

Understanding Nations: *New Ideas to Analyze Foreign States*

by Tom Pike, Nick Long and Perry Alexander

"The right perspective makes hard problems easy while the wrong perspective makes easy problems hard."

—Scott Page

How humans understand the world drives the actions they take. This truth has literally changed the course of history. Galileo put the sun in the center of the solar system and altered humanity's view of its place in the cosmos. Einstein showed time and space are not two separate phenomenon but really different sides of the same coin. These developments allowed for exponential development, as people leveraged new understandings to make incredible breakthroughs. Every great revolution is the result of changing a shared understanding, and U.S. foreign policy and military strategy are no different.¹ The U.S. government's approach to analyzing foreign nations assumes the Westphalian notion of foreign states as single entities. Although it is essential the U.S. government and all governments continue to treat nations as single entities, it is critical to realize this assumption fundamentally flaws U.S. analysis when trying to understand these nations. This is particularly true when the nation has collapsed, and international efforts

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are being made to stop the ensuing conflict and stabilize the area. To understand the true nature of a nation, its behavior, and the incredible dynamics that can emerge within it, we must use a more effective lens than a seventeenth century treaty. Complex adaptive systems or complexity theory provides such a lens. Similar to an ecosystem with its plants and wildlife forming a complex web of relationships, nations are the embodiment of their interdependencies and competitions. Accepting this perspective allows for a critical examination of current U.S. government frameworks and shows how the

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assumption of a single state entity can lead to poor understanding. However, it is not enough to throw stones at existing frameworks; the same ideas critiquing the current approaches must be usable in crafting new frameworks. To show the viability of these ideas, we roughly apply them to an analysis of Pakistan. The behavior of a state is a result of the interdependencies and competition within it; accepting this perspective will fundamentally alter how the U.S. understands foreign nations.

The importance of the perspective the U.S. government adopts when understanding a problem is overwhelmingly obvious in the U.S. experience in Iraq. At the beginning of the conflict, the Secretary of Defense would not allow the term insurgency, even as it became obvious large portions of the population were actively supporting armed resistance against coalition forces and the Iraqi government the coalition was trying to establish.² Military units seeing the attacks as perpetuated by “terrorist elements” built large, heavily-

protected forward operating bases (FOBs) and focused on seek and destroy missions. This perspective and the subsequent actions were counterproductive to success based on known best practices of counterinsurgency.³ When the Secretary of Defense changed and leaders such as Generals Mattis and Petraeus emerged, they allowed and advocated for a counterinsurgency approach. This new, shared understanding fundamentally altered the daily decisions of coalition members from the private on the ground to the senior leaders in Iraq and Washington. With a counterinsurgency perspective, it became critical to engage the population and get out of the FOBs. Local Iraqi leaders became allies who needed to be part of the solution, and the leadership placed new emphasis on not just finding the insurgents but understanding the people.⁴ Regardless of whether or not one believes counterinsurgency was the right perspective, the point is still clear, leaders altering their organization’s shared understanding fundamentally changed the daily decisions and behavior of that organization. This makes the perspective the U.S. government uses to understand foreign populations an issue of strategic importance.

Accepting the importance of perspective begs the question: What perspective provides the greatest ability to understand the dynamics of foreign nations and subsequently craft policy to achieve U.S. goals? Complex adaptive systems theory provides a rigorously-tested, conceptual lens developed specifically to find the underlying laws governing everything from the earth’s environment, to populations, to the human brain. As credence to selecting this particular lens, complexity theory is already providing the basis for current military doctrine and is seen across the government through the emergence of terms like feedback loops, non-linearity, and wicked problems in everyday lexicon.⁵ But what is complexity theory? One proposed definition is “Complexity arises when

the dependencies among the elements become important. In such a system, removing one such element destroys system behavior to an extent that goes beyond what is embodied by the particular element that is removed.”⁶ This idea is epitomized in the expression “the whole is greater than the sum of its parts.” Although these descriptions may seem nebulous, you are a complex adaptive system and are immersed in complex adaptive systems every day. Take your body for instance; your lungs, brain, and heart working together are essential to who you are, but when separated, these organs become piles of organic matter which quickly rot away. When functioning together, these organs are part of a living “whole” far beyond the individual capability of each piece. The science behind why such interdependencies can produce amazingly complex behavior is complexity theory. Complexity theory provides the best current thinking to understand foreign nations, and two foundational aspects of complexity provide criteria with which to examine existing frameworks, while roughly building a new framework to leverage complexity to analyze foreign nations.

