 1998; and Mats Utas, ed., *African Conflicts and Informal Power: Big Men and Networks*, New York: Palgrave Macmillan, 2012, pp. 12–20.

⁷⁶ Peter Halden, “Against Endogeneity: The Systemic Preconditions of State Formation,” in Robert Egnell and Peter Halden, eds., *New Agendas in Statebuilding: Hybridity, Contingency, and History*, New York: Routledge, 2013.

cies.⁷⁷ Moreover, according to this argument, centralized political systems tend to emerge where the financial gains from controlling territory justify the costs of control.⁷⁸ Most of Africa's land is not especially economically valuable on an average basis; this suggests that, generally, there has historically been neither the incentives nor the means to create large, powerful, and expensive centralized political systems in most African societies.⁷⁹

The longstanding tendency in Africa is, instead, toward distributed, diffuse, overlapping networks of hybrid political power, reflecting the social networks that underlie political systems.⁸⁰ A substantial body of anthropological, sociological, and political science research indicates that the natural political unit in African politics is therefore the *patrimonial network*.⁸¹ Often built on kinship ties, patrimonial networks are informal webs of relationships and influence supported by patronage.⁸² Powerful patrimonial networks in Africa are archetypally led by what are termed *big men*, placing powerbrokers at the heart of politics on the continent.⁸³

Political scientists have described the political systems created by interactions among these patrimonial networks as *limited access political orders*.⁸⁴ In limited access political orders, powerful patrimonial networks control entrée to activities that produce economic and social value within the society.⁸⁵ The most-important aspects of society are incorporated into these networks, from the commercial and financial to the administrative, religious,

⁷⁷ This is a central point in Jeffrey Herbst, *States and Power in Africa: Comparative Lessons in Authority and Control*, Princeton, N.J.: Princeton University Press, 2002. See also Gorm Harste, "The Improbable European State: Its Ideals Observed with Social Systems Theory," in Robert Egnell and Peter Halden, eds., *New Agendas in Statebuilding: Hybridity, Contingency, and History*, New York: Routledge, 2013.

⁷⁸ The key source is Charles Tilly, *Coercion, Capital and European States, A.D. 990–1992*, revised ed., Cambridge, Mass.: Wiley-Blackwell, 1992. For a recent development, see Lee Jones, "State Theory and Statebuilding: Towards a Gramscian Analysis," in Robert Egnell and Peter Halden, eds., *New Agendas in Statebuilding: Hybridity, Contingency, and History*, New York: Routledge, 2013.

⁷⁹ Jean-Francois Bayart, *The State in Africa: Politics of the Belly*, London, United Kingdom: Longman, 1993.

⁸⁰ Roger Mac Ginty, "Hybrid Statebuilding," in Robert Egnell and Peter Halden, eds., *New Agendas in Statebuilding: Hybridity, Contingency, and History*, New York: Routledge, 2013; Morten Boas, "Somalia: State 'Failure' and the Emergence of Hybrid Political Orders," in Robert Egnell and Peter Halden, eds., *New Agendas in Statebuilding: Hybridity, Contingency, and History*, New York: Routledge, 2013.

⁸¹ Victor T. LeVine, "African Patrimonial Regimes in Comparative Perspective," *Journal of Modern African Studies*, Vol. 18, 1980.

⁸² Bayart, 1993, pp. 60–86.

⁸³ Utas, 2012, pp. 1–34.

⁸⁴ The seminal work is Douglass C. North, John Joseph Wallis, Steven B. Webb, and Barry R. Weingast, *Limited Access Orders in the Developing World*, Washington, D.C.: World Bank, Policy Research Working Paper 4359, September 2007.

⁸⁵ Douglass C. North, John Joseph Wallis, Steven B. Webb, and Barry R. Weingast, *Limited Access Orders: Rethinking the Problems of Development and Violence*, unpublished working paper, Stanford University, March 10, 2012.

and political.⁸⁶ Controlling access to these activities allows the networks to extract resources from the society to support themselves and to compete with one another for influence.⁸⁷ The most-powerful patrimonial networks collaborate to prevent new powerbrokers from emerging, creating a kind of dynamic stability.⁸⁸ Where powerbrokers frequently resort to force to settle disputes between rival patrimonial networks, in many areas of the continent, the result is what William Reno has described as “warlord politics.”⁸⁹

One important characteristic of limited-access political orders is that government institutions are not typically independent actors themselves but rather contested domains in which patrimonial networks compete for influence. In the memorable words of Jean-Francois Bayart, government bureaucracies in Africa are “institutional trees in the factional forest.”⁹⁰ In such a context, government institutions take form primarily because international law makes them necessary for interactions between segmentary African societies and the broader international system.⁹¹ State bureaucracies thereby become yet another source of financial resources and political influence, and hence the subject of competition among patrimonial networks.⁹² As a consequence, African states tend to be weak by global standards for reasons deeply rooted in geography, economics, social structure, and history.

