



## Populations as Complex Adaptive Systems: A Case Study of Corruption in Afghanistan

by Tom Pike and Eddie J. Brown

*Eight years into the war in Afghanistan, the U.S. intelligence community is only marginally relevant to the overall strategy. Having focused the overwhelming majority of its collection efforts and analytical brainpower on insurgent groups, the vast intelligence apparatus is unable to answer fundamental questions about the environment in which U.S. and allied forces operate and the people they seek to persuade.*

- Major General Michael Flynn, Captain Matt Pottinger and Paul D. Batchelor<sup>1</sup>

In August 2009, the North Atlantic Treaty Organization's International Security Assistance Force mission shifted from an enemy-centric, anti-insurgency campaign to a broader, population-centric counterinsurgency.<sup>2</sup> This strategy change immediately presented challenges to field of intelligence and its existing analytic methods as it struggled to cope with the complexity of population analysis. However, a wave of innovation under the name of complexity theory is spreading through mathematics, computer science, biology, economics, and sociology that do cope with the challenges of analyzing entities as complex as populations. The Emergent States Assessment<sup>3</sup> (ESA) is an analytic tool that attempts to exploit this wave to support decision makers in Counterinsurgency and Stability Operations. To demonstrate the potential power of viewing populations through the lens of complexity this article examines the phenomenon of corruption in Afghanistan through the ESA framework.

### *Invalid Assumptions*

First, one should wonder why the established methods falter against the current problem before considering an alternative. The methods come from the two main analytic stakeholders for Afghanistan: the Department of Defense and the Department of State. The Department of Defense uses Joint Intelligence Preparation of the Operating Environment (JIPOE) in support of the U.S. military, while the Department of State uses the Interagency Conflict Assessment Framework (ICAF) in support of the U.S. diplomatic mission. Each is unique in approach, useful in its intended role, and yet both fall short of providing meaningful insight into something as complex as a population analysis.

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<sup>1</sup> Major General Michael Flynn, Captain Matt Pottinger and Paul D. Batchelor, "Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan", *Center for New American Strategy* (January 2010), available at [http://www.cnas.org/files/documents/publications/AfghanIntel\\_Flynn\\_Jan2010\\_code507\\_voices.pdf](http://www.cnas.org/files/documents/publications/AfghanIntel_Flynn_Jan2010_code507_voices.pdf)

<sup>2</sup> Stanley A. McChrystal, Commander NATO International Security Assistance Force Afghanistan, U.S. Forces, "Commander's Initial Assessment 30 August 2009", *The Washington Post*, available at [http://media.washingtonpost.com/wp-srv/politics/documents/Assessment\\_Redacted\\_092109.pdf](http://media.washingtonpost.com/wp-srv/politics/documents/Assessment_Redacted_092109.pdf)

<sup>3</sup> Tom Pike, *The Emergent States Assessment: An Argument for Population Centric Analysis During Counterinsurgency Operations*, (master's thesis, National Defense Intelligence College, 2010), pp. 11-15.

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The Department of Defense JIPOE and its derivative, service-specific off-shoots, such as U.S. Army's Intelligence Preparation of the Battlefield, was developed for and time-tested against the enemies of the United States on the field of battle. The method has evolved over time and remains an efficient tool to enable military victory in offensive and defensive operations. It is, however, a highly customized tool that rests on the assumption that the analytic problem is opponent-centric.<sup>4</sup> A review of the Department of Defense Joint Publication 2-01.3 finds a remarkably efficient system for analyzing enemy military forces, which is then awkwardly applied to concepts such as "non-lethal targeting" and "civil considerations." Expecting elucidating conclusions about a population by using JIPOE is analogous to setting screws with a hammer: it might ultimately work, but a different tool may yield better results.

Perhaps the Department of State has the tool for the job? The diplomatic school, through USAID and the Department of State Coordinator for Reconstruction and Stability, utilizes the ICAF, which also has derivatives. For example, the Tactical Conflict Assessment Framework (TCAF) is designed to assist the military in providing State officials relevant information in Stability Operations.<sup>5</sup> These tools seek to minimize conflict in order to promote stability, from which development may then occur. In this way, ICAF is conflict-centric. Unfortunately, while stability may be necessary for development, prematurely ending a conflict may leave the conflict unresolved in the minds of many of the population. Furthermore, unrequited conflict may work to more firmly entrench an unsavory situation, such as supporting autocracy and despotism. To continue the analogy from above, ICAF sets the screws without regard for what part of the structure bears the load.