The adjectives complex and adaptive found in complexity theory’s more formal name, complex adaptive system theory, provides two foundational aspects of the theory which we can use to critically examine existing U.S. government frameworks. Complexity, as mentioned in the previous paragraph, arises from the interdependencies within a system. An example of interdependencies is at the very core of the U.S. government. The U.S. government has three branches, the legislative, the executive, and the judicial, which are separate but equal. These branches have checks and balances to ensure no one branch is able to dominate the others. These checks and balances also force each branch to be dependent on the other for some critical function. The checks and balances are the interdependencies of the U.S. governing

system, and these three branches working together are able to produce an amazingly, complex government, relatively speaking.⁷ The interdependencies of a system are what make it complex. Therefore, the first criterion for analysis is: “Do the frameworks assess the interdependencies of the system?”

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The next component complex adaptive systems theory is the “adaptive.” Businesses, individuals, organizations, and governments all change or adapt based on the pressures they face within their environments. Every person experiences this in his or her life. Develop skills for a certain career, and that has a significant impact on income level and a whole array of other choices. If the environment alters, say a new technology comes along and makes those skills obsolete, drastic change (adaptation) must occur to survive. A macro example of adaptation is the U.S. economic system of capitalism. Every day, different businesses compete for profits, and this competition drives the adaptations of the companies as they constantly seek to maintain or gain market share. This competition then drives the behavior of the market. Those who find successful models or products are able to thrive and are emulated, while those who are unable to get enough market share or unable to change their approaches as their market share dwindles, go out of business. Somewhat simplified, competition drives adaptation.⁸ This fact leads to the second criterion for analysis, “Does the framework account for the competition of the key groups?” Armed with these two criteria of assessing interdependencies and understanding the competition, it is now possible to examine current U.S. government frameworks through the lens of complexity.

As the Department of Defense (DoD) and the Department of State (State) are the two major entities engaged in U.S. foreign policy, we will focus on these two departments and how they seek to understand foreign nations. The current perspective of the DoD is outlined in its joint intelligence doctrine, which describes the process the DoD uses to understand and interpret the environment. The process is known as Joint Intelligence Preparation of the Operating

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Environment (JIPOE) and is based on systems analysis.⁹ To analyze the operating environment, JIPOE uses the acronym PMESII (political, military, economic, social, information, and infrastructure). The intent of the methodology is to effectively find the key interdependencies within the operating environment using PMESII as a common way to characterize different aspects of the system (see Figure 1). This meets the first criterion; JIPOE does account for the interdependencies within the system. Yet, applying this methodology to an operating environment produces an immediate divergence from what complexity would suggest. As it examines the whole system, the critical quality JIPOE assumes away competition within the foreign system. Since the competition within the system is the essence of how the foreign system will adapt and hence how its behavior will change, exclusion of this criterion is detrimental to complete system comprehension. If the purpose of foreign policy is to alter the behavior of a foreign government, eliminating competition from the analysis eliminates understanding the underlying dynamic driving the government's behavior. The Defense

framework accounts for the interdependencies aspect of complex adaptive systems but fails to account for the adaptive part.

Before analyzing the framework of State, it is important to understand that State has a fundamentally different culture than Defense.¹⁰ The military, with its planning culture and established processes, provides documentation on how it generally analyzes the environment. State does not have comparable planning and synchronizing efforts. Diplomats must maintain dialogue indefinitely and so must often obscure their intent to keep open the possibility of future diplomatic relations.¹¹ This position is most clearly articulated by State's philosophical leader Talleyrand, the famous French diplomat, who extorted "Above all, not too much zeal." Yet after more than a decade of conflict, State has recognized the need for diplomats and others to offset a purely military approach and to engage when appropriate. In addition, as the U.S. government looked to improve the effectiveness of its actions, State was empowered to lead the whole-of-government approach to help stabilize countries in conflict.¹² State's effort to try and develop a more effective whole-of-government approach has led to a new element within the department.