As a corollary, political networks both above and below the state level (supranational and subnational) tend to be more salient in Africa than in most regions of the world.⁹³ In Africa, subnational patrimonial networks are often the most-important actors in domestic political dynamics.⁹⁴ Supranational and transnational networks—such as the United Nations, the African Union, multinational corporations, and extracontinental powers—play key roles as well.⁹⁵ There is a longstanding tradition of both subnational networks and transnational networks cooperating so that both of these combined forces can compete *against* each other for influence in African states.⁹⁶

Given the Clausewitzian dictum that war is politics by other means, it comes as no surprise that the decentralized political systems in Africa influence how military force is employed

⁸⁶ Bayart, 1993, pp. 87–103.

⁸⁷ Bayart, 1993, pp. 228–259.

⁸⁸ Bayart, 1993, pp. 150–179.

⁸⁹ William Reno, *Warlord Politics and African States*, Boulder, Colo.: Lynne Rienner, 1999.

⁹⁰ Bayart, 1993, p. 16.

⁹¹ Reno, 1999, p. 2.

⁹² Bayart, 1993, pp. 104–115.

⁹³ Louise Moe and Anna Geis, “Hybridity and Friction in Organizational Politics: New Perspectives on the African Security Regime Complex,” *Journal of Intervention and Statebuilding*, Vol. 14, No. 2, 2020.

⁹⁴ Bayart, 1993, pp. 207–227.

⁹⁵ Reno, 1999, pp. 210–227.

⁹⁶ Jean-Francois Bayart, “Africa in the World: A History of Extraversion,” *African Affairs*, Vol. 99, No. 395, April 2000.

for political purposes. Although African conflicts are diverse and complex, they tend toward unconventionality, network-centricity, and a strategic emphasis on coercion rather than conquest. These patterns might collectively be labeled *patrimonial warfare*.⁹⁷

A primary characteristic of patrimonial warfare is its unconventionality. Belligerents in Africa frequently lack the internal resources necessary to support large-scale, standing statutory forces.⁹⁸ Control of territory is much less valuable politically and economically than in many more-developed regions of the international system, where conventional warfare evolved.⁹⁹ Decisive military results are difficult, perhaps even frequently impossible, to achieve in these decentralized political and social systems.¹⁰⁰

Second, the belligerents in African conflicts tend to be networks rather than statutory militaries. Political violence in Africa tends to occur between patrimonial networks vying for position or control of some asset.¹⁰¹ Even when one or more of the belligerents have institutional trappings and statutory forces, the fundamental dynamic of the conflict tends to be patrimonial.¹⁰²

Third, conflicts in Africa tend to draw in actors from outside the continent. Africa's informal, network-based social and political systems make its conflicts uniquely permeable to outside involvement.¹⁰³ Moreover, there is a longstanding tradition of local networks seeking to involve external actors to alter the local balance of power. External actors have their own objectives, of course. Great powers are routinely intent on countering African networks that they perceive to be dangerous to their interests. Foreign corporate interests—whether state-owned enterprises from China or France or purely commercial corporations, such as Anglo-American Mining and Royal Dutch Shell—seek to capitalize on Africa's incredibly rich natural resources. Transnational networks, such as ISIL and Lebanese Hezbollah, encroach into Africa in search of influence, undergoverned space, and willing recruits. The result is that African conflicts are unusually likely to draw in actors from the outside.

Fourth, force is typically employed to coerce rather than to defeat an adversary network. Because decisive victory is unlikely in most African political contexts, military conflicts in

⁹⁷ For a useful review of the literature on patrimonialism and neopatrimonialism as it relates to African security, see Paul D. Williams, *War and Conflict in Africa*, Cambridge, United Kingdom: Polity Press, 2011, pp. 55–71.

⁹⁸ Richard J. Reid, *Warfare in African History*, Cambridge, United Kingdom: Cambridge University Press, 2012, pp. 1–18.

⁹⁹ Jeffrey Herbst, “War and the State in Africa,” *International Security*, Vol. 14, No. 4, Spring 1990; Jeffrey Herbst, “African Militaries and Rebellion: The Political Economy of Threat and Combat Effectiveness,” *Journal of Peace Research*, Vol. 41, No. 3, May 2004.

¹⁰⁰ Herbert Howe, *Ambiguous Order: Military Forces in African States*, Boulder, Colo.: Lynne Rienner, 2001.