After considering the two predominate, existing methods, the base-line assumptions appear to be the issue for both JIPOE and ICAF in the face of population-centric problems. So how does one analyze a population in a way that addresses the conflict from the perspective of the population? This discussion proposes a complexity-based approach to assess populations.

### ***The Emergent States Assessment: an Alternative Analytic Method***

*Classical counterinsurgency uses systems analysis, but traditional reductionist systems analysis cannot handle the complexity of insurgency. However, the emerging science of complexity provides new tools for systems assessment- hence complex systems analysis may provide new mental models for globalized counterinsurgency.* -David Kilcullen<sup>6</sup>

Before discussing the specifics of the Emergent States Assessment (ESA), it is necessary to establish a conceptual baseline for complex adaptive systems vis- a-vie military strategy. As Clausewitz surmised, the basic purpose of military and diplomatic policy is "to bend others to our will." Complexity refines this "bending" into creating selection functions that favors the replication and continuation of certain traits over others. In other words, U.S. Government (USG) actions seek to influence the adaptive path of the population to achieve its objectives. Complexity suggests to influence trait selection the USG should alter interdependencies within the system. Just as changing the food available in an environment will change the dominant traits of a species, changing the interdependencies within a population will change the dominant traits of a population. Therefore, if decisions makers want to stabilize a country or defeat an

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<sup>4</sup> U.S. Joint Chiefs of Staff, JP 2-01.3, *Joint Intelligence Preparation of the Environment*, (Washington D.C.: June 16, 2009), p. xi.

<sup>5</sup> Paul Turner, interview by the author, Washington D.C., December 2, 2009.

<sup>6</sup> David Kilcullen, *Counterinsurgency*, (New York: Oxford University Press, 2010) 166.

insurgency they must alter the populations' interdependencies and ESA is a framework designed to assess the interdependencies and their implications within a target population.

ESA defines, analyzes, and assesses a population by the complex adaptive system terms of Agents, Flow<sup>7</sup>, Fitness Landscapes, and Emergent Phenomena. Agents are sub-sets of the population grouped by analytically relevant characteristics (such as tribes, insurgent groups, and professions), where individuals may belong to more than one Agent. Flow is the movement of "energy" (such as money, information, and authority) between Agents as described by interdependencies. The Fitness Landscape is composed of the relatively stable situational factors (such as water resources, laws, and culture) that both shape an Agent's "health" in the system as well as influence the flow of "energy" through the system. Analyzing these aspects of a population reveals the major interdependencies that produce Emergent Phenomena.

Emergent Phenomena are the irreducible patterns (such as tolerance for extremism, distrust of foreigners, corruption or even economic growth) that characterize the system based on the interaction of Agents, Flow, and the Fitness Landscape. The Emergent Phenomena are the observable issues that policy and operational decision-makers will want to change. Analysts must work to understand the unique interdependencies of the Agents, Flow, and Fitness Landscape that explain Emergent Phenomena.

In an attempt to employ the power of the reader's intuition to reach shared understanding, the next section provides a link diagram and a narrative analysis from the ESA method. It is important to note that while this analysis may seem to follow a stepped progression, the method does not require or advocate one. In addition, as this is a publication, the connections and conclusions are neat and the failed starts and disproved notions are removed. In reality, analysts will develop hypotheses about emergent phenomena and constantly assess, refine, and even disprove those hypotheses. This analysis begins at a logical start point and walks through a building analytic process. Other problems may require different employment of the ESA framework and will always require critical thought.

### ***Emergent States Analysis: The Case of Corruption in Afghanistan***

*"The extent to which leaders attempt to detect and eradicate corruption depends on the institutional arrangements.*

- Bruce Bueno De Mesquita, Alastair Smith, Randolph M. Siverson and James D. Morrow<sup>8</sup>

### ***Emergent Phenomenon***

Corruption permeates every facet of Afghan governance from the high levels of grand corruption at the national government to petty corruption at the lower levels of government. Corruption is so pervasive many Afghans have turned to the Taliban shadow government, because the government has not been successful at establishing a consistent and enforceable rule-

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<sup>7</sup> John Holland, *Hidden Order: How Adaptation Build Complexity*, (New York: Basic Books), 23-27.