In 2012, Secretary Hillary Clinton established the Bureau for Conflict and Stabilization Operations (CSO), solidifying its existence and making its core principles innovation and agility. The CSO is working to find better ways to analyze, surge, and conduct operations to stabilize conflict-ridden areas, to include leveraging tools from the Defense Advanced Research Projects Agency.¹³ Currently, the most prominent tool of the CSO is the Interagency Conflict Assessment Framework (ICAF), used as a common guide to determine the underlying drivers of conflict. The ICAF was originally developed by the United States Agency for International Development (USAID) under the direction of

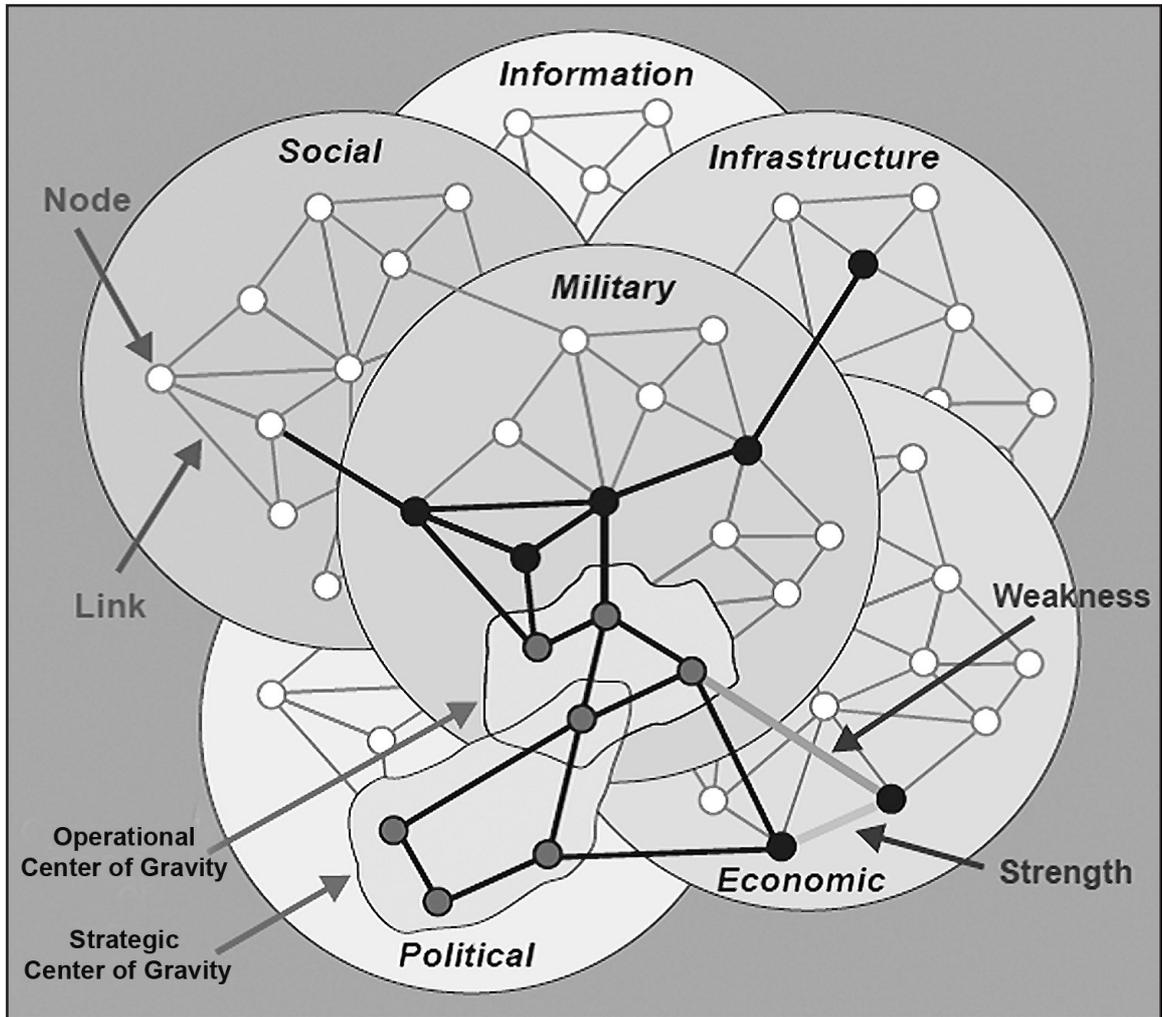


Figure 1. PMESII Analysis of the Operating Environment

then Director Andrew Nastios. Director Nastios created the beginnings of CSO's framework by leveraging the field experience and knowledge of USAID's FSOs.¹⁴ Although it is a small and emerging bureau, CSO represents the most developed efforts by State in developing a whole-of-government approach. The CSO ICAF tool provides a comparable composition to JIPOE to assess State's current understanding of analyzing foreign nations, specifically those in crisis or facing an impending crisis.