¹⁰¹ Utas, 2012.

¹⁰² Jean-Francois Bayart, Stephen Ellis, and Beatrice Hibou, *The Criminalization of the State in Africa*, Bloomington, Ind.: Indiana University Press, 1999.

¹⁰³ See, for example, David B. Skillicorn, Olivier Walther, and Quan Zheng, “The Diffusion and Permeability of Political Violence in North and West Africa,” *Terrorism and Political Violence*, Vol. 33, No. 5, 2021.

Africa tend to be persistent and enduring.¹⁰⁴ Armed force is typically employed to gain an advantage in an enduring contest for political influence, a process William Reno calls *violent patronage politics*.¹⁰⁵ Therefore, the predominant mode of military operation in Africa is the punitive or coercive raid rather than the decisive conventional campaign. The purpose of raid operations is to impose costs on the adversary and to punish behavior that is contrary to the interests of the raider.¹⁰⁶ The coercive effect of the operation is intended to shape future behavior and to set the conditions for the next round of competition for influence, not to decisively defeat the competing network.¹⁰⁷ Collectively, these characteristics frame a way of war that is unique to Africa.

Summary of African Strategic Dynamics: Understanding Other UGS

This sketch portrait of African strategic dynamics based on the expert literature highlights the informal, distributed, network-centric, and patrimonial nature of competition and conflict in Africa's vast UGS. And although space limitations prevent anything more than generalization, this description does suggest why the United States struggles to perceive the strategic and military dynamics of African UGS. The USG sees like a state and DoD sees like an institution, which could not be more diametrically opposed to the structure and fundamental dynamics of the African context. It could be said that DoD analysts and policymakers suffer from selective blindness, like color blindness, in which certain aspects of African strategic dynamics are visible but others are completely invisible or indistinguishable from those that are visible.

Although this blindness might be particularly evident in the context of Africa's UGS, it is certainly not limited to Africa. The long war in Afghanistan has also occurred in a country with minimal carrying capacity, low population density, distributed subsistence agriculture, diffuse and segmented social networks, a patronage-based political system, and patrimonial patterns of warfare.¹⁰⁸ This strategic context affects how wars are fought in Afghanistan.¹⁰⁹ Efforts by the United States and its coalition partners to build a highly centralized, capable Afghan state apparatus with reach throughout the hinterlands—supported by professional and apolitical, centralized security forces—suggest categorical blindness to the fundamen-

¹⁰⁴ Jeffrey Gettleman, "Africa's Forever Wars: Why the Continent's Conflicts Never End," *Foreign Policy*, February 11, 2010.

¹⁰⁵ William Reno, *Warfare in Independent Africa*, Cambridge, United Kingdom: Cambridge University Press, 2011, p. 250. See also Reno, 1999, pp. 15–45.

¹⁰⁶ Reid refers to this as *raiding war* and contrasts it with Western-style *campaigning war* (Reid, 2012, p. 4).

¹⁰⁷ This is a primary point in Reno, 1999.

¹⁰⁸ Thomas Barfield, *Afghanistan: A Cultural and Political History*, Princeton, N.J.: Princeton University Press, 2010; William Maley, *The Afghanistan Wars*, London, United Kingdom: Palgrave, 2002.

¹⁰⁹ Rob Johnson, *The Afghan Way of War: Culture and Pragmatism—A Critical History*, London, United Kingdom: Hurst, 2011; Antonio Giustozzi, *Empires of Mud: Wars and Warlords in Afghanistan*, New York: Columbia University Press, 2009.

tal characteristics of Afghanistan's UGS.¹¹⁰ Similar blindness has arguably been evident in Syria, Yemen, and Iraq, where patronage-based warlord regimes compete with substate and transnational networks—not surprisingly, all UGS where the United States has struggled to formulate and achieve meaningful objectives.¹¹¹

The Analytical Problem in UGS: Complex Infinite Competition

At a conceptual level, the preceding discussion of strategic dynamics in Africa and other UGS suggests that conflicts in those areas might tend to take a complex and infinite form that is difficult for DoD to perceive and understand. When we describe competition in Africa and other UGS that is informally structured, minimally delineated in time and space, permeable to the entrance of new participants and the exit of current participants, and vulnerable to continuous struggle for relative influence and power among longstanding patrimonial networks, we are describing a form of what Simon Sinek and others have termed an *infinite game*.¹¹² The USG and DoD are optimally suited for conflicts that are finite games that adhere to formal structures and conventional rules and that are clearly delineated in time and space. What the USG and DoD encounter in Africa and other UGS are infinite games that conform to a structure and logic that is alien to a government that sees like a state and a DoD that sees like an institution. As a result, the United States has trouble perceiving and understanding what is happening on the ground in UGS and how it might devise an approach to achieve its objectives.