<sup>8</sup> Bruce Bueno De Mesquita, Alastair Smith, Randolph M. Siverson and James D. Morrow, *The Logic of Political Survival*, (Cambridge, Massachusetts: The MIT Press, 2005),102.

of-law.<sup>9</sup> The Afghan government's endemic corruption is one of the primary concerns of the international donor community and ISAF.

In 2009, *Transparency International* ranked Afghanistan at 176<sup>th</sup> out of 180 countries, only fourth from the worst case, based on an index of government corruption as perceived by its people.<sup>10</sup> Corruption in Afghanistan is an emergent phenomenon requiring understanding the interdependencies of the population.

### ***Fitness Landscape***

To describe the fitness landscape this assessment begins with an examination of the interdependencies of the Government of Islamic Republic of Afghanistan with its population. The highly-bureaucratic Afghan government's centrally-controlled structure, considered the trappings of a modern government with none of its qualitative substance. Afghanistan had an interim weak central government from 2002 to 2004, at which point Afghanistan promulgated a new Afghan constitution and Afghan government.<sup>11</sup> While the Afghan government held provincial governance council elections in September 2005, the councils never had a clear mandate, a budget, or revenue raising capacity.<sup>12</sup> Afghanistan is still awaiting institutional elections below the provincial-level at the district-level because districts elections for the fall of 2010 were cancelled.<sup>13</sup> The centralization of the Afghan government and the lack of local governance means that the population is failing to form meaningful interdependencies with their government.

Afghans who have minimal positive ties with their national government, have minimal incentive to support it. The Afghan government has not executed the basic administrative chores of a government such as removing waste, supplying and managing water, or providing a deed or title for property transfer especially in the more urban areas where higher densities of populations live. So, Afghan communities use traditional methods to settle property disputes, manage water supplies, or conduct any number of other functions often conducted by local governments. The lack of the central government's presence and the existence of informal local governments retard industry and trade.<sup>14</sup> However, the challenge for the central government is creating a national framework that provides immediate structure for local issues while not strengthening the insurgency.<sup>15</sup> Any centralized attempt to impose a standard local government system will result in failure since broad national laws undermine the intricate local customs on which many Afghan livelihoods depend. Programs such as the Afghan National Solidarity Program address the lack of local governance, but do not make the local populace, local

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<sup>9</sup>David Kilcullen, "Counterinsurgency," (lecture, Afghanistan-Pakistan Foundation Course, National Defense University, October 6, 2009)

<sup>10</sup>[http://www.transparency.org/publications/publications/global\\_corruption\\_report/gcr2009](http://www.transparency.org/publications/publications/global_corruption_report/gcr2009), (accessed June 1, 2010), 402.

<sup>11</sup> TRADOC Culture Center, *Afghanistan Smart Book*, 2<sup>nd</sup> Ed, (Sierra Vista, Arizona: February, 2010),, 45.

<sup>12</sup>Sarah Lister and Hamish Nixon, "Provincial Governance Structures in Afghanistan: From Confusion to Vision?" *Afghanistan Research and Evaluation Unit (AREU)- Briefing Paper*, (May 2006), <http://www.areu.org.af/> (accessed June 2, 2010).

<sup>13</sup> JJ Malevich, "Democracy Denied: No District Election 2010," *USA and USMC Counterinsurgency Center Blog*, (Jan 2010), <http://usacac.leavenworth.army.mil/blog/blogs/coin/archive/2010/01/07/democracy-denied-no-district-election-2010.aspx> (accessed December 26, 2010).

<sup>14</sup> Hernando De Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*, (New York: Basic Books, 2000).

<sup>15</sup> Hernando De Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*, (New York: Basic Books, 2000), 105- 152.

government and national government mutually dependent on each other. Not only does the population see minimal benefits from the government but also the Afghan national government has had little reason to concern itself with the population.

According to classic counterinsurgency theory, the rate and success of taxation is a measure for government support.<sup>16</sup> *The Open Budget Index* gave Afghanistan a measly score of 8 out of 100 in 2008 for the openness of budget information by the Afghan government.<sup>17</sup> While Afghanistan's Ministry of Finance continues to expand its tax code and states that "[it is] serious about ensuring that taxpayers meet their tax obligations,"<sup>18</sup> the central government does not depend on the local population because of its inability to collect taxes. Afghanistan has no effective local tax collection, which means the provincial state has no dependency on the local population.<sup>19</sup> Without a dependency on the local population, the national and provincial governments have little incentive to provide public services to the population. Since the population provides little to the national government, the government has little reason to provide services to the population and yet it must find ways to fund national budget.