The ICAF goes further than the JIPOE and acknowledges the competition of groups in foreign populations and seeks to diagnose

conflict through four steps. Critical to the ICAF is identifying the core grievances the different groups have and whether or not they feel there are social institutions to address these grievances. The outline of the ICAF is located in Figure 2. Available ICAF reports to date include Liberia, Tajikistan, Burma, Cambodia, Nepal, and Mindanao, Philippines.¹⁵ Each of these reports provides exceptional insights into the views of the population and the common narratives circulating throughout the various groups used to justify the rightness of their position. At first glance, the ICAF meets both criteria. As Figure 2 shows, the ICAF examines

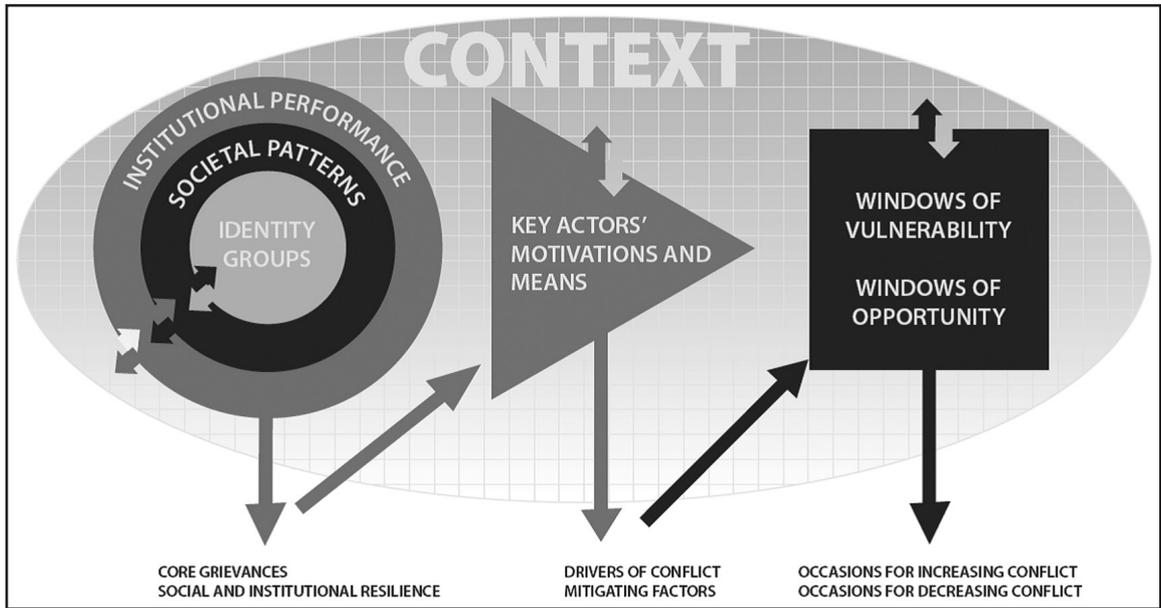


Figure 2. The Interagency Conflict Assessment Framework

the interdependencies within the society and how they link key actors and groups. It also examines the grievances of various groups and the reasons they feel they cannot get those grievances addressed.¹⁶ This seemingly answers the competition piece of the assessment criteria. However, when put into practice, this setting does not describe the foreign population in terms of the key competing groups. Instead, the framework focuses on grievances of the population and looks at the social institutions as broken pieces of equipment, which when reformed can address the grievances. The challenge with this is that official institutions in the government are created and run by competing groups and often ignored by other groups who instead are using their own social mechanisms. These institutions are an integral part of the competitive dynamic, not a separate piece. The ICAF does go further than JIPOE and acknowledges competing groups and through its applications provides crucial insights. Despite this, the ICAF still does not meet the competition criterion because competition is not prominent enough to be a key driver of

adaption.