Similarly, when we describe the structural characteristics of African and other UGS as informal, diffuse, network-centric, patronage-based, and patrimonial, what we are describing is a complex adaptive system.¹¹³ Similar to other such systems, the strategic dynamics in UGS feature rich and nonlinear interactions among actors, feedback loops, and adaptive, emergent behavior.¹¹⁴ The functioning of the overall system cannot be predicted from the

¹¹⁰ Adam R. Grissom, "Shoulder to Shoulder Fighting Different Wars: NATO Advisors and Military Adaptation in the Afghan National Army," in Theo Farrell and James Russell, eds., *Military Adaptation in Afghanistan*, Palo Alto, Calif.: Stanford University, 2013b.

¹¹¹ Stephen Watts, Patrick B. Johnston, Jennifer Kavanagh, Sean M. Zeigler, Bryan Frederick, Trevor Johnston, Karl P. Mueller, Astrid Stuth Cevallos, Nathan Chandler, Meagan L. Smith, Alexander Stephenson, and Julia A. Thompson, *Limited Intervention: Evaluating the Effectiveness of Limited Stabilization, Limited Strike, and Containment Operations*, Santa Monica, Calif.: RAND Corporation, RR-2037-A, 2017.

¹¹² Simon Sinek, *The Infinite Game*, New York: Portfolio, 2019; Andrew Hoehn, Andrew Parasiliti, Sonni Efron, and Steven Strongin, *Discontinuities and Distractions—Rethinking Security in the Year 2040: Findings from a RAND Corporation Workshop*, Santa Monica, Calif.: RAND Corporation, CF-384, 2018.

¹¹³ For trenchant applications, see Manu Lekunze, *Complex Adaptive Systems, Resilience, and Security in Cameroon*, London, United Kingdom: Routledge, 2019a; and Manu Lekunze, "Security as an Emergent Property of a Complex Adaptive System," *Stability: International Journal of Security & Development*, Vol. 8, No. 1, 2019b.

¹¹⁴ Nadine Ansorg and Eleanor Gordon, "Cooperation, Contestation, and Complexity in Post-Conflict Security Reform," *Journal of Intervention and Statebuilding*, Vol. 13, No. 1, 2019.

behavior of the individual units, nor will the “inputs” of an external actor, such as the United States, produce linearly predictable “outputs” in terms of effects on a competition and its participants.¹¹⁵ Again, a USG that sees like a state and a DoD that sees like an institution are poorly suited to the complexity of competition in UGS.

Taken together, these observations indicate that when DoD operates in UGS, it is participating (however unwillingly) in complex infinite games. Moreover, at the government, organizational, and individual levels, DoD is uniquely ill suited to accurately perceive and understand the strategic dynamics of these complex infinite games. Selective blindness is an apt metaphor for this situation, in which the United States observes UGS from the governmental, institutional, and individual perspectives but is unable to perceive and distinguish essential features ranging from actors to causal dynamics. Unsurprisingly, despite best efforts, the results are ambiguous. More insidiously, the results might be impossible to discern in the first place.

Moreover, while the United States might initially encounter complex infinite games as analytical problems, the games clearly pose challenges that extend beyond seeing to the realm of doing.¹¹⁶ The same individual- and institutional-level characteristics that inhibit DoD’s ability to perceive the complex infinite conditions of UGS also tend to make the department ponderous in action.¹¹⁷ DoD is also notoriously centralized when it comes to taking action in UGS. Day-to-day and tactical decisions require approval and reporting at the theater or national level.¹¹⁸ Talking points are debated in the inter-agency process, which by design grants maximum power to those in the system wishing to delay or block actions.¹¹⁹ The result is that DoD’s behavior in Africa and other UGS is slow, infrequently adjusted, and directed by those who are furthest from the realities of complex infinite competitions.¹²⁰ This is the antithesis of the dynamic, experimental, adaptive, and problem-centric approach that is increasingly viewed as the most effective mode of behavior in conditions of complex

¹¹⁵ Malte Brosig, *Cooperative Peacekeeping in Africa: Exploring Regime Complexity*, London, United Kingdom: Routledge, 2015.

¹¹⁶ For a particularly powerful discussion of this link, see Ben Connable, *Embracing the Fog of War: Assessment and Metrics in Counterinsurgency*, Santa Monica, Calif.: RAND Corporation, MG-1086-DOD, 2012.