As the national government survived and was not being funded by widespread taxes, it focused on securing other funding sources over which it could exert substantial control. One source of funding is donor aid and to secure it the Afghan government argues that all aid funding should flow through the central government.<sup>20</sup> The government has also clashed with local leaders over efforts to renationalize their lucrative sources of income. The central government's showdown, in 2004, with Herat's former Governor, the warlord Ismail Khan, for the tax revenue from major border crossing points between Afghanistan and Iran is another example. The Afghan government marginalized the famous warlord from Herat and secured profits from the Herat border. It increased the government's tax revenue six-fold from that border crossing, from \$2 million US dollars a month in 2001 to \$12 million US dollars a month in 2005.<sup>21</sup> Another potential source of individual funding for the government is illicit narcotics activity, a cash crop for pro-government warlords and the Taliban insurgents.

The Afghan government's monopolization of key revenue sources encourages corrupt practices and stifles competition. Afghans have little choice but to try to benefit from the patron who has the monopoly. Warlords leaders since the Soviet occupation have worked to secure funding sources, in order to maintain their militias, used as a patronage network.<sup>22</sup> These same people have formed the Afghan central government. Their continued competition over funding sources has not only revitalized those old patronage networks, but is driving more people into patronage networks in order to make a living. Afghanistan is devolving down the path toward a mafia state, thus unaccountable its population resulting. The Afghan government's foreign patronage and control over specific industries are tied to a small portion of the population. The

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<sup>16</sup>David Kilcullen, "Measuring Progress in Afghanistan," (2009), 9.

<sup>17</sup> Open Budget Index, "Afghanistan 2008, <http://openbudgetindex.org>, (accessed June 3, 2010).

<sup>18</sup>Ministry of Finance Afghanistan, "Taxpayer Compliance," (30 Jan 2009), <http://www.mof.gov.af/?lang=en&p=news&nid=13>, (accessed June 2, 2010).

<sup>19</sup>David Kilcullen, "Measuring Progress in Afghanistan," (2009), "9.

<sup>20</sup> Jelani Popal- director of the Independent Directorate of Local Governance (ILDG) of the Governemnt of Afghanistan, "Opening Remarks at the Emerald Express Symposium," (Quantico, VA: Marine Corps University, April 21, 2010).

<sup>21</sup> Antonio Giustozzi, *Empires of Mud*, (New York: Columbia University Press, 2009), 234-246.

<sup>22</sup> Antonio Giustozzi, *Empires of Mud*, (New York: Columbia University Press, 2009), 80-81.

central government is weakened by its inability to provide basic public services.<sup>23</sup> Government officials are motivated to expand patronage networks to increase power.

The governance fitness landscape of Afghanistan provides an environment that enables corrupt agents and mistrust of the Afghan government. People rely on local customs to interact with one another because there are no functioning government mechanisms in the localities. Powerful patrons are advantaged because Afghans must have allies to protect themselves from other abusive patronage networks. This devil's spiral inspires more Afghans to partake in the endemic corruption across Afghanistan because they must aid their patrons in securing revenues. The legal structure and dynamics do not alter the patronage network instead the patronage network drives the government dynamics. Patronage networks characterize Afghanistan's fitness landscape.

## **Agents**

An environment characterized by patronage networks favors the development and replication of certain agents. The primary agents of the patronage network include the patron agents, client agents, and the non-client agents. A patron acts as the key person maintaining a monopoly on a revenue source and distributing that revenue to a group of clients. Once conditions have allowed them to exist and thrive; patrons gain control of governing bodies thus altering the fitness landscape, such as enacting specific laws to their network's benefit and secure their lifestyle and positions of power.<sup>24</sup> The clients provide patrons with services through everything from pledging loyalty to maintaining the flow of revenue source by working for the patron.<sup>25</sup> The non-client agent is not attached to a patron, but may be in the patronage network, exuding indirect benefits such as building schools or governance maintained by the patron. In the case of Herat's former Governor Ismail Khan, the schools and public works projects he built benefitted the entire population, including the non-client agents.<sup>26</sup> Patrons and clients in Afghanistan have a stake in ensuring the continuity of the fitness landscape to support their way of life.