Assessing the analytic frameworks of Defense and State reveals they both overlook the importance of competition within foreign systems. JIPOE focuses on the foreign system as the competitor and, in doing so, misses any opportunity to understand the internal competition within the environment. The ICAF does a much better job of identifying the competing groups but takes an idealistic view of governing institutions, as opposed to understanding those institutions as adaptive elements within the system that shape the action of competing groups, and are exploited and shaped by them. Taking this analysis of both DoD and State, it is possible to create a rough framework more consistent with the science of complex adaptive systems that more effectively understands the dynamics of a foreign country.

As our evaluating criteria, we know the two concepts of interdependencies and competition are essential pieces of any complexity-based framework; however, the essence of any complex system is not these ideas by themselves but how they work together. A web of interdependencies

with its different elements adapting in order to compete more effectively gives rise to truly complex behavior. This dynamic is the same as in any ecosystem; different species connected through a web of interdependencies cooperate and compete over scarce resources. A healthy system allows life to diversify and flourish and find a type of homeostasis. Nonetheless, over time, the system's homeostasis may become unbalanced, or invasive species may appear and overwhelm the system effectively killing it off. The goal of this framework is to try and describe the ecosystem of the nation. What are the dominant groups and their critical interdependencies, and how are they competing and cooperating over the scarce resources in order to perpetuate and ensure their survival? Unlike the JIPOE and ICAF, this approach assumes the governance structure both shapes the competition of the different groups and is a result of the competition as different groups manipulate the governance structure to aid their group's survival.¹⁷ As such, a group with enough power can fundamentally alter the government to solidify its position, while a resilient system prevents any group from completely seizing control. Describing nations as ecosystems or an interdependent web of competing groups is a nice thought problem, but can it be applied in practice? Pakistan, as a strategically important as well as a confusing and often misunderstood country, represents an ideal opportunity to apply this approach.

A rudimentary description of the Pakistani ecosystem includes four primary groups with the economic system representing the scarce resources over which the groups are competing. The first group is the dynastic political parties, epitomized by the last two leaders, Zadari of the Bhuttos and Nawaz Sharif. The second group is the military, which forms an undeniably strong and somewhat insulated group. Third are the local leaders and kinships groups, which provide a fluctuating base that the military and dynastic

parties seek to leverage in order to enhance their particular positions. The kinship groups are not powerful enough to gain national power on their own, but their support is necessary for the military or dynastic parties to gain and maintain power. Fourth are the bureaucrats, the educated elite, who still maintain the governance systems handed down from British colonialism. These English-speaking professionals compose the various ministers, their ministries, the lawyers, and the judges, and they control the official record. These four groups compose an intricate system that creates the Pakistani ecosystem.

The dynastic political parties are perhaps best illustrated by the Pakistan Peoples Party, the Pakistan Muslim League (Nawaz), and the Awami National Party. The parties are old (in relation to the age of country), and leadership often passes via family lineage. The dynasties seek to build and retain power through a patronage system that provides postings, favors, resources, etc. to those families or kinship groups that provide the support necessary to rise above one's competition. Through these

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promises of patronage, the dynasties gain power, control the government, and distribute the wealth the controlling government provides to those who support them.¹⁸ Yet over time, the governments are typically unable to keep their promises to those local leaders and/or kinship groups and ultimately lose the base necessary to retain the government.

The military is different than the political parties and subject to a different set of economic resources. Within the Pakistani political system, the military can be seen as both a stabilizing

factor and a manipulative entity capable of removing any democratically-elected leader that falls out of favor. The military, having its own internal social welfare system and ideological paradigm, is able to somewhat insulate itself from the patronage system the other political entities suffer from; however, the military cannot insulate itself completely. Once in power it becomes subject to the same need to dole out patronage. The three military leaders of Pakistan's history, Ayub Khan, Zia Al-Huq, and Perez Musharraf have all tried in different ways to alter this dynamic. In each case, these reforms were unsuccessful, particularly in the case of Khan and Musharraf, where the civilian leaders swept away all the reforms in order to restore their prestige.¹⁹ Ultimately, the military suffers from the same competitions as the other political parties and is unable to provide the requisite patronage to maintain power.