¹¹⁷ Theo Farrell and James Russell, eds., *Military Adaptation in Afghanistan*, Palo Alto, Calif.: Stanford University, 2013; Frank G. Hoffman, *Mars Adapting: Military Change During War*, Annapolis, Md.: Naval Institute Press, 2021.

¹¹⁸ This insight emerges from author field observations.

¹¹⁹ Alan G. Whittaker, Frederick C. Smith, and Elizabeth McKune, *The National Security Process: The National Security Council and the Interagency System*, Carlisle, Pa.: U.S. Army War College, 2008.

¹²⁰ Kristen Harkness and Michael Hunzeker, “Military Maladaptation: Counterinsurgency and the Politics of Failure,” *Journal of Strategic Studies*, Vol. 38, No. 6, 2015.

infinite games.¹²¹ The Australian armed forces have particularly well-developed arguments for adopting the antithesis of DoD's approach in complex infinite competitions in UGS.¹²²

It would be easy to criticize DoD's approach to action in UGS as unhelpfully centralized and ponderous if decentralization were a feasible alternative. However, decentralized action in a modern bureaucracy requires trustworthy subordinates with the requisite expertise, experience, and preparation to succeed in their environments. Broadly speaking, DoD lacks such individuals on the ground or anywhere in the system. Any prospective solution would involve profound structural reform across DoD or, perhaps, a completely new approach to developing and sharing an understanding of real-time conditions in complex infinite competitions.

Concluding Thoughts: The Need for New Lenses in UGS

Although the United States, and DoD in particular, finds UGS uncongenial and frustrating, the historical record suggests that UGS cannot simply be ignored. Since the early 20th century, the United States has repeatedly attempted to eschew involvement in UGS, only to be pulled in by threats and opportunities that repeatedly arise in them. The 2018 National Defense Strategy, with its emphasis on competing with revisionist great powers and suppressing the threat posed by VEO networks, points directly toward continued and perhaps even growing DoD commitments in UGS in Africa, the Middle East, Central Asia, Southeast Asia, and perhaps Latin America.

There is thus a need for new analytical techniques that can provide new lenses for DoD to perceive and understand the complex infinite competitions it encounters in UGS. These lenses must incorporate the information and signifiers that locals use to understand and navigate these competitions, and they must be general tools that can be rendered bespoke to specific times and places. Perhaps most challengingly, they must translate the informal complexity of UGS to individuals who see like generalists, a department that sees like an institution, and a government that sees like a state. The USG and DoD will not transform themselves wholesale to operate more effectively in complex infinite games. Instead, new analytical lenses are required that will translate effectively between the two types of reality.

Recent advances in artificial intelligence, machine learning, modeling, and gaming could individually and collectively contribute to the development of such lenses. In particular, from an analytical perspective, the development of artificial intelligence or machine-learning tools

¹²¹ Quinton Mayne, Jorrit deJong, and Fernando Fernandez-Monge, "State Capabilities for Problem-Oriented Governance," *Perspectives on Public Management and Governance*, Vol. 3, No. 1, 2019; Rudra Sil, "Problems Chasing Methods or Methods Chasing Problems? Research Communities, Constrained Pluralism, and the Role of Eclecticism," in Ian Shapiro, Rogers M. Smith, and Tarek E. Masoud, eds., *Problems and Methods in the Study of Politics*, Cambridge, United Kingdom: Cambridge University Press, 2004.

¹²² See Justin Kelly and Mike Brennan, "OODA Versus ASDA: Metaphors at War," *Australian Army Journal*, Vol. 6, No. 3, Summer 2009. (This entire issue of *Australian Army Journal* is a particularly good overview of Australian views on the matter.)

might permit the sociocultural and political signatures of African societies to be collected at comprehensive scale, correlated longitudinally, visualized in real time, and, ultimately, rendered legible to generalists in DoD and other USG institutions. Emerging modeling and gaming capabilities, on the other hand, might allow this analytical portrait to be projected forward in time to help policymakers understand the likely results of their choices. Several components of mosaic warfare point the way toward these capabilities.

Acknowledgments

I would like to thank Elizabeth M. Bartels and Aaron B. Frank for their thoughtful leadership, Timothy Gulden, Angela O’Mahony, and Dan Patt for incisive substantive reviews, and Katie Hynes and Arwen Bicknell for astute and indefatigable publications editing. I am forever indebted to Bernd McConnell—mentor, *inkosi*, and the inspiration for this chapter.

Abbreviations

COIN	counterinsurgency
CT	counterterrorism
DoD	U.S. Department of Defense
ISIL	Islamic State in Iraq and the Levant
MoD	ministry of defense
UGS	undergoverned spaces
USG	U.S. government
VEO	violent extremist organizations

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