Patron-client mentalities and relationships have been prevalent in the Afghan population because of the strong ethnic-based patronage networks. This is exemplified in the opinion Afghans have of parliament members and the source of funding for student organizations in universities across the nation. The population views parliament members as patrons for specific local districts and legislators in a national apparatus, who serve them through national legislative duties. In the case of student organizations, they are usually representative of one ethnic group, even if the group does not claim to be mono-ethnic.<sup>27</sup> This dynamic reinforces the ethnic divides created by years of war, as these strict ethnic lines were not as prevalent prior to the Soviet invasion.<sup>28</sup> Many students attending the university can only afford to do so because of the

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<sup>23</sup> Bruce Bueno De Mesquita, Alastair Smith, Randolph M. Siverson and James D. Morrow, *The Logic of Political Survival*, (Cambridge, Massachusetts: The MIT Press, 2005), 179-186.

<sup>24</sup> Bruce Bueno De Mesquita, Alastair Smith, Randolph M. Siverson and James D. Morrow, *The Logic of Political Survival*, (Cambridge, Massachusetts: The MIT Press, 2005), 179-186.

<sup>25</sup> James D. Montgomery, "The Structure of Norms and Relations in Patronage Systems," (June 23, 2007), pp. , 3-5, <http://www.ssc.wisc.edu/~jmontgom/alliances-SN2.pdf>, (accessed June 8, 2010)

<sup>26</sup> Antonio Giustozzi, *Empires of Mud*, (New York: Columbia University Press, 2009), 233-236.

<sup>27</sup> Antonio Giustozzi, "Between Patronage and Rebellion: Student Politics in Afghanistan," *AREU Briefing Paper Series*, (February 2010), pp. 6-12, <http://www.areu.org.af/>, (accessed June 2, 2010)

<sup>28</sup> Antonio Giustozzi, "Between Patronage and Rebellion: Student Politics in Afghanistan," *AREU Briefing Paper Series*, (February 2010), pp. 1-4, <http://www.areu.org.af/>, (accessed June 2, 2010)

patronage of the group with which they are associated.<sup>29</sup> This patronage serves to integrate educated students into the existing patronage networks. This recruitment dynamic reinforces the patronage system, as these educated Afghans become the next generation of Afghan leaders, they sustain and defend their patronage network. The Afghan attitude toward their parliament members and the use of patronage to facilitate and attract educated Afghans demonstrates the influence of the patron-client relationship within Afghan society.

The Taliban do not break the patron-client paradigm, but they provide a modified model (see figure 1). Although the Taliban may have begun as a consultative religious student movement, by the time they ran Kabul in the mid-1990s, their ruling *shura* (council) headed by Mullah Mohammed Omar was secretive and exclusive.<sup>30</sup> This process epitomizes the patronage dynamic, in which a few people dictate policy and through their positions of power create a ruling elite that dole out goods and services to the population. The post-2001 Taliban continue to integrate the patron-client structure incorporating the loosely affiliated groups, which also call themselves Taliban. Their patronage network survives due in part to funding from religious charities, narcotics revenues, and trucking revenue.<sup>31</sup>

The Taliban provide the non-client agents greater opportunities by supporting local mechanisms such as local dispute resolution that allows non-client agents to resolve their day-to-day problems ranging from land and water disputes to outstanding debt issues.<sup>32</sup> The non-client agent has to choose between two patron-client systems: the Afghan government or the Taliban. The corruption of the Afghan government and the Taliban's support of local systems means that the Taliban provide a better, albeit harsher, fitness landscape for the non-client agent. The Taliban provide support for the non-client agent and in turn gain that agent's support.