The local leaders and kinship groups ultimately provide the base from which the political parties derive their power. The local leaders and kinship groups pool together to create the coalitions necessary to win national elections. Promises are made by the larger, dynastic political parties that form the skeleton of the patronage system required to reimburse the local leaders. The promises provide local leaders and kinship groups an advantage over other groups; however, they are also subject to the ability of those large political parties to continue to provide those rewards to them. Control of the government gives local leaders advantages in ensuring disputes with their neighbors go their way; they receive the valuable water rights, business licenses, or better energy services. By aligning themselves with a losing or less powerful party, local leaders and kinship groups run the risk of a net loss of power relative to other similar groups.

The bureaucrats are key to control when in power. The bureaucrats represent the governing institutions, such as official judicial,

records, and law enforcement systems, which the elected political party can exploit to its advantage, negatively affecting adversaries and complicating the lives of their opponents. At a local level, the judicial system is unwelcome, decidedly ineffective, un-Islamic, and fundamentally British.²⁰ Additionally, much of the promised patronage comes from ministerial and ambassadorial postings, making the bureaucratic system a method to strengthen one's powerbase and pilfer state resources to pay one's client base. The result is many kinship groups continue to use informal judicial systems to settle their disputes, as the official system is primarily a tool of the governing party.²¹ The bureaucrats are the educated elite who control the governing institutions, and the group that controls the government is able to exploit this group to pay its client base.

The economic system is the pool of resources within the country the various groups use to survive. Bureaucracy is the key aspect of the economic system and provides any group that controls it a competitive advantage in gaining and exploiting the available economic resources. Since the military maintains its own economic resources, it is partially insulated from the politics of the government. However, as Pakistan is an interdependent web, the military is not completely insulated, and government decisions will affect its economic resources. There may be times when the actions of bureaucrats and other elements within the government have a detrimental effect on the military, prompting it to adapt to protect itself and potentially wrest power from the government. This is a solid example of systems adapting to compete over the finite resources of a complex system.

The ecosystem in Pakistan is a unique complex adaptive system. Dynastic political parties vie for power by promising rewards or patronage to local actors, leaders, and kinship groups. The military is capable of and often

actively meddles in the affairs of politicians to maintain its quality of life and protect against both explicit and inferred existential threats. The bureaucratic and economic systems are shaped and exploited by those same political and military elites to retain and/or gain power and often have an unforeseen effect on the general population of Pakistan. Interestingly, Pakistan is in a type of equilibrium where one group's attempted change may undermine the status of other groups, and these groups may then actively work or adapt to maintain the status quo. Musharraf saw this as he tried to address the significant problem of the unaccountable police by bringing them under the locally-elected council versus under the bureaucrats. The councils did not have the power, experience, or capability of taking responsibility for or administering the police. As a result, the police simply took no action in the face of any crisis out of fear they would have to take responsibility if something went wrong. This situation led to several embarrassing events of local police collapsing in the face of a Taliban attack.²² It will be difficult to change the strong balance within the Pakistan ecosystem.

The Pakistan case study provides a rough example of how to use the concepts from complexity theory to more effectively analyze a foreign nation. The challenge is how do we prove this as a more effective framework? Like any adaptation, its effectiveness will be determined through use and application, but the logic supporting this approach is sound. Foreign nations are complex adaptive systems, and complexity theory delivers the best, rigorously-tested understanding available to more effectively analyze them. Nevertheless, complexity also shows us that the approach presented here is just another adaptation; to survive it must prove its utility through application.

When trying to understand foreign nations, the most prevalent assumption in the U.S government is that each is a single entity. The Westphalian notion of states as entities has proven very useful in facilitating international relations and law, much like making a corporation an entity. Unfortunately, in trying to explain why a country behaves the way it does, this view is fundamentally flawed. The JIPOE effectively analyzes the interdependencies of a foreign nation but ignores the competing groups within it, providing a false understanding of why the nation is acting the way it is. The ICAF identifies both the interdependencies and the competing groups but looks at the governing institutions and those individuals in them as not subject to the competing groups around them. Complexity theory argues against both approaches because interdependencies and competition are critical in understanding the behavior of foreign nations. When these aspects are taken together, analyzing nations becomes very similar to analyzing ecosystems. In the very quick analysis of Pakistan, we see the key dynamics of its ecosystem which, despite its many frustrations, has proven relatively resilient. Adopting a complexity-based understanding of foreign nations, which seeks to understand the interdependencies and competition within it, will improve U.S. understanding of foreign nations and in doing so improve U.S. foreign policy. **IAJ**

NOTES

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