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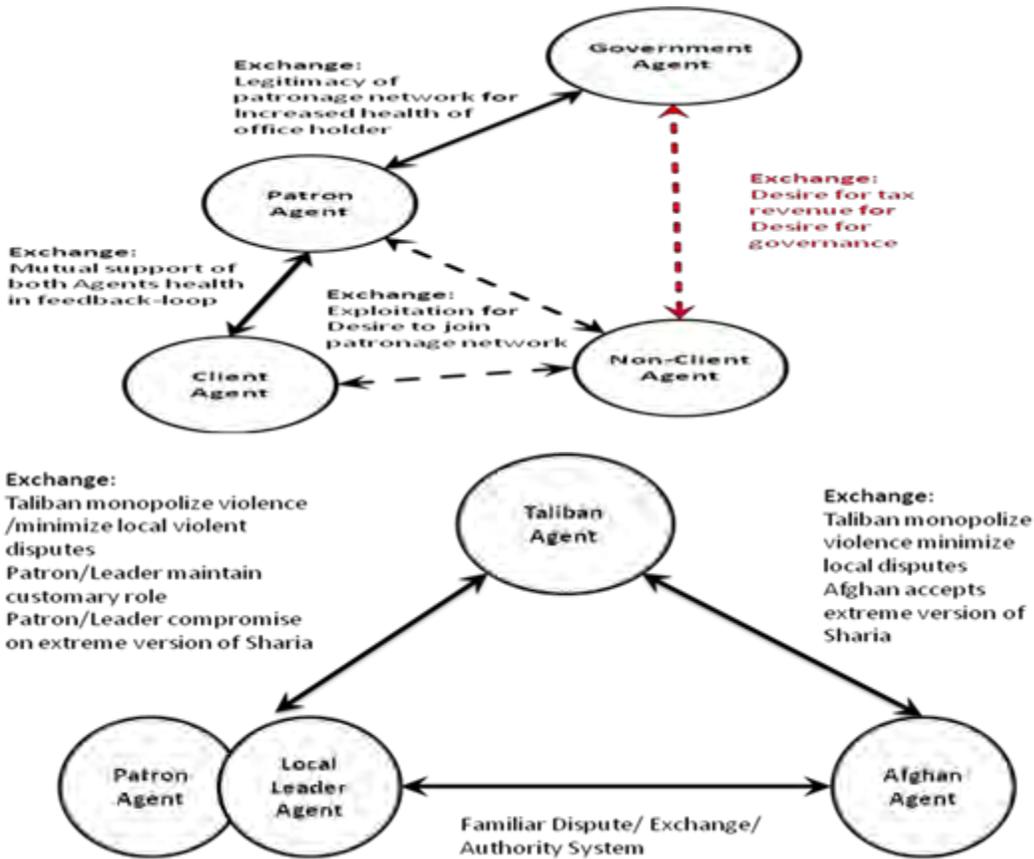
<sup>29</sup> Antonio Giustozzi, "Between Patronage and Rebellion: Student Politics in Afghanistan," *AREU Briefing Paper Series*, (February 2010), pp. , 5-12, <http://www.areu.org.af/>, (accessed June 2, 2010)

<sup>30</sup> Ahmed Rashid, *Taliban: Militant Islam, Oil and Fundamentalism in Central Asia*, (New Haven: Yale University Press, 2001)

<sup>31</sup> Abdulkader Sinno, "Explaining the Taliban's Ability to Mobilize the Pashtuns," *Decade of the Taliban*, edited by Robert Cres and Amin Tarzi, (Boston: Harvard University press, 2008), <http://www.sinno.com/>, (accessed May 28, 2010), 68-73.

<sup>32</sup> Mohammed Osman Tariq Elias, "The Resurgence of the Taliban in Kabul: Logar and Wardak," *Decoding the New Taliban*, edited Antonio Giustozzi, (New York: Columbia University Press, 2009), 50-53.

**Figure 1- Simplified Flow of the Afghan Government versus Simplified Flow of the Taliban**



Whether the Taliban or Afghan Government system survives, the mere presence of a patron-client mentality breeds corruption because the goal of any patron is to maintain his clientele and revenue sources. Years of civil war, breakdown of the rule of law, and the pulverized infrastructure favored this patron-client dynamic. The patron and client agents in Afghanistan will not alter their mentality in the short-term, thus in the short-term there will be corruption in Afghanistan. However, understanding and altering the flow of these dynamics can break the patronage network over the long term while making corruption more difficult and less pronounced in the short term.

**Flow<sup>33</sup>**

As the dominant feature of the fitness landscape is the patronage network, and this allows the patron-client agents to flourish it logically follows that the flow of goods, services, wealth

<sup>33</sup> Flow is a term coined by John Holland to describe the direction and path of the items being transferred. Complexity theoretician refers to what is being transferred as energy. See John Holland, *Hidden Order: How Adaptation Build Complexity*, (New York: Basic Books), 23-27.

and power in Afghanistan follows the patronage networks. This discussion uses the general term *energy* to refer to the items that give the patron power. Patrons seek to secure *energy* sources and then redistribute this *energy* across the network. Patrons must always ensure the safety and flow of his *energy* sources. Different patrons compete for *energy* and each has a slight variation on the model used to maintain their patronage network, expand it, or ward off threats. Over time different variations compete, and the most successful variations gain control.

Afghanistan's patronage networks have several variations for distributing *energy*. For example, the Afghan government empowers a person to act as an authority, which that authority uses to extort money to pay the government for his position and then that client keeps any excess collection for himself.<sup>34</sup> As a patron, the government bestows authority on its clients in exchange for revenue. As was seen previously, another scenario is the case of the students, who exchange their future decision-making capacity for financial support while attending college. Other examples include monopolizing local revenue sources derived from opium or trucking transport. The network then distributes the revenue to the clients who grow the opium, drive the trucks, monitor group behavior, and fight off threats. Afghan patronage networks have developed complex and intricate ways of securing and distributing *energy*.

### ***The Final Assessment and Recommendations***

A complexity-based approach focusing on the population recommends that COIN operations focus on altering interdependencies. Intelligence analysis should identify current interdependencies and their associated emergent phenomenon, and then the USG should conduct operations to either enhance or alter them. Once operations establish the desired interdependencies the population goes about its daily life and make millions of micro-decisions. The emergent phenomena produced by these decisions will then ideally produce population behavior consistent with ISAF objectives. Operations are successful when agents within the system attempt to revert or alter dynamics to give themselves a monopoly on the energy. The systems is resilient if the operations have created feedback loops which stop this without external intervention. It is critical to identify the flow dynamics across the system, analyze how changes to the dynamic affect entities considered external to the objective system, and monitor internal and external attempts to alter the objective dynamics. Instead of building advanced governing institutions, the purpose is to establish simple and basic interdependencies that grow the desired institutions, which favor specific agent traits.

An example of a helpful interdependency feedback-loop is between the population, the tax collector, the police, and the local leadership (see figure 2). The population provides a tax base and is the source of the leadership's authority. The tax collector receives and accounts for the taxes on the population and provides revenue for the leadership. The police provide security for the tax collector, the leadership, and the populace. The tax revenue pays the salary of the leadership, the tax collector, and the police. The leadership provides oversight of the police and the tax collector and uses tax revenue to benefit the populace. Establishing these interdependencies will ideally put the village in a homeostasis of checks and balances that prevents abuse, provides stability to allow development, and increases their resilience to outside stressors, such as insurgents.

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<sup>34</sup> Sarah Chayes, "Special Advisor to General McChrystal," (lecture, Defense Intelligence Agency, March 23, 2010).

**Figure 2: A Simplified Example of Village Interdependencies to Produce a Homeostasis**



Instead of trying to build developed Afghan institutions regardless of the cultural and situational dynamics ISAF elements across the country should adjust local interdependencies based on local conditions. This change will alter the Afghan populace's decision-making considerations causing them to favor choices compatible with U.S. objective and allowing the Afghans to develop their own governing institutions consistent with their unique and varying cultural dynamics. Decision-makers who adopt a population-centric, complexity –based approach should be more effective in setting the conditions to create a stable and productive Afghanistan, which is intolerant of terrorist safe havens.

### ***Closing Thoughts***

The purpose of the Emergent States Assessment method is to offer an analytic framework that facilitates the rapid understanding of complex populations in a way that may be communicated across large organizations and leveraged to conduct operations that are more effective. After ten years of conflict and trial-and-error analysis, the conclusions presented by this Emergent States Assessment may seem redundant to the intuitive conclusions many Afghan experts have already arrived at. Perhaps this is exactly the point: this method independently came to the same conclusions that innumerable analysts spent significant time and effort to reach, often times through intuitive means difficult to substantiate. The authors hope that this discussion offers insight into analytic efforts and positive actions that can grow a new emergent state of Afghanistan, shaped by mutually supporting actions, across a complex country.

*MAJ Tom Pike and MAJ Eddie J. Brown are Intelligence Officers in the United States Army who have conducted extensive study on analytical methods for population centric analysis. The opinions expressed herein are solely those of the authors and do not reflect the official policy or positions of the Department of Defense or the U.S. government.*